



MICROSOFT DIGITAL OPERATIONS SERVICES USER MANUAL 23.0

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CHANGE LOG:

Version #	Date	Details Updated
1.0	07/29/2016	Initial version
2.0	09/02/2016	Partner Reject, Test environment switch functionality, LRM Search
3.0	10/07/2016	Single agreement multiple business model, LRM auto approval, DPK bulk return, auto send CBR, PBR and Return to upper level system
4.0	11/11/2016	OA 3.0 integration with IT services, DPK tagging, Bulk Import changes
5.0	12/09/2016	MDOS Key Order, Add New Partner, Submit Optional Information
6.0	01/13/2017	Key History, Multiple FFKI Support, auto submit CBR, PBR history
7.0	02/10/2017	Report CBR "By Quantity", Enable/Disable down level partners, Resend MDOS FFKI credential, "Delete" or "Remove" certificate option
8.0	03/22/2017	Rewritten the user manual, corrected the grammatical mistakes, updated screenshots with Contoso account
9.0	09/15/2017	New onboarding flow, certificate automation changes
10.0	12/15/2017	Updated login, email templates and certificate settings screenshots.
11.0	01/12/2018	Disable/Delete DLP, validate existing TPI updates

12.0	02/09/2018	DSB changes, removal of certificate automation for existing partners, credit hold updates and FAQ's
13.0	03/16/2018	Refresh button in Key order page, content update in DLP export and content update in export keys
14.0	04/20/2018	Search All option, Search results export, Return & PBR batch limitation and Upgrade to MDOS SC options
15.0	05/18/2018	Product Bound status introduced for service keys, return procedure in DSB, Privacy section and screenshot updates
16.0	07/06/2018	PBR changes and screenshot updates
17.0	07/31/2018	GPA2.0 agreement changes
18.0	10/05/2018	PBR, key order, search improvement changes
19.0	11/19/2018	GPA contents updated
20.0	01/18/2019	UI changes in dashboard, search, assign keys screens
21.0	09/08/2019	MDOS OSP Integration, removal of certificate dependency & Use of DOC account.
22.0	12/11/2019	Updated to reflect the launch of DA, replacing DSB
23.0	12/02/2020	Updated to reflect the initial phase for the MDOS data archival

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WELCOME TO MDOS

Instruction: Welcome to MDOS - a cloud-based digital key distribution and entitlement service for Microsoft OEM partners. Please read the overview and capabilities to learn more about this service.



MDOS Overview

Welcome to Microsoft Digital Operations Services (MDOS)

MDOS is a web based service that provides Microsoft partners (OEM, ODM/IDH and Third-Party Installers) the ability to complete the OEM Activation Services 3.0 (OA 3.0) end-to-end process that is required to order and ship devices installed with Microsoft Windows. The MDOS service provides partners the ability to digitally order, fulfill, transfer and return digital product keys (DPKs) as part of doing business with Microsoft. Microsoft is discontinuing physical Certificate of Authority (COAs) licensing stickers as a way of licensing products. Beginning with Microsoft Windows 8, partners are now required to use DPKs to manufacture and pre-license the device at manufacturing time. The MDOS system is a cloud service that can be used by partners to complete these transactions with Microsoft.

The OA 3.0 activation process is a new way to license and activate Windows. Before beginning to use this new model, it is important to understand some key concepts and requirements. Below, is a high-level overview of both the new OA 3.0 end-to-end process requirements, as well as a high-level overview of the capabilities of the MDOS service.

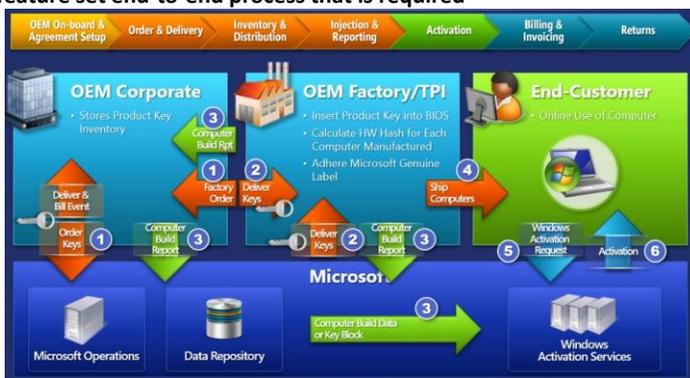
OEM Activation 3.0 End-to-End

OA 3.0 as noted is a new digital way of manufacturing, pre-licensing, and shipping windows-based systems. OA 3.0 provides an entire framework for how OEM/ODM partners transact with Microsoft, as well their downstream manufacturing partners and entities. In OA 3.0, the process starts by an OEM/ODM, who has already completed a GPA agreement with Microsoft. If you do

not have GPA or Licensing agreement with Microsoft, please contact your Customer Operations Manager (COM) or your Microsoft Sales Manager to understand what is required to complete a direct licensing agreement with Microsoft.

Once a partner has an agreement signed with Microsoft to sell Microsoft Windows and/or additional products, the next step is understanding the end-to-end process that is required to complete the OA 3.0 process for Windows shipments. The process starts with a toolset required to digitally connect to Microsoft. Today, the partner has a choice of whether to build an OA 3.0 client or leverage the existing solution offered by Microsoft, called MDOS. The MDOS solution is provided for partners that complete under one million transactions a year. For all other partners, building an OA 3.0 client is required. The remainder of this manual will detail aspects of the MDOS system, as well provide overview, step-by-step examples, tips, and details about the specific functionality available in the MDOS service. Below, we discuss the OA 3.0 end-to-end process for understanding. We will then discuss at a high level how to use MDOS to ensure your continued success purchasing, manufacturing, and shipping Microsoft Windows to your end users.

The OA 3.0 feature set end-to-end process that is required



The Digital licensing and entitlement process starts with the OEM/ODM placing an order to Microsoft for Microsoft Windows digital product keys (DPKs). This order can either be a form of a Blanket Order, which allows the OEM’s designated partners to order against (Call Off Order), or it is a direct order from the OEM to Microsoft (Standard Order), either type is supported. Once the digital order is placed to the Microsoft services, the OA 3.0 DPKs for Windows will be fulfilled into the MDOS system. The OEM then chooses a partner to complete the manufacturing portion of the project and will deploy (transfer) the digital product keys from their system to the factory, where the factory may be owned by the OEM or is a third-party Installer (TPI). Once the keys have been deployed to the factory, the factory will manufacture the Windows device and will be required to inject the DPK into the firmware (BIOS/UEFI) of the device. Once the DPK is injected, the factory will capture a Computer Build Report (CBR), which contains complete hardware information shipping with the device, as well information about

the now injected DPK. This CBR is sent to Microsoft and is recorded prior to the device reaching the end user. Once the end user purchases that device and powers on, Windows will request a machine activation, which ensures the device is a Genuine Microsoft Windows device. The activation event occurs and completes and the OA 3.0 process completes. If the machine is returned for any reason within 365 days, the OEM can request a refund and must send Microsoft information about the specific DPK being returned and the reason for the return.

There are a variety of use cases and scenarios that are supported by the OA 3.0 end-to-end process and requires some general understanding before beginning to complete the process with Microsoft. The OEM/ODM, the entity with a direct relationship and contract with Microsoft is in control of deciding how much involvement they will have in the end-to-end process. There are three ways to setup your relationship with your downstream partners (subsidiaries, servicing centers and/or factories for manufacturing). In MDOS, we define the relationship of the OEM/ODM and its partners as a Business relationships as a Business. A business within MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering. The OEM/ODM, those that have a direct contract with Microsoft, choose the type of control and involvement they will have in the OA 3.0 end-to-end process. The OEM/ODM can choose to have a centralized or decentralized relationship with its business entities. In a centralized business setup, the OEM chooses to have total control of the process from Order to Return and all functions in between. The OEM will order, fulfill and transfer the DPKs to their downstream partners called DLP (Downlevel Partners), as well will handle all returns on their own behalf. The centralized model allows the parent entity (OEM/ODM) full control throughout the MDOS system and the end-to-end process. The other type of business setup is a Decentralized model. The decentralized model requires the OEM to place the Call Off order with Microsoft. The OEM does not need to manage the order or the digital product keys at all, instead this model relies on the DLP to manage all DPK orders, fulfillments, transfers and returns on behalf of their OEM partner. The OEM does not need to “manage” anything except the call off order with Microsoft, but is responsible for any audits required by Microsoft and as such the OEM should check in with their DLP’s on a regular basis to understand what is happening within their business. OEMs are liable for keys once they are fulfilled.

In summary, the OA 3.0 end-to-end process is setup by the OEM/ODM, the entity with the direct contract with Microsoft. The OEM/ODM is required to define the business and yet can choose to manage the entire end-to-end process directly (centralized) or choose to outsource the process to their DLP (decentralized).

MDOS Service Overview

Now that you have familiarity with the OA 3.0 end-to-end process requirements and available business related options, we will explore the high level MDOS capabilities as a tool to complete your digital business transactions with Microsoft. The MDOS service offering is available to our smaller OEM/ODM partners, those that complete less than one million shipments of Windows. The MDOS service is currently free to use for these partners including support of the service

and its feature offerings. MDOS provides electronic email based support from the vendor hired by Microsoft to complete the service offering, please see support section within the MDOS manual for additional details and the specific contact information.

As noted above, partners can choose to onboard to the MDOS service or complete a build of their own OA 3.0 client, connecting to Microsoft backend web service directly. The MDOS service is an Azure Cloud based solution that also requires a physical client for the factory floor manufacturing requirements. MDOS provides the end-to-end solution required to order, fulfill, deploy, report and return Digital Product Keys required to manufacture Windows devices. Below we will explore some of the high-level features of the MDOS service offering, and walk through the onboarding requirements.

Onboarding to MDOS

MDOS provides everything required to complete the digital pre-licensing requirements set by Windows since Windows 8. To onboard to the MDOS service, you will need to complete your GPA contract with Microsoft. Once the contract has been signed, Microsoft will send you an email with your MDOS Registration information, including a link to the DOC site. The DOC is used to “register” your MSA email account and corporate email account with the system. Because MDOS is a cloud service, you do not need to “install” any software for the OEM/ODM entity, rather you access the MDOS service via a browser URL address that will be sent to you once you have completed your contract with Microsoft. The link you will receive will direct you to register with DOC and choose which type of partner you identify as. Once the DOC registration is complete, you will be sent the MDOS direct link URL in order to login for the first time.

Defining an MDOS Business

Once the OEM/ODM have registered and successfully logged into the MDOS system, the next step is to define the type of Business that will be used (centralized or decentralized), and which entities (DLP's) you will work with to complete your Windows device end-to-end process for manufacturing and device shipment. Setting up the business is a critical step and one that should be thought through prior to attempting to setup your Business within MDOS. MDOS supports multiple businesses; which means that for one business the OEM may choose to work with Manufacturing Partner A and for another business the OEM may choose Manufacturing Partner B. The OEM may choose to setup one business as centralized and the other as decentralized. Each business is secured and keeps all details regarding that business separate, whether it be DPKs, Log files, and/or Alerts. An OEM can also define how the business behaves with regard to DPK fulfillment and/or CBR submissions to Microsoft. In other words, the OEM may choose to order and then manually download DPKs for one business, while setting up automatic DPK fulfillment for their other business. There are a variety of settings and options defined within this manual and we encourage you to explore the details of each for a thorough understanding.

Manufacturing with MDOS

As part of setting up the MDOS Businesses, the OEM/ODM can choose the manufacturing partner(s) they will work with. Adding the manufacturing partners into the MDOS Business requires the OEM/ODM to invite the manufacturing entity as a business entity within your defined business. The OEM/ODM will “invite” the manufacturing partner (TPI) into the business via the DLP setup within the MDOS service. Once the manufacturing partner accepts the invite, they are ready to transact on behalf of the OEM/ODM partner. The MDOS service requires the manufacturing partner to “configure” themselves within the MDOS cloud service (as a TPI) and then requires the manufacturing partner to install the physical MDOS Factory Floor Key Inventory (FFKI) client on the manufacturing floor. The MDOS FFKI client is a software install that will connect to the MDOS cloud via a secure connection through either a VPN or via the Internet. The MDOS FFKI client manages the DPKs between the MDOS cloud and the physical manufacturing floor. The MDOS FFKI Client will request DPKs from the service and will make those DPKs available for injection into the Windows device being manufactured. The MDOS FFKI client will also capture the Computer Build Report (CBR) required and send that CBR upstream to the Uplevel Partner (ULP), who will relay that to Microsoft directly depending on Centralized or Decentralized business setup.

MDOS Capabilities and Benefits

Microsoft Digital Operations Service (MDOS) is a cloud-based digital key distribution and entitlement service for Microsoft partners. It gives partners the ability to order, deploy, manage, bind, return, and recall Digital Product Keys (DPKs) as needed. MDOS is a self-service tool that provides easy access to new capabilities and allows partners to scale.

The key benefits of using MDOS include:

- Flexible platform: Easy to add new partners and scale your business
- Self-service capabilities
- Efficient inventory management
- User-friendly interface
- Software as a service – no need to upgrade software, always up to date
- Integrated with other Microsoft platforms

MDOS provides the following capabilities:

- Basic OA 3.0 infrastructure (order, fulfill, transfer, return, report, etc.)
- Automated setup/onboarding
- ERP system integration*
- Integration with other Microsoft platforms (DOC and Connector)*
- Low cost scalability to support new Microsoft programs (pricing configurator, DA, cloud attachments, etc.)
- Business Intelligence reporting*
- Self-serve capabilities (Pop-up support, tip tool, chat support, form integration, support forums, link to documentation, etc.)
- Offline run mode (File-based DPKs)

*Some features may not be available today but will be available at a future date.

Example: Contoso OEM has a growing business where they work with multiple downlevel partners (DLPs) including TPI, IDH/ODM, and FFKIs. The businesses run in different business models where some are centralized and some are decentralized. Contoso OEM was using the DIS Chinasoft legacy system, but they are now migrating over to MDOS for its many benefits.

Contoso OEM will now be able to:

- take advantage of the flexible platform that allows them to easily add new partners as their business grows.
- navigate across different views depending on each business' structure with a user-friendly interface.
- use the self-service tool to easily perform key functions (order, fulfill, transfer, return, report, etc.).
- manage inventory for each business and see a real-time view of inventory levels, key status details, as well as access business intelligence data—all in one place.

Additionally, Contoso OEM knows that MDOS is also an online service, so updates are made automatically and they will never have to manually update their software to have the latest version.

MDOS TERMS OF USE

Instruction: Review the MDOS terms of use and sign the acknowledgement to continue this set up process. Terms must be agreed upon to continue the set up and begin working with MDOS.

The screenshot shows a web browser window displaying the 'Microsoft MDOS Privacy Statement'. The page is titled 'MDOS TERMS & CONDITIONS' and 'Microsoft MDOS Privacy Statement'. It includes a 'Last updated: June 2016' notice and a detailed privacy policy. The 'Collection and Use of Personal Data' section explains that Microsoft collects data to improve services. The 'Name and contact data' section lists the types of information collected. The 'Credentials' section discusses account security. The 'Usage data' section describes how user interactions are tracked. On the right-hand side, the 'USER PROFILE' is set to 'OEM 1, Contoso'. Below this, there is a 'SIGNATURE' field with a text input box. A note asks the user to 'Please type in the User Profile name in the above text field. (E.g. Lastname, Firstname)'. There is an unchecked checkbox for 'I Accept The Microsoft MDOS Terms Of Use'. At the bottom of the right panel, there are two buttons: 'I DISAGREE' and 'I AGREE'.

MDOS terms of use

Please review the MDOS terms of use and sign the acknowledgement to continue this set up process. Terms must be agreed upon to continue the set up and begin working with MDOS.

NOTE: To sign the agreement, please be sure to enter your name in the signature field as it is displayed above. The signature field is case sensitive. An inactive button is greyed out until this field matches.

This User Manual is a resource where you can find descriptions, examples, and step-by-step instructions for all the functionality available in MDOS. You can also find definitions for acronyms, and links to other sources, such as FAQs.

The manual is intended for all MDOS users and all Microsoft OEM business partners; OEM, TPI, ODM, IDH, and MDOS FFKI.

Refer to the User Manual to find helpful information on how to:

- Get set up on MDOS (Introduction/Wizard)
- Access MDOS and Inventory Management
- Get Digital Product Keys (Order/Fulfillment)
- Manage Inventory
- Submit Reporting
- Utilize BI Instrumentation
- Manage your Business
- Find Advanced Functionality

ONBOARDING

Before beginning onboarding, you must decide if you require a centralized or decentralized business model.

Centralized Business Model:

- OEM Corporate conducts all transactions with Microsoft directly.
- OEM Corporate places orders, receives DPKs, distributes DPKs to ODM or TPI manufacturing sites.
- OEM /TPI manufactures PC and returns computer build report (CBR) to OEM Corporate.
- OEM Corporate submits CBRs to Microsoft.
- OEM can perform returns.

Example: Centralized Business: Contoso OEM is in a centralized business model with ABC Factory. Contoso OEM has a direct agreement and relationship with Microsoft and a direct agreement and relationship with ABC Factory. Contoso OEM places orders with Microsoft to receive their Digital Product Keys (DPKs) directly and sends the keys to ABC Factory. The

factory manufactures the PCs and injects the keys. The Computer Build Reports (CBR) is created by ABC Factory and sent to Contoso OEM, for approval, and submission to Microsoft. Contoso OEM choose this model because they want to be in control of their business and manage their DPK's directly.

Decentralized Business Model

- OEM Corporate creates relationship with Microsoft, but third parties can conduct transactions on behalf of OEM.
- OEM Corporate places blanket orders with Microsoft.
- TPI places call-off orders, receives DPKs from Microsoft, manufactures PCs.
- TPI submits CBR to Microsoft, and a copy to OEM.
- TPI cannot perform returns on behalf of the OEM.

Example: Decentralized Business: OEM ABC is in a decentralized business model with Mexico Factory and China Factory. OEM ABC places Blanket Orders with Microsoft for each factory that will be manufacturing client PCs. The factories receive the keys directly, manufacture the devices, and inject the keys. Both factories create their Computer Build Reports (CBR) and submit the CBRs directly to Microsoft. OEM ABC chose a decentralized model because it has trusted relationship with both factories and does not want to manage any of the daily operations of DPK's. OEM ABC understands their liable for all the operations performed by their factories on their behalf.

STEPS FOR ONBOARDING - NEW OEM

The following steps are required for OEMs who wish to onboard to MDOS as a Centralized or Decentralized OEM. The steps for both are similar but you click on the desired business relationship (Centralized or Decentralized) depending on your business model. More information on Centralized and Decentralized OEMs can be access in step 10 of New OEM Onboarding.

1. RECEIVE EMAIL INVITATION

Email the Global Partner Onboarding (GPO) Team (gposup@microsoft.com) to request access to MDOS. Ensure to include the below information:

- a. MSA Email Account*
- b. First Name
- c. Last Name
- d. Company Name

Microsoft recommends onboarding at least accounts to MDOS during onboarding to support partner business continuity if one user is not available to access to tool.

NOTE: Expected SLA for email ~24hrs.

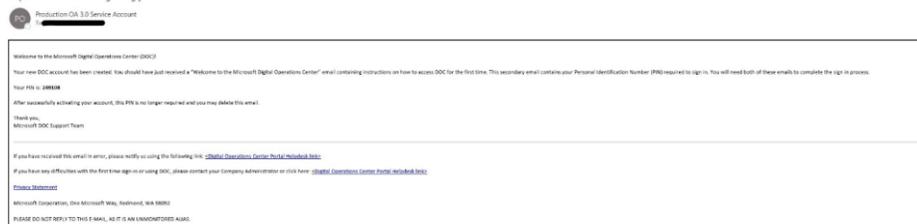
* A Microsoft account (MSA) is an email account used to sign into Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com).

2. ACTIVATING DOC ACCOUNT

You will receive an email to join MDOS via the MSA email account provided to the GPO.

STEP 1: Find your sign-in PIN (Personal Identification Number). After this welcome email, you will receive an additional email containing a first-time sign-in PIN. Please make note of the PIN; it is a six-digit number.

Important information regarding your new Microsoft DOC account



STEP 2: Select your preferred sign-in method. The Digital Operations Center supports several types of sign-in methods: depending on your user account type. You may select any qualifying account of your choice or create a new one.

STEP 3: Sign in for the first time. Supported sign-in credentials Windows Live ID Microsoft Corp Net with the information from Steps 2 and 1, You are ready to sign in to DOC by clicking www.microsoftoem.com where you will be asked to select a preferred sign-in method. After making your selection, you will be directed to the sign-in page.

STEP 4: Enter your PIN. Once you have successfully signed in, you will be asked to provide the PIN number obtained in Step 1. After entering PIN, you will be taken to the Home Page. The invitation mail will provide you the detailed step (as per below screen).

Microsoft Digital Operations Services User Manual

Subject: Welcome to the Microsoft Digital Operations Center

Welcome to the Microsoft Digital Operations Center (DOC)!

Your new DOC account has been created. To begin using DOC applications, you will need to complete the following five steps the first time you sign in.

STEP 1 – Find your sign-in PIN (Personal Identification Number).
After this welcome email, you will receive an additional email containing a first time sign-in PIN. Please make note of the PIN; it is a six-digit number.

STEP 2 – Select your preferred sign-in method.
The Digital Operations Center supports several types of sign-in methods, depending on your user account type. You may select any qualifying account of your choice or create a new one. Please note that your company may have policy guidelines regarding this account selection.

User Account Type	Supported sign-in credentials	
Microsoft Partner Extranet <code>yourdomain\userid</code>	Windows Live ID Microsoft account	Microsoft CorpNet Microsoft account
External customer (OEM, Distributor, etc.)	✓	✓
External partner (AR, SPV, etc.)	✓	✓
Internal Microsoft employee or vendor		

STEP 3 – Sign in for the first time.
With the information from Steps 1 and 2, you are ready to sign in to DOC by clicking the following link: [first time sign-in link](#). You will be asked to select a preferred sign-in method. After making your selection, you will be directed to the sign-in page.

STEP 4 – Enter your PIN.
Once you have successfully signed in, you will be asked to provide the PIN number obtained in Step 1. After entering your PIN, you will be taken to the Home Page.

STEP 5 – Browser Configuration.
After you have successfully completed your first-time login, please follow the steps outlined in Section 1 of our "About DOC" guide to ensure DOC runs smoothly within Internet Explorer: [About DOC](#). You are now ready to start using the Microsoft Digital Operations Center!

Note: Your account must be activated within 30 days of receipt of this email, otherwise your account will be suspended.

Note: If your account is suspended or if your account becomes locked after three unsuccessful sign-in attempts, please contact your Company Administrator. The Company Administrator is a designated person within your organization defined in your Microsoft agreement.

To learn more about the functionality of various applications within DOC, click here: [About DOC](#)

Thank you,
Microsoft DOC Support Team

If you have received this email in error, please notify us using the following link: [Digital Operations Center Portal Helpdesk link](#)

If you have any difficulties with the first time sign-in or using DOC, please contact your Company Administrator or click here: [Digital Operations Center Portal Helpdesk link](#)

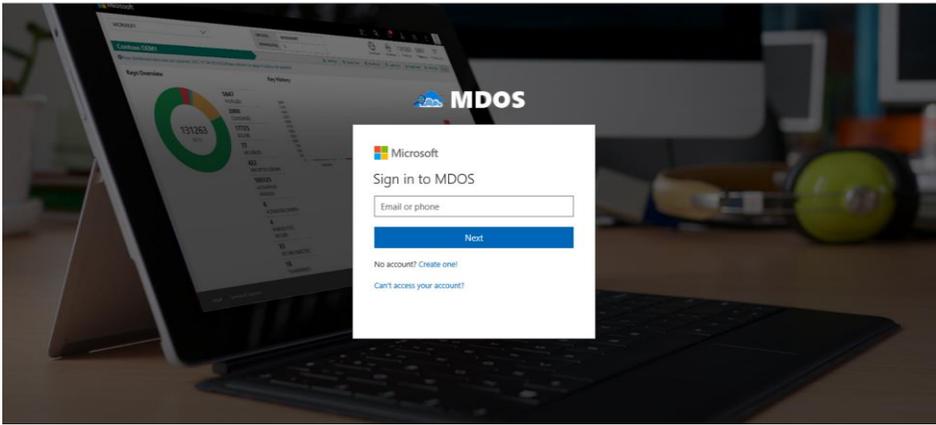
[Privacy Statement](#)

Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

PLEASE DO NOT REPLY TO THIS E-MAIL, AS IT IS AN UNMONITORED ALIAS.

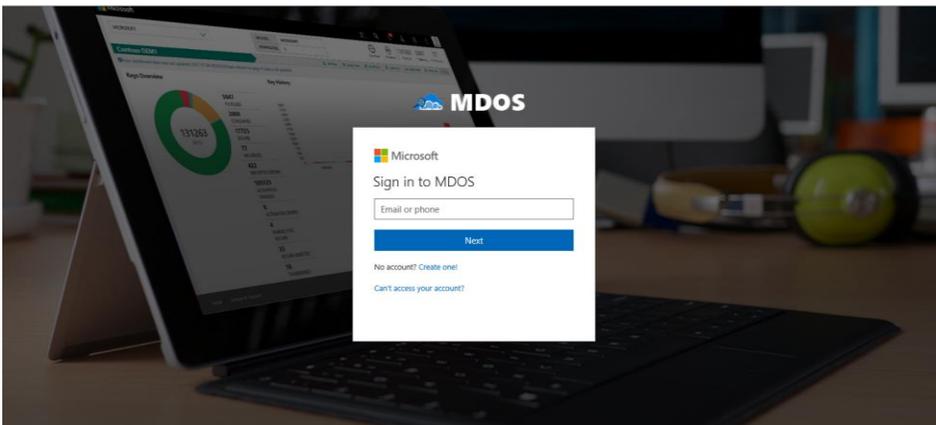
3. ACCESS MDOS

Access MDOS by typing <https://digitaloperations.oa.microsoft.com> in your browser.



4. LOG IN USING MSA EMAIL ACCOUNT

Log in using the MSA email account credentials you provided to the GPO team.





5. FOLLOW ONBOARDING STEPS

Follow the MDOS onboarding process steps.

6. WELCOME TO MDOS

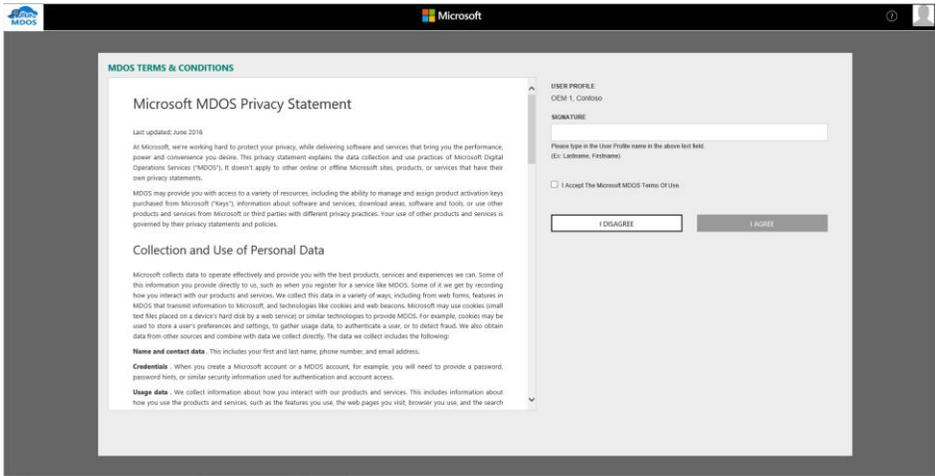
To review the MDOS Overview, hover on the information icon on the welcome screen.



7. MDOS TERMS OF USE

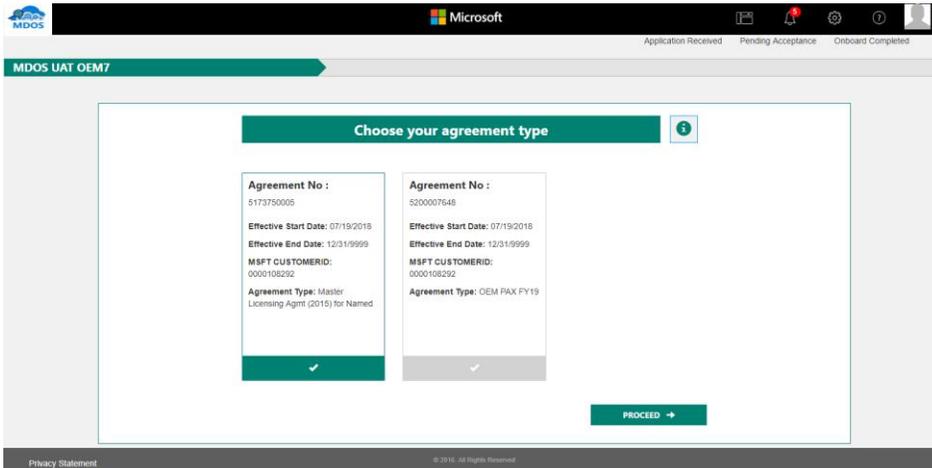
Microsoft Digital Operations Services User Manual

Review the MDOS terms of use and sign the acknowledgement to continue this set up process. Terms must be agreed upon to continue the set up and begin working with MDOS.



8. AGREEMENT SETUP PAGE

Select the agreement you would like to set up.



Tip Tool : Select your agreement from the options to be redirected and continue onboarding. If you have more than one agreement, you must set up both agreements individually.

Business definition:

A business in MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering. You must select the business/partner you wish to work with from the dropdown menu when you sign into the MDOS dashboard.

Example : Contoso OEM has a single licensing agreement with Microsoft under a Global Partner Agreement (GPA), supporting two businesses: an OEM Program Appendix (PAX) and an IOT Program Appendix. The OEM PAX is for the OEM Royalty business and the IOT PAX is for the Embedded business. Each PAX will have a unique agreement number for ordering.

Based on the business definition, Contoso OEM has two business structures, one for the OEM PAX agreement and one for the IOT PAX agreement. They get different keys for the OEM PAX and the IOT PAX. While onboarding, Contoso OEM must set up both agreements individually.

Contoso OEM decides to set up their OEM PAX agreement first. They select the OEM PAX option and follow the steps to onboard their DLP for the Windows Client business. Once completed, they will set up their IOT PAX for the Embedded manufacturing business.

ULP Definition:

Upper Level Partner or Up level Partner (ULP) is the entity above the down level entity. Keys will flow from this entity to downstream entities. An Up level partner can be:

- Microsoft agreement (GPA with OEM, ODM or IOT PAX)
- OEM, ODM/IDH, IOT or TPI in a centralized relationship
- OEM, ODM/IDH, IOT or TPI in a decentralized relationship

Agreement types are under the Global Partner Agreement (GPA):

- OEM Program Appendix – licensing for Windows Client, Office, Server, IoT for OEM products.
- ODM Program Appendix – licensing for Windows Client, Office products
- IOT Program Appendix – licensing for IoT OA products for Embedded devices and Internet of Things (IoT)

OEM

OEM (Original Equipment Manufacturer) will be having a direct GPA agreement with Microsoft or they may have multiple agreements as well, Microsoft will be the up level partner for an OEM.

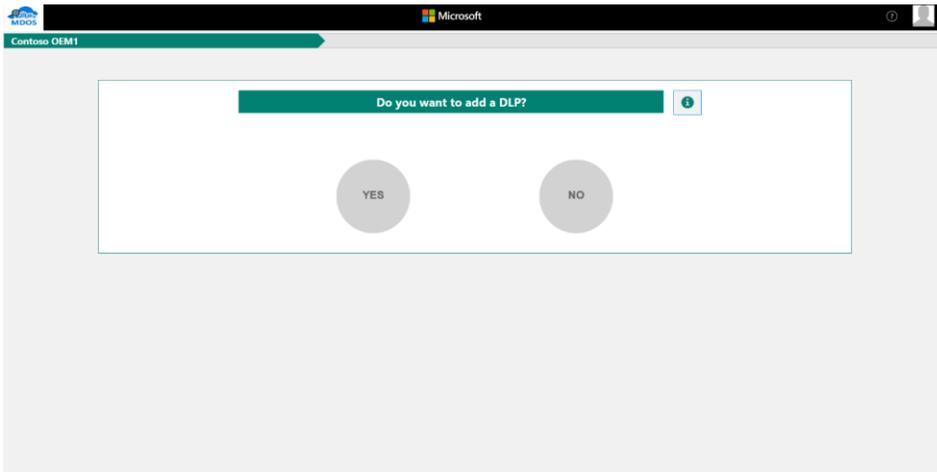
ODM/IDH

The ODM/IDH business model might have a direct ODM/IDH agreement with Microsoft or they may have multiple agreements with Microsoft. An ODM/IDH can have one or multiple OEMs or ULPs as well.

Example : Contoso OEM has a business where they work with down-level partner ABC TPI. Contoso OEM is the up level partner for ABC TPI and Contoso OEM's up level partner is Microsoft.

9. ADD NEW DLP

Determine if you would like to add a new down-level partner (or partners) to the business. New partner(s) will then be able to perform key operations.



MDOS definition of partner types

Acronym	Term	Description
FFKI	Factory Floor Key Inventory	Inventory (FFKI) client on the manufacturing floor. The MDOS FFKI client is a software install that will connect to the MDOS cloud via a secure connection through either a VPN or via the Internet or may be manually transferred (e.g. via USB). The MDOS FFKI client manages the DPKs

		between the MDOS cloud and the physical manufacturing floor. The MDOS FFKI Client will request DPKs from the service and will make those DPKs available for injection into the Windows device being manufactured. The MDOS FFKI client will also capture the Computer Build Report (CBR) required and send that CBR upstream to the Uplevel Partner (ULP), who will relay that to Microsoft directly depending on Centralized or Decentralized business setup.
ODM/ IDH	Original Design Manufacturer/ Independent Design House	An original design manufacturer (ODM) or independent design house (IDH) is hired by an OEM. They are a company that designs and manufactures devices (tablet, PC, etc.) based on requirements specified by the OEM, (such as screen size, processor, memory, performance, etc.). The devices manufactured by the ODM/IDH are rebranded by the OEM. ODM/IDH companies allow the firm that owns or licenses the brand to produce products without having to engage in the design or running of a factory.
OEM	Original Equipment Manufacturer	Original equipment manufacturer (OEM) is a term used when one company makes a part or subsystem that is used in another company's product.
TPI	Third-Party Installer	A manufacturer that is licensed through a TPI agreement to preinstall the Windows operating system onto a computer on behalf of an OEM. TPIs are authorized to use the OA 3.0 Tool. The OEM sends the DPKs to the Factories (usually a Third-Party Installer (TPI) factory).

DLP Definition:

Down Level Partner or Down-level Partner (DLP):

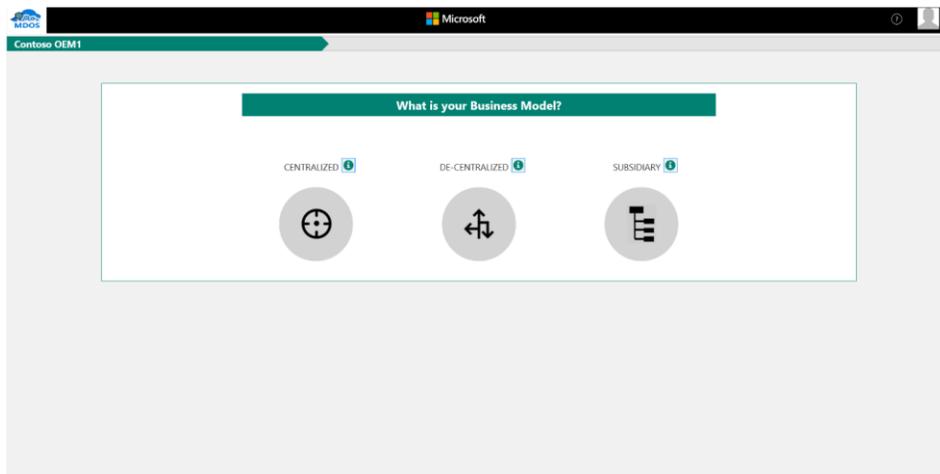
Receives keys from the up level entity. Down level entities can deploy keys to downstream partners, manufacture devices, and/or submit CBR/PHR reports. A Down level partner can be:

- ODM/IDH or TPI in a centralized relationship
- ODM/IDH or TPI in a decentralized relationship
- Factory Floor (FFKI end entity in business)

Example: Contoso OEM has a direct agreement with Microsoft and has three TPIs that they work with. In this supply chain model (business model), Contoso OEM has three down-level partners; Contoso TPI Mexico, ABC TPI, and Contoso TPI China. Contoso OEM is the up level partner for all three TPIs and Contoso OEM's up level partner is Microsoft since they have a direct OEM GPA agreement with Microsoft.

10. SELECT BUSINESS RELATIONSHIP CENTRALIZED OR DECENTRALIZED

Choose the type of relationship you want to setup for your DLP



Centralized Business Model:

- OEM Corporate conducts all transactions with Microsoft directly.
- OEM Corporate places orders, receives DPKs, distributes DPKs to ODM or TPI manufacturing sites.
- OEM /TPI manufactures PC and returns computer build report (CBR) to OEM Corporate.
- OEM Corporate submits CBRs to Microsoft.
- OEM can perform returns.

Example: Centralized Business: Contoso OEM is in a centralized business model with ABC Factory. Contoso OEM has a direct agreement and relationship with Microsoft and a direct agreement and relationship with ABC Factory. Contoso OEM places orders with Microsoft to receive their Digital Product Keys (DPKs) directly and sends the keys to ABC Factory. The factory manufactures the PCs and injects the keys. The Computer Build Reports (CBR) is created by ABC Factory and sent to Contoso OEM, for approval, and submission to Microsoft. Contoso OEM choose this model because they want to be in control of their business and manage their DPK's directly.

Decentralized Business Model

- OEM Corporate creates relationship with Microsoft, but third parties can conduct transactions on behalf of OEM.

- OEM Corporate places blanket orders with Microsoft.
- TPI places call-off orders, receives DPKs from Microsoft, manufactures PCs.
- TPI submits CBR to Microsoft, and a copy to OEM.
- TPI cannot perform returns on behalf of the OEM.

Example: Decentralized Business: OEM ABC is in a decentralized business model with Mexico Factory and China Factory. OEM ABC places Blanket Orders with Microsoft for each factory that will be manufacturing client PCs. The factories receive the keys directly, manufacture the devices, and inject the keys. Both factories create their Computer Build Reports (CBR) and submit the CBRs directly to Microsoft. OEM ABC chose a decentralized model because it has trusted relationship with both factories and does not want to manage any of the daily operations of DPK's. OEM ABC understands their liable for all the operations performed by their factories on their behalf.

Subsidiary:

- A subsidiary, subsidiary company, or daughter company is a company that is owned or controlled by another company, which is called the parent company, parent, or holding company.
- The subsidiary can be a company, corporation, or limited liability company.
- A company can have multiple subsidiaries.
- An example of a subsidiary within MDOS could be an OEM who has offices in different countries; OEM USA, OEM Asia; or a company who has different facilities for different functions; Contoso Design House, Contoso Factory, etc.

Example: Subsidiary: An example of a subsidiary within MDOS could be an OEM who has offices in different countries; OEM USA, OEM Asia; or a company who has different facilities for different functions; Contoso Design House, Contoso Factory, etc.

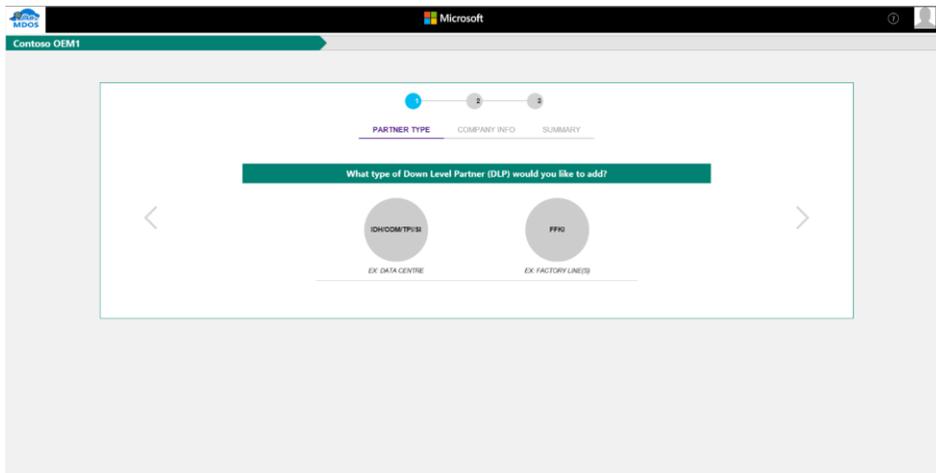
For centralized business, please continue to step 15.

For decentralized business, please continue to step 16.

For subsidiary, please continue to step 17.

11. ADD DLP OR FFKI

Select your centralized DLP factory datacenter or DLP FFKI.



An FFKI partner differs from other DLPs because:

- The FFKI can have a business that runs online or offline. The FFKI is not required to onboard through MDOS web app for initial set up and they would not be required to maintain an online connection with MDOS, while the DLP factory datacenter will always be online.
- The FFKI will receive its credentials via email.
- The FFKI is the only type of partner that can inject the keys into devices and collects CBR information, where the factory datacenters do not inject keys.
- The FFKI can submit the reports to their up level TPI, who then reviews and submits the final CBR to their unlevel OEM partner.
- The FFKI is not able to add any DLPs, where the factory datacenters may add DLPs.
- The FFKI would also receive additional email communications for their business that would contain information based on how they communicate with MDOS.

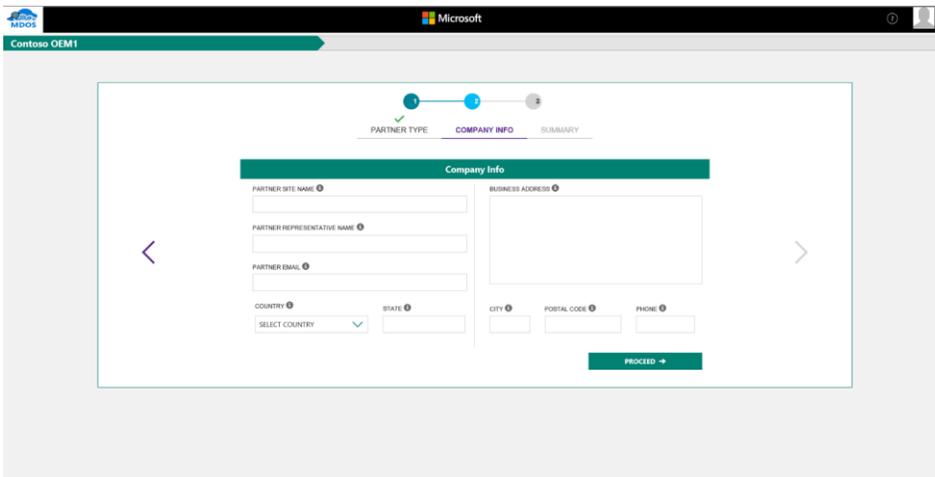
Business setup specific for FFKI

1. FFKI Partner receives invitation from ULP via email.
2. FFKI Partner will receive an email with step-by-step guide.
3. FFKI Partner will receive an email with credentials.
4. FFKI Partner downloads software.
5. FFKI Partner will get set up.
6. FFKI Partner will test.

Example: Contoso OEM owns its own factory, which is called Contoso FFKI. Contoso FFKI is the main site Contoso OEM uses to manufacture their devices. Contoso OEM sets up Contoso FFKI as down-level partners for their business within MDOS. After that, Contoso FFKI receives the credentials it will use to communicate with MDOS to authenticate. Contoso FFKI is run offline,

hence they need to initially onboard through MDOS and follow the initial online set up. Then Contoso FFKI can follow the offline mode steps to receive keys and submit CBR's back to OEM Contoso. Once the CBR is submitted to Contoso OEM, they provide a final review and submit the CBR to Microsoft.

Complete all the required fields for your partner to gain access to MDOS. OEM will fill this out on behalf of the DLP or FFKI.

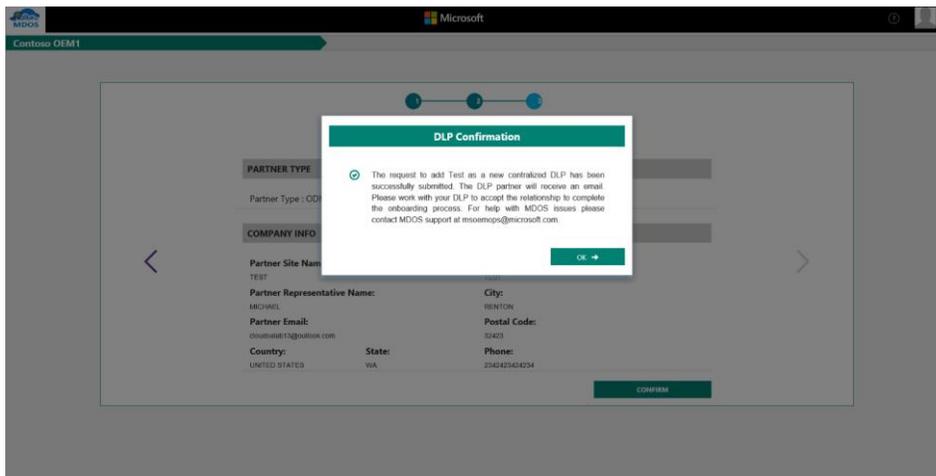


DLP Form Field Explanation

DLP Form

DLP Form Fields	Explanation
DLP Company Name	Down-level partner company name (i.e. Contoso TPI)
DLP Contact Name	Down-level partner User first and last name
DLP Company Email	Down-level partner's corporate email address at authorized site. (ContosoTPI@TPI.com)
DLP Login Email (MSA)	The user's MSA email account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign into Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com,

	name@gmail.com, name@qq.com, name@163.com). <u>Additional information about MSA email accounts.</u> NOTE: IF the TPI is already onboarded to MDOS, please verify that this is the MSA that they registered with.
DLP Address	Street address where DLP company is based
DLP Country	Country where DLP company is based
DLP State	State where DLP company is based
DLP City	City where DLP company is based
DLP Postal Code	Postal code where DLP company is based
DLP Phone	DLP company phone number



DLP Next steps:

1. Have your partner look for the email from MDOS (sent to the partner’s MSA email).
2. Make sure the partner reads the [Onboarding Training Guide](#) for MDOS.
3. Partner should click on the registration link (within the email) to get registered.
4. Ensure your partner fills out the DOC registration form completely.
5. Ensure your partner completes the MDOS setup process.

FFKI Form Field Explanation

DLP FFKI Form:

FFKI (owns factory) Form Fields	Explanation
FFKI Admin Name (first, last)	FFKI contact first and last name
FFKI Admin Email	FFKI contact email address. MDOS sends the connection information to this address.
Login Email (MSA)	The user's MSA email account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign into Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com). Additional information about MSA email accounts.

Next steps for the FFKI:

1. Have your partner download the [Step-by-step Guide](#) on how to set up an FFKI.
2. Have your partner download the [MDOS FFKI Client installation](#) software.
3. Have your partner review all the documentation.
4. Ensure the FFKI has completed the pre-level steps.
5. Have your partner look for the email from MDOS (sent to the partner MSA email) that contains the login credentials.
6. Make sure the partner reads the [FFKI Onboarding Training Guide](#) for MDOS.
7. Make sure the partner reads the [User Manual for MDOS – FFKI Section](#).

Once the DLP or FFKI form is submitted, you will receive a notification within MDOS stating successful submission.

NOTE: This process may take up to ~5-10 min. for final approval and activation.

Note: Move to step 18 to continue MDOS Onboarding.

12.ADD TPI FOR DECENTRALZIED BUSINESS

TPI Form Field Explanation

OA TPI Form Fields	Explanation
TPI/OM Company Name	TPI/OM (Third-Party Installer/Outsource Manufacturer) company name. Downlevel partner company name.
TPI/OM Parent Company	TPI/OM parent company name (if applicable). Previously "Installer Friendly Name".
OEM Company Name	The OEM company name.
TPI/OM Contact Name (First, Last)	TPI/OM contact first and last name
TPI/OM Address	Street address where TPI/OM company is based.
TPI/OM Address 2	Street address (line 2) where TPI/OM company is based
TPI/OM Address 3	Street address (line 3) where TPI/OM company is based
TPI/OM City	City where company is based
TPI/OM State/Province	State/Province where company is based
TPI/OM Postal Code	Postal code where company is based.
TPI/OM Country	Country where company is based.
TPI/OM Contact email	TPI/OM company contact email. This is the email address that receives all Fulfilment, Returns and MBR notifications related to the OEM. This must be unique – Cannot use the same TPI/OM contact e-mail address for multiple TPIs.
OEM Customer Contact Email	OEM contact email. This email address will receive status notifications as the TPI goes through the MS approval process.
OEM MSA email address	OEM's MSA login email address for DOC. This field will be pre-populated.
TPI/ODM MSA email address	The TPI/OM's MSA login account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign in to Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com). Additional information about MSA email accounts.
TPI/OM Phone Number	TPI/OM company telephone number.
TPI/OM Fax Number	TPI/OM company fax number.
Microsoft Account Manager Contact Email	Microsoft Account Manager Contact email
Associated Agreement	(dropdown menu) GPA (Master Licensing Agreement, Embedded GPA, etc....

Customer License Agreement (CLA) number (if applicable)	Customer License Agreement number (if applicable - this is embedded agreement number)
Enable TPI/OM for services	Switch to turn on services for OEM Activation.
Submit Call-Offs	Submit Call-Offs from Blanket Orders and receive DPK Fulfillment from Microsoft
Send CBRs	Send Computer Build Reports (CBRs) to Microsoft
Additional TPI/OM OA Contact Email	Email address for any additional TPI OA 3.0 contact email address. This is the email address that receives all Fulfillment, Returns and MBR notifications related to the OEM
Customer Notes	Customer may add additional notes - up to 300 characters

Next steps:

1. Wait for Anti-piracy (AP) approval for the TPI
2. Once AP is approved, you will be notified by email.
3. MS Operations will set up TPI SAP account. You will be notified when it is complete.
4. TPI will receive an invite to MDOS by email.
5. Have your partner look for the email from MDOS (sent to the partner’s MSA email).
6. Make sure the partner reads the [Onboarding Training Guide](#) for MDOS.
7. Partner should click on the registration link (within the email) to get registered.
8. Ensure your partner fills out the DOC registration form completely.
9. Ensure you partner completes the MDOS setup process.

Once the TPI form is submitted, you will receive a notification within MDOS stating successful submission.

NOTE: This process may take up to ~5-10 min. for final approval and activation.

Note: Move to step 18 to continue MDOS Onboarding.

13.OA ENROLLMENT FORM FOR SUBSIDIARY

Instruction: Complete all the required fields for your partner to gain access to MDOS. OEM will fill this out on behalf of the subsidiary.

OEM 3.0 Details

OEM Company Name:
MEDCS IAT OEM7

OEM Sold to Number:
0000108292

OA 3.0 Contact Email:
oisp_cloudsalab7@outlook.com

Company Admin Email:
oisp_cloudsalab7@outlook.com

License Agreement Type:
OEM PAALY119

License Agreement Number:
5200003369

License Agreement Start Date:
07/22/2019

License Agreement End Date:
12/31/9999

SUBSIDIARY FORM

FIRST NAME*
[]

LAST NAME*
[]

OA 3.0 AUTHORIZED SITE NAME*
HAIER INFORMATION TECHNOLOGY(SUZHOUL) CO. LTD.

OA COMPANY ADMINISTRATIVE EMAIL*
oisp_cloudsalab7@outlook.com

OA 3.0 AUTHORIZED SITE CONTACT NAME*
[]

OA CONTACT EMAIL*
[]

OA 3.0 AUTHORIZED SITE ADDRESS1*
NO. 1 HAIER ROAD, LAOSHAN DISTRICT

CUSTOMER CONTACT EMAIL*
[]

OA 3.0 AUTHORIZED SITE ADDRESS2:
[]

MDS LOGIN EMAIL*
[]

OA 3.0 AUTHORIZED SITE NAME*
HAIER INFORMATION TECHNOLOGY(SUZHOUL) CO. LTD.

OA COMPANY ADMINISTRATIVE EMAIL*
oisp_cloudsalab7@outlook.com

OA 3.0 AUTHORIZED SITE CONTACT NAME*
[]

OA CONTACT EMAIL*
[]

OA 3.0 AUTHORIZED SITE ADDRESS1*
NO. 1 HAIER ROAD, LAOSHAN DISTRICT

CUSTOMER CONTACT EMAIL*
[]

OA 3.0 AUTHORIZED SITE ADDRESS2:
[]

MDS LOGIN EMAIL*
[]

TELEPHONE*
[]

CITY*
QINGDAO

OA 3.0 TRANSACTION TYPE ⓘ
FULL

COUNTRY AND REGION ⓘ
FITCAIRN ISLANDS

PROCEED →

Subsidiary Form Field Explanation

Subsidiary Form:

Subsidiary Form Fields	Explanation
OEM Company Name	This section would be auto-populated with OEM information and disabled.
OEM Sold-to Number	
License Agreement Number	
License Agreement Expiration	
License Agreement Type	
OA 3.0 Contact Email	
Company Admin	
Admin Email	

Country	
OEM 3.0 Authorized Site Name	OEM 3.0 Authorized Site Name, i.e. subsidiary site
OEM 3.0 Authorized Site Contact Name	Subsidiary company representative first and last name
OEM 3.0 Authorized Site Email Address	Subsidiary corporate email address of user at authorized site
Login email address (MSA)	The user's MSA email account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign in to Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com). Additional information about MSA email accounts.
Transaction Type	Select radio button for Full capabilities or Partial capabilities. FULL: This DOC Account requires full capabilities: <ul style="list-style-type: none"> • Submit Standard and Blanket Orders, Call-off Orders and receive Fulfillment, and/or • Submit Returns via B2B, and/or • Send Computer Build Reports (CBRs) PARTIAL: This DOC Account requires partial capabilities: <ul style="list-style-type: none"> • Submit Call-off Orders and receive Fulfillment, • Send Computer Build Reports (CBRs)

Next steps:

1. Make sure the subsidiary reads the [Onboarding Training Guide](#) for MDOS.
2. MDOS will request the subsidiary set up with the Microsoft LRM (Licensing & Revenue Management) team.
3. Once subsidiary is approved by LRM, the OEM and subsidiary will be notified.
4. Have your subsidiary look for the email from MDOS. (Sent to the partner's MSA email).
5. Subsidiary should click on the registration link (within the email) to get registered.
6. Ensure your subsidiary fills out the DOC registration form completely.
7. Ensure you subsidiary completes the MDOS setup process.

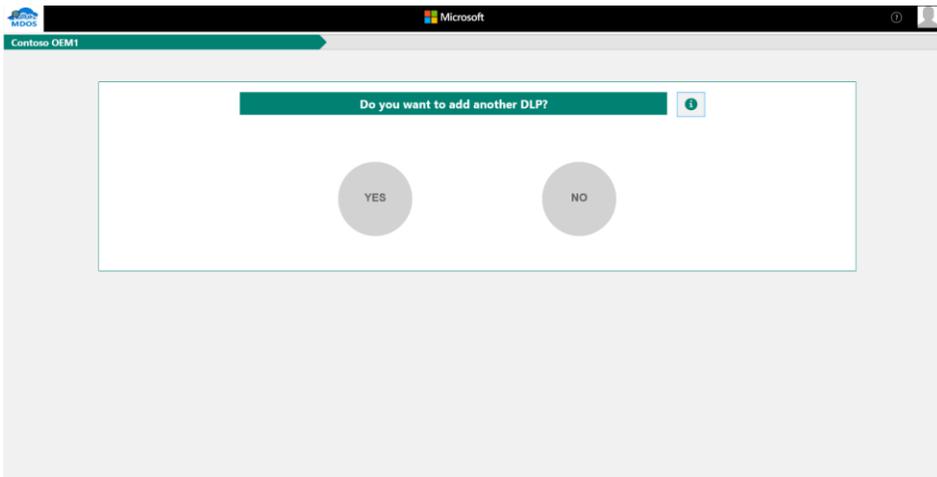
Once the subsidiary form is submitted, you will receive a notification within MDOS stating successful submission.

NOTE: This process may take up to ~2-3 days for final approval and activation.

Note: Move to step 18 to continue MDOS Onboarding.

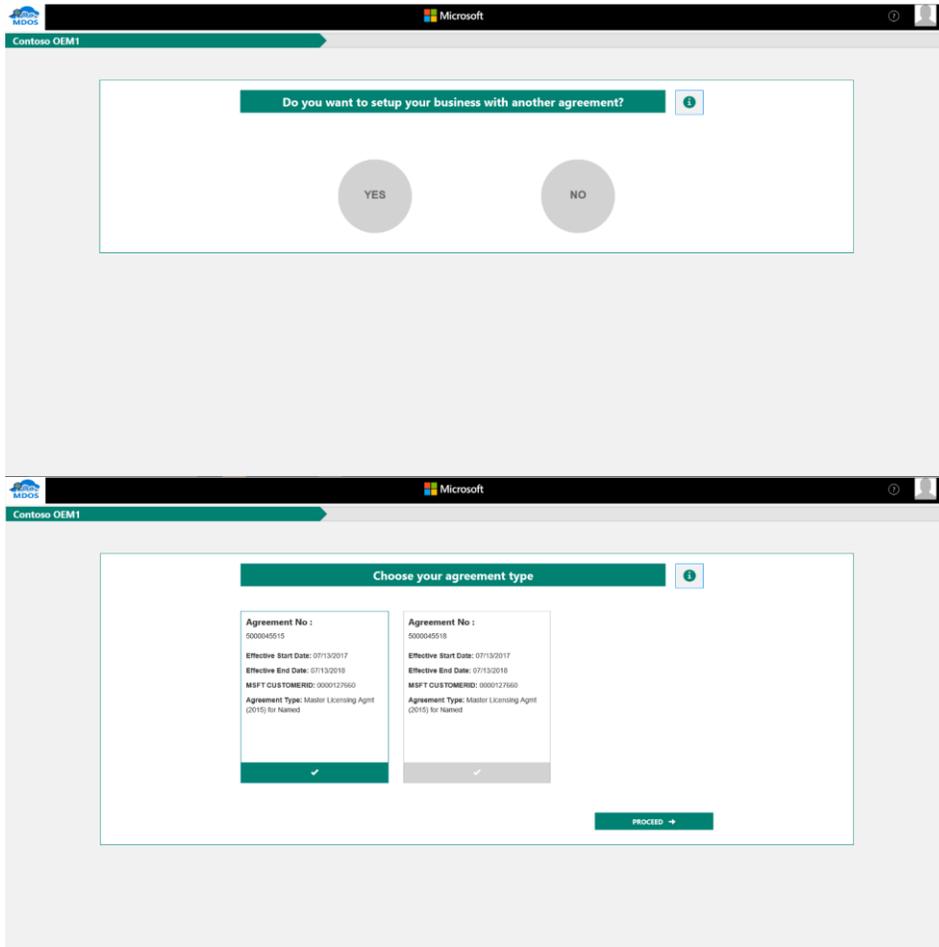
14. ADD ANOTHER DLP

Determine if you would like to add an additional down-level partner (or partners) to the account during set up. You can add additional DPLs at any time.



15. SETUP ANOTHER AGREEMENT

Add another agreement to your business. Each business model must be set up separately, even if the same DLP is begin used.



Why each business needs its DLP's set up?

An OEM or IDH may have multiple Down-level partners (DLPs) that they work with. If an IDH uses the same factory DLP, for two different OEMs, the IDH must set up the factory for both businesses separately.

Example: Contoso IDH has three factories that they work with (Mexico FFKI, China FFKI, and Taiwan FFKI) and has two OEMs that they work with (ABC OEM and XYZ OEM). ABC OEM has a large demand, so it uses all three factories for their manufacturing. Contoso IDH sets up all

three factories under the ABC OEM business model in MDOS. XYZ OEM has a smaller demand for manufacturing, so Contoso IDH only use two factories for production, China FFKI and Taiwan FFKI. Contoso IDH needs to set up China FFKI and Taiwan FFKI as separate business under the XYZ OEM business model in MDOS.

16. ADD AN AUTHORIZED USER

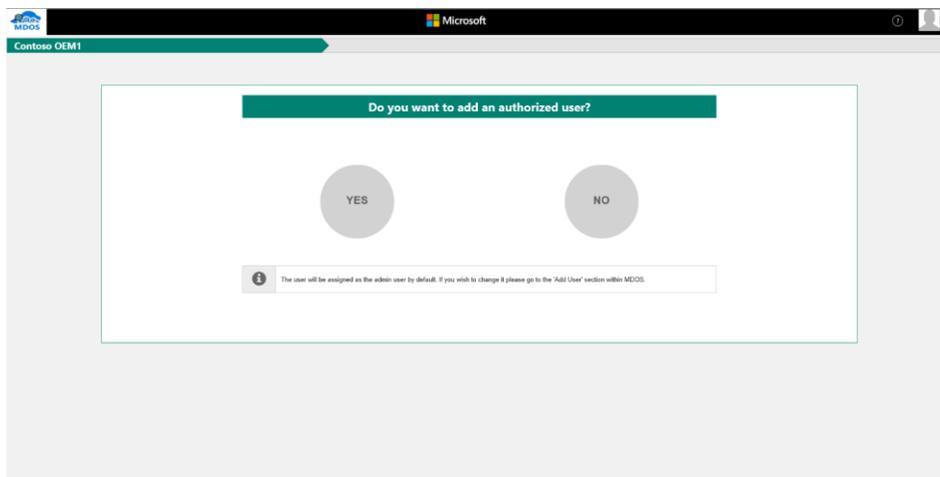
Add an authorized user connected to your MDOS account. Microsoft recommends adding at least two authorized admin users to support the business, if for some reason the primary contact can not access MDOS.

What is an Authorized User?

An authorized user will have permissions to access MDOS and perform key actions or read-only access. Access and permissions must be set by the company administrator (admin).

The Admin section in MDOS provides a view of all your authorized user accounts and lets you manage users connected to your account from this dashboard. From the Admin page, under CREATE USERS; you can add, remove, or edit current users. You can also edit user permissions from this section.

Example: Contoso IDH hired a new purchasing manager and wants to add him as new authorized user in MDOS. The Admin signs into MDOS and clicks on the Admin icon in the top navigation bar to see existing users. From there, the admin clicks on the plus (+) button to add the new user, enters the user's email address, and sets the roles/permissions to "View Admin" with ordering permissions. The user receives an email with instructions on how to onboard to MDOS.



17. USER INTAKE FORM

Fill out the form to add an authorized user.

User Intake Form Field Explanation

User Intake Form:

User Intake Form Fields	Explanation
First Name	User first name
Last Name	User last name
Login Email (MSA)	The user’s MSA email account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign in to Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com). <u>Additional information about MSA email accounts.</u>
State	State where company is based
City	City where company is based
Permissions	MDOS permissions that were set by company admin.

Once the form is submitted, you will receive a notification within MDOS stating successful submission.

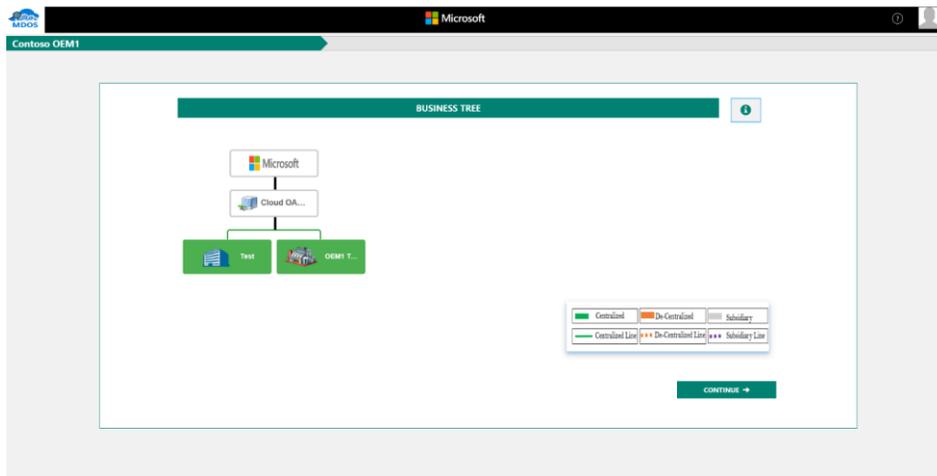
Next steps:

1. Have your authorized user look for the email from MDOS. (Sent to the user's MSA email).
2. Make sure the user reads the [User Manual](#) for MDOS.
3. User should click on the registration link (within the email) to get registered.
4. Ensure your user fills out the New User registration form completely.
5. Add an additional authorized user by completing the submission form again

NOTE: This process may take up to ~5-10 min. for final approval and activation for this user.

18. DISPLAY BUSINESS SETUP TREES

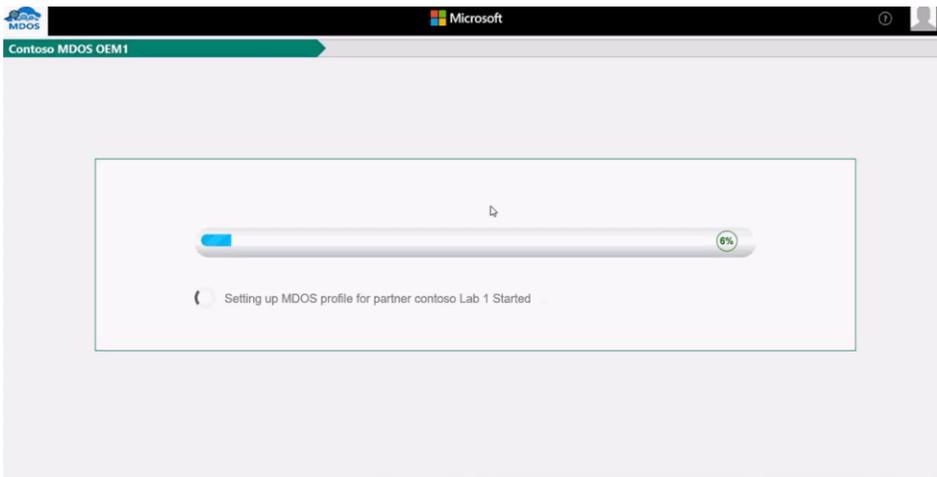
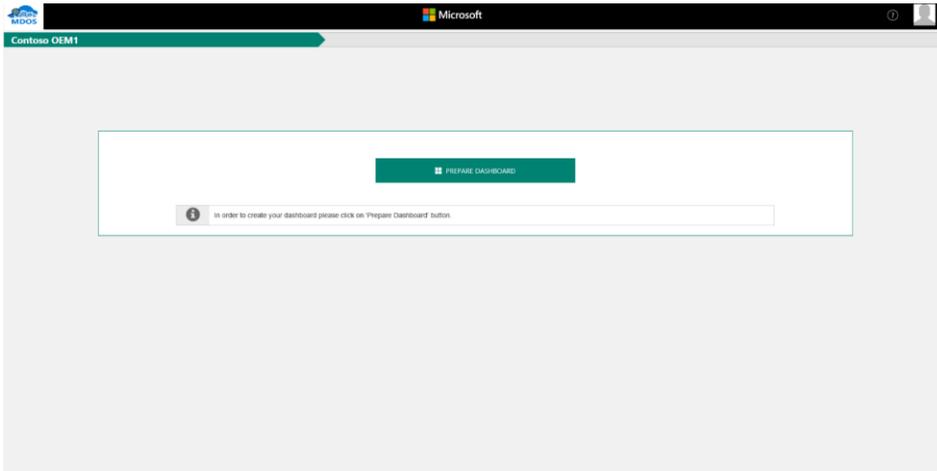
Review your current business setup for accuracy and edit if necessary.



Business definition:

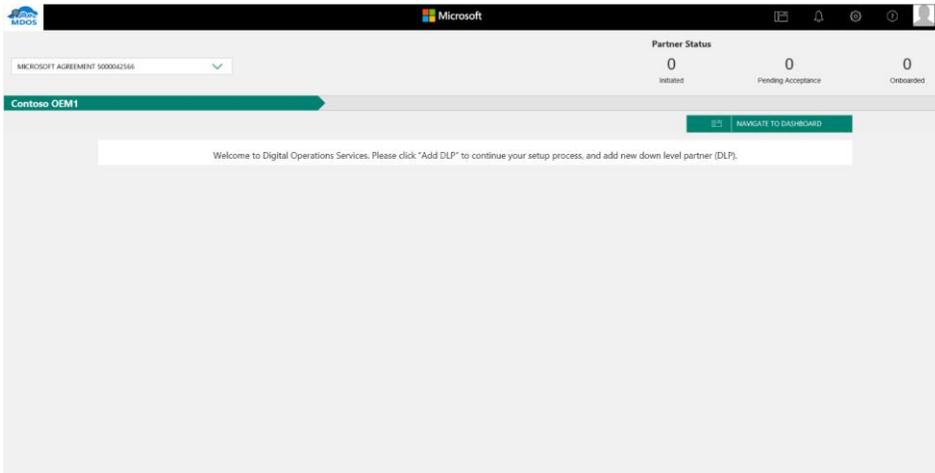
19. WAIT SCREEN WHILE DASHBOARD IS CREATED

Please stand by while your account is being created in MDOS.



Your account is being set up MDOS. Soon you will have access to the cloud-based digital key distribution and entitlement service for Microsoft partners.

NOTE: This process may take a few minutes. Please do not close this window or refresh your browser.



20. DISABLE/ DELETE DLP

Instruction: This functionality will help to delete or disable the DLP from the list of added IDH/TPI/FFKI/FKI. Up level partner can disable/delete the DLP only when there is no DLP under them and they don't have any keys assigned to them.

Example: Contoso OEM is no longer doing business with ABC Design House and wants to remove it as a down level partner. From the Partner Information page, they select "Disable" for ABC Design House. After successfully disabling the partner permissions, the status next to the partner name changes to "Disabled". Contoso sees the action button for ABC Design House change to ENABLE, so they may easily re-enable the partner at any time if desired.

In case partner do not need that DLP in future, they can remove it from list of added DLPs.

To Delete DLP, you need to select partner by clicking on radio button and then click on delete option. A confirmation message box will pop out. After clicking confirm button, selected DLP will be removed from the list.

From manage business dashboard, up level partner can delete or disable their down level partner.

DISABLE DLP:

1. From manage business dashboard, select the partner by clicking on radio button that need to be disabled.

Microsoft Digital Operations Services User Manual

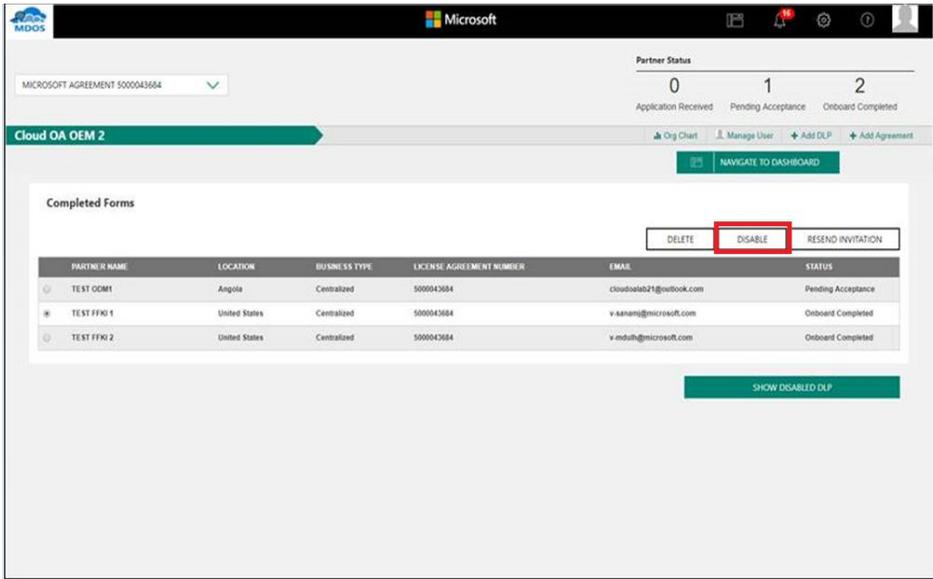
The screenshot displays the Microsoft Digital Operations Services (MDOS) interface. At the top, there is a navigation bar with the Microsoft logo and a search bar containing 'MICROSOFT AGREEMENT 500043684'. Below this, a 'Partner Status' section shows a progress bar with three stages: '0 Application Received', '1 Pending Acceptance', and '2 Onboard Completed'. A 'Cloud OA OEM 2' banner is visible, along with buttons for 'Org Chart', 'Manage User', 'Add DLP', and 'Add Agreement'. A 'NAVIGATE TO DASHBOARD' button is also present.

The main content area is titled 'Completed Forms' and contains a table with the following data:

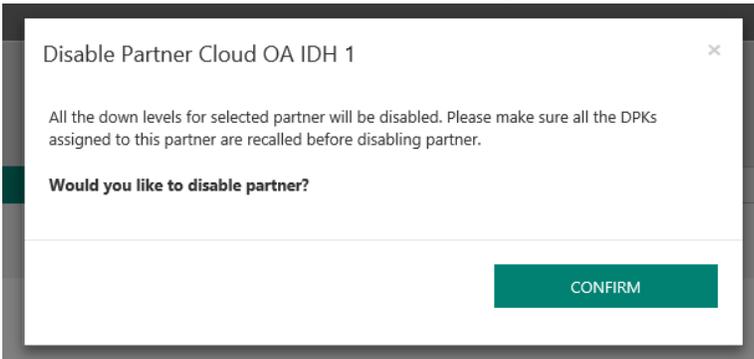
PARTNER NAME	LOCATION	BUSINESS TYPE	LICENSE AGREEMENT NUMBER	EMAIL	STATUS
TEST COM1	Angola	Centralized	500043684	cloudtest21@outlook.com	Pending Acceptance
TEST FPK1	United States	Centralized	500043684	v.sanjam@microsoft.com	Onboard Completed
TEST FPK2	United States	Centralized	500043684	v.mduh@microsoft.com	Onboard Completed

Buttons for 'DELETE', 'DISABLE', and 'RESEND INVITATION' are located above the table. A 'SHOW DISABLED DLP' button is located below the table.

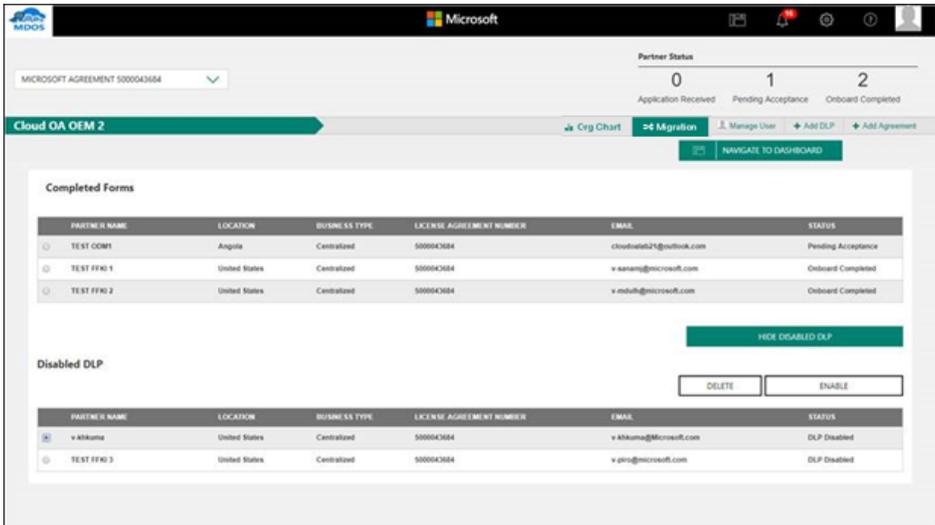
2. Click on disable button.



3. A confirmation window will open to confirm your selection. Click CONFIRM, the request will be processed and the partner will be notified through alert.



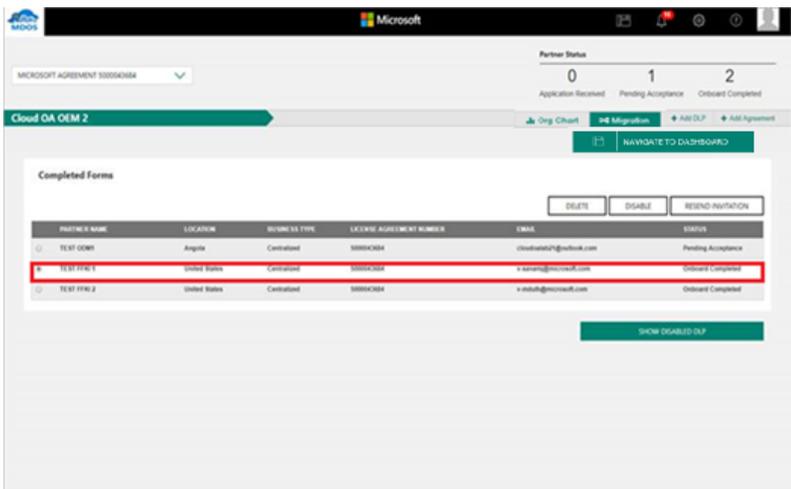
4. Once the partner has been disabled successfully, the disabled partner will be moved to 'Disabled DLP' section, the status of the partner will change to "Disabled".



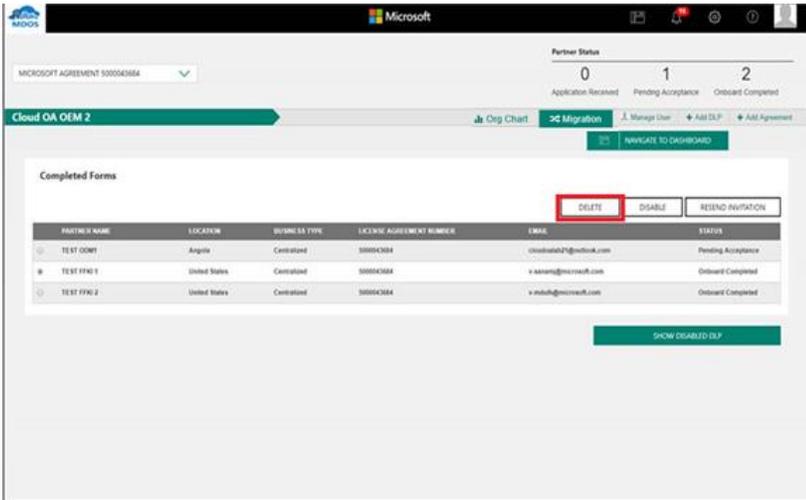
5. To re enable the partner, you need to select the disabled partner from the Disabled DLP list and then click on enable button.

DELETE DLP:

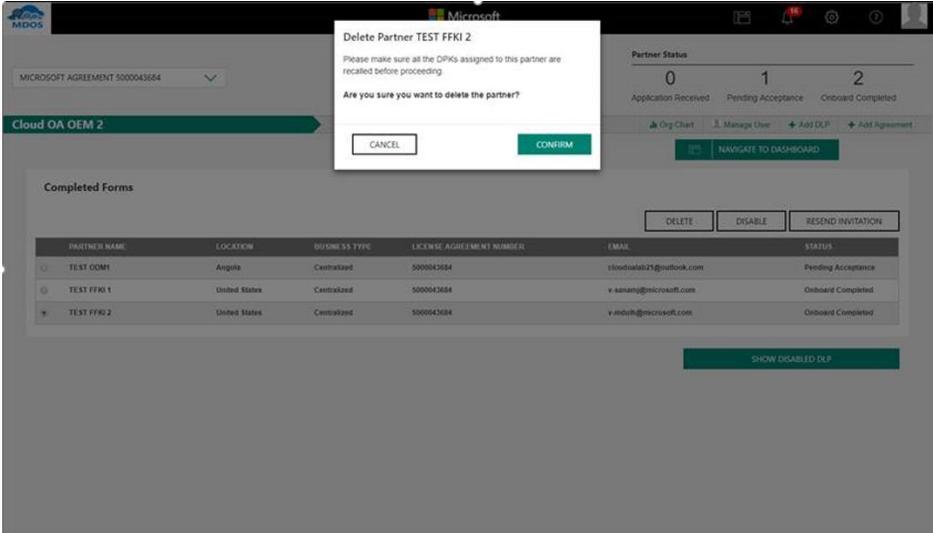
1. From manage business dashboard, select the partner by clicking on radio button that need to be disabled.



2. Click on Delete button.



3. A confirmation window will open to confirm your selection. Click CONFIRM, the request to delete the DLP will be processed.

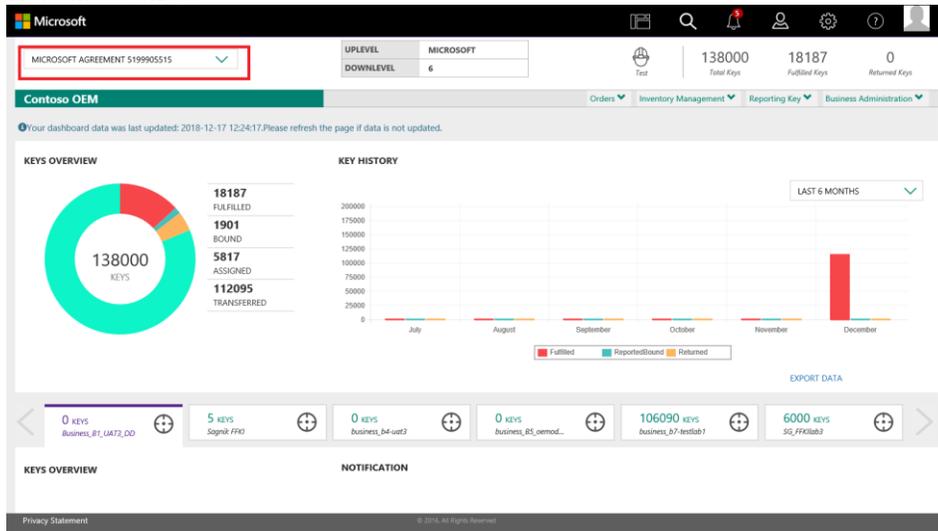


4. Once the request is processed successfully, the partner will be notified with an alert message and the DLP partner will not be visible.

21. MDOS DASHBOARD

Please review the readiness materials for MDOS.

Welcome to MDOS



Helpful Information:

Refer to the [MDOS FAQ](#) for quick answers to common questions

22. MDOS SUPPORT (MSOEMOPS@MICROSOFT.COM)

For support on how to use MDOS, or for any technical queries, please contact: msoemops@microsoft.com

To download documents use this [URL](#)

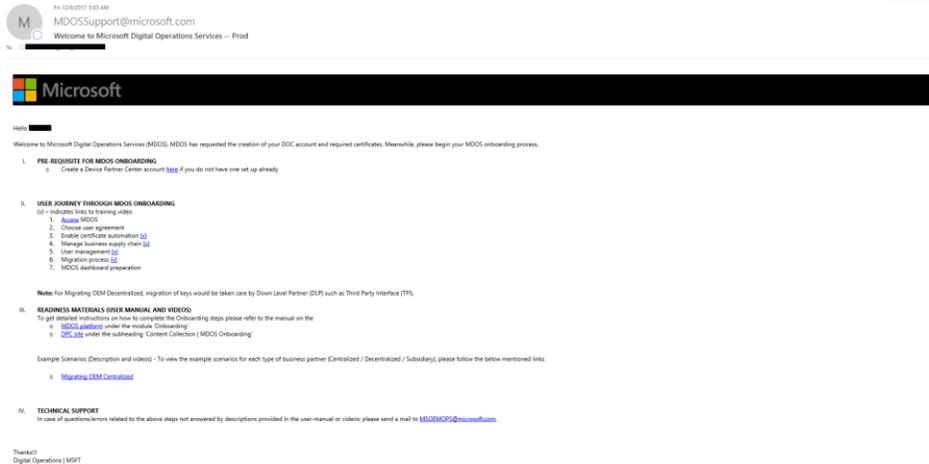
STEPS FOR ONBOARDING - NEW TPI CENTRALIZED

These steps apply to the following persona: New TPI Centralized

1. RECEIVE EMAIL INVITATION TO JOIN MDOS

You will receive an email invitation to join MDOS via the MSA email account provided to OEM.

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2. ACTIVATING DOC ACCOUNT

You will receive an email to join MDOS via the MSA email account provided to the GPO.

STEP 1: Find your sign-in PIN (Personal Identification Number). After this welcome email, you will receive an additional email containing a first-time sign-in PIN. Please make note of the PIN; it is a six-digit number.

Important information regarding your new Microsoft DOC account



STEP 2: Select your preferred sign-in method. The Digital Operations Center supports several types of sign-in methods: depending on your user account type. You may select any qualifying account of your choice or create a new one.

STEP 3: Sign in for the first time. Supported sign-in credentials Windows Live ID Microsoft Corp Net with the information from Steps 2 and I, You are ready to sign in to DOC by clicking www.microsoftoem.com where you will be asked to select a preferred sign-in method. After making your selection, you will be directed to the sign-in page.

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STEP 4: Enter your PIN. Once you have successfully signed in, you will be asked to provide the PIN number obtained in Step 1. After entering PIN, you will be taken to the Home Page. The invitation mail will provide you the detailed step (as per below screen).

Subject: Welcome to the Microsoft Digital Operations Center

Welcome to the Microsoft Digital Operations Center (DOC)!

Your new DOC account has been created. To begin using DOC applications, you will need to complete the following five steps the first time you sign in.

STEP 1 – Find your sign-in PIN (Personal Identification Number).
After this welcome email, you will receive an additional email containing a first time sign-in PIN. Please make note of the PIN; it is a six-digit number.

STEP 2 – Select your preferred sign-in method.
The Digital Operations Center supports several types of sign-in methods, depending on your user account type. You may select any qualifying account of your choice or create a new one. Please note that your company may have policy guidelines regarding this account selection.

User Account Type	Supported sign-in credentials	
Microsoft Partner Extranet <i>yourdomain\userid</i>	Windows Live ID	Microsoft CorpNet
External customer (OEM, Distributor, etc.)	✓	✓
External partner (AR, SPV, etc.)	✓	✓
Internal Microsoft employee or vendor		

STEP 3 – Sign in for the first time.
With the information from Steps 1 and 2, you are ready to sign in to DOC by clicking the following link: [<first time sign-in link>](#). You will be asked to select a preferred sign-in method. After making your selection, you will be directed to the sign-in page.

STEP 4 – Enter your PIN.
Once you have successfully signed in, you will be asked to provide the PIN number obtained in Step 1. After entering your PIN, you will be taken to the Home Page.

STEP 5 – Browser Configuration.
After you have successfully completed your first-time login, please follow the steps outlined in Section 1 of our "About DOC" guide to ensure DOC runs smoothly within Internet Explorer: [About DOC](#). You are now ready to start using the Microsoft Digital Operations Center!

Note: *Your account must be activated within 30 days of receipt of this email, otherwise your account will be suspended.*

Note: *If your account is suspended or if your account becomes locked after three unsuccessful sign-in attempts, please contact your Company Administrator. The Company Administrator is a designated person within your organization defined in your Microsoft agreement.*

To learn more about the functionality of various applications within DOC, click here: [About DOC](#)

Thank you,
Microsoft DOC Support Team

If you have received this email in error, please notify us using the following link: [<Digital Operations Center Portal Helpdesk link>](#)

If you have any difficulties with the first time sign-in or using DOC, please contact your Company Administrator or click here: [<Digital Operations Center Portal Helpdesk link>](#)

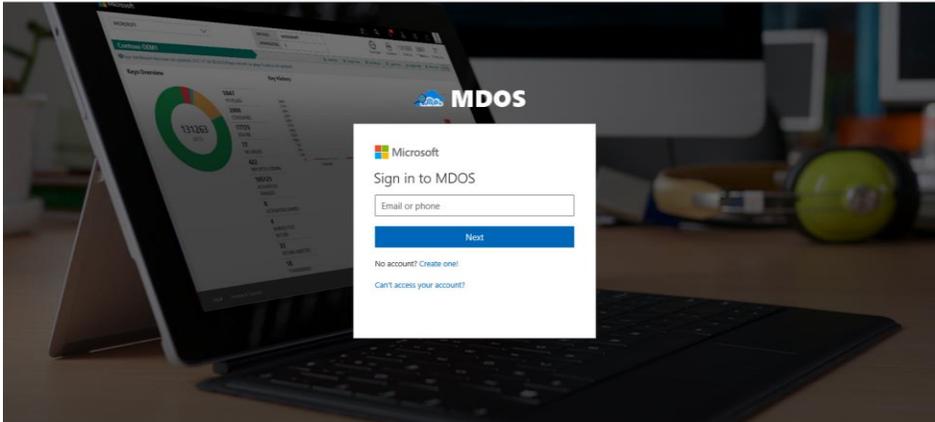
[Privacy Statement](#)

Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

PLEASE DO NOT REPLY TO THIS E-MAIL, AS IT IS AN UNMONITORED ALIAS.

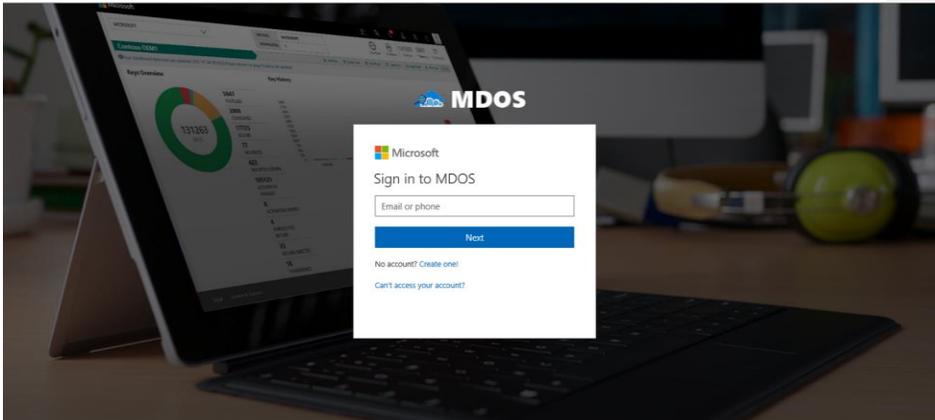
3. GO TO MDOS

Go to MDOS by typing www.digitaloperations.oa.microsoft.com in your browser.



4. LOG IN TO ACCOUNT

Log in using the MSA email account credentials you provided to your COM.

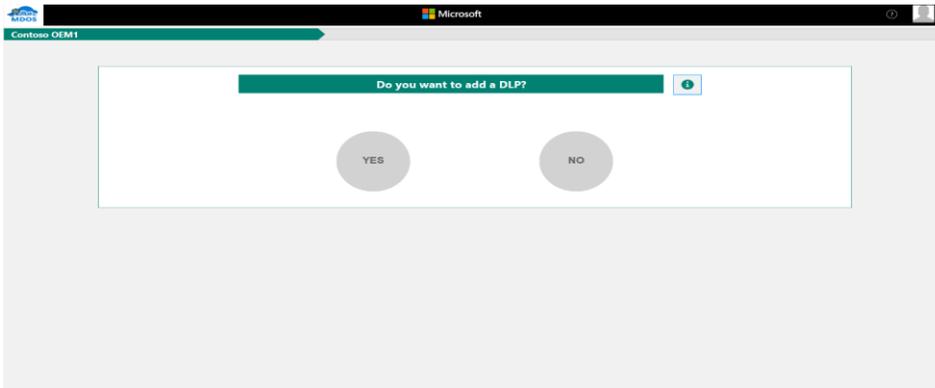


5. FOLLOW ONBOARDING STEPS

Follow the MDOS onboarding process steps.

6. ADD NEW DLP

Instruction: Determine if you would like to add a new downlevel partner (or partners) to the business. New partner(s) will then be able to perform key operations.



MDOS definition of partner types

Acronym	Term	Description
FFKI	Factory Floor Key Inventory	Inventory (FFKI) client on the manufacturing floor. The MDOS FFKI client is a software install that will connect to the MDOS cloud via a secure connection through either a VPN or via the Internet or may be manually transferred (e.g. via USB). The MDOS FFKI client manages the DPKs between the MDOS cloud and the physical manufacturing floor. The MDOS FFKI Client will request DPKs from the service and will make those DPKs available for injection into the Windows device being manufactured. The MDOS FFKI client will also capture the Computer Build Report (CBR) required and send that CBR upstream to the Uplevel Partner (ULP), who will relay that to Microsoft directly depending on Centralized or Decentralized business setup.
ODM/ IDH	Original Design Manufacturer/ Independent Design House	An original design manufacturer (ODM) or independent design house (IDH) is hired by an OEM. They are a company that designs and manufactures devices (tablet, PC, etc.) based on requirements specified by the OEM, (such as screen size, processor, memory, performance, etc.). The devices manufactured by the ODM/IDH are rebranded by the OEM. ODM/IDH companies allow the firm that owns or licenses the brand to produce products without having to engage in the design or running of a factory.
OEM	Original Equipment Manufacturer	Original equipment manufacturer (OEM) is a term used when one company makes a part or subsystem that is used in another company's product.

TPI	Third-Party Installer	A manufacturer that is licensed through a TPI agreement to preinstall the Windows operating system onto a computer on behalf of an OEM. TPIs are authorized to use the OA 3.0 Tool. The OEM sends the DPKs to the Factories (usually a Third-Party Installer (TPI) factory).
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DLP Definition:

Down Level Partner or Downlevel Partner (DLP):

Is the entity that receives keys from the uplevel entity. Down level entities can deploy keys to downstream partners, manufacture devices, and/or submit CBR/PHR reports. A Down level partner can be:

- ODM/IDH or TPI in a centralized relationship
- ODM/IDH or TPI in a decentralized relationship
- Factory Floor (FFKI end entity in business)

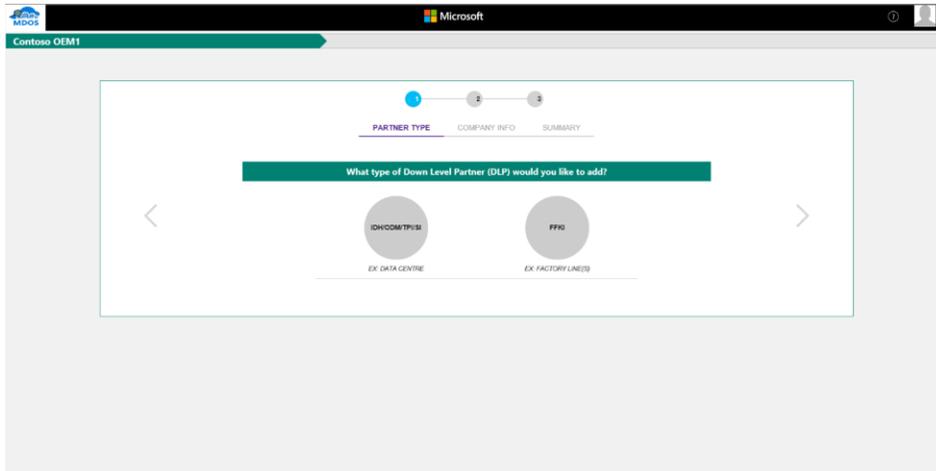
Example: Contoso OEM has a direct agreement with Microsoft and has three TPIs that they work with. In this supply chain model (business model), Contoso OEM has three downlevel partners; Contoso TPI Mexico, ABC TPI, and Contoso TPI China. Contoso OEM is the uplevel partner for all three TPIs and Contoso OEM's uplevel partner is Microsoft since they have a direct OEM GPA agreement with Microsoft.

Tip Tool: Once the business is established, a new downlevel partner (or partners) can be added to the business. New partner(s) will then be able to perform key operations.

Step-by-step: (Add a new DLP)

7. ADD DLP OR FFKI

Instruction: Select your centralized DLP factory datacenter or DLP FFKI.



Difference between centralized DLP factory datacenter & DLP FFKI

An FFKI partner differs from other factory datacenter partners because:

- The FFKI can have a business that runs online or offline. The FFKI is not required to onboard through MDOS web app for initial set up and they would not be required to maintain an online connection with MDOS, while the DLP factory datacenter will always be online.
- The FFKI will receive its credentials vis email.
- The FFKI is the only type of partner that can inject the keys into devices and collects CBR information, where the factory datacenters do not inject keys.
- The FFKI can submit the reports to their uplevel TPI, who then reviews and submits the final CBR to their uplevel OEM partner.
- The FFKI is not able to add any DLPs, where the factory datacenters may add DLPs.
- The FFKI would also receive additional email communications for their business that would contain information based on how they communicate with MDOS.

Business setup specific for FFKI

1. FFKI Partner receives invitation from ULP via email.
2. FFKI Partner will receive an email with step-by-step guide.
3. FFKI Partner will receive an email with credentials.
4. FFKI Partner downloads software.
5. FFKI Partner will get set up.
6. FFKI Partner will test.

Example: Contoso OEM owns its own factory, which is called Contoso FFKI. Contoso FFKI is the main site Contoso OEM uses to manufacture their devices. Contoso OEM sets up Contoso FFKI as downlevel partners for their business within MDOS. After that, Contoso FFKI receives the

credentials it will use to communicate with MDOS to authenticate. Contoso FFKI is run offline, hence they need to initially onboard through MDOS and follow the initial online set up. Then Contoso FFKI can follow the offline mode steps to receive keys and submit CBR's back to OEM Contoso. Once the CBR is submitted to Contoso OEM, they provide a final review and submit the CBR to Microsoft.

8. FILL DLP FORM

Instruction: Complete all the required fields for your partner to gain access to MDOS. OEM will fill this out on behalf of the DLP.

DLP Form Field Explanation

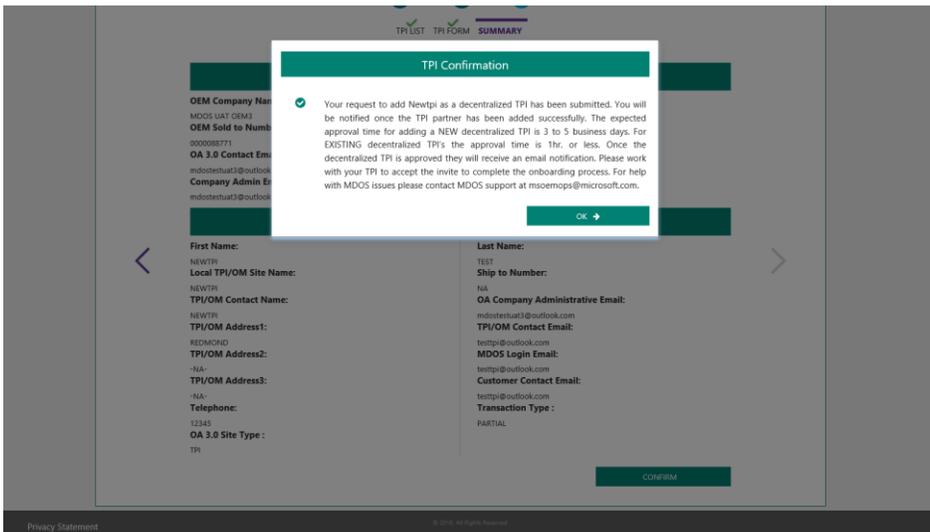
DLP Form

DLP Form Fields	Explanation
DLP Company Name	Downlevel partner company name (i.e. Contoso TPI)
DLP Contact Name	Downlevel partner User first and last name
DLP Company Email	Downlevel partner's corporate email address at authorized site. (ContosoTPI@TPI.com)
DLP Login Email (MSA)	The user's MSA email account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign in to Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is

	registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com). <u>Additional information about MSA email accounts.</u> NOTE: IF the TPI is already onboarded to MDOS, please verify that this is the MSA that they registered with.
DLP Address	Street address where DLP company is based
DLP Country	Country where DLP company is based
DLP State	State where DLP company is based
DLP City	City where DLP company is based
DLP Postal Code	Postal code where DLP company is based
DLP Phone	DLP company phone number

9. SUCCESS MESSAGE FOR NEW DLP

Instruction: Your request was successfully received for submitting a new downlevel partner (DLP). Please ensure the partner follows their next steps to complete the setup process.



Congratulations!

Your request was successfully received for submitting a new downlevel partner (DLP).

Please follow the next steps carefully to ensure your setup is completed. Once setup is complete you may onboard into the MDOS tool and begin using it for your product key management.

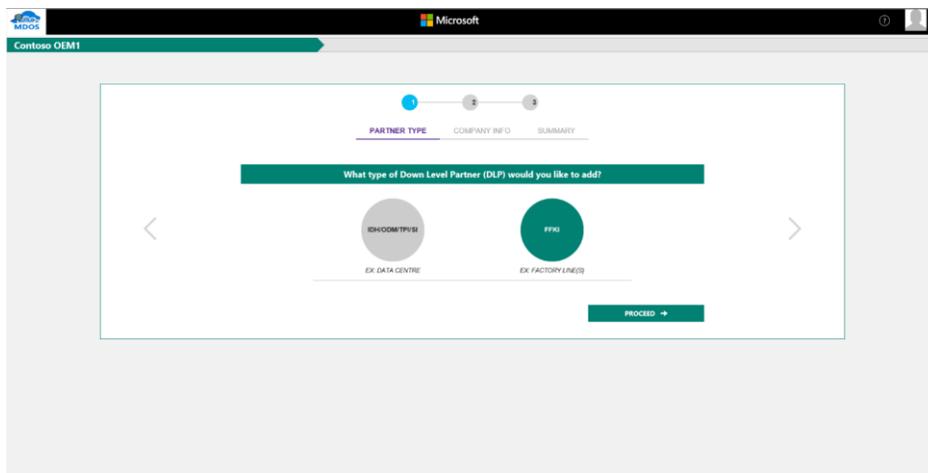
Next steps:

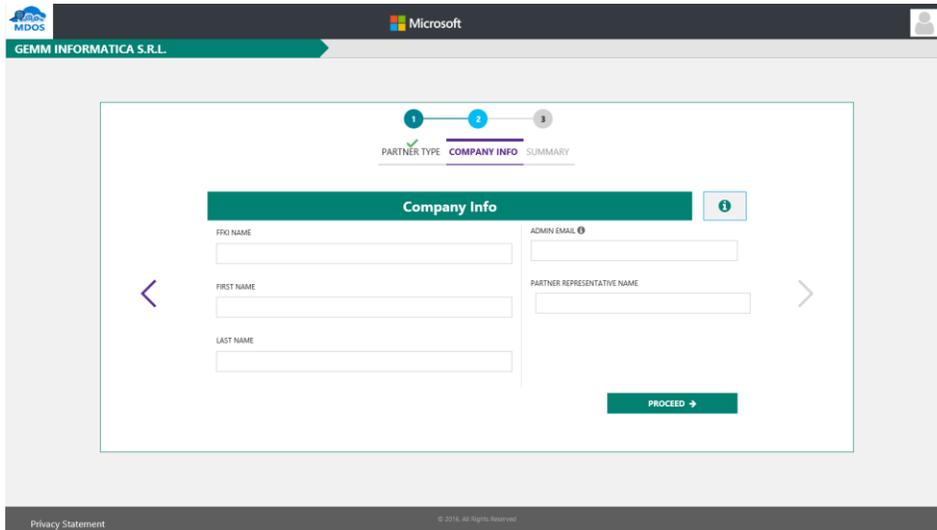
1. Have your partner look for the email from MDOS (sent to the partner’s MSA email).
2. Make sure the partner reads the [Onboarding Training Guide](#) for MDOS.
3. Partner should click on the registration link (within the email) to get registered.
4. Ensure your partner fills out the DOC registration form completely.
5. Ensure you partner completes the MDOS setup process.

NOTE: This process may take up to ~5-10 min. for final approval and activation.

10. FILL FFKI FORM

Instruction: Complete all the required fields for your partner to gain access to MDOS. OEM will fill this out on behalf of the FFKI.





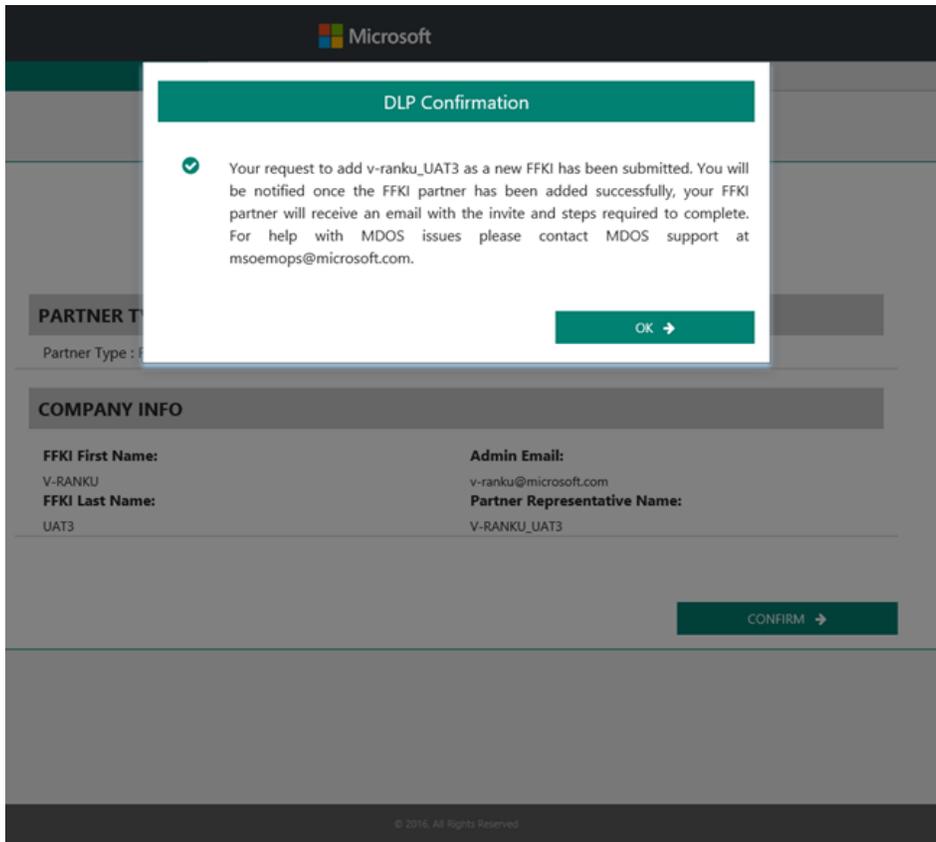
FFKI Form Field Explanation

DLP FFKI Form:

FFKI (owns factory) Form Fields	Explanation
FFKI Admin Name (first, last)	FFKI contact first and last name
FFKI Admin Email	FFKI contact email address. MDOS sends the connection information to this address.
Login Email (MSA)	The user's MSA email account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign in to Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com). Additional information about MSA email accounts.

11. SUCCESS MESSAGE FOR NEW FFKI

Instruction: Your request was successfully received for submitting a new Factory Floor Key Inventory (FFKI). Please ensure the partner follows their next steps to complete the setup process.



Congratulations!

Your request was successfully received for submitting a new Factory Floor Key Inventory (FFKI).

Please follow the next steps carefully to ensure your setup is completed. Once setup is complete you may onboard into the MDOS tool and begin using it for your product key management.

Next steps for the FFKI:

1. Have your partner download the [Step-by-step Guide](#) on how to set up an FFKI.
2. Have your partner download the [MDOS FFKI Client installation](#) software.

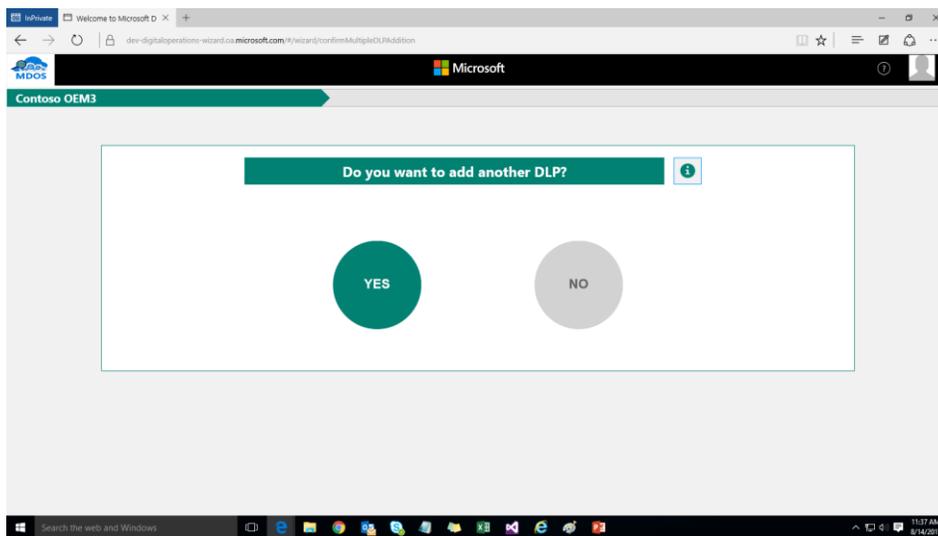
Microsoft Digital Operations Services User Manual

3. Have your partner review all the documentation.
4. Ensure the FFKI has completed the pre-level steps.
5. Have your partner look for the email from MDOS (sent to the partner MSA email) that contains the login credentials.
6. Make sure the partner reads the [FFKI Onboarding Training Guide](#) for MDOS.
7. Make sure the partner reads the [User Manual for MDOS – FFKI Section](#).

NOTE: This process may take up to ~5-10 min. for final approval and activation.

12. ADD ANOTHER DLP

Instruction: Determine if you would like to add an additional downlevel partner (or partners) to the account. New partner(s) will then be able to perform key operations.



DLP Definition:

Down Level Partner or Downlevel Partner (DLP):

A DLP is the entity that receives keys from the uplevel entity. Down level entities can deploy keys to downstream partners, manufacture devices, and/or submit CBR/PHR reports. A Down level partner can be:

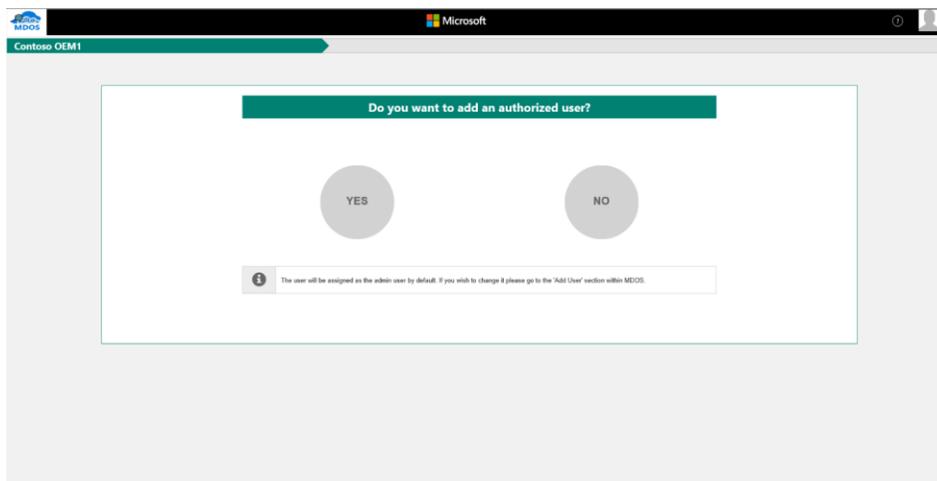
- ODM/IDH or TPI in a centralized relationship
- ODM/IDH or TPI in a decentralized relationship
- Factory Floor (FFKI end entity in business)

Example: Contoso OEM has a direct agreement with Microsoft and has three TPIs that they work with. In this supply chain model Contoso OEM has three downlevel partners; Contoso TPI Mexico, ABC TPI, and Contoso TPI China. Contoso OEM is the uplevel partner for all three TPIs and Contoso OEM's uplevel partner is Microsoft since they have a direct agreement with Microsoft.

Tip Tool: Once the business is established, a new downlevel partner (or partners) can be added to the account. New partner(s) will then be able to perform key operations.

13. ADD AN AUTHORIZED USER

Instruction: Add an authorized user connected to your MDOS account. An authorized user will have permissions to access MDOS and perform key actions.



What is an Authorized User?

An authorized user will have permissions to access MDOS and perform key actions or read-only access. Access and permissions must be set by the company administrator (admin).

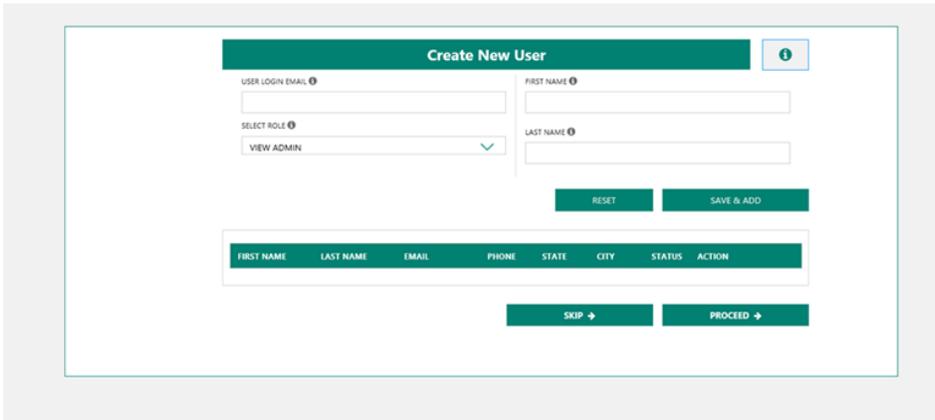
The Admin section in MDOS provides a view of all your authorized user accounts and lets you manage users connected to your account from this dashboard. From the Admin page, under CREATE USERS; you can add, remove, or edit current users. You can also edit user permissions from this section.

Example: Contoso IDH hired a new purchasing manager, and wants to add him as new authorized user in MDOS. The Admin signs into MDOS and clicks on the Admin icon in the top navigation bar to see existing users. From there, the admin clicks on the plus (+) button to

add the new user, enters the user’s email address, and sets the roles/permissions to “View Admin” with ordering permissions. The user receives an email with instructions on how to onboard to MDOS.

14. USER INTAKE FORM

Instruction: Fill out the OA enrollment form to add an authorized user.



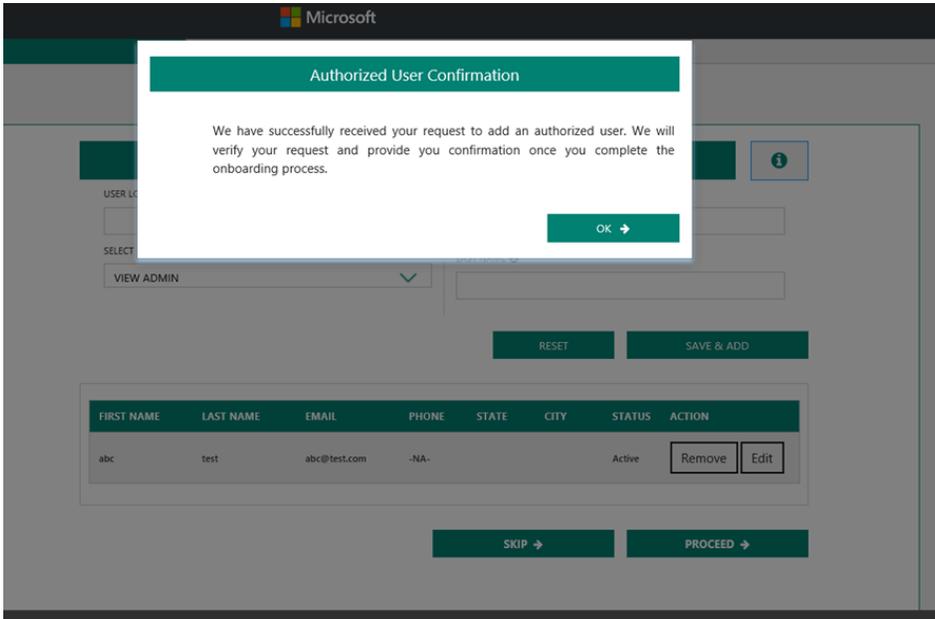
User Intake Form Field Explanation

User Intake Form:

User Intake Form Fields	Explanation
First Name	User first name
Last Name	User last name
Login Email (MSA)	The user’s MSA email account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign in to Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com). <u>Additional information about MSA email accounts.</u>
State	State where company is based
City	City where company is based
Permissions	MDOS permissions that were set by company admin.

15. SUCCESS MESSAGE FOR NEW USER

Instruction: Your request was successfully received for submitting a new user. Please ensure the user follows their next steps to complete the setup process.



Congratulations!

Your request was successfully received for submitting a new user.

Please follow the next steps carefully to ensure your setup is completed. Once setup is complete you may onboard into the MDOS tool and begin using it for your product key management.

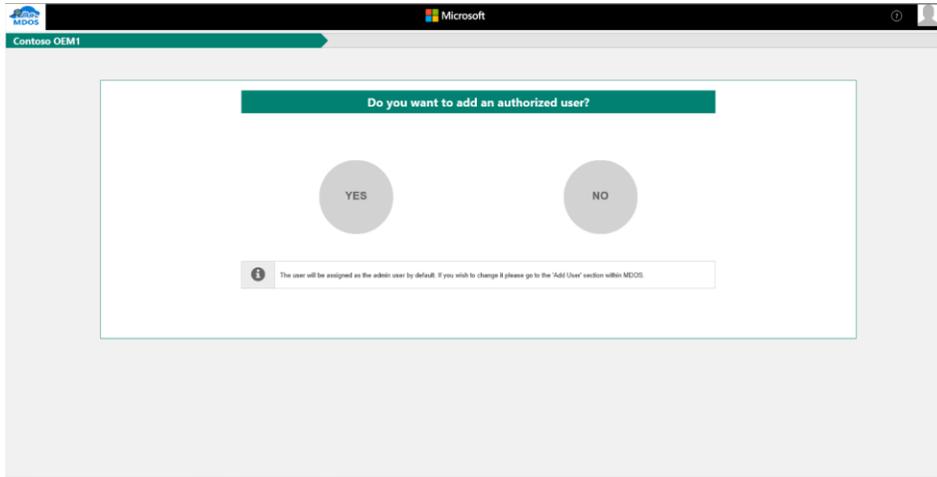
Next steps:

1. Have your authorized user look for the email from MDOS. (Sent to the user’s MSA email).
2. Make sure the use reads the [User Manual](#) for MDOS.
3. User should click on the registration link (within the email) to get registered.
4. Ensure your user fills out the New User registration form completely.

NOTE: This process may take up to ~5-10 min. for final approval and activation for this user.

16. ADD ANOTHER AUTHORIZED USER

Instruction: Add an authorized user connected to your MDOS account. An authorized user will have permissions to access MDOS and perform key actions.



What is an Authorized User?

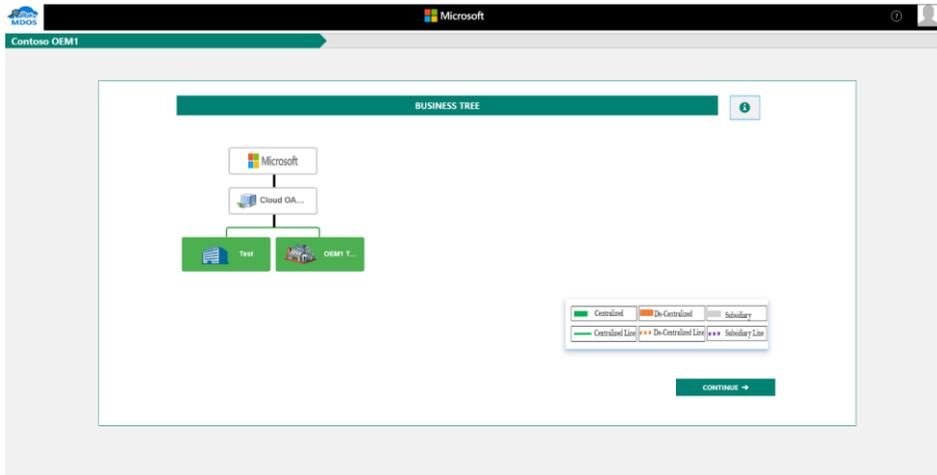
An authorized user will have permissions to access MDOS and perform key actions or read-only access. Access and permissions must be set by the company administrator (admin).

The Admin section in MDOS provides a view of all your authorized user accounts and lets you manage users connected to your account from this dashboard. From the Admin page, under CREATE USERS; you can add, remove, or edit current users. You can also edit user permissions from this section.

Example: Contoso IDH hired a new purchasing manager, and wants to add him as new authorized user in MDOS. The Admin signs into MDOS and clicks on the Admin icon in the top navigation bar to see existing users. From there, the admin clicks on the plus (+) button to add the new user, enters the user's email address, and sets the roles/permissions to "View Admin" with ordering permissions. The user receives an email with instructions on how to onboard to MDOS.

17. DISPLAY BUSINESS SETUP TREES

Instruction: Review your current business setup for accuracy and provide edits if necessary.



Business definition:

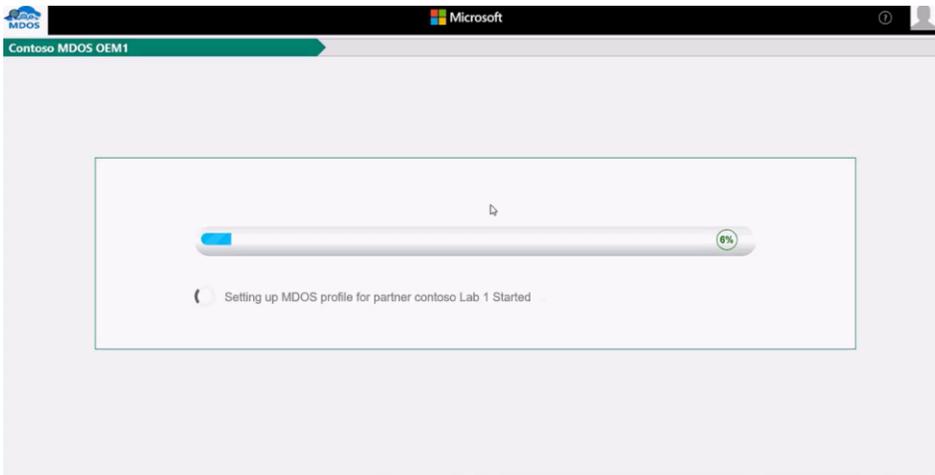
A business in MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering. You must select the business/partner you wish to work with from the dropdown menu when you sign into the MDOS dashboard.

Example: Contoso IDH/ODM has a business where they work with different OEMs; Contoso OEM and ABC OEM had both reached out to Contoso IDH/ODM through an MDOS invitation to invite Contoso IDH/ODM to work with them. Contoso IDH/ODM will setup a centralized business model with Contoso OEM and a decentralized model with ABC OEM. They also have an additional business because they signed an IDH/ODM agreement with Microsoft. So, they now have three businesses. They are looking to utilize MDOS to help manage all their businesses. MDOS allows Contoso IDH/ODM to easily identify the DPK owners, and better manage multiple businesses.

Tip Tool: A business in MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering. You must select the business/partner you wish to work with from the dropdown menu when you sign into the MDOS dashboard.

18. WAIT SCREEN WHILE DASHBOARD IS CREATED

Instruction: Please stand by while your account is being created in MDOS.



Please stand by while your account is being created in MDOS.

Your account is being set up MDOS. Soon you will have access to the cloud-based digital key distribution and entitlement service for Microsoft partners.

NOTE: This process may take a few minutes. Please do not close this window or refresh your browser.

19. DISABLE/ DELETE DLP

Instruction: This functionality will help to delete or disable the DLP from the list of added IDH/TPI/FFKI/FKI. Up level partner can disable/delete the DLP only when there is no DLP under them and they don't have any keys assigned to them.

Example: Contoso OEM is no longer doing business with ABC Design House and wants to remove it as a down level partner. From the Partner Information page, they select "Disable" for ABC Design House. After successfully disabling the partner permissions, the status next to the partner name changes to "Disabled". Contoso sees the action button for ABC Design House change to ENABLE, so they may easily re-enable the partner at any time if desired.

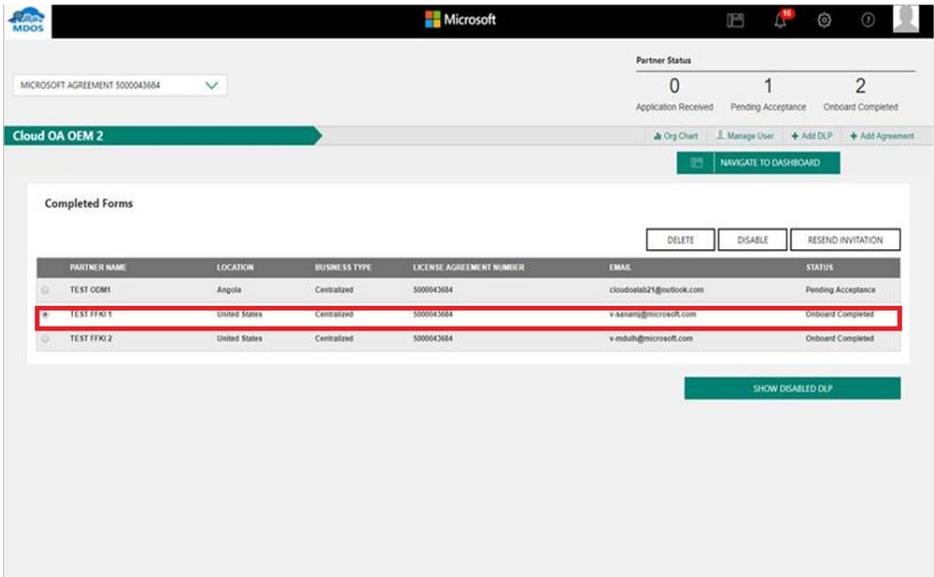
In case partner do not need that DLP in future, they can remove it from list of added DLPs.

To Delete DLP, you need to select partner by clicking on radio button and then click on delete option. A confirmation message box will pop out. After clicking confirm button, selected DLP will be removed from the list.

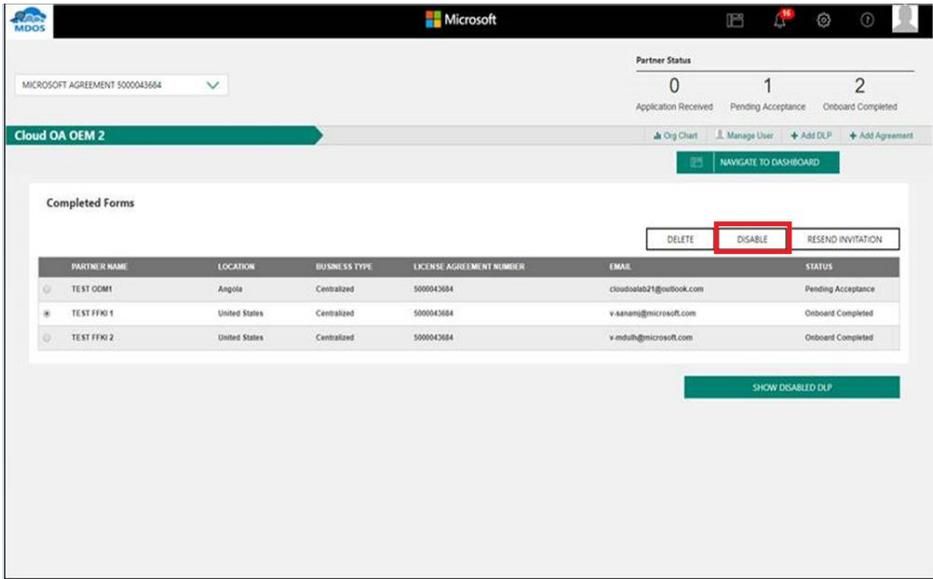
From manage business dashboard, up level partner can delete or disable their down level partner.

DISABLE DLP:

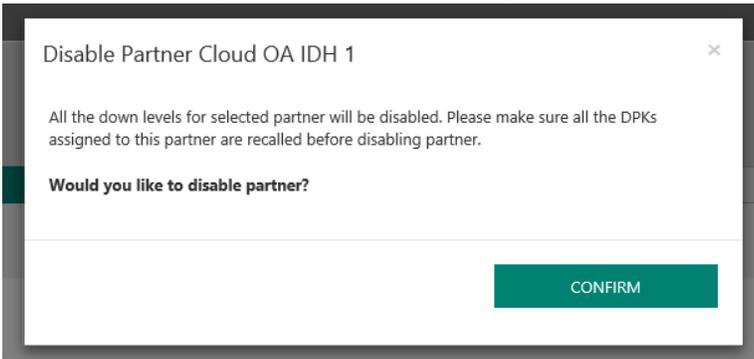
1. From manage business dashboard, select the partner by clicking on radio button that need to be disabled.



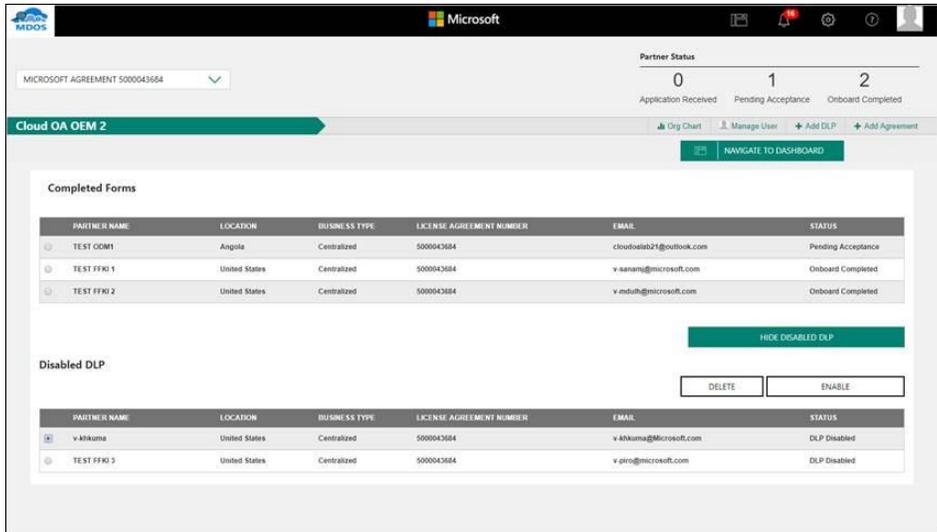
2. Click on disable button.



3. A confirmation window will open to confirm your selection. Click CONFIRM, the request will be processed and the partner will be notified through alert.



4. Once the partner has been disabled successfully, the disabled partner will be moved to 'Disabled DLP' section, the status of the partner will change to "Disabled".



5. To re enable the partner, you need to select the disabled partner from the Disabled DLP list and then click on enable button.

DELETE DLP:

1. From manage business dashboard, select the partner by clicking on radio button that need to be disabled.

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The screenshot shows the Microsoft Digital Operations Services (MDDS) dashboard. At the top, there is a navigation bar with the Microsoft logo and user profile. Below the navigation bar, there is a search bar for 'MICROSOFT AGREEMENT 500043684'. The main content area is titled 'Cloud OA OEM 2' and features a 'Partner Status' section with three progress indicators: '0 Application Received', '1 Pending Acceptance', and '2 Onboard Completed'. Below this, there are buttons for 'Org Chart', 'Manage User', 'Add DLP', and 'Add Agreement', along with a 'NAVIGATE TO DASHBOARD' button. The 'Completed Forms' section contains a table with columns: PARTNER NAME, LOCATION, BUSINESS TYPE, LICENSE AGREEMENT NUMBER, EMAIL, and STATUS. The table has three rows: 'TEST OEM1' (Angola, Centralized, 500043684, cloudoab21@outlook.com, Pending Acceptance), 'TEST FFK2' (United States, Centralized, 500043684, v.aaan@microsoft.com, Onboard Completed), and 'TEST FFK1' (United States, Centralized, 500043684, v.mduh@microsoft.com, Onboard Completed). The 'TEST FFK2' row is highlighted with a red border. Above the table are buttons for 'DELETE', 'DISABLE', and 'RESEND INVITATION'. Below the table is a 'SHOW DISABLED DLP' button.

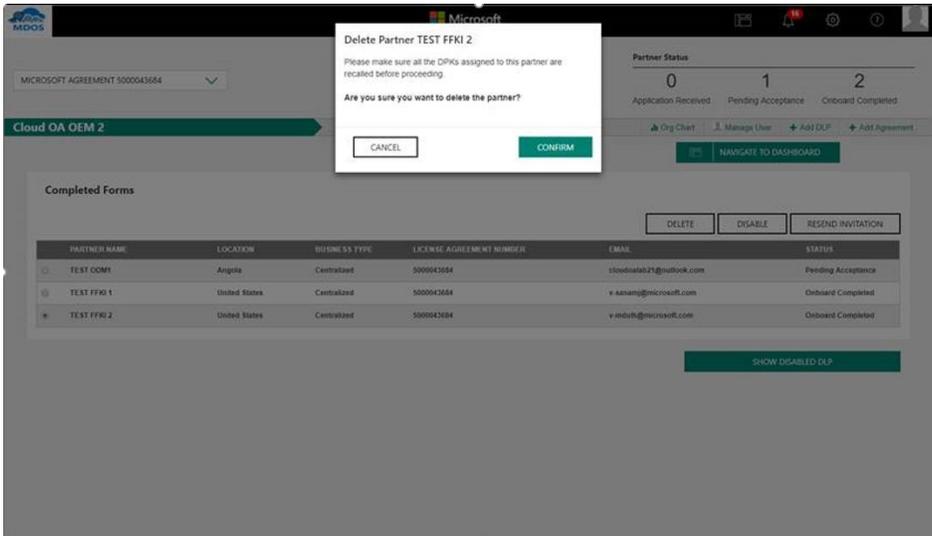
PARTNER NAME	LOCATION	BUSINESS TYPE	LICENSE AGREEMENT NUMBER	EMAIL	STATUS
TEST OEM1	Angola	Centralized	500043684	cloudoab21@outlook.com	Pending Acceptance
TEST FFK2	United States	Centralized	500043684	v.aaan@microsoft.com	Onboard Completed
TEST FFK1	United States	Centralized	500043684	v.mduh@microsoft.com	Onboard Completed

2. Click on Delete button.

This screenshot is identical to the one above, but the 'DELETE' button in the 'Completed Forms' section is highlighted with a red border, indicating the next step in the process.

3. A confirmation window will open to confirm your selection. Click CONFIRM, the request to delete the DLP will be processed.

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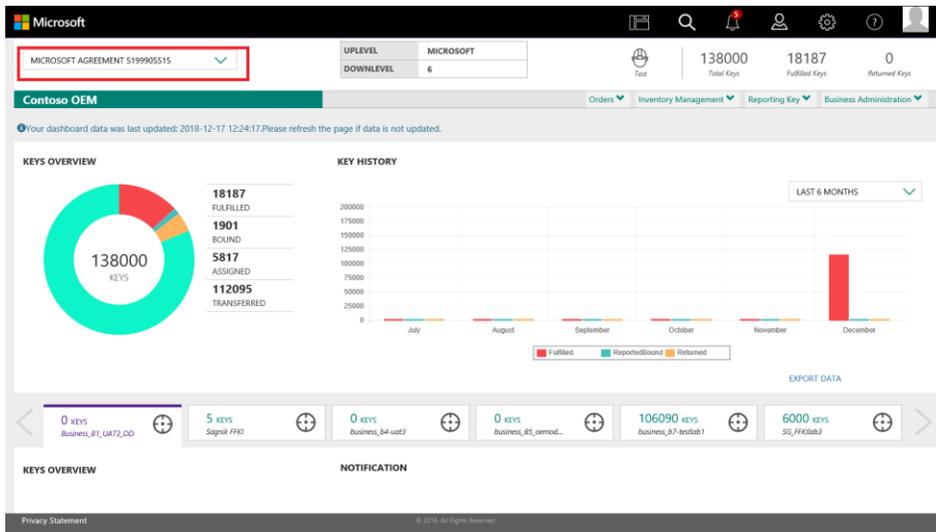


4. Once the request is processed successfully, the partner will be notified with an alert message and the DLP partner will not be visible.

20. MDOS DASHBOARD

Instruction: Please review the readiness materials for MDOS.

Microsoft Digital Operations Services User Manual



Welcome to MDOS

Helpful Information:

Please review the [User Manual](#) before beginning to use MDOS. Refer to the [FAQ](#) section for quick answers to common questions.

21. MDOS SUPPORT (MSOEMOPS@MICROSOFT.COM)

For support, please contact: msoemops@microsoft.com

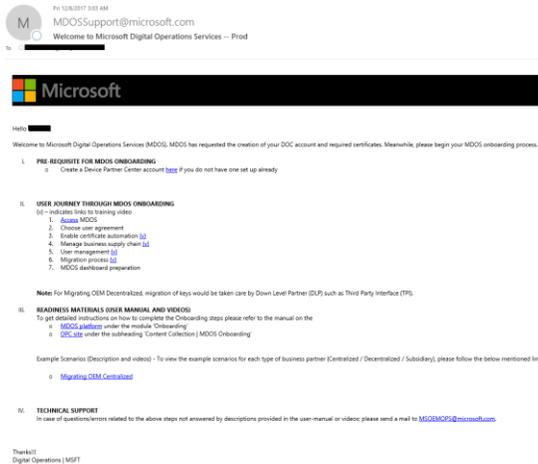
STEPS FOR ONBOARDING - NEW TPI DECENTRALIZED

These steps apply to the following persona: New TPI Decentralized

1. RECEIVE EMAIL INVITATION TO JOIN MDOS

Microsoft Digital Operations Services User Manual

You will receive an email invitation to join MDOS via the MSA email account provided to OEM.

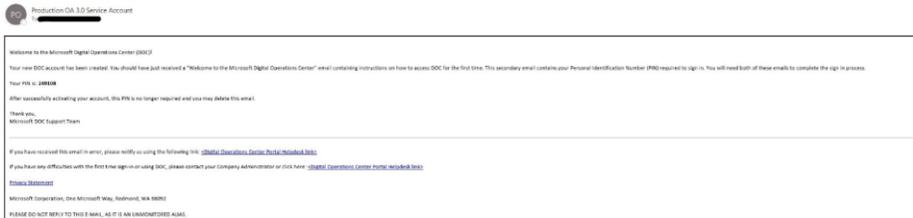


2. ACTIVATING DOC ACCOUNT

You will receive an email to join MDOS via the MSA email account provided to the GPO.

STEP 1: Find your sign-in PIN (Personal Identification Number). After this welcome email, you will receive an additional email containing a first-time sign-in PIN .Please make note of the PIN; it is a six-digit number.

Important information regarding your new Microsoft DOC account



STEP 2: Select your preferred sign-in method. The Digital Operations Center supports several types of sign-in methods: depending on your user account type. You may select any qualifying account of your choice or create a new one.

STEP 3: Sign in for the first time. Supported sign-in credentials Windows Live ID Microsoft Corp Net with the information from Steps 2 and 1, You are ready to sign in to DOC by clicking

www.microsoftoem.com where you will be asked to select a preferred sign-in method. After making your selection, you will be directed to the sign-in page.

STEP 4: Enter your PIN. Once you have successfully signed in, you will be asked to provide the PIN number obtained in Step 1. After entering PIN, you will be taken to the Home Page. The invitation mail will provide you the detailed step (as per below screen).

Subject: Welcome to the Microsoft Digital Operations Center

Welcome to the Microsoft Digital Operations Center (DOC)!

Your new DOC account has been created. To begin using DOC applications, you will need to complete the following five steps the first time you sign in.

STEP 1 – Find your sign-in PIN (Personal Identification Number).
After this welcome email, you will receive an additional email containing a first time sign-in PIN. Please make note of the PIN; it is a six-digit number.

STEP 2 – Select your preferred sign-in method.
The Digital Operations Center supports several types of sign-in methods, depending on your user account type. You may select any qualifying account of your choice or create a new one. Please note that your company may have policy guidelines regarding this account selection.

User Account Type	Supported sign-in credentials		
Microsoft Partner Extranet <i>yourdomain\userid</i>	Windows Live ID <i>yourdomain\userid</i>	Microsoft CorpNet <i>yourdomain\userid</i>	
External customer (OEM, Distributor, etc.)	✓	✓	
External partner (AR, SPV, etc.)	✓	✓	
Internal Microsoft employee or vendor			✓

STEP 3 – Sign in for the first time.
With the information from Steps 1 and 2, you are ready to sign in to DOC by clicking the following link: [<first time sign-in link>](#). You will be asked to select a preferred sign-in method. After making your selection, you will be directed to the sign-in page.

STEP 4 – Enter your PIN.
Once you have successfully signed in, you will be asked to provide the PIN number obtained in Step 1. After entering your PIN, you will be taken to the Home Page.

STEP 5 – Browser Configuration.
After you have successfully completed your first-time login, please follow the steps outlined in Section 1 of our "About DOC" guide to ensure DOC runs smoothly within Internet Explorer: [About DOC](#). You are now ready to start using the Microsoft Digital Operations Center!

Note: *Your account must be activated within 30 days of receipt of this email, otherwise your account will be suspended.*

Note: *If your account is suspended or if your account becomes locked after three unsuccessful sign-in attempts, please contact your Company Administrator. The Company Administrator is a designated person within your organization defined in your Microsoft agreement.*

To learn more about the functionality of various applications within DOC, click here: [About DOC](#)

Thank you,
Microsoft DOC Support Team

If you have received this email in error, please notify us using the following link: [<Digital Operations Center Portal Helpdesk link>](#)

If you have any difficulties with the first time sign-in or using DOC, please contact your Company Administrator or click here: [<Digital Operations Center Portal Helpdesk link>](#)

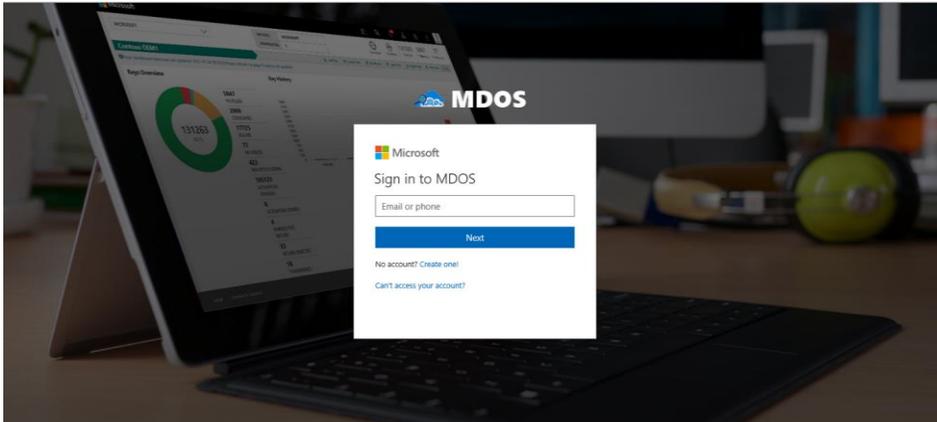
[Privacy Statement](#)

Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

PLEASE DO NOT REPLY TO THIS E-MAIL, AS IT IS AN UNMONITORED ALIAS.

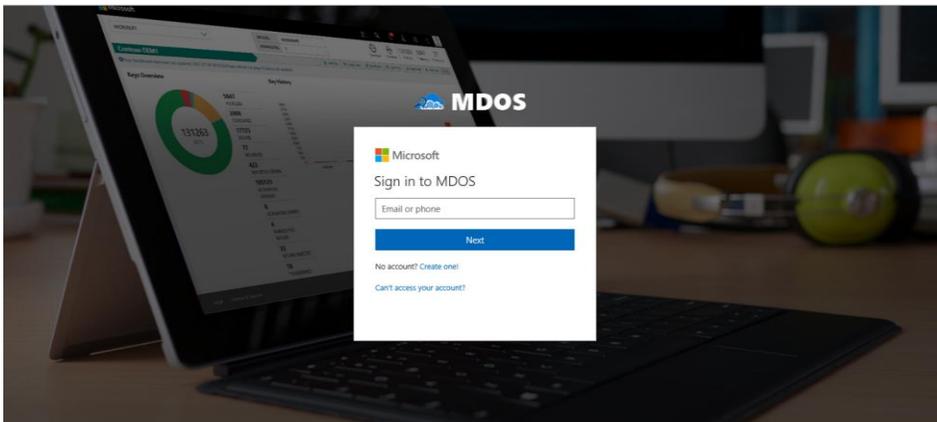
3. GO TO MDOS

Go to MDOS by typing www.digitaloperations.oa.microsoft.com in your browser.

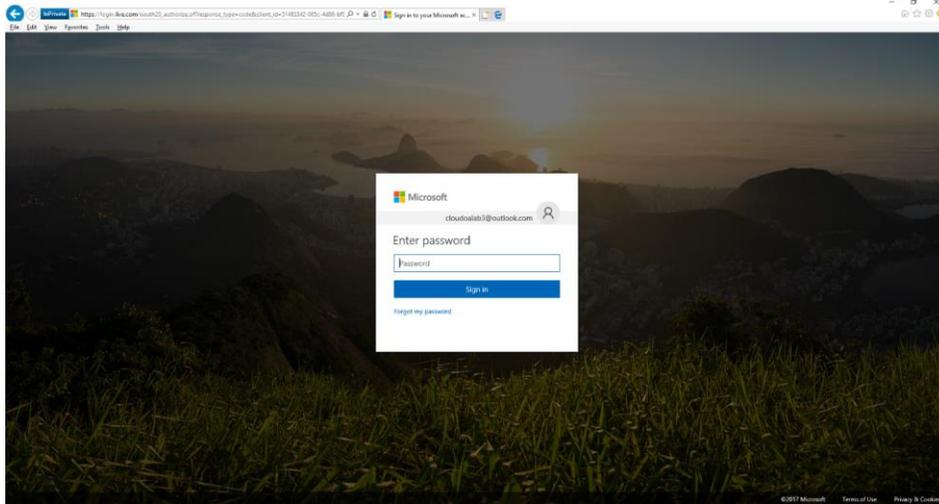


4. LOG IN TO ACCOUNT

Log in using the MSA email account credentials you provided to your COM.



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5. FOLLOW ONBOARDING STEPS

Follow the MDOS onboarding process steps.

6. WELCOME TO MDOS

Instruction: Welcome to MDOS - a cloud-based digital key distribution and entitlement service for Microsoft OEM partners. Please read the overview and capabilities to learn more about this service.



MDOS Overview

Welcome to Microsoft Digital Operations Services (MDOS)

MDOS is a web based service that provides Microsoft partners (OEM, ODM/IDH and Third-Party Installers) the ability to complete the OEM Activation Services 3.0 (OA 3.0) end-to-end process that is required to order and ship devices installed with Microsoft Windows. The MDOS service provides partners the ability to digitally order, fulfill, transfer and return digital product keys (DPKs) as part of doing business with Microsoft. Microsoft is discontinuing physical Certificate of Authority (COAs) licensing stickers as a way of licensing products. Beginning with Microsoft Windows 8, partners are now required to use DPKs to manufacture and pre-license the device at manufacturing time. The MDOS system is a cloud service that can be used by partners to complete these transactions with Microsoft.

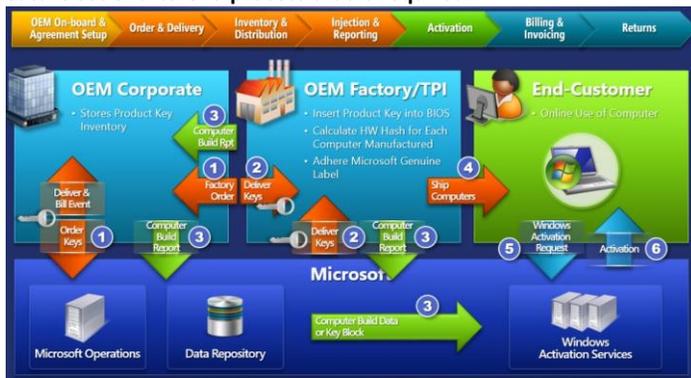
In order to transact with Microsoft, new and existing partners will need to onboard onto the MDOS system and begin transacting in a digital way. The OA 3.0 activation process is a new way to license and activate Windows. Before beginning to use this new model, it is important to understand some key concepts and requirements. Below, is a high-level overview of both the new OA 3.0 end-to-end process requirements, as well a high-level overview of the capabilities of the MDOS service.

OEM Activation 3.0 End-to-End

OA 3.0 as noted is a new digital way of manufacturing, pre-licensing, and shipping windows-based systems. OA 3.0 provides an entire framework for how OEM/ODM partners transact with Microsoft, as well their downstream manufacturing partners and entities. In OA 3.0, the process starts by an OEM/ODM, who has already completed a GPA agreement with Microsoft. If you do not have GPA or Licensing agreement with Microsoft, please contact your Customer Operations Manager (COM) or your Microsoft Sales Manager to understand what is required to complete a direct licensing agreement with Microsoft.

Once a partner has an agreement signed with Microsoft to sell Microsoft Windows and/or additional products, the next step is understanding the end-to-end process that is required to complete the OA 3.0 process for Windows shipments. The process starts with a toolset required to digitally connect to Microsoft. Today, the partner has a choice of whether to build an OA 3.0 client or leverage the existing solution offered by Microsoft, called MDOS. The MDOS solution is provided for partners that complete under one million transactions a year. For all other partners, building an OA 3.0 client is required. The remainder of this manual will detail aspects of the MDOS system, as well provide overview, step-by-step examples, tips, and details about the specific functionality available in the MDOS service. Below, we discuss the OA 3.0 end-to-end process for understanding. We will then discuss at a high level how to use MDOS to ensure your continued success purchasing, manufacturing, and shipping Microsoft Windows to your end users.

The OA 3.0 feature set end-to-end process that is required



The Digital licensing and entitlement process starts with the OEM/ODM placing an order to Microsoft for Microsoft Windows digital product keys (DPKs). This order can either be a form of credit card at Microsoft, which allows the OEM’s designated partners to order against (Call Off Order), or it is a direct order from the OEM to Microsoft (Standard Order), either type is supported. The order process can be completed within the MDOS service, or direct to Microsoft DOC Portal site. Once the digital order is placed to the Microsoft services, the OA 3.0 DPKs for Windows will be fulfilled into the MDOS system. The OEM then chooses a partner to complete the manufacturing portion of the project and will deploy (transfer) the digital product keys from their system to the factory, where the factory may be owned by the OEM or is a third-party Installer (TPI). Once the keys have been deployed to the factory, the factory will manufacture the Windows device and will be required to inject the DPK into the firmware (BIOS/UEFI) of the device. Once the DPK is injected, the factory will capture a Computer Build Report (CBR), which contains complete hardware information shipping with the device, as well information about the now injected DPK. This CBR is sent to Microsoft and is recorded prior to the device reaching the end user. Once the end user purchases that device and powers on, Windows will request a machine activation, which ensures the device is a Genuine Microsoft Windows device. The

activation event occurs and completes and the OA 3.0 process completes. If the machine is returned for any reason within 365 days, the OEM can request a refund and must send Microsoft information about the specific DPK being returned and the reason for the return.

There are a variety of use cases and scenarios that are supported by the OA 3.0 end-to-end process and requires some general understanding before beginning to complete the process with Microsoft. The OEM/ODM, the entity with a direct relationship and contract with Microsoft is in control of deciding how much involvement they will have in the end-to-end process. There are three ways to setup your relationship with your downstream partners (subsidiaries, servicing centers and/or factories for manufacturing). In MDOS, we define the relationship of the OEM/ODM and its partners as a Business relationships as a Business. A business within MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering. The OEM/ODM, those that have a direct contract with Microsoft, choose the type of control and involvement they will have in the OA 3.0 end-to-end process. The OEM/ODM can choose to have a centralized or decentralized relationship with its business entities. In a centralized business setup, the OEM chooses to have total control of the process from Order to Return and all functions in between. The OEM will order, fulfill and transfer the DPKs to their downstream partners called DLP (Downlevel Partners), as well will handle all returns on their own behalf. The centralized model allows the parent entity (OEM/ODM) full control throughout the MDOS system and the end-to-end process. The other type of business setup is a Decentralized model. The decentralized model requires the OEM to place the Call Off order with Microsoft. The OEM does not need to manage the order or the digital product keys at all, instead this model relies on the DLP to manage all DPK orders, fulfillments, transfers and returns on behalf of their OEM partner. The OEM does not need to “manage” anything except the call off order with Microsoft, but is responsible for any audits required by Microsoft and as such the OEM should check in with their DLP’s on a regular basis to understand what is happening within their business.

In summary, the OA 3.0 end-to-end process is setup by the OEM/ODM, the entity with the direct contract with Microsoft. The OEM/ODM is required to define the business and yet can choose to manage the entire end-to-end process directly (centralized) or choose to outsource the process to their DLP (decentralized).

MDOS Service Overview

Now that you have familiarity with the OA 3.0 end-to-end process requirements and available business related options, we will explore the high level MDOS capabilities as a tool to complete your digital business transactions with Microsoft. The MDOS service offering is available to our smaller OEM/ODM partners, those that complete less than one million shipments of Windows. The MDOS service is currently free to use for these partners including support of the service and its feature offerings. MDOS provides electronic email based support from the vendor hired by Microsoft to complete the service offering, please see support section within the MDOS manual for additional details and the specific contact information.

As noted above, partners can choose to onboard to the MDOS service or complete a build of their own OA 3.0 client, connecting to Microsoft backend web service directly. The MDOS service is an Azure Cloud based solution that also requires a physical client for the factory floor manufacturing requirements. MDOS provides the end-to-end solution required to order, fulfill, deploy, report and return Digital Product Keys required to manufacture Windows devices. Below we will explore some of the high-level features of the MDOS service offering, and walk through the onboarding requirements.

Onboarding to MDOS

MDOS provides everything required to complete the digital pre-licensing requirements set by Windows since Windows 8. To onboard to the MDOS service, you will need to complete your GPA contract with Microsoft. Once the contract has been signed, Microsoft will send you an email with your MDOS Registration information, including a link to the DOC site. The DOC is used to “register” your MSA email account and corporate email account with the system. Because MDOS is a cloud service, you do not need to “install” any software for the OEM/ODM entity, rather you access the MDOS service via a browser URL address that will be sent to you once you have completed your contract with Microsoft. The link you will receive will direct you to register with DOC and choose which type of partner you identify as. Once the DOC registration is complete, you will be sent the MDOS direct link URL in order to login for the first time.

Defining an MDOS Business

Once the OEM/ODM have registered and successfully logged into the MDOS system, the next step is to define the type of Business that will be used (centralized or decentralized), and which entities (DLP’s) you will work with to complete your Windows device end-to-end process for manufacturing and device shipment. Setting up the business is a critical step and one that should be thought through prior to attempting to setup your Business within MDOS. MDOS supports multiple businesses; which means that for one business the OEM may choose to work with Manufacturing Partner A and for another business the OEM may choose Manufacturing Partner B. The OEM may choose to setup one business as centralized and the other as decentralized. Each business is secured and keeps all details regarding that business separate, whether it be DPKs, Log files, and/or Alerts. An OEM can also define how the business behaves with regard to DPK fulfillment and/or CBR submissions to Microsoft. In other words, the OEM may choose to order and then manually download DPKs for one business, while setting up automatic DPK fulfillment for their other business. There are a variety of settings and options defined within this manual and we encourage you to explore the details of each for a thorough understanding.

Manufacturing with MDOS

As part of setting up the MDOS Businesses, the OEM/ODM can choose the manufacturing partner(s) they will work with. Adding the manufacturing partners into the MDOS Business requires the OEM/ODM to invite the manufacturing entity as a business entity within your defined business. The OEM/ODM will “invite” the manufacturing partner (TPI) into the business via the DLP setup within the MDOS service. Once the manufacturing partner accepts the invite,

they are ready to transact on behalf of the OEM/ODM partner. The MDOS service requires the manufacturing partner to “configure” themselves within the MDOS cloud service (as a TPI) and then requires the manufacturing partner to install the physical MDOS Factory Floor Key Inventory (FFKI) client on the manufacturing floor. The MDOS FFKI client is a software install that will connect to the MDOS cloud via a secure connection through either a VPN or via the Internet. The MDOS FFKI client manages the DPKs between the MDOS cloud and the physical manufacturing floor. The MDOS FFKI Client will request DPKs from the service and will make those DPKs available for injection into the Windows device being manufactured. The MDOS FFKI client will also capture the Computer Build Report (CBR) required and send that CBR upstream to the Uplevel Partner (ULP), who will relay that to Microsoft directly depending on Centralized or Decentralized business setup.

Conclusion

In order to manufacture and ship Windows devices, our OEM and ODM partners are now required to complete these transactions in a digital way, no longer using the COA’s of the past. The OEM Activation 3.0 end-to-end process is a defined set of steps that are required to purchase, fulfill, deploy and/or return digital product from Microsoft. The OA 3.0 process requires the parent entity, that is the entity that has a direct licensing agreement with Microsoft to connect, order and fulfill digital product keys. The OEM/ODM has a choice of whether to build their own OA 3.0 client software, or leverage the MDOS service for completing transactions. The MDOS service is for use by OEM/ODM partners who complete one million or more Microsoft Windows device shipments per year. Onboarding to MDOS occurs once the OEM or ODM have successfully completed a licensing agreement with Microsoft. The MDOS service provides these entities and partners with a system to use to complete end-to-end digital orders, fulfillments, deployments and returns electronically with Microsoft. The MDOS service supports setting up Businesses that allow the OEM/ODM the ability to manage their business in a way that meets their business needs—either centralized, decentralized or a combination of both—as a subsidiary in a secure way. The OEM/ODM can invite downlevel partner (DLP’s) into their business to complete functions such as servicing and manufacturing. The remainder of this manual will provide overviews, examples, step by step instructions and tips for completing your MDOS features and functions.

MDOS Capabilities and Benefits

Microsoft Digital Operations Service (MDOS) is a cloud-based digital key distribution and entitlement service for Microsoft partners. It gives partners the ability to order, deploy, manage, bind, return, and recall Digital Product Keys (DPKs) as needed. MDOS is a self-service tool that provides easy access to new capabilities and allows partners to scale.

The key benefits of moving to MDOS include:

- Flexible platform: Easy to add new partners and scale your business
- Self-service capabilities
- Efficient inventory management
- User-friendly interface

- Software as a service – no need to upgrade software, always up to date
- Integrated with other Microsoft platforms

MDOS provides the following capabilities:

- Basic OA 3.0 infrastructure (order, fulfill, transfer, return, report, etc.)
- Automated setup/onboarding
- ERP system integration*
- Integration with other Microsoft platforms (DOC and Connector)*
- Low cost scalability to support new Microsoft programs (pricing configurator, DA, cloud attachments, etc.)
- Business Intelligence reporting*
- Self-serve capabilities (Pop-up support, tip tool, chat support, form integration, support forums, link to documentation, etc.)
- Offline run mode (File-based DPKs)
- MES system integration* (API for FF EMS/MES)

*Some features may not be available today but will be available at a future date.

Example: Contoso OEM has a growing business where they work with multiple downlevel partners (DLPs) including TPI, IDH/ODM, and FFKIs. The businesses run in different business models where some are centralized and some are decentralized. Contoso OEM was using the DIS Chinasoft legacy system, but they are now migrating over to MDOS for its many benefits.

Contoso OEM will now be able to:

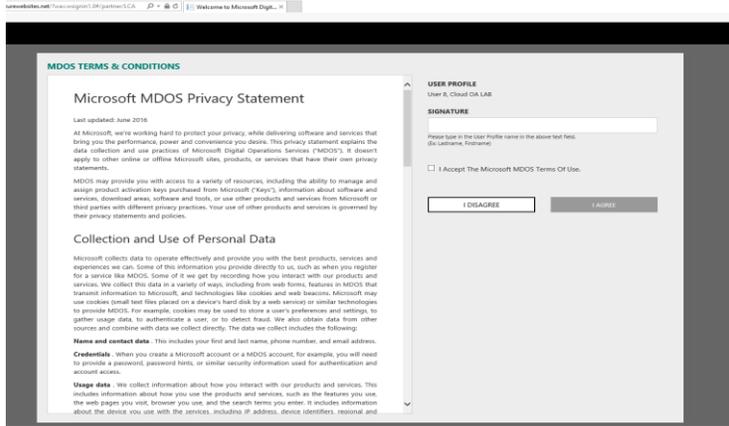
- take advantage of the flexible platform that allows them to easily add new partners as their business grows.
- navigate across different views depending on each business' structure with a user-friendly interface.
- use the self-service tool to easily perform key functions (order, fulfill, transfer, return, report, etc.).
- manage inventory for each business and see a real-time view of inventory levels, key status details, as well as access business intelligence data—all in one place.

Additionally, Contoso OEM knows that MDOS is also an online service, so updates are made automatically and they will never have to manually update their software to have the latest version.

Tip Tool: MDOS is a cloud-based digital key distribution and entitlement service for Microsoft OEM partners. It gives partners the ability to order, deploy, manage, bind, return, and recall Digital Product Keys (DPKs) as needed. MDOS is a self-service tool that provides easy access to new capabilities and allows partners to scale.

7. MDOS TERMS OF USE

Instruction: Review the MDOS terms of use and sign the acknowledgement to continue this set up process. Terms must be agreed upon to continue the set up and begin working with MDOS.



MDOS terms of use

Please review the MDOS terms of use and sign the acknowledgement to continue this set up process. Terms must be agreed upon to continue the set up and begin working with MDOS.

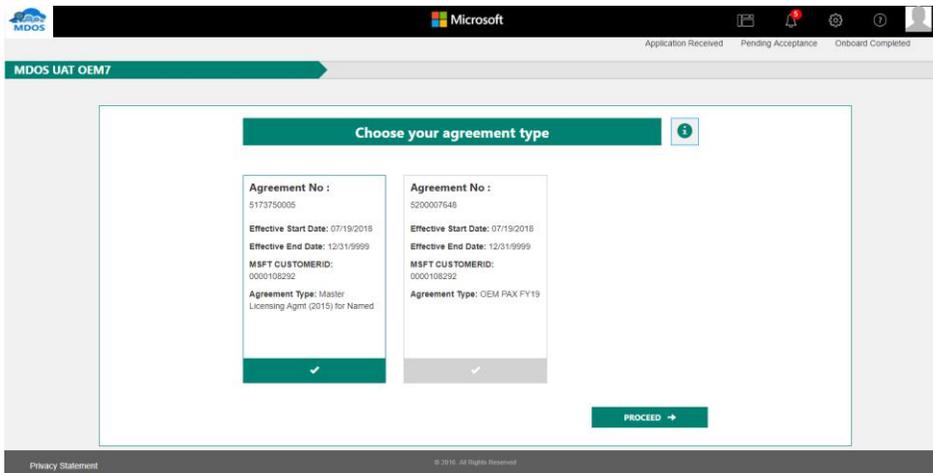
NOTE: To sign the agreement, please be sure to enter your name in the signature field as it is displayed above. The signature field is case sensitive. An inactive button is greyed out until this field matches.

For more information:

Read the full [MDOS Terms of Use](#) on a separate page.

8. AGREEMENT SETUP PAGE

Instruction: Select the agreement you would like to set up.



Tip Tool : Select your agreement from the options to be redirected and continue onboarding. If you have more than one agreement, you must set up both agreements individually.

Business definition:

A business in MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering. You must select the business/partner you wish to work with from the dropdown menu when you sign into the MDOS dashboard.

Example : Contoso OEM has a single licensing agreement with Microsoft under a Global Partner Agreement (GPA), supporting two businesses: an OEM Program Appendix (PAX) and an IOT Program Appendix. The OEM PAX is for the OEM Royalty business and the IOT PAX is for the Embedded business. Each PAX will have a unique agreement number for ordering.

Based on the business definition, Contoso OEM has two business structures, one for the OEM PAX agreement and one for the IOT PAX agreement. They get different keys for the OEM PAX and the IOT PAX. While onboarding, Contoso OEM must set up both agreements individually.

Contoso OEM decides to set up their OEM PAX agreement first. They select the OEM PAX option and follow the steps to onboard their DLP for the Windows Client business. Once completed, they will set up their IOT PAX for the Embedded manufacturing business.

ULP Definition:

Upper Level Partner or Uplevel Partner (ULP) is the entity above the down level entity. Keys will flow from this entity to downstream entities. An Uplevel partner can be:

- Microsoft agreement (GPA with OEM, ODM or IOT PAX)
- OEM, ODM/IDH, IOT or TPI in a centralized relationship
- OEM, ODM/IDH, IOT or TPI in a decentralized relationship

Agreement types are under the Global Partner Agreement (GPA):

- OEM Program Appendix – licensing for Windows Client, Office, Server, IoT for OEM products.
- ODM Program Appendix – licensing for Windows Client, Office products
- IOT Program Appendix – licensing for IoT OA products for Embedded devices and Internet of Things (IoT)

OEM

OEM (Original Equipment Manufacturer) will be having a direct GPA agreement with Microsoft or they may have multiple agreements as well, Microsoft will be the uplevel partner for an OEM.

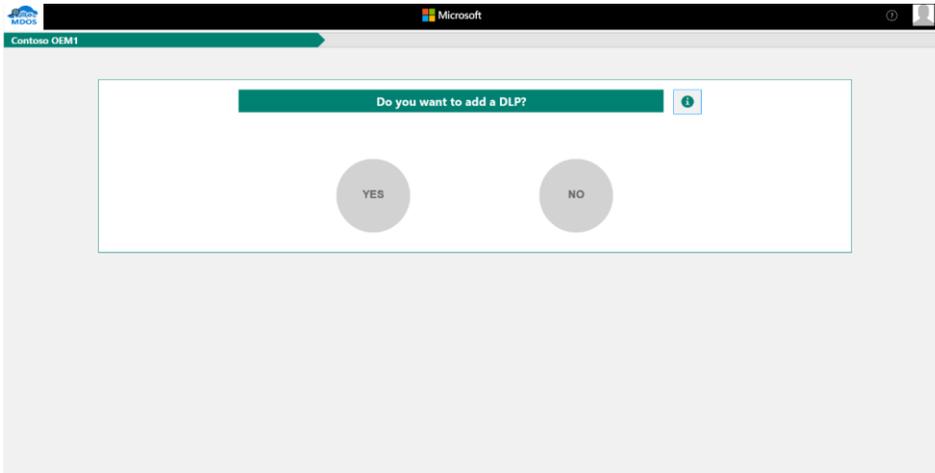
ODM/IDH

The ODM/IDH business model might have a direct ODM/IDH agreement with Microsoft or they may have multiple agreements with Microsoft. An ODM/IDH can have one or multiple OEMs or ULPs as well.

Example : Contoso OEM has a business where they work with downlevel partner ABC TPI. Contoso OEM is the uplevel partner for ABC TPI and Contoso OEM's uplevel partner is Microsoft.

9. ADD NEW DLP

Instruction: Determine if you would like to add a new downlevel partner (or partners) to the business. New partner(s) will then be able to perform key operations.



MDOS definition of partner types

Acronym	Term	Description
FFKI	Factory Floor Key Inventory	Inventory (FFKI) client on the manufacturing floor. The MDOS FFKI client is a software install that will connect to the MDOS cloud via a secure connection through either a VPN or via the Internet or may be manually transferred (e.g. via USB). The MDOS FFKI client manages the DPKs between the MDOS cloud and the physical manufacturing floor. The MDOS FFKI Client will request DPKs from the service and will make those DPKs available for injection into the Windows device being manufactured. The MDOS FFKI client will also capture the Computer Build Report (CBR) required and send that CBR upstream to the Uplevel Partner (ULP), who will relay that to Microsoft directly depending on Centralized or Decentralized business setup.
ODM/ IDH	Original Design Manufacturer/ Independent Design House	An original design manufacturer (ODM) or independent design house (IDH) is hired by an OEM. They are a company that designs and manufactures devices (tablet, PC, etc.) based on requirements specified by the OEM, (such as screen size, processor, memory, performance, etc.). The devices manufactured by the ODM/IDH are rebranded by the OEM. ODM/IDH companies allow the firm that owns or licenses the brand to produce products without having to engage in the design or running of a factory.

OEM	Original Equipment Manufacturer	Original equipment manufacturer (OEM) is a term used when one company makes a part or subsystem that is used in another company's product.
TPI	Third-Party Installer	A manufacturer that is licensed through a TPI agreement to preinstall the Windows operating system onto a computer on behalf of an OEM. TPis are authorized to use the OA 3.0 Tool. The OEM sends the DPKs to the Factories (usually a Third-Party Installer (TPI) factory).

DLP Definition:

Down Level Partner or Downlevel Partner (DLP):

Is the entity that receives keys from the uplevel entity. Down level entities can deploy keys to downstream partners, manufacture devices, and/or submit CBR/PHR reports. A Down level partner can be:

- ODM/IDH or TPI in a centralized relationship
- ODM/IDH or TPI in a decentralized relationship
- Factory Floor (FFKI end entity in business)

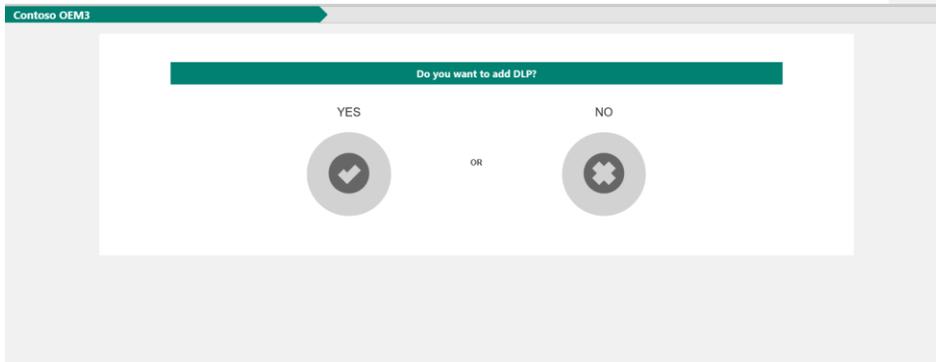
Example: Contoso OEM has a direct agreement with Microsoft and has three TPis that they work with. In this supply chain model (business model), Contoso OEM has three downlevel partners; Contoso TPI Mexico, ABC TPI, and Contoso TPI China. Contoso OEM is the uplevel partner for all three TPis and Contoso OEM's uplevel partner is Microsoft since they have a direct OEM GPA agreement with Microsoft.

Tip Tool: Once the business is established, a new downlevel partner (or partners) can be added to the business. New partner(s) will then be able to perform key operations.

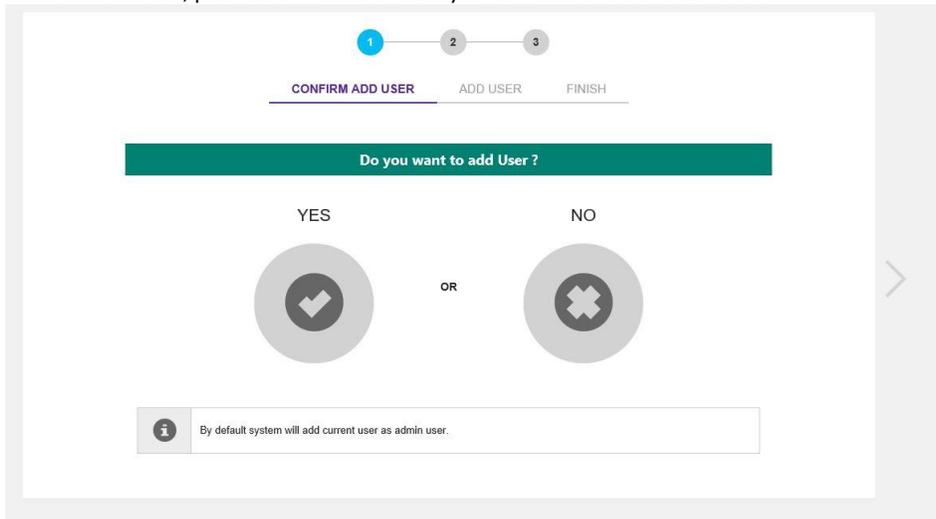
Step-by-step: (Add a new DLP)

Pre-Requirement: TPI/DLP partner should receive an invitation email from ULP. From there, they can add their DLPs.

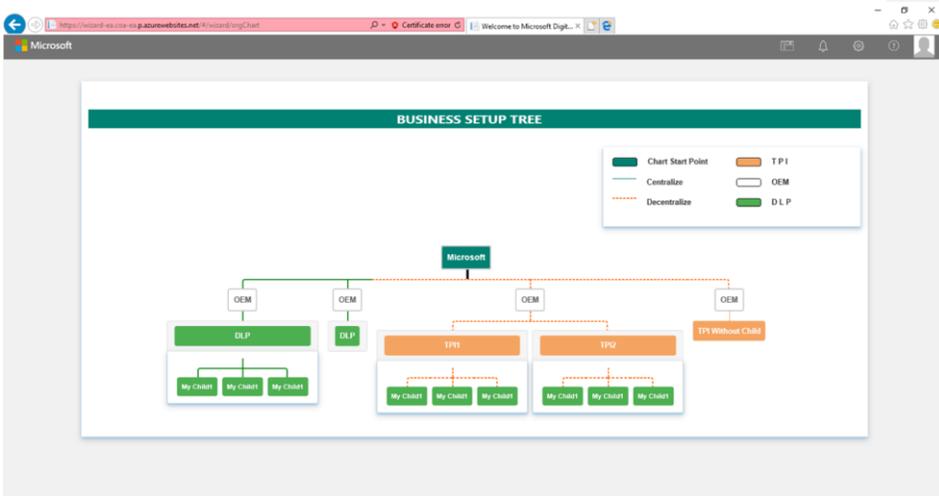
1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.



5. Select 'Yes', refer to the **Add another DLP** section (below).
6. Select 'No', partner will be asked "Do you want to add authorized users?"

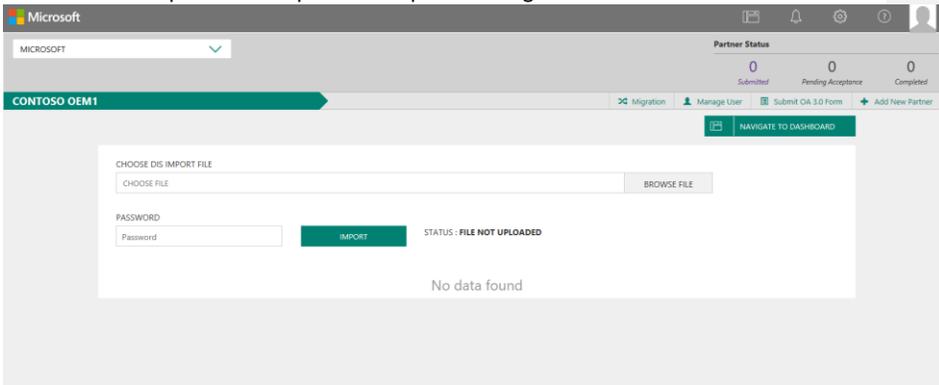


7. Select 'Yes' and refer to the **Add a new authorized user** section.
8. Select 'No', MDOS will display a business set up in a tree format.



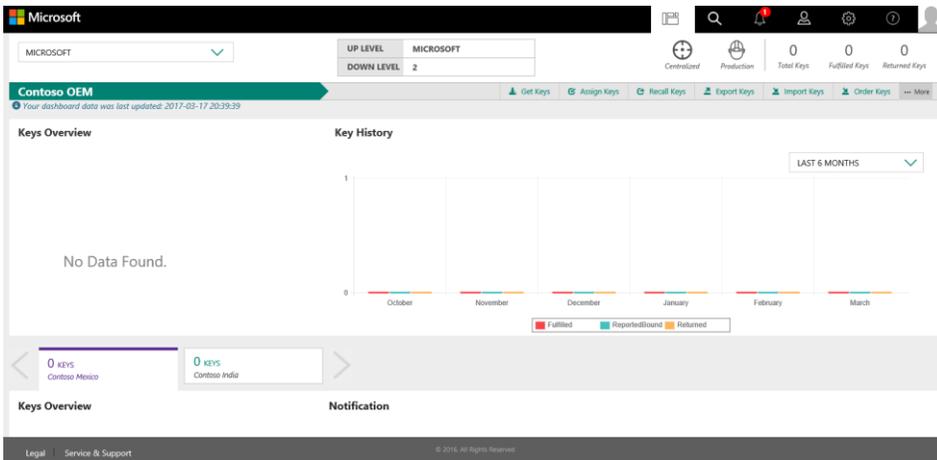
9. MDOS will display the steps for the partners to migrate the keys.

10. MDOS will allow partners to upload the zip file for migration.



11. Partner will be redirected to dashboard screen to perform the key operations.

Microsoft Digital Operations Services User Manual

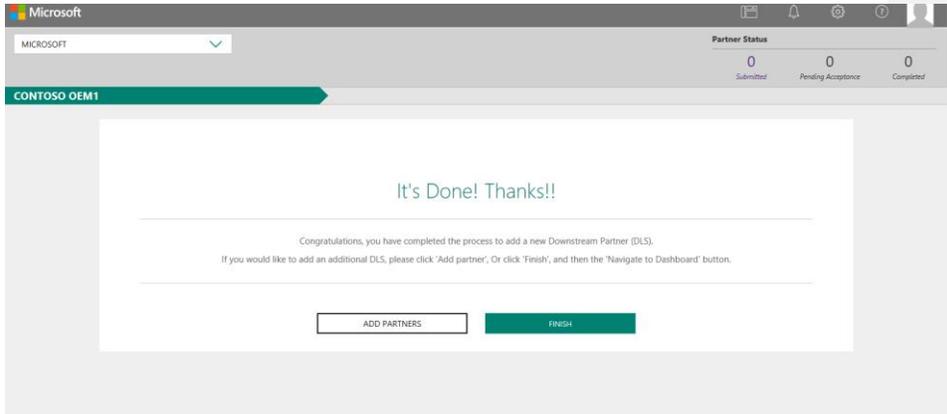


Step-by-step: (Add another DLP)

1. OEM/ULP partner will be presented with a message: “Do you want to add a DLP or FFKI”.
2. If partner selects DLP, partner will be asked to fill the DLP form.

The screenshot shows the 'Company Info' form in the Microsoft Digital Operations Services interface. The form is part of a multi-step process, with 'PARTNER TYPE' and 'SUMMARY' steps also visible. The 'Company Info' form includes the following fields: 'FIRST NAME', 'LAST NAME', 'PARTNER COMPANY NAME', 'BUSINESS ADDRESS', 'PARTNER REPRESENTATIVE NAME', 'PARTNER MSA EMAIL', 'COUNTRY AND REGION', 'STATE', 'CITY', 'POSTAL CODE', and 'PHONE'. The form is currently empty, and the user is prompted to fill in the required information. The form is titled 'Company Info' and includes a 'Privacy Statement' link at the bottom.

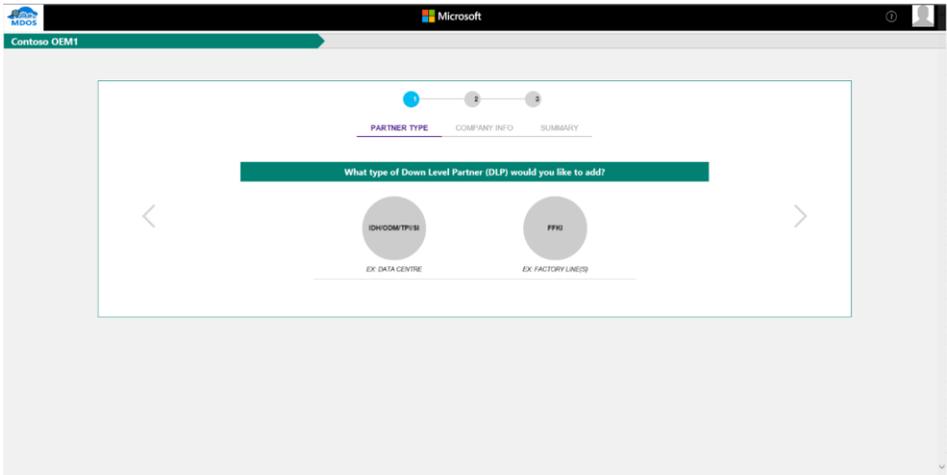
3. Once the DLP form is submitted successfully, partner will see a message that the DLP has been added successfully.



- 4. An email will be sent to the DLP to set up a business with MDOS.
- 5. Partner will be asked if partner wants to add another DLP. If yes, continue with step 1 else partner must continue with step 6 in **Add existing TPI as a new DLP** section. (above)

10. ADD DLP OR FFKI

Instruction: Select your centralized DLP factory datacenter or DLP FFKI.



Difference between centralized DLP factory datacenter & DLP FFKI
An FFKI partner differs from other factory datacenter partners because:

- The FFKI can have a business that runs online or offline. The FFKI is not required to onboard through MDOS web app for initial set up and they would not be required to maintain an online connection with MDOS, while the DLP factory datacenter will always be online.
- The FFKI will receive its credentials vis email.
- The FFKI is the only type of partner that can inject the keys into devices and collects CBR information, where the factory datacenters do not inject keys.
- The FFKI can submit the reports to their uplevel TPI, who then reviews and submits the final CBR to their uplevel OEM partner.
- The FFKI is not able to add any DLPs, where the factory datacenters may add DLPs.
- The FFKI would also receive additional email communications for their business that would contain information based on how they communicate with MDOS.

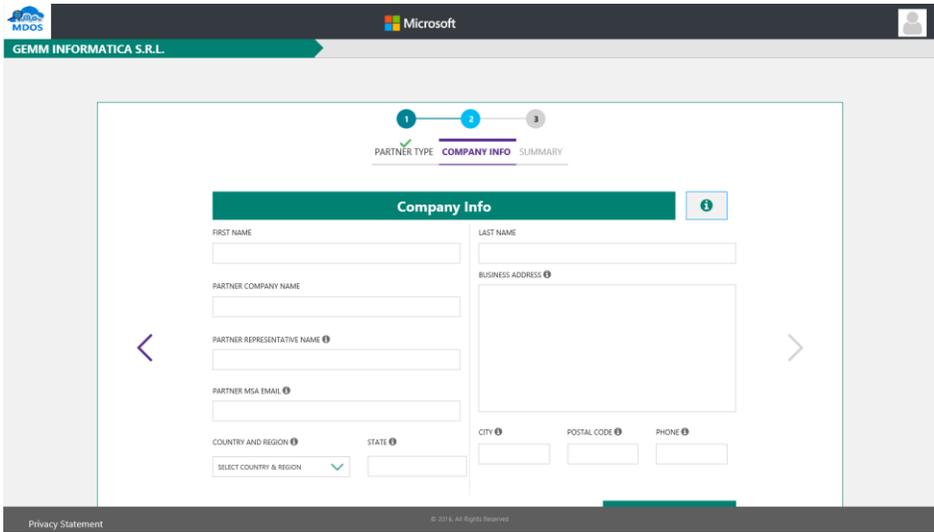
Business setup specific for FFKI

1. FFKI Partner receives invitation from ULP via email.
2. FFKI Partner will receive an email with step-by-step guide.
3. FFKI Partner will receive an email with credentials.
4. FFKI Partner downloads software.
5. FFKI Partner will get set up.
6. FFKI Partner will test.

Example: Contoso OEM owns its own factory, which is called Contoso FFKI. Contoso FFKI is the main site Contoso OEM uses to manufacture their devices. Contoso OEM sets up Contoso FFKI as downlevel partners for their business within MDOS. After that, Contoso FFKI receives the credentials it will use to communicate with MDOS to authenticate. Contoso FFKI is run offline, hence they need to initially onboard through MDOS and follow the initial online set up. Then Contoso FFKI can follow the offline mode steps to receive keys and submit CBR's back to OEM Contoso. Once the CBR is submitted to Contoso OEM, they provide a final review and submit the CBR to Microsoft.

11. FILL DLP FORM

Instruction: Complete all the required fields for your partner to gain access to MDOS. OEM will fill this out on behalf of the DLP.



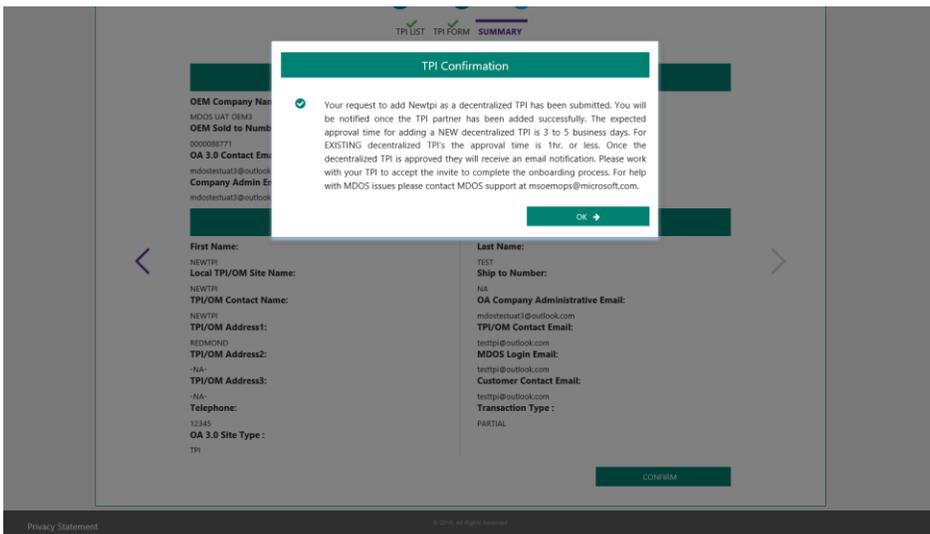
DLP Form Field Explanation

DLP Form

DLP Form Fields	Explanation
DLP Company Name	Downlevel partner company name (i.e. Contoso TPI)
DLP Contact Name	Downlevel partner User first and last name
DLP Company Email	Downlevel partner’s corporate email address at authorized site. (ContosoTPI@TPI.com)
DLP Login Email (MSA)	The user’s MSA email account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign in to Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com). <u>Additional information about MSA email accounts.</u> NOTE: IF the TPI is already onboarded to MDOS, please verify that this is the MSA that they registered with.
DLP Address	Street address where DLP company is based
DLP Country	Country where DLP company is based
DLP State	State where DLP company is based
DLP City	City where DLP company is based
DLP Postal Code	Postal code where DLP company is based
DLP Phone	DLP company phone number

12. SUCCESS MESSAGE FOR NEW DLP

Instruction: Your request was successfully received for submitting a new downlevel partner (DLP). Please ensure the partner follows their next steps to complete the setup process.



Congratulations!

Your request was successfully received for submitting a new downlevel partner (DLP).

Please follow the next steps carefully to ensure your setup is completed. Once setup is complete you may onboard into the MDOS tool and begin using it for your product key management.

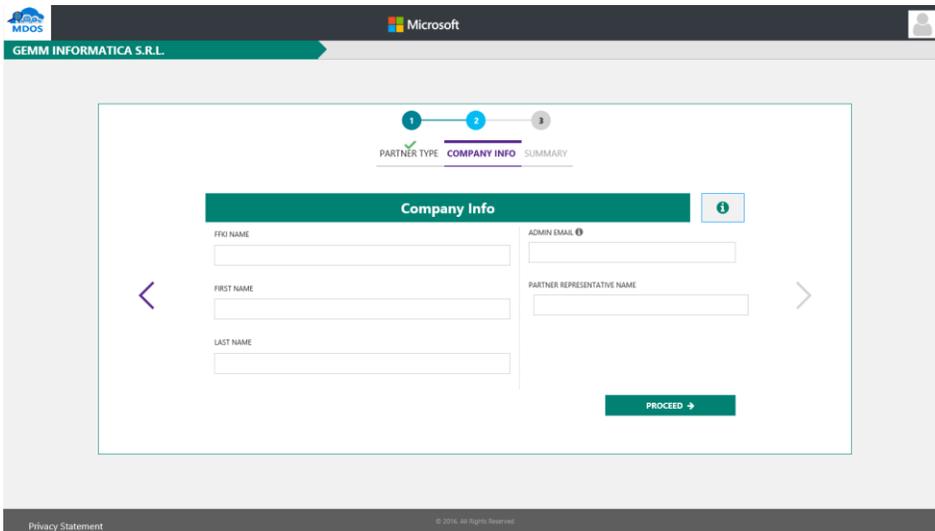
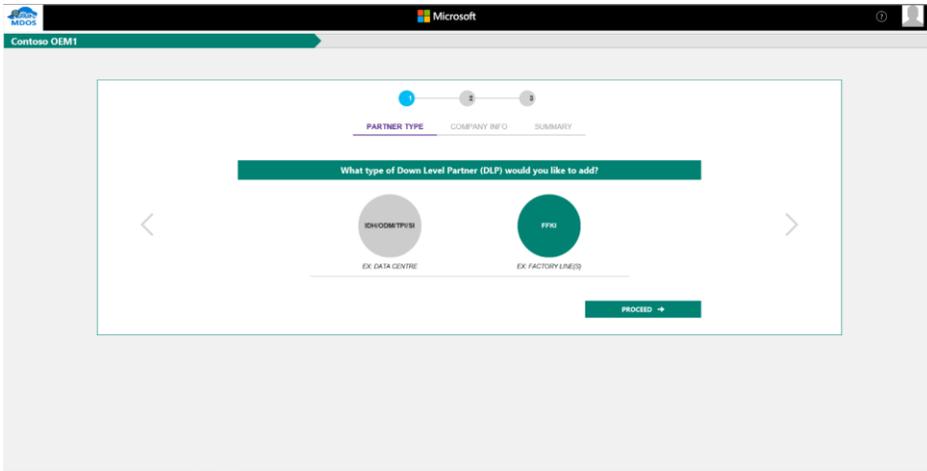
Next steps:

1. Have your partner look for the email from MDOS (sent to the partner's MSA email).
2. Make sure the partner reads the [Onboarding Training Guide](#) for MDOS.
3. Partner should click on the registration link (within the email) to get registered.
4. Ensure your partner fills out the DOC registration form completely.
5. Ensure you partner completes the MDOS setup process.

NOTE: This process may take up to ~5-10 min. for final approval and activation.

13. FILL FFKI FORM

Instruction: Complete all the required fields for your partner to gain access to MDOS. OEM will fill this out on behalf of the FFKI.



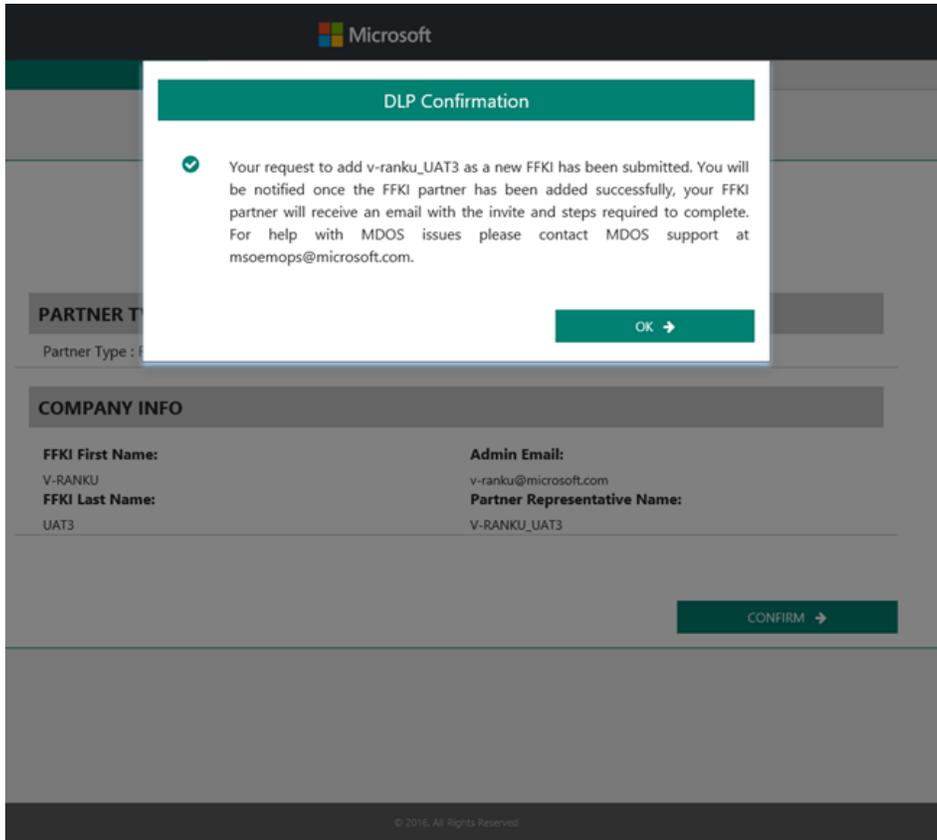
FFKI Form Field Explanation

DLP FFKI Form:

FFKI (owns factory) Form Fields	Explanation
FFKI Admin Name (first, last)	FFKI contact first and last name
FFKI Admin Email	FFKI contact email address. MDOS sends the connection information to this address.
Login Email (MSA)	The user's MSA email account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign in to Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com). Additional information about MSA email accounts.

14. SUCCESS MESSAGE FOR NEW FFKI

Instruction: Your request was successfully received for submitting a new Factory Floor Key Inventory (FFKI). Please ensure the partner follows their next steps to complete the setup process.



Congratulations!

Your request was successfully received for submitting a new Factory Floor Key Inventory (FFKI).

Please follow the next steps carefully to ensure your setup is completed. Once setup is complete you may onboard into the MDOS tool and begin using it for your product key management.

Next steps for the FFKI:

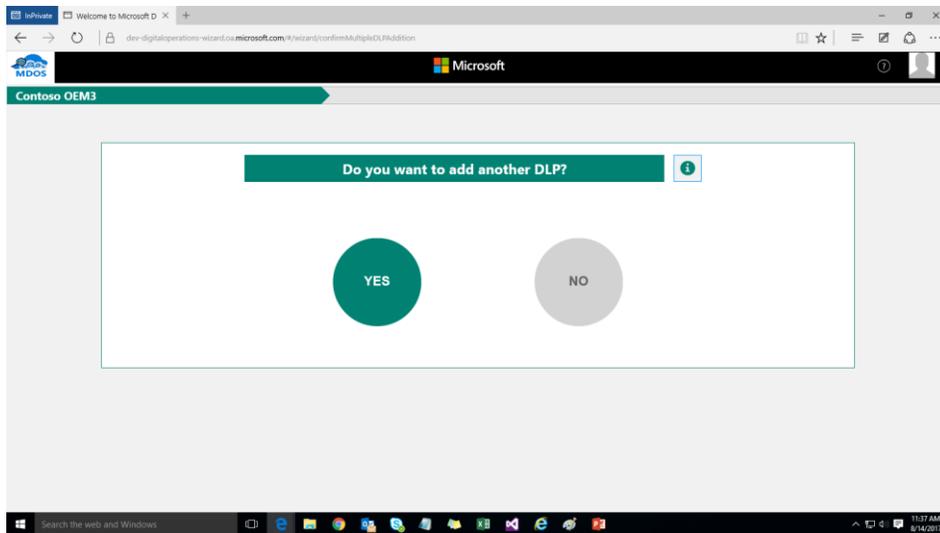
1. Have your partner download the [Step-by-step Guide](#) on how to set up an FFKI.
2. Have your partner download the [MDOS FFKI Client installation](#) software.
3. Have your partner review all the documentation.
4. Ensure the FFKI has completed the pre-level steps.
5. Have your partner look for the email from MDOS (sent to the partner MSA email) that contains the login credentials.

6. Make sure the partner reads the [FFKI Onboarding Training Guide](#) for MDOS.
7. Make sure the partner reads the [User Manual for MDOS – FFKI Section](#).

NOTE: This process may take up to ~5-10 min. for final approval and activation.

15. ADD ANOTHER DLP

Instruction: Determine if you would like to add an additional downlevel partner (or partners) to the account. New partner(s) will then be able to perform key operations.



DLP Definition:

Down Level Partner or Downlevel Partner (DLP):

A DLP is the entity that receives keys from the uplevel entity. Down level entities can deploy keys to downstream partners, manufacture devices, and/or submit CBR/PHR reports. A Down level partner can be:

- ODM/IDH or TPI in a centralized relationship
- ODM/IDH or TPI in a decentralized relationship
- Factory Floor (FFKI end entity in business)

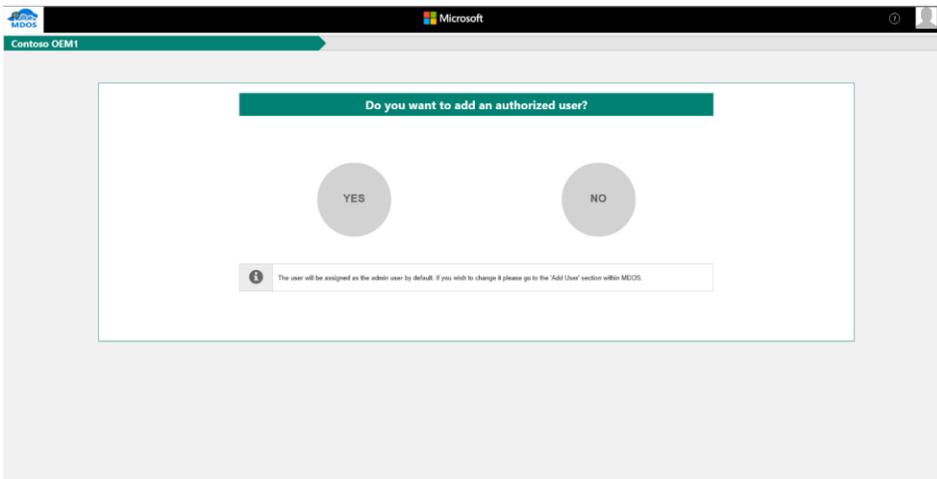
Example: Contoso OEM has a direct agreement with Microsoft and has three TPIs that they work with. In this supply chain model Contoso OEM has three downlevel partners; Contoso TPI Mexico, ABC TPI, and Contoso TPI China. Contoso OEM is the uplevel partner for all three TPIs

and Contoso OEM's uplevel partner is Microsoft since they have a direct agreement with Microsoft.

Tip Tool: Once the business is established, a new downlevel partner (or partners) can be added to the account. New partner(s) will then be able to perform key operations.

16. ADD AN AUTHORIZED USER

Instruction: Add an authorized user connected to your MDOS account. An authorized user will have permissions to access MDOS and perform key actions.



What is an Authorized User?

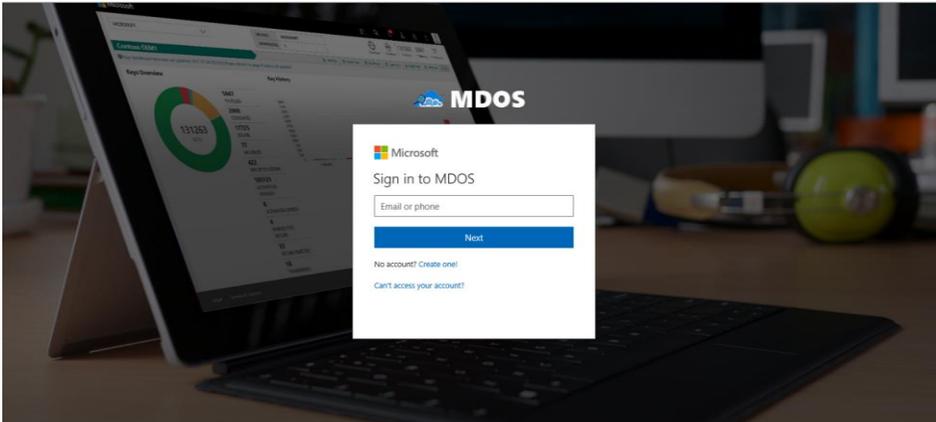
An authorized user will have permissions to access MDOS and perform key actions or read-only access. Access and permissions must be set by the company administrator (admin).

The Admin section in MDOS provides a view of all your authorized user accounts and lets you manage users connected to your account from this dashboard. From the Admin page, under CREATE USERS; you can add, remove, or edit current users. You can also edit user permissions from this section.

Example: Contoso IDH hired a new purchasing manager, and wants to add him as new authorized user in MDOS. The Admin signs into MDOS and clicks on the Admin on icon in the top navigation bar to see existing users. From there, the admin clicks on the plus (+) button to add the new user, enters the user's email address, and sets the roles/permissions to "View Admin" with ordering permissions. The user receives an email with instructions on how to onboard to MDOS.

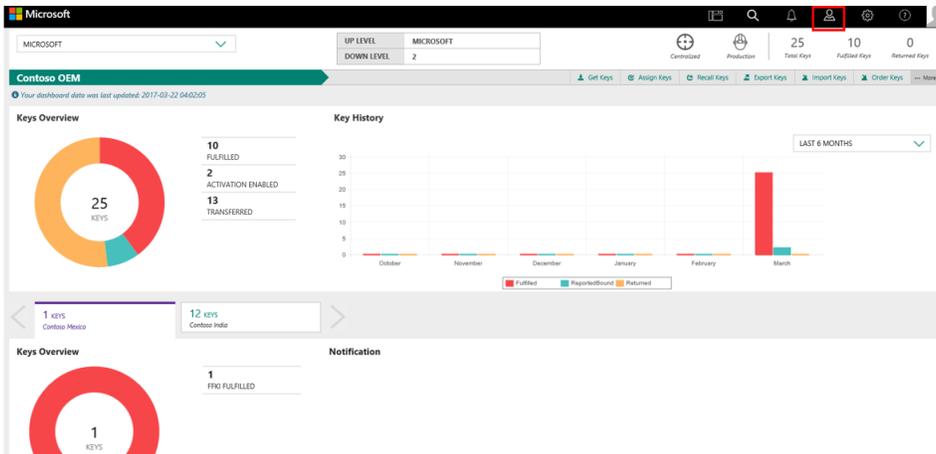
Step-by-step: (Add an authorized user)

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

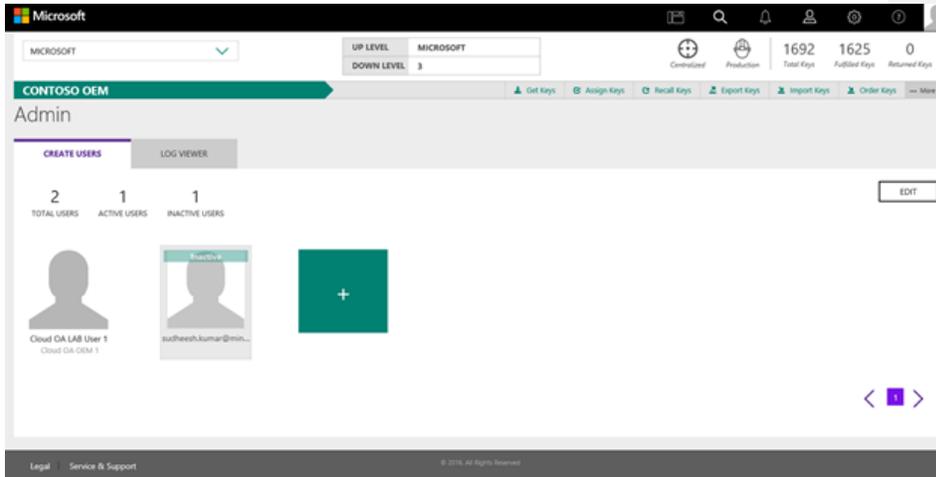


NOTE: Partner (OEM/DLP) needs to add the authorized user in MDOS on their behalf.

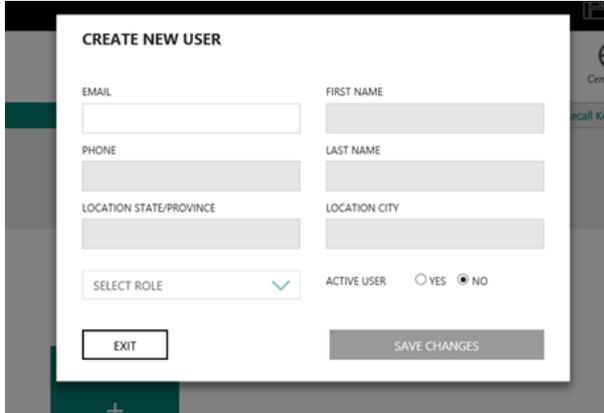
2. Partner: Click on Admin icon in dashboard header



3. Partner: Click '+ ' icon to add authorized user.



- 4. Partner: Enter first name, last name, login email, state, and city.



- 5. Partner: Select the roles and permissions to be provided for the authorized user and click on **Save Changes** button

The screenshot shows a user management form with the following fields and controls:

- EMAIL: tet@rer.com
- FIRST NAME: Fsad
- ROLE: IDH INVENTORY MANAGER (dropdown menu)
- LAST NAME: Asd
- ACTIVE USER: YES (radio button), NO (radio button, selected)

Below the form is a table with three tabs: DPK Permissions, User Permissions, and Site Permissions. The DPK Permissions tab is active, showing a list of permissions:

DPK View
DPK Return
DPK Assign
DPK Recall
DPK Export
DPK Import
DPK EditInfo
DPK Report
DPK Download

The Site Permissions tab shows SITE Get. At the bottom of the form are two buttons: EXIT and SAVE CHANGES.

- Once the changes are saved successfully, an email will be sent to the authorized user (MSA email account) with a hyperlink to log in to MDOS.

17. USER INTAKE FORM

Instruction: Fill out the OA enrollment form to add an authorized user.

The screenshot shows the 'Create New User' form with the following fields and controls:

- USER LOGIN EMAIL: [text input]
- SELECT ROLE: VIEW ADMIN (dropdown menu)
- FIRST NAME: [text input]
- LAST NAME: [text input]

Buttons: RESET, SAVE & ADD

Table:

FIRST NAME	LAST NAME	EMAIL	PHONE	STATE	CITY	STATUS	ACTION
------------	-----------	-------	-------	-------	------	--------	--------

Buttons: SKIP →, PROCEED →

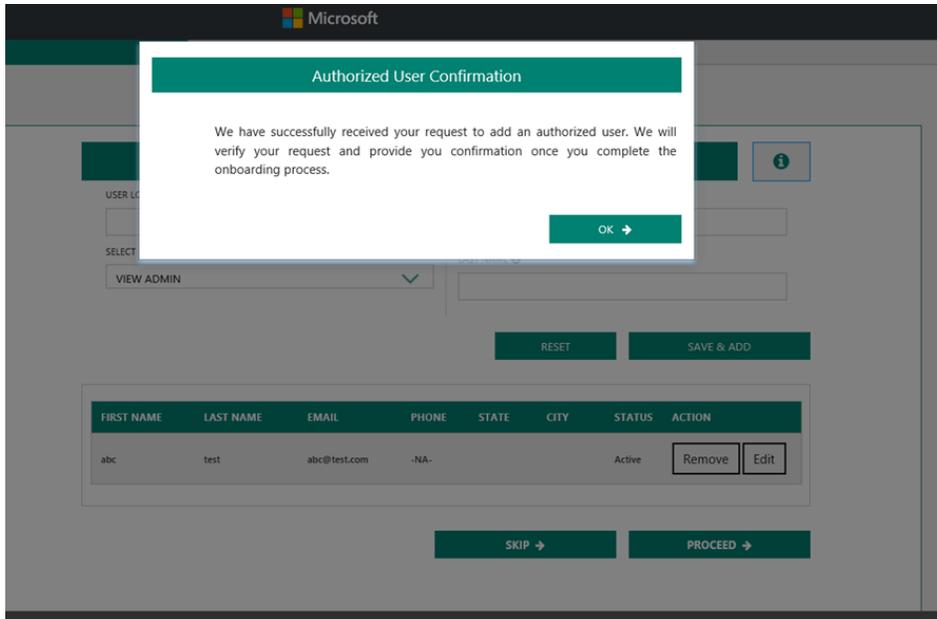
User Intake Form Field Explanation

User Intake Form:

User Intake Form Fields	Explanation
First Name	User first name
Last Name	User last name
Login Email (MSA)	The user’s MSA email account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign in to Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com). Additional information about MSA email accounts.
State	State where company is based
City	City where company is based
Permissions	MDOS permissions that were set by company admin.

18. SUCCESS MESSAGE FOR NEW USER

Instruction: Your request was successfully received for submitting a new user. Please ensure the user follows their next steps to complete the setup process.



Congratulations!

Your request was successfully received for submitting a new user.

Please follow the next steps carefully to ensure your setup is completed. Once setup is complete you may onboard into the MDOS tool and begin using it for your product key management.

Next steps:

1. Have your authorized user look for the email from MDOS. (Sent to the user's MSA email).
2. Make sure the use reads the [User Manual](#) for MDOS.
3. User should click on the registration link (within the email) to get registered.
4. Ensure your user fills out the New User registration form completely.

NOTE: This process may take up to ~5-10 min. for final approval and activation for this user.

19. ADD ANOTHER AUTHORIZED USER

Instruction: Add an authorized user connected to your MDOS account. An authorized user will have permissions to access MDOS and perform key actions.

FIRST NAME	LAST NAME	EMAIL	PHONE	STATE	CITY	STATUS	ACTION
------------	-----------	-------	-------	-------	------	--------	--------

What is an Authorized User?

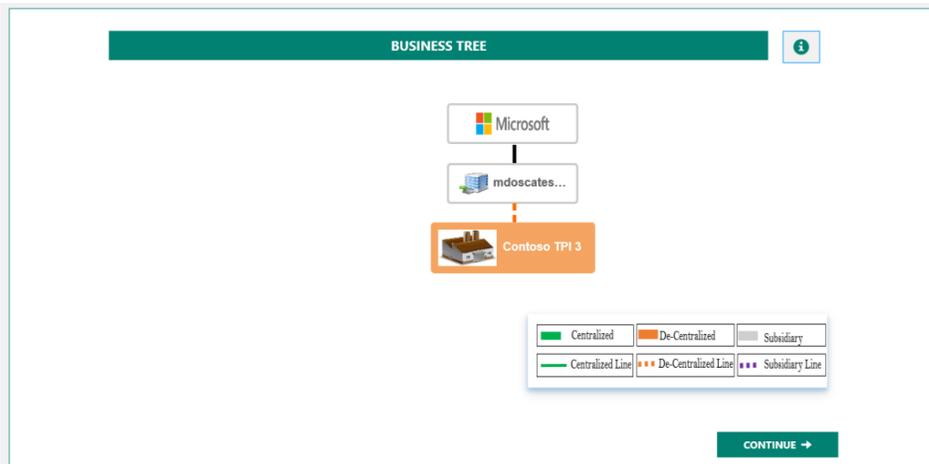
An authorized user will have permissions to access MDOS and perform key actions or read-only access. Access and permissions must be set by the company administrator (admin).

The Admin section in MDOS provides a view of all your authorized user accounts and lets you manage users connected to your account from this dashboard. From the Admin page, under CREATE USERS; you can add, remove, or edit current users. You can also edit user permissions from this section.

Example: Contoso IDH hired a new purchasing manager, and wants to add him as new authorized user in MDOS. The Admin signs into MDOS and clicks on the Admin icon in the top navigation bar to see existing users. From there, the admin clicks on the plus (+) button to add the new user, enters the user's email address, and sets the roles/permissions to "View Admin" with ordering permissions. The user receives an email with instructions on how to onboard to MDOS.

20. DISPLAY BUSINESS SETUP TREES

Instruction: Review your current business setup for accuracy and provide edits if necessary.



Business definition:

A business in MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering. You must select the business/partner you wish to work with from the dropdown menu when you sign into the MDOS dashboard.

Example: Contoso IDH/ODM has a business where they work with different OEMs; Contoso OEM and ABC OEM had both reached out to Contoso IDH/ODM through an MDOS invitation to invite Contoso IDH/ODM to work with them. Contoso IDH/ODM will setup a centralized business model with Contoso OEM and a decentralized model with ABC OEM. They also have an

additional business because they signed an IDH/ODM agreement with Microsoft. So, they now have three businesses. They are looking to utilize MDOS to help manage all their businesses. MDOS allows Contoso IDH/ODM to easily identify the DPK owners, and better manage multiple businesses.

Tip Tool: A business in MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering. You must select the business/partner you wish to work with from the dropdown menu when you sign into the MDOS dashboard.

21. DISABLE/ DELETE DLP

Instruction: This functionality will help to delete or disable the DLP from the list of added IDH/TPI/FFKI/FKI. Up level partner can disable/delete the DLP only when there is no DLP under them and they don't have any keys assigned to them.

Example: Contoso OEM is no longer doing business with ABC Design House and wants to remove it as a down level partner. From the Partner Information page, they select "Disable" for ABC Design House. After successfully disabling the partner permissions, the status next to the partner name changes to "Disabled". Contoso sees the action button for ABC Design House change to ENABLE, so they may easily re-enable the partner at any time if desired.

In case partner do not need that DLP in future, they can remove it from list of added DLPs.

To Delete DLP, you need to select partner by clicking on radio button and then click on delete option. A confirmation message box will pop out. After clicking confirm button, selected DLP will be removed from the list.

From manage business dashboard, up level partner can delete or disable their down level partner.

DISABLE DLP:

1. From manage business dashboard, select the partner by clicking on radio button that need to be disabled.

Microsoft Digital Operations Services User Manual

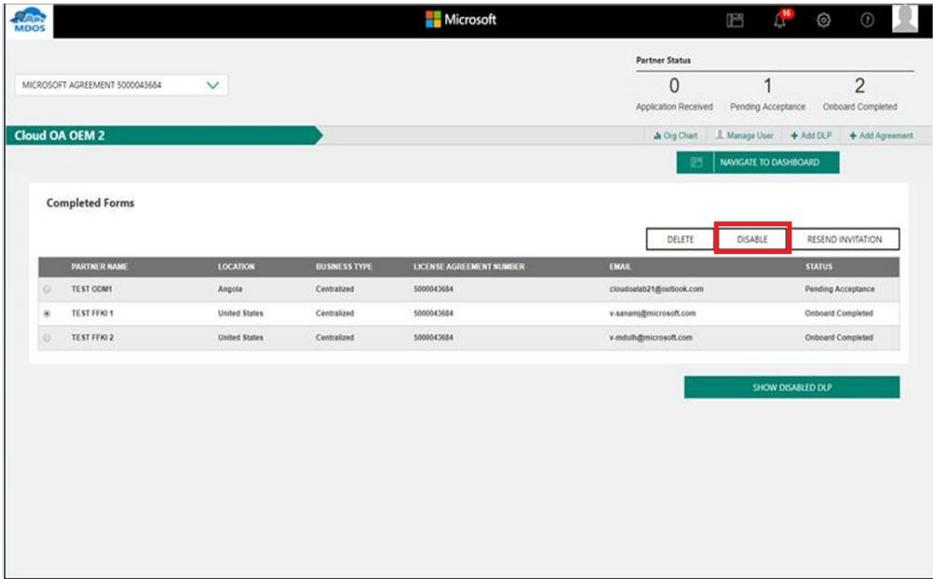
The screenshot displays the Microsoft Digital Operations Services (MDS) interface. At the top, there is a navigation bar with the Microsoft logo and a search bar. Below the navigation bar, a dropdown menu shows "MICROSOFT AGREEMENT 500043684". To the right, a "Partner Status" section shows a progress bar with three stages: "Application Received" (0), "Pending Acceptance" (1), and "Onboard Completed" (2). Below this, there are buttons for "Org Chart", "Manage User", "Add DLP", and "Add Agreement". A green button labeled "NAVIGATE TO DASHBOARD" is also present.

The main content area is titled "Completed Forms" and contains a table with the following data:

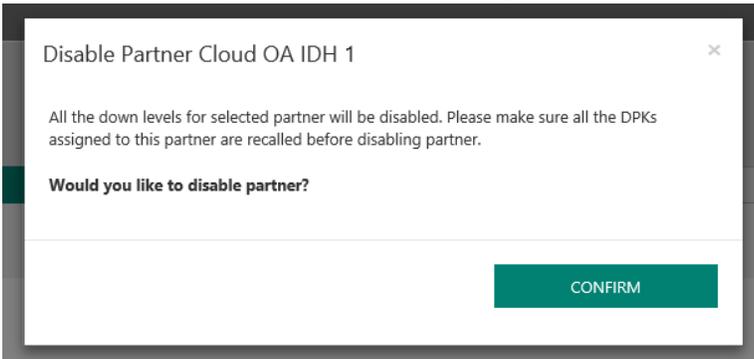
PARTNER NAME	LOCATION	BUSINESS TYPE	LICENSE AGREEMENT NUMBER	EMAIL	STATUS
TEST COM1	Angola	Centralized	500043684	cloudtest21@outlook.com	Pending Acceptance
TEST FFK1	United States	Centralized	500043684	v.sanjam@microsoft.com	Onboard Completed
TEST FFK2	United States	Centralized	500043684	v.mduh@microsoft.com	Onboard Completed

At the top right of the table, there are buttons for "DELETE", "DISABLE", and "RESEND INVITATION". At the bottom right of the table area, there is a green button labeled "SHOW DISABLED DLP".

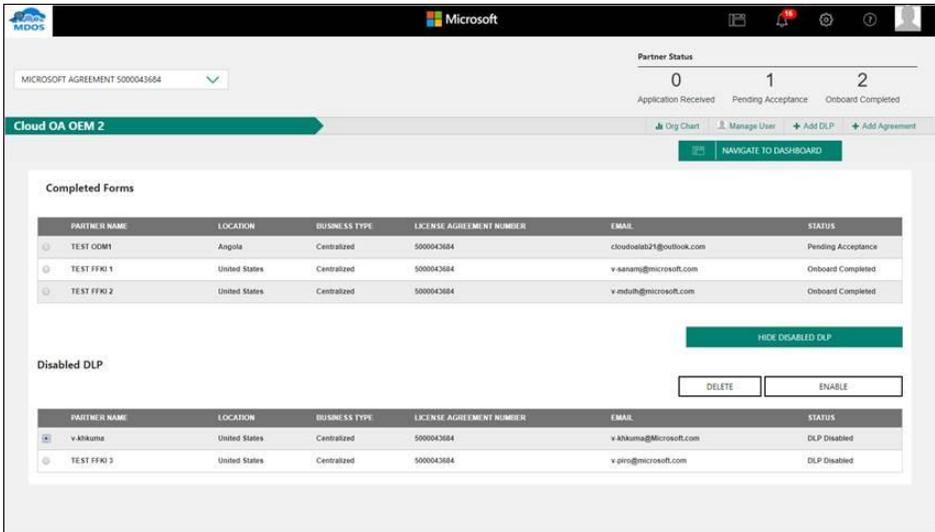
2. Click on disable button.



3. A confirmation window will open to confirm your selection. Click CONFIRM, the request will be processed and the partner will be notified through alert.



4. Once the partner has been disabled successfully, the disabled partner will be moved to 'Disabled DLP' section, the status of the partner will change to "Disabled".



5. To re enable the partner, you need to select the disabled partner from the Disabled DLP list and then click on enable button.

DELETE DLP:

1. From manage business dashboard, select the partner by clicking on radio button that need to be disabled.

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The screenshot shows the Microsoft Digital Operations Services (MDDS) dashboard. At the top, there is a navigation bar with the Microsoft logo and user profile. Below the navigation bar, there is a search bar for 'MICROSOFT AGREEMENT 500043684'. The 'Partner Status' section shows three stages: 'Application Received' (0), 'Pending Acceptance' (1), and 'Onboard Completed' (2). The 'Cloud OA OEM 2' section has a 'NAVIGATE TO DASHBOARD' button. The 'Completed Forms' section contains a table with columns: PARTNER NAME, LOCATION, BUSINESS TYPE, LICENSE AGREEMENT NUMBER, EMAIL, and STATUS. The table has three rows: 'TEST ODM1' (Angola, Centralized, 500043684, cloudoab21@outlook.com, Pending Acceptance), 'TEST FFK1' (United States, Centralized, 500043684, v.aanani@microsoft.com, Onboard Completed), and 'TEST FFK2' (United States, Centralized, 500043684, v.mduh@microsoft.com, Onboard Completed). The 'TEST FFK1' row is highlighted in red. Above the table, there are three buttons: 'DELETE', 'DISABLE', and 'RESEND INVITATION'. Below the table, there is a 'SHOW DISABLED DLP' button.

PARTNER NAME	LOCATION	BUSINESS TYPE	LICENSE AGREEMENT NUMBER	EMAIL	STATUS
TEST ODM1	Angola	Centralized	500043684	cloudoab21@outlook.com	Pending Acceptance
TEST FFK1	United States	Centralized	500043684	v.aanani@microsoft.com	Onboard Completed
TEST FFK2	United States	Centralized	500043684	v.mduh@microsoft.com	Onboard Completed

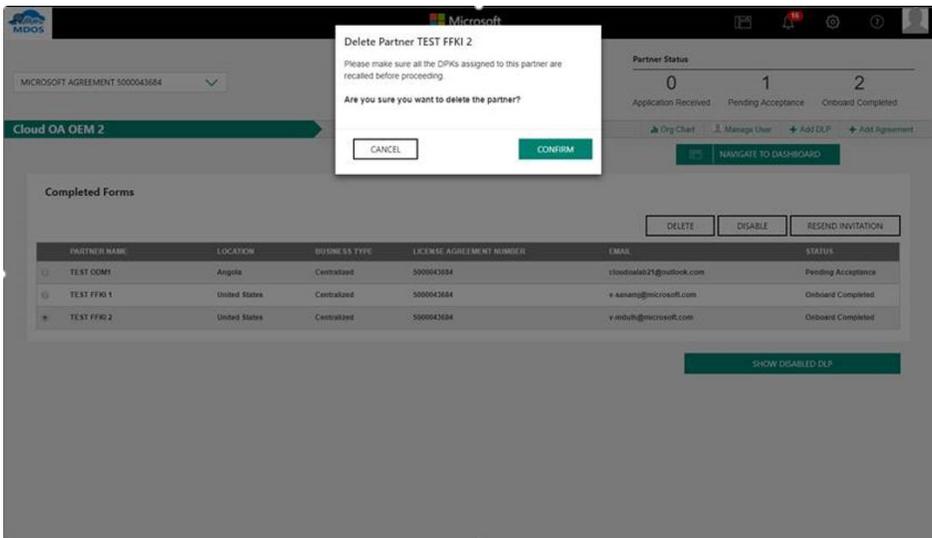
2. Click on Delete button.

The screenshot shows the Microsoft Digital Operations Services (MDDS) dashboard, similar to the previous one. The 'Completed Forms' section contains the same table. The 'DELETE' button above the table is now highlighted in red.

PARTNER NAME	LOCATION	BUSINESS TYPE	LICENSE AGREEMENT NUMBER	EMAIL	STATUS
TEST ODM1	Angola	Centralized	500043684	cloudoab21@outlook.com	Pending Acceptance
TEST FFK1	United States	Centralized	500043684	v.aanani@microsoft.com	Onboard Completed
TEST FFK2	United States	Centralized	500043684	v.mduh@microsoft.com	Onboard Completed

3. A confirmation window will open to confirm your selection. Click CONFIRM, the request to delete the DLP will be processed.

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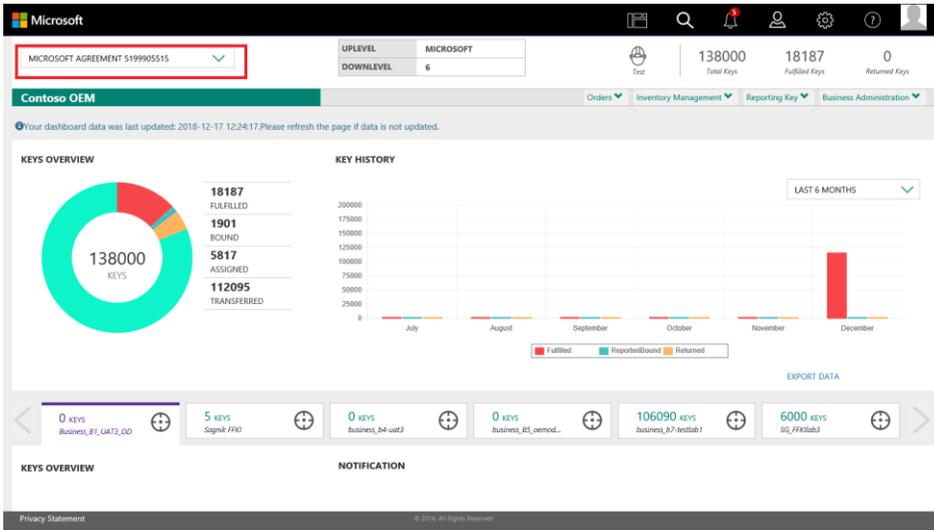


4. Once the request is processed successfully, the partner will be notified with an alert message and the DLP partner will not be visible.

22. MDOS DASHBOARD

Instruction: Please review the readiness materials for MDOS.

Microsoft Digital Operations Services User Manual



Welcome to MDOS

Helpful Information:



Please review the [User Manual](#) before beginning to use MDOS.
Refer to the [FAQ](#) section for quick answers to common questions.

23. MDOS SUPPORT (Msoemops@microsoft.com)

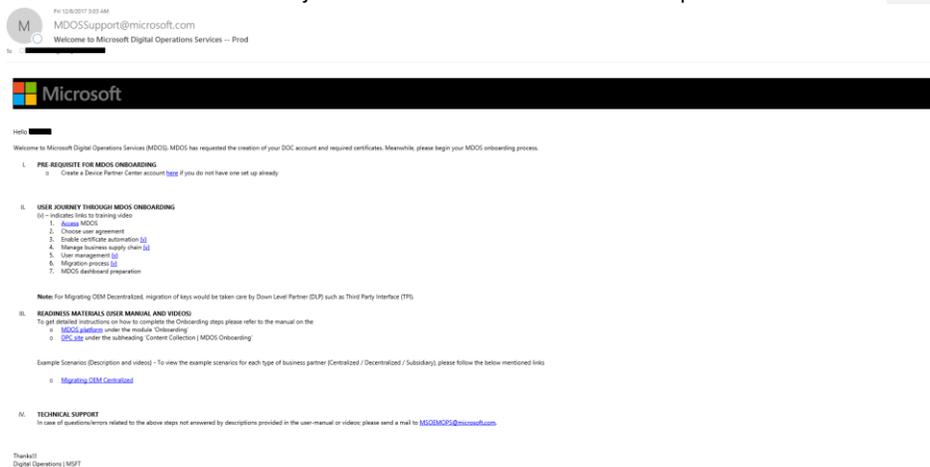
For support, please contact: msoemops@microsoft.com

STEPS FOR ONBOARDING - NEW SUBSIDIARY

These steps apply to the following persona: **New Subsidiary**

1. RECEIVE EMAIL INVITATION TO JOIN MDOS

You will receive an email invitation to join MDOS via the MSA email account provided to OEM.



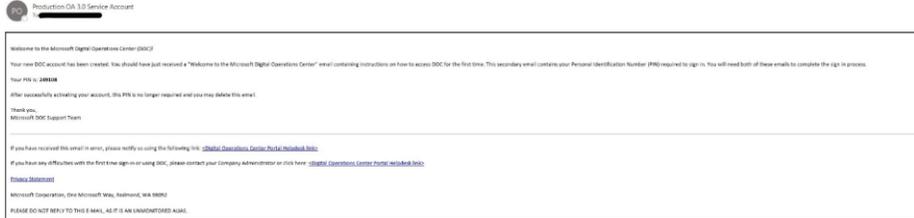
2. ACTIVATING DOC ACCOUNT

You will receive an email to join MDOS via the MSA email account provided to the GPO.

STEP 1: Find your sign-in PIN (Personal Identification Number). After this welcome email, you will receive an additional email containing a first-time sign-in PIN. Please make note of the PIN; it is a six-digit number.

Microsoft Digital Operations Services User Manual

Important information regarding your new Microsoft DOC account



STEP 2: Select your preferred sign-in method. The Digital Operations Center supports several types of sign-in methods: depending on your user account type. You may select any qualifying account of your choice or create a new one.

STEP 3: Sign in for the first time. Supported sign-in credentials Windows Live ID Microsoft Corp Net with the information from Steps 2 and 1, You are ready to sign in to DOC by clicking www.microsoftoem.com where you will be asked to select a preferred sign-in method. After making your selection, you will be directed to the sign-in page.

STEP 4: Enter your PIN. Once you have successfully signed in, you will be asked to provide the PIN number obtained in Step 1. After entering PIN, you will be taken to the Home Page. The invitation mail will provide you the detailed step (as per below screen).

Microsoft Digital Operations Services User Manual

Subject: Welcome to the Microsoft Digital Operations Center

Welcome to the Microsoft Digital Operations Center (DOC)!

Your new DOC account has been created. To begin using DOC applications, you will need to complete the following five steps the first time you sign in.

STEP 1 – Find your sign-in PIN (Personal Identification Number).
After this welcome email, you will receive an additional email containing a first time sign-in PIN. Please make note of the PIN; it is a six-digit number.

STEP 2 – Select your preferred sign-in method.
The Digital Operations Center supports several types of sign-in methods, depending on your user account type. You may select any qualifying account of your choice or create a new one. Please note that your company may have policy guidelines regarding this account selection.

User Account Type	Supported sign-in credentials	
Microsoft Partner Extranet <code>yourdomain\userid</code>	Windows Live ID Microsoft.com	Microsoft CorpNet Microsoft.com
External customer (OEM, Distributor, etc.)	✓	✓
External partner (AR, SPV, etc.)	✓	✓
Internal Microsoft employee or vendor		✓

STEP 3 – Sign in for the first time.
With the information from Steps 1 and 2, you are ready to sign in to DOC by clicking the following link: [<first time sign-in link>](#). You will be asked to select a preferred sign-in method. After making your selection, you will be directed to the sign-in page.

STEP 4 – Enter your PIN.
Once you have successfully signed in, you will be asked to provide the PIN number obtained in Step 1. After entering your PIN, you will be taken to the Home Page.

STEP 5 – Browser Configuration.
After you have successfully completed your first-time login, please follow the steps outlined in Section 1 of our "About DOC" guide to ensure DOC runs smoothly within Internet Explorer: [About DOC](#). You are now ready to start using the Microsoft Digital Operations Center!

Note: *Your account must be activated within 30 days of receipt of this email, otherwise your account will be suspended.*

Note: *If your account is suspended or if your account becomes locked after three unsuccessful sign-in attempts, please contact your Company Administrator. The Company Administrator is a designated person within your organization defined in your Microsoft agreement.*

To learn more about the functionality of various applications within DOC, click here: [About DOC](#)

Thank you,
Microsoft DOC Support Team

If you have received this email in error, please notify us using the following link: [<Digital Operations Center Portal Helpdesk link>](#)

If you have any difficulties with the first time sign-in or using DOC, please contact your Company Administrator or click here: [<Digital Operations Center Portal Helpdesk link>](#)

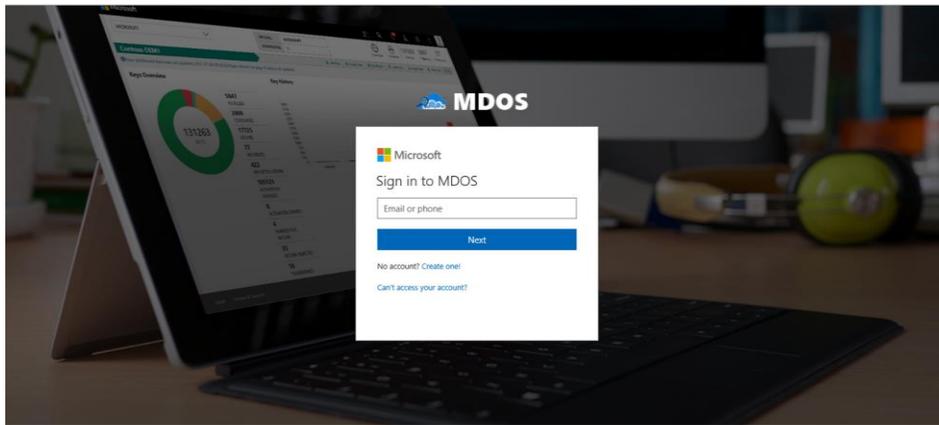
[Privacy Statement](#)

Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

PLEASE DO NOT REPLY TO THIS E-MAIL, AS IT IS AN UNMONITORED ALIAS.

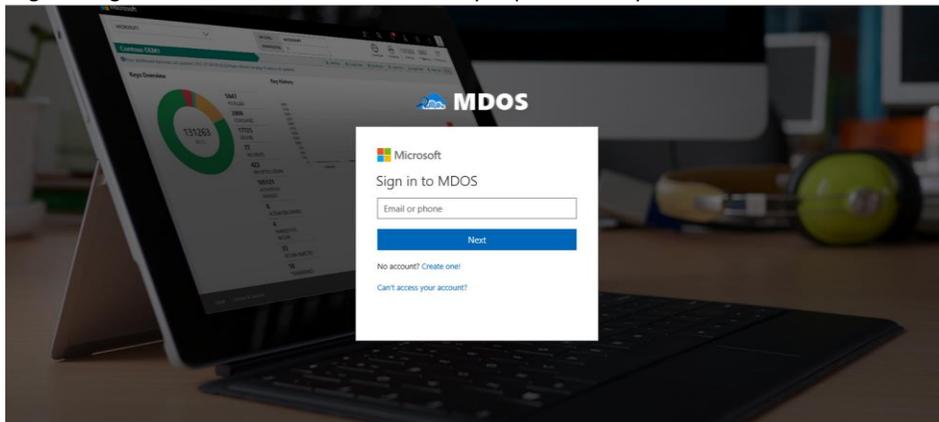
3. GO TO MDOS

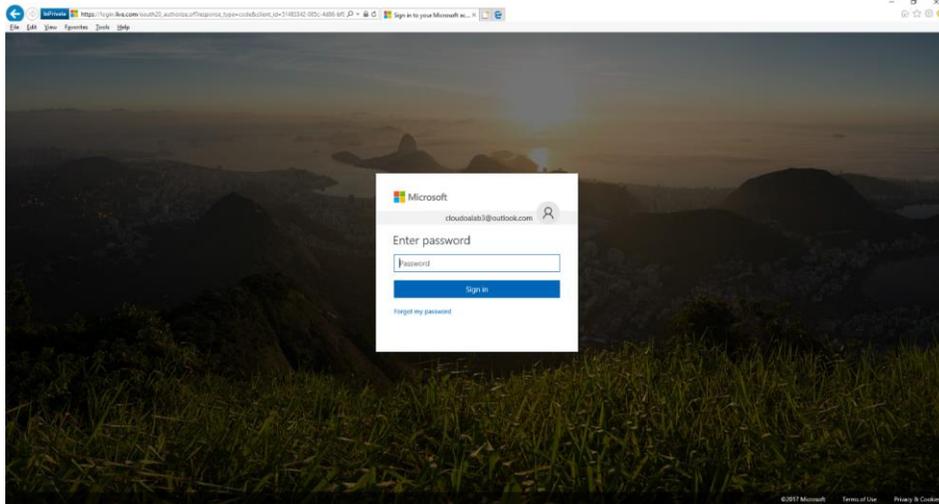
Go to MDOS by typing www.digitaloperations.oa.microsoft.com in your browser.



4. LOG IN TO ACCOUNT

Log in using the MSA email account credentials you provided to your COM.





5. FOLLOW ONBOARDING STEPS

Follow the MDOS onboarding process steps.

6. WELCOME TO MDOS

Instruction: Welcome to MDOS - a cloud-based digital key distribution and entitlement service for Microsoft OEM partners. Please read the overview and capabilities to learn more about this service.



MDOS Overview

Welcome to Microsoft Digital Operations Services (MDOS)

MDOS is a web based service that provides Microsoft partners (OEM, ODM/IDH and Third-Party Installers) the ability to complete the OEM Activation Services 3.0 (OA 3.0) end-to-end process that is required to order and ship devices installed with Microsoft Windows. The MDOS service provides partners the ability to digitally order, fulfill, transfer and return digital product keys (DPKs) as part of doing business with Microsoft. Microsoft is discontinuing physical Certificate of Authority (COAs) licensing stickers as a way of licensing products. Beginning with Microsoft Windows 8, partners are now required to use DPKs to manufacture and pre-license the device at manufacturing time. The MDOS system is a cloud service that can be used by partners to complete these transactions with Microsoft.

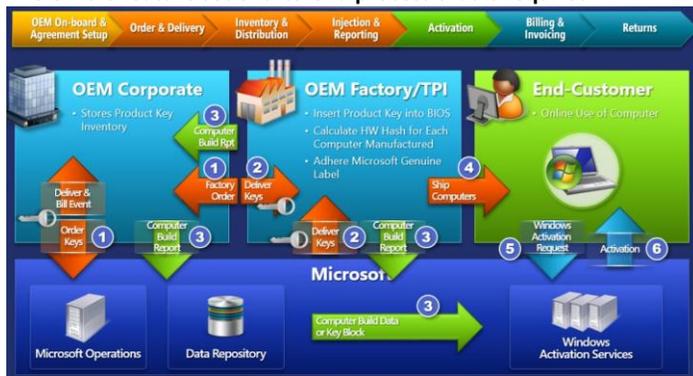
In order to transact with Microsoft, new and existing partners will need to onboard onto the MDOS system and begin transacting in a digital way. The OA 3.0 activation process is a new way to license and activate Windows. Before beginning to use this new model, it is important to understand some key concepts and requirements. Below, is a high-level overview of both the new OA 3.0 end-to-end process requirements, as well a high-level overview of the capabilities of the MDOS service.

OEM Activation 3.0 End-to-End

OA 3.0 as noted is a new digital way of manufacturing, pre-licensing, and shipping windows-based systems. OA 3.0 provides an entire framework for how OEM/ODM partners transact with Microsoft, as well their downstream manufacturing partners and entities. In OA 3.0, the process starts by an OEM/ODM, who has already completed a GPA agreement with Microsoft. If you do not have GPA or Licensing agreement with Microsoft, please contact your Customer Operations Manager (COM) or your Microsoft Sales Manager to understand what is required to complete a direct licensing agreement with Microsoft.

Once a partner has an agreement signed with Microsoft to sell Microsoft Windows and/or additional products, the next step is understanding the end-to-end process that is required to complete the OA 3.0 process for Windows shipments. The process starts with a toolset required to digitally connect to Microsoft. Today, the partner has a choice of whether to build an OA 3.0 client or leverage the existing solution offered by Microsoft, called MDOS. The MDOS solution is provided for partners that complete under one million transactions a year. For all other partners, building an OA 3.0 client is required. The remainder of this manual will detail aspects of the MDOS system, as well provide overview, step-by-step examples, tips, and details about the specific functionality available in the MDOS service. Below, we discuss the OA 3.0 end-to-end process for understanding. We will then discuss at a high level how to use MDOS to ensure your continued success purchasing, manufacturing, and shipping Microsoft Windows to your end users.

The OA 3.0 feature set end-to-end process that is required



The Digital licensing and entitlement process starts with the OEM/ODM placing an order to Microsoft for Microsoft Windows digital product keys (DPKs). This order can either be a form of credit card at Microsoft, which allows the OEM’s designated partners to order against (Call Off Order), or it is a direct order from the OEM to Microsoft (Standard Order), either type is supported. The order process can be completed within the MDOS service, or direct to Microsoft DOC Portal site. Once the digital order is placed to the Microsoft services, the OA 3.0 DPKs for Windows will be fulfilled into the MDOS system. The OEM then chooses a partner to complete the manufacturing portion of the project and will deploy (transfer) the digital product keys from their system to the factory, where the factory may be owned by the OEM or is a third-party Installer (TPI). Once the keys have been deployed to the factory, the factory will manufacture the Windows device and will be required to inject the DPK into the firmware (BIOS/UEFI) of the device. Once the DPK is injected, the factory will capture a Computer Build Report (CBR), which contains complete hardware information shipping with the device, as well information about the now injected DPK. This CBR is sent to Microsoft and is recorded prior to the device reaching the end user. Once the end user purchases that device and powers on, Windows will request a machine activation, which ensures the device is a Genuine Microsoft Windows device. The

activation event occurs and completes and the OA 3.0 process completes. If the machine is returned for any reason within 365 days, the OEM can request a refund and must send Microsoft information about the specific DPK being returned and the reason for the return.

There are a variety of use cases and scenarios that are supported by the OA 3.0 end-to-end process and requires some general understanding before beginning to complete the process with Microsoft. The OEM/ODM, the entity with a direct relationship and contract with Microsoft is in control of deciding how much involvement they will have in the end-to-end process. There are three ways to setup your relationship with your downstream partners (subsidiaries, servicing centers and/or factories for manufacturing). In MDOS, we define the relationship of the OEM/ODM and its partners as a Business relationships as a Business. A business within MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering. The OEM/ODM, those that have a direct contract with Microsoft, choose the type of control and involvement they will have in the OA 3.0 end-to-end process. The OEM/ODM can choose to have a centralized or decentralized relationship with its business entities. In a centralized business setup, the OEM chooses to have total control of the process from Order to Return and all functions in between. The OEM will order, fulfill and transfer the DPKs to their downstream partners called DLP (Downlevel Partners), as well will handle all returns on their own behalf. The centralized model allows the parent entity (OEM/ODM) full control throughout the MDOS system and the end-to-end process. The other type of business setup is a Decentralized model. The decentralized model requires the OEM to place the Call Off order with Microsoft. The OEM does not need to manage the order or the digital product keys at all, instead this model relies on the DLP to manage all DPK orders, fulfillments, transfers and returns on behalf of their OEM partner. The OEM does not need to “manage” anything except the call off order with Microsoft, but is responsible for any audits required by Microsoft and as such the OEM should check in with their DLP’s on a regular basis to understand what is happening within their business.

In summary, the OA 3.0 end-to-end process is setup by the OEM/ODM, the entity with the direct contract with Microsoft. The OEM/ODM is required to define the business and yet can choose to manage the entire end-to-end process directly (centralized) or choose to outsource the process to their DLP (decentralized).

MDOS Service Overview

Now that you have familiarity with the OA 3.0 end-to-end process requirements and available business related options, we will explore the high level MDOS capabilities as a tool to complete your digital business transactions with Microsoft. The MDOS service offering is available to our smaller OEM/ODM partners, those that complete less than one million shipments of Windows. The MDOS service is currently free to use for these partners including support of the service and its feature offerings. MDOS provides electronic email based support from the vendor hired by Microsoft to complete the service offering, please see support section within the MDOS manual for additional details and the specific contact information.

As noted above, partners can choose to onboard to the MDOS service or complete a build of their own OA 3.0 client, connecting to Microsoft backend web service directly. The MDOS service is an Azure Cloud based solution that also requires a physical client for the factory floor manufacturing requirements. MDOS provides the end-to-end solution required to order, fulfill, deploy, report and return Digital Product Keys required to manufacture Windows devices. Below we will explore some of the high-level features of the MDOS service offering, and walk through the onboarding requirements.

Onboarding to MDOS

MDOS provides everything required to complete the digital pre-licensing requirements set by Windows since Windows 8. To onboard to the MDOS service, you will need to complete your GPA contract with Microsoft. Once the contract has been signed, Microsoft will send you an email with your MDOS Registration information, including a link to the DOC site. The DOC is used to “register” your MSA email account and corporate email account with the system. Because MDOS is a cloud service, you do not need to “install” any software for the OEM/ODM entity, rather you access the MDOS service via a browser URL address that will be sent to you once you have completed your contract with Microsoft. The link you will receive will direct you to register with DOC and choose which type of partner you identify as. Once the DOC registration is complete, you will be sent the MDOS direct link URL in order to login for the first time.

Defining an MDOS Business

Once the OEM/ODM have registered and successfully logged into the MDOS system, the next step is to define the type of Business that will be used (centralized or decentralized), and which entities (DLP’s) you will work with to complete your Windows device end-to-end process for manufacturing and device shipment. Setting up the business is a critical step and one that should be thought through prior to attempting to setup your Business within MDOS. MDOS supports multiple businesses; which means that for one business the OEM may choose to work with Manufacturing Partner A and for another business the OEM may choose Manufacturing Partner B. The OEM may choose to setup one business as centralized and the other as decentralized. Each business is secured and keeps all details regarding that business separate, whether it be DPKs, Log files, and/or Alerts. An OEM can also define how the business behaves with regard to DPK fulfillment and/or CBR submissions to Microsoft. In other words, the OEM may choose to order and then manually download DPKs for one business, while setting up automatic DPK fulfillment for their other business. There are a variety of settings and options defined within this manual and we encourage you to explore the details of each for a thorough understanding.

Manufacturing with MDOS

As part of setting up the MDOS Businesses, the OEM/ODM can choose the manufacturing partner(s) they will work with. Adding the manufacturing partners into the MDOS Business requires the OEM/ODM to invite the manufacturing entity as a business entity within your defined business. The OEM/ODM will “invite” the manufacturing partner (TPI) into the business via the DLP setup within the MDOS service. Once the manufacturing partner accepts the invite,

they are ready to transact on behalf of the OEM/ODM partner. The MDOS service requires the manufacturing partner to “configure” themselves within the MDOS cloud service (as a TPI) and then requires the manufacturing partner to install the physical MDOS Factory Floor Key Inventory (FFKI) client on the manufacturing floor. The MDOS FFKI client is a software install that will connect to the MDOS cloud via a secure connection through either a VPN or via the Internet. The MDOS FFKI client manages the DPKs between the MDOS cloud and the physical manufacturing floor. The MDOS FFKI Client will request DPKs from the service and will make those DPKs available for injection into the Windows device being manufactured. The MDOS FFKI client will also capture the Computer Build Report (CBR) required and send that CBR upstream to the Uplevel Partner (ULP), who will relay that to Microsoft directly depending on Centralized or Decentralized business setup.

Conclusion

In order to manufacture and ship Windows devices, our OEM and ODM partners are now required to complete these transactions in a digital way, no longer using the COA’s of the past. The OEM Activation 3.0 end-to-end process is a defined set of steps that are required to purchase, fulfill, deploy and/or return digital product from Microsoft. The OA 3.0 process requires the parent entity, that is the entity that has a direct licensing agreement with Microsoft to connect, order and fulfill digital product keys. The OEM/ODM has a choice of whether to build their own OA 3.0 client software, or leverage the MDOS service for completing transactions. The MDOS service is for use by OEM/ODM partners who complete one million or more Microsoft Windows device shipments per year. Onboarding to MDOS occurs once the OEM or ODM have successfully completed a licensing agreement with Microsoft. The MDOS service provides these entities and partners with a system to use to complete end-to-end digital orders, fulfillments, deployments and returns electronically with Microsoft. The MDOS service supports setting up Businesses that allow the OEM/ODM the ability to manage their business in a way that meets their business needs—either centralized, decentralized or a combination of both—as a subsidiary in a secure way. The OEM/ODM can invite downlevel partner (DLP’s) into their business to complete functions such as servicing and manufacturing. The remainder of this manual will provide overviews, examples, step by step instructions and tips for completing your MDOS features and functions.

MDOS Capabilities and Benefits

Microsoft Digital Operations Service (MDOS) is a cloud-based digital key distribution and entitlement service for Microsoft partners. It gives partners the ability to order, deploy, manage, bind, return, and recall Digital Product Keys (DPKs) as needed. MDOS is a self-service tool that provides easy access to new capabilities and allows partners to scale.

The key benefits of moving to MDOS include:

- Flexible platform: Easy to add new partners and scale your business
- Self-service capabilities
- Efficient inventory management
- User-friendly interface

- Software as a service – no need to upgrade software, always up to date
- Integrated with other Microsoft platforms

MDOS provides the following capabilities:

- Basic OA 3.0 infrastructure (order, fulfill, transfer, return, report, etc.)
- Automated setup/onboarding
- ERP system integration*
- Integration with other Microsoft platforms (DOC and Connector)*
- Low cost scalability to support new Microsoft programs (pricing configurator, DA, cloud attachments, etc.)
- Business Intelligence reporting*
- Self-serve capabilities (Pop-up support, tip tool, chat support, form integration, support forums, link to documentation, etc.)
- Offline run mode (File-based DPKs)
- MES system integration* (API for FF EMS/MES)

*Some features may not be available today but will be available at a future date.

Example: Contoso OEM has a growing business where they work with multiple downlevel partners (DLPs) including TPI, IDH/ODM, and FFKIs. The businesses run in different business models where some are centralized and some are decentralized. Contoso OEM was using the DIS Chinasoft legacy system, but they are now migrating over to MDOS for its many benefits.

Contoso OEM will now be able to:

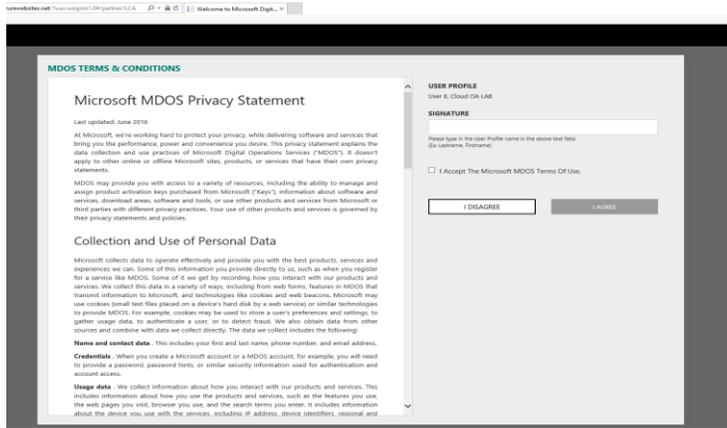
- take advantage of the flexible platform that allows them to easily add new partners as their business grows.
- navigate across different views depending on each business' structure with a user-friendly interface.
- use the self-service tool to easily perform key functions (order, fulfill, transfer, return, report, etc.).
- manage inventory for each business and see a real-time view of inventory levels, key status details, as well as access business intelligence data—all in one place.

Additionally, Contoso OEM knows that MDOS is also an online service, so updates are made automatically and they will never have to manually update their software to have the latest version.

Tip Tool: MDOS is a cloud-based digital key distribution and entitlement service for Microsoft OEM partners. It gives partners the ability to order, deploy, manage, bind, return, and recall Digital Product Keys (DPKs) as needed. MDOS is a self-service tool that provides easy access to new capabilities and allows partners to scale.

7. MDOS TERMS OF USE

Instruction: Review the MDOS terms of use and sign the acknowledgement to continue this set up process. Terms must be agreed upon to continue the set up and begin working with MDOS.



MDOS terms of use

Please review the MDOS terms of use and sign the acknowledgement to continue this set up process. Terms must be agreed upon to continue the set up and begin working with MDOS.

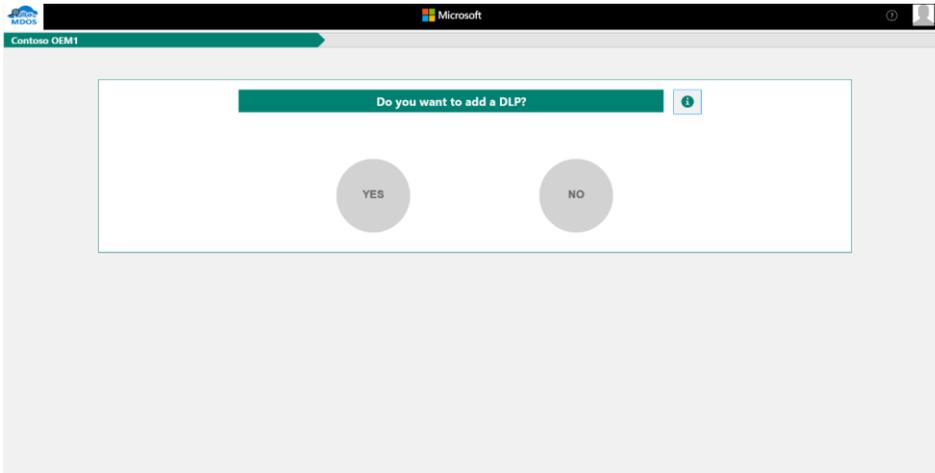
NOTE: To sign the agreement, please be sure to enter your name in the signature field as it is displayed above. The signature field is case sensitive. An inactive button is greyed out until this field matches.

For more information:

Read the full [MDOS Terms of Use](#) on a separate page.

8. ADD NEW DLP

Instruction: Determine if you would like to add a new downlevel partner (or partners) to the business. New partner(s) will then be able to perform key operations.



MDOS definition of partner types

Acronym	Term	Description
FFKI	Factory Floor Key Inventory	Inventory (FFKI) client on the manufacturing floor. The MDOS FFKI client is a software install that will connect to the MDOS cloud via a secure connection through either a VPN or via the Internet or may be manually transferred (e.g. via USB). The MDOS FFKI client manages the DPKs between the MDOS cloud and the physical manufacturing floor. The MDOS FFKI Client will request DPKs from the service and will make those DPKs available for injection into the Windows device being manufactured. The MDOS FFKI client will also capture the Computer Build Report (CBR) required and send that CBR upstream to the Uplevel Partner (ULP), who will relay that to Microsoft directly depending on Centralized or Decentralized business setup.
ODM/ IDH	Original Design Manufacturer/ Independent Design House	An original design manufacturer (ODM) or independent design house (IDH) is hired by an OEM. They are a company that designs and manufactures devices (tablet, PC, etc.) based on requirements specified by the OEM, (such as screen size, processor, memory, performance, etc.). The devices manufactured by the ODM/IDH are rebranded by the OEM. ODM/IDH companies allow the firm that owns or licenses the brand to produce products without having to engage in the design or running of a factory.

OEM	Original Equipment Manufacturer	Original equipment manufacturer (OEM) is a term used when one company makes a part or subsystem that is used in another company's product.
TPI	Third-Party Installer	A manufacturer that is licensed through a TPI agreement to preinstall the Windows operating system onto a computer on behalf of an OEM. TPis are authorized to use the OA 3.0 Tool. The OEM sends the DPKs to the Factories (usually a Third-Party Installer (TPI) factory).

DLP Definition:

Down Level Partner or Downlevel Partner (DLP):

Is the entity that receives keys from the uplevel entity. Down level entities can deploy keys to downstream partners, manufacture devices, and/or submit CBR/PHR reports. A Down level partner can be:

- ODM/IDH or TPI in a centralized relationship
- ODM/IDH or TPI in a decentralized relationship
- Factory Floor (FFKI end entity in business)

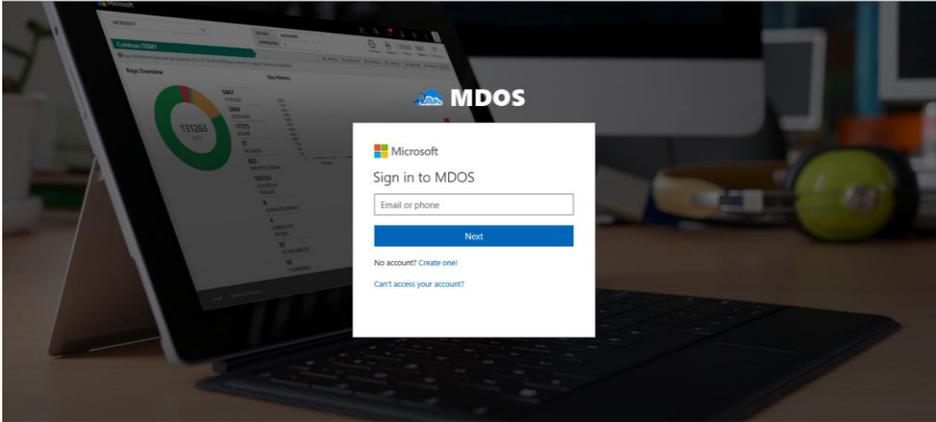
Example: Contoso OEM has a direct agreement with Microsoft and has three TPis that they work with. In this supply chain model (business model), Contoso OEM has three downlevel partners; Contoso TPI Mexico, ABC TPI, and Contoso TPI China. Contoso OEM is the uplevel partner for all three TPis and Contoso OEM's uplevel partner is Microsoft since they have a direct OEM GPA agreement with Microsoft.

Tip Tool: Once the business is established, a new downlevel partner (or partners) can be added to the business. New partner(s) will then be able to perform key operations.

Step-by-step: (Add a new DLP)

Pre-Requisite: TPI/DLP partner should receive an invitation email from ULP. From there, they can add their DLPs.

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

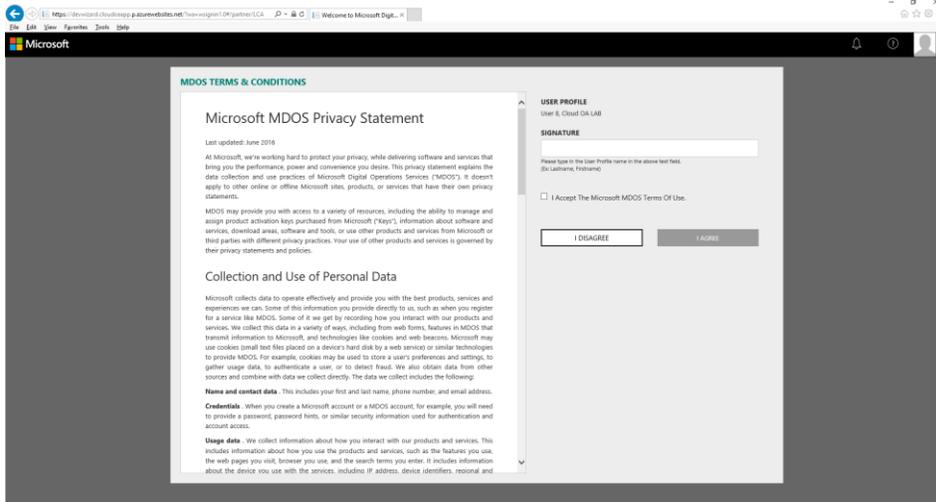


2. TPI Partner will be greeted with a welcome message to MDOS.

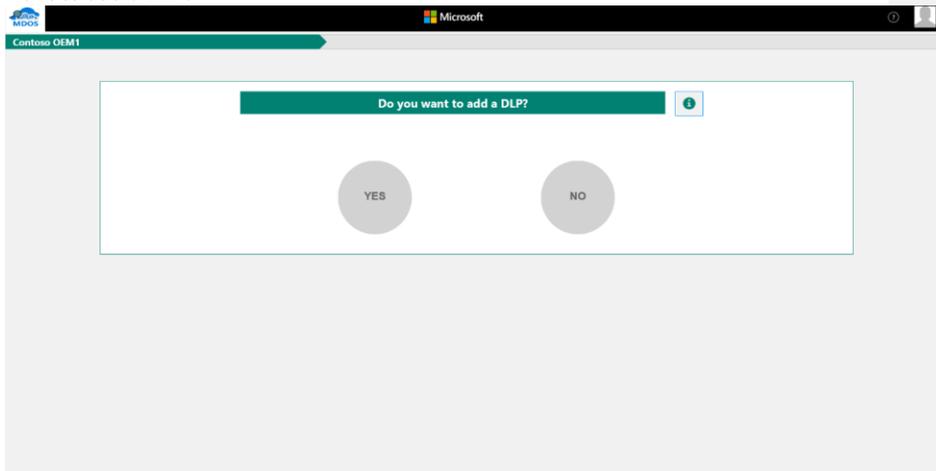


3. Partner: Accept the Terms and Conditions (if you agree), to continue with MDOS application.

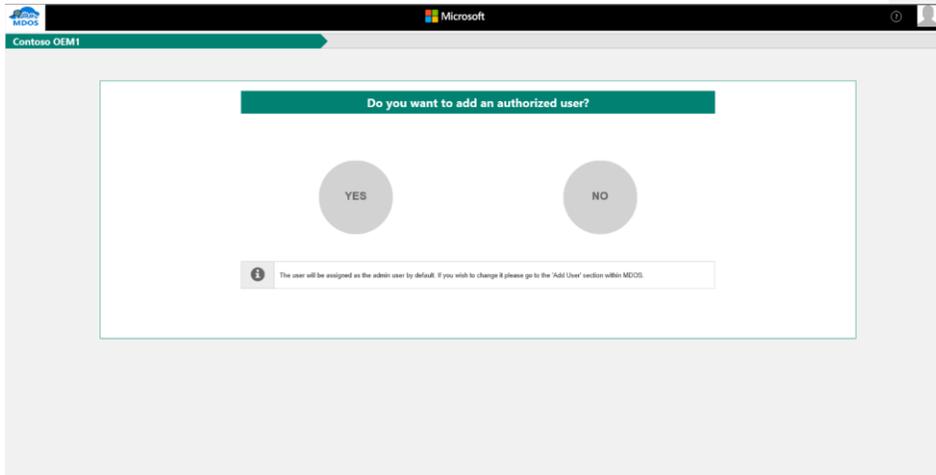
Microsoft Digital Operations Services User Manual



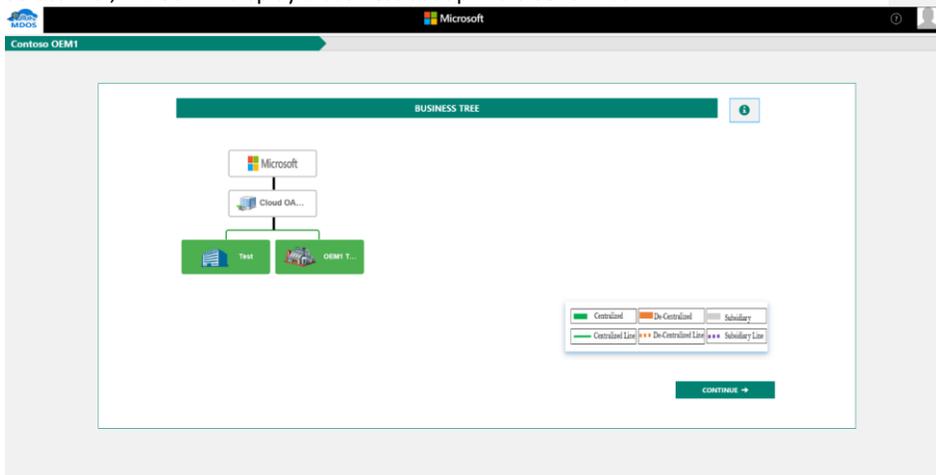
- Once the Terms and Conditions are accepted, partner will see the message “Do you want to add a DLP?”



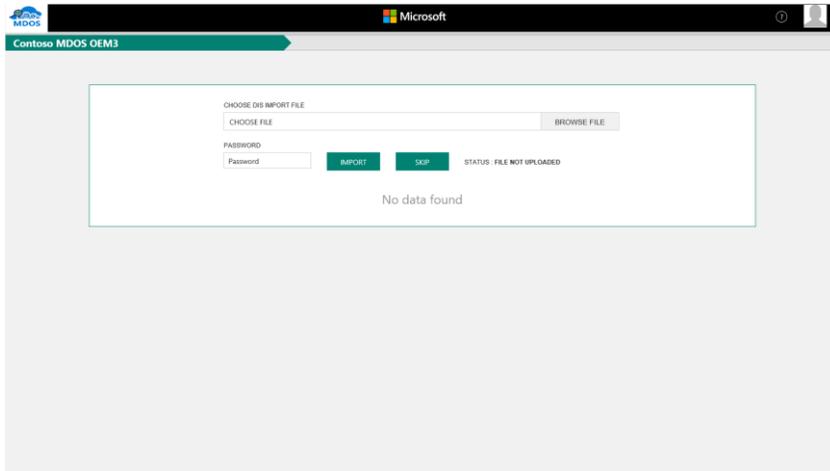
- Select 'Yes', refer to the **Add another DLP** section (below).
- Select 'No', partner will be asked “Do you want to add authorized users?”



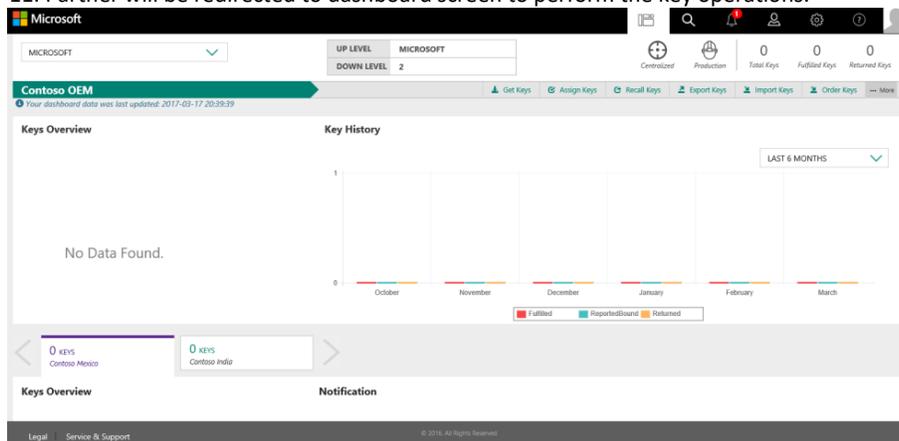
- 7. Select 'Yes' and refer to the **Add a new authorized user** section.
- 8. Select 'No', MDOS will display a business set up in a tree format.



- 9. MDOS will display the steps for the partners to migrate the keys.
- 10. MDOS will allow partners to upload the zip file for migration.

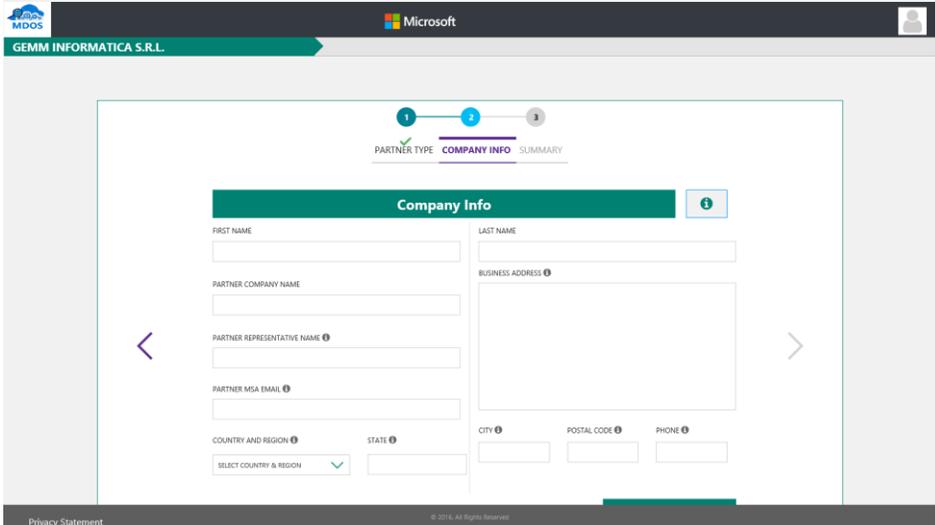
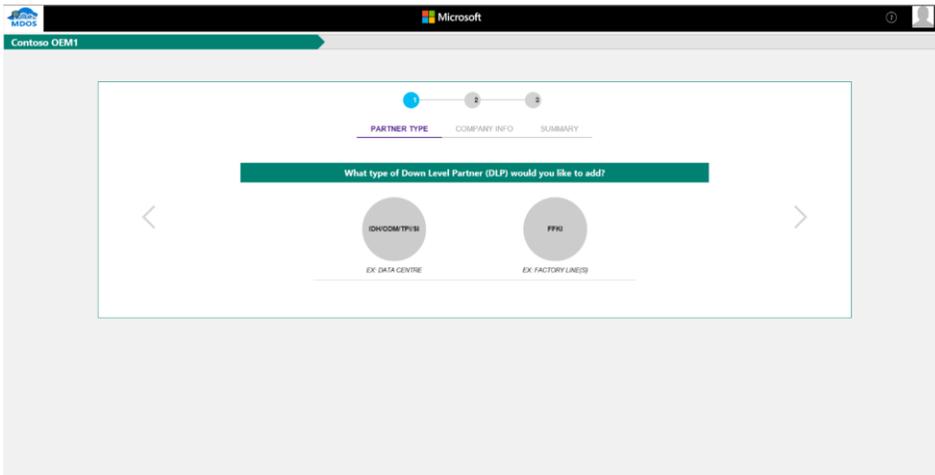


11. Partner will be redirected to dashboard screen to perform the key operations.

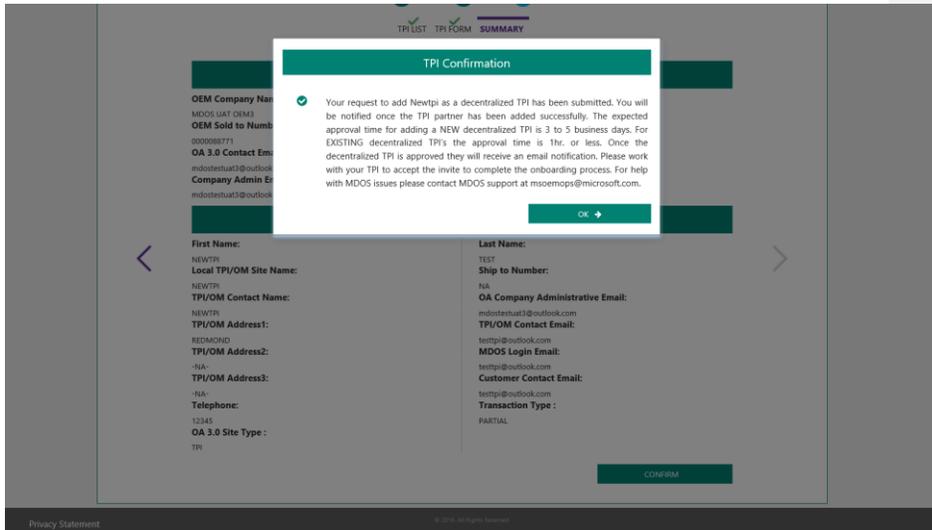


Step-by-step: (Add another DLP)

1. OEM/ULP partner will be presented with a message: “Do you want to add a DLP or FFKI”.
2. If partner selects DLP, partner will be asked to fill the DLP form.



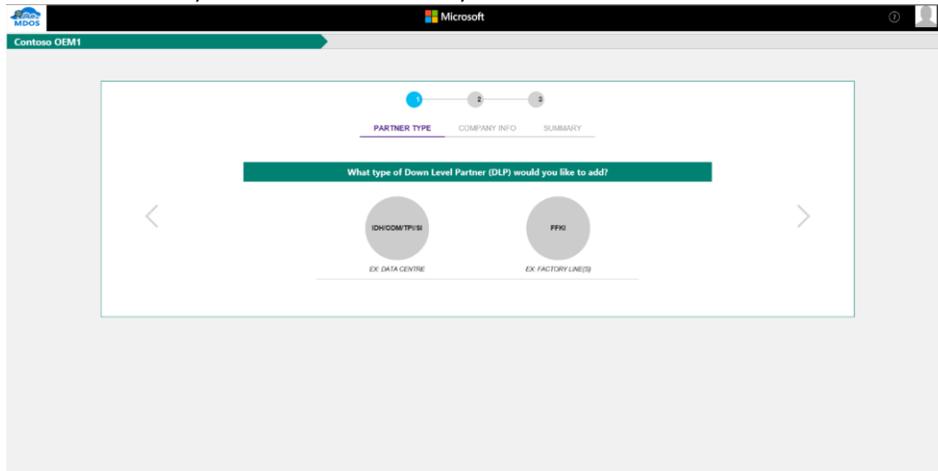
3. Once the DLP form is submitted successfully, partner will see a message that the DLP has been added successfully.



4. An email will be sent to the DLP to set up a business with MDOS.
5. Partner will be asked if partner wants to add another DLP. If yes, continue with step 1 else partner must continue with step 6 in **Add existing TPI as a new DLP** section. (above)

9. ADD DLP OR FFKI

Instruction: Select your centralized DLP factory datacenter or DLP FFKI.



Difference between centralized DLP factory datacenter & DLP FFKI

An FFKI partner differs from other factory datacenter partners because:

- The FFKI can have a business that runs online or offline. The FFKI is not required to onboard through MDOS web app for initial set up and they would not be required to maintain an online connection with MDOS, while the DLP factory datacenter will always be online.
- The FFKI will receive its credentials vis email.
- The FFKI is the only type of partner that can inject the keys into devices and collects CBR information, where the factory datacenters do not inject keys.
- The FFKI can submit the reports to their uplevel TPI, who then reviews and submits the final CBR to their uplevel OEM partner.
- The FFKI is not able to add any DLPs, where the factory datacenters may add DLPs.
- The FFKI would also receive additional email communications for their business that would contain information based on how they communicate with MDOS.

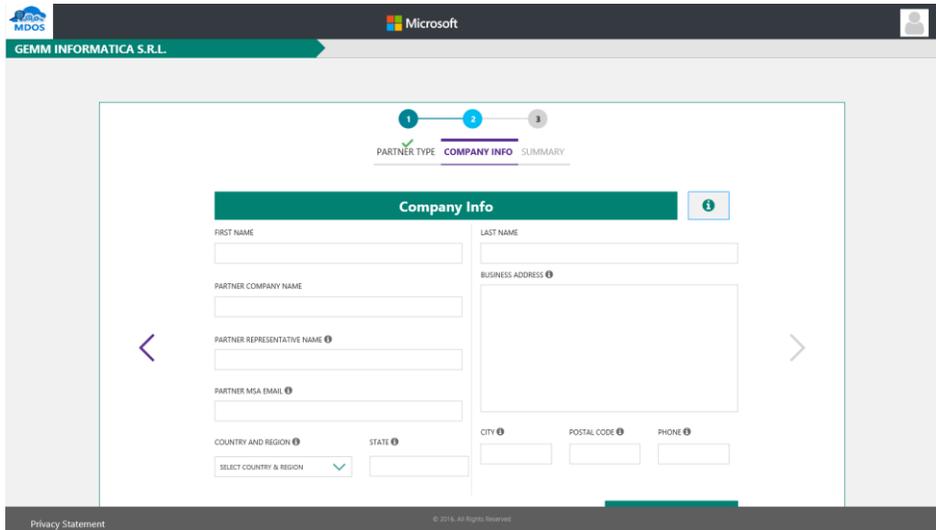
Business setup specific for FFKI

1. FFKI Partner receives invitation from ULP via email.
2. FFKI Partner will receive an email with step-by-step guide.
3. FFKI Partner will receive an email with credentials.
4. FFKI Partner downloads software.
5. FFKI Partner will get set up.
6. FFKI Partner will test.

Example: Contoso OEM owns its own factory, which is called Contoso FFKI. Contoso FFKI is the main site Contoso OEM uses to manufacture their devices. Contoso OEM sets up Contoso FFKI as downlevel partners for their business within MDOS. After that, Contoso FFKI receives the credentials it will use to communicate with MDOS to authenticate. Contoso FFKI is run offline, hence they need to initially onboard through MDOS and follow the initial online set up. Then Contoso FFKI can follow the offline mode steps to receive keys and submit CBR's back to OEM Contoso. Once the CBR is submitted to Contoso OEM, they provide a final review and submit the CBR to Microsoft.

10. FILL DLP FORM

Instruction: Complete all the required fields for your partner to gain access to MDOS. OEM will fill this out on behalf of the DLP.



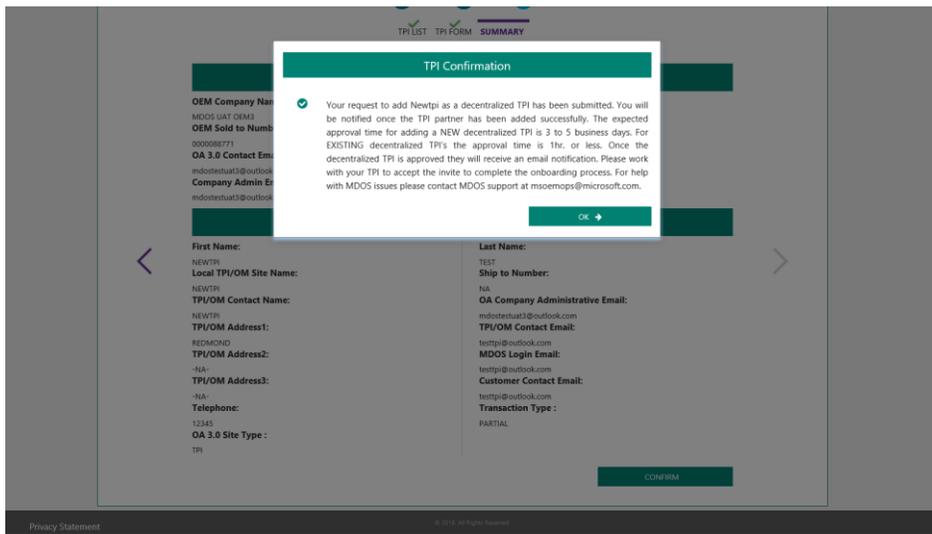
DLP Form Field Explanation

DLP Form

DLP Form Fields	Explanation
DLP Company Name	Downlevel partner company name (i.e. Contoso TPI)
DLP Contact Name	Downlevel partner User first and last name
DLP Company Email	Downlevel partner’s corporate email address at authorized site. (ContosoTPI@TPI.com)
DLP Login Email (MSA)	The user’s MSA email account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign in to Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com). <u>Additional information about MSA email accounts.</u> NOTE: IF the TPI is already onboarded to MDOS, please verify that this is the MSA that they registered with.
DLP Address	Street address where DLP company is based
DLP Country	Country where DLP company is based
DLP State	State where DLP company is based
DLP City	City where DLP company is based
DLP Postal Code	Postal code where DLP company is based
DLP Phone	DLP company phone number

11. SUCCESS MESSAGE FOR NEW DLP

Instruction: Your request was successfully received for submitting a new downlevel partner (DLP). Please ensure the partner follows their next steps to complete the setup process.



Congratulations!

Your request was successfully received for submitting a new downlevel partner (DLP).

Please follow the next steps carefully to ensure your setup is completed. Once setup is complete you may onboard into the MDOS tool and begin using it for your product key management.

Next steps:

1. Have your partner look for the email from MDOS (sent to the partner's MSA email).
2. Make sure the partner reads the [Onboarding Training Guide](#) for MDOS.
3. Partner should click on the registration link (within the email) to get registered.
4. Ensure your partner fills out the DOC registration form completely.
5. Ensure your partner completes the MDOS setup process.

NOTE: This process may take up to ~5-10 min. for final approval and activation.

12. FILL FFKI FORM

Instruction: Complete all the required fields for your partner to gain access to MDOS. OEM will fill this out on behalf of the FFKI.

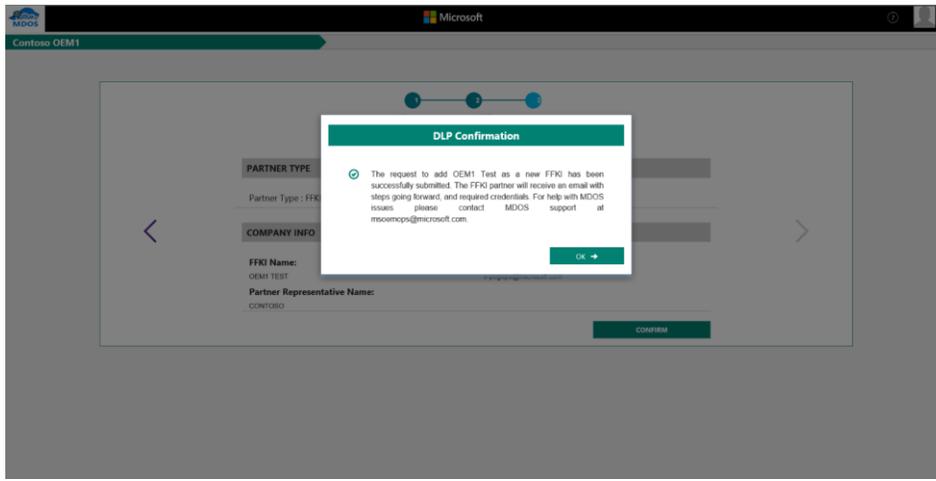
FFKI Form Field Explanation

DLP FFKI Form:

FFKI (owns factory) Form Fields	Explanation
FFKI Admin Name (first, last)	FFKI contact first and last name
FFKI Admin Email	FFKI contact email address. MDOS sends the connection information to this address.
Login Email (MSA)	The user's MSA email account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign in to Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com). Additional information about MSA email accounts.

13. SUCCESS MESSAGE FOR NEW FFKI

Instruction: Your request was successfully received for submitting a new Factory Floor Key Inventory (FFKI). Please ensure the partner follows their next steps to complete the setup process.



Congratulations!

Your request was successfully received for submitting a new Factory Floor Key Inventory (FFKI).

Please follow the next steps carefully to ensure your setup is completed. Once setup is complete you may onboard into the MDOS tool and begin using it for your product key management.

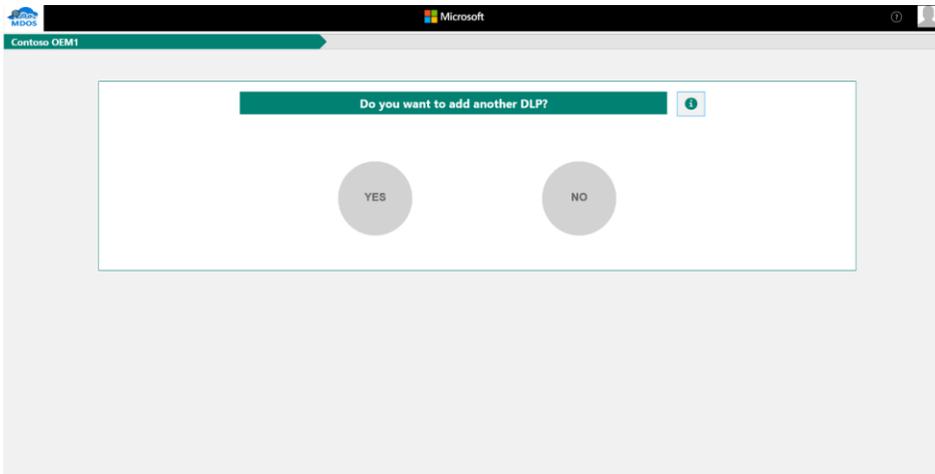
Next steps for the FFKI:

1. Have your partner download the [Step-by-step Guide](#) on how to set up an FFKI.
2. Have your partner download the [MDOS FFKI Client installation](#) software.
3. Have your partner review all the documentation.
4. Ensure the FFKI has completed the pre-level steps.
5. Have your partner look for the email from MDOS (sent to the partner MSA email) that contains the login credentials.
6. Make sure the partner reads the [FFKI Onboarding Training Guide](#) for MDOS.
7. Make sure the partner reads the [User Manual for MDOS – FFKI Section](#).

NOTE: This process may take up to ~5-10 min. for final approval and activation.

14. ADD ANOTHER DLP

Instruction: Determine if you would like to add an additional downlevel partner (or partners) to the account. New partner(s) will then be able to perform key operations.



DLP Definition:

Down Level Partner or Downlevel Partner (DLP):

A DLP is the entity that receives keys from the uplevel entity. Down level entities can deploy keys to downstream partners, manufacture devices, and/or submit CBR/PHR reports. A Down level partner can be:

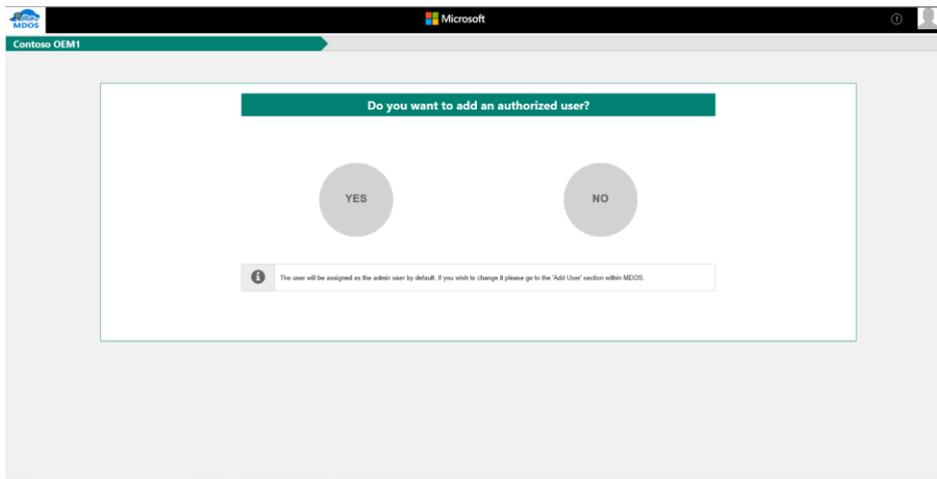
- ODM/IDH or TPI in a centralized relationship
- ODM/IDH or TPI in a decentralized relationship
- Factory Floor (FFKI end entity in business)

Example: Contoso OEM has a direct agreement with Microsoft and has three TPIs that they work with. In this supply chain model Contoso OEM has three downlevel partners; Contoso TPI Mexico, ABC TPI, and Contoso TPI China. Contoso OEM is the uplevel partner for all three TPIs and Contoso OEM's uplevel partner is Microsoft since they have a direct agreement with Microsoft.

Tip Tool: Once the business is established, a new downlevel partner (or partners) can be added to the account. New partner(s) will then be able to perform key operations.

15. ADD AN AUTHORIZED USER

Instruction: Add an authorized user connected to your MDOS account. An authorized user will have permissions to access MDOS and perform key actions.



What is an Authorized User?

An authorized user will have permissions to access MDOS and perform key actions or read-only access. Access and permissions must be set by the company administrator (admin).

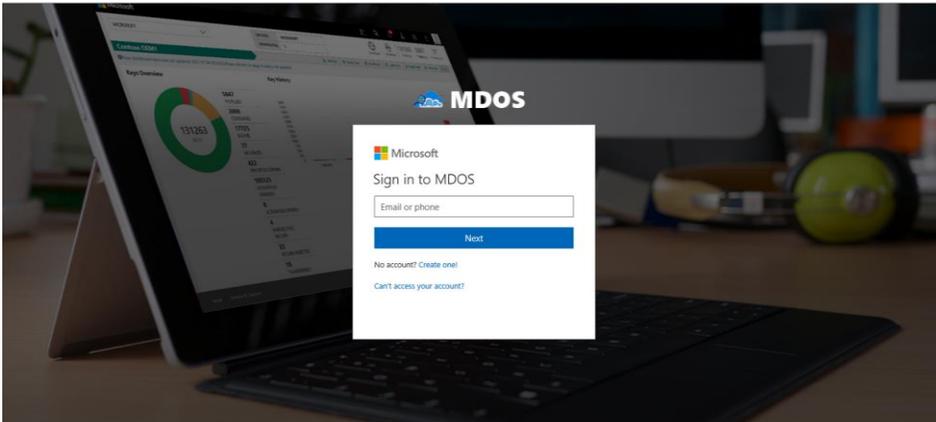
The Admin section in MDOS provides a view of all your authorized user accounts and lets you manage users connected to your account from this dashboard. From the Admin page, under CREATE USERS; you can add, remove, or edit current users. You can also edit user permissions from this section.

In order to support business continuity within a partners organization, Microsoft recommends that OEMs have more than one user onboarded to MDOS.

Example: Contoso IDH hired a new purchasing manager, and wants to add him as new authorized user in MDOS. The Admin signs into MDOS and clicks on the Admin icon in the top navigation bar to see existing users. From there, the admin clicks on the plus (+) button to add the new user, enters the user's email address, and sets the roles/permissions to "View Admin" with ordering permissions. The user receives an email with instructions on how to onboard to MDOS.

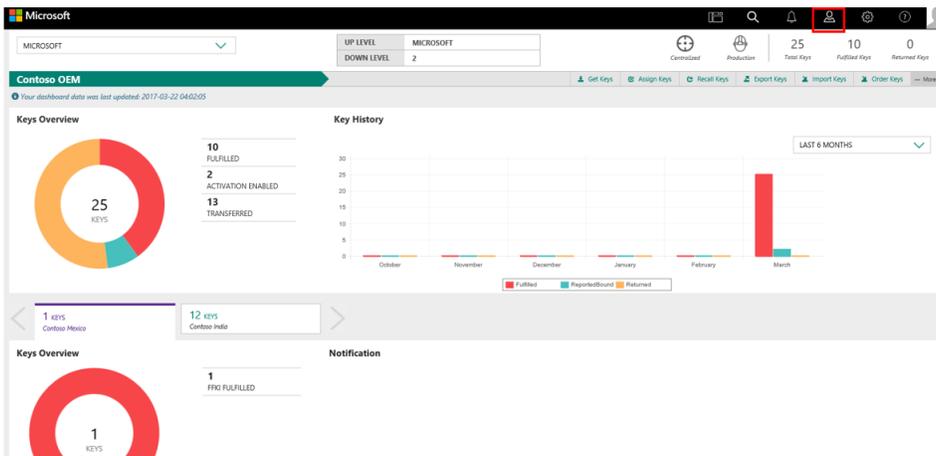
Step-by-step: (Add an authorized user)

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

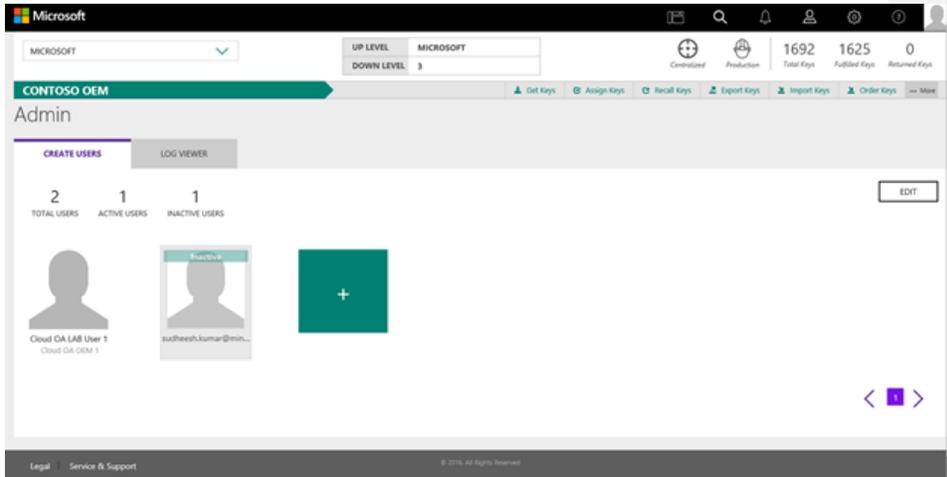


NOTE: Partner (OEM/DLP) needs to add the authorized user in MDOS on their behalf.

2. Partner: Click on Admin icon in dashboard header



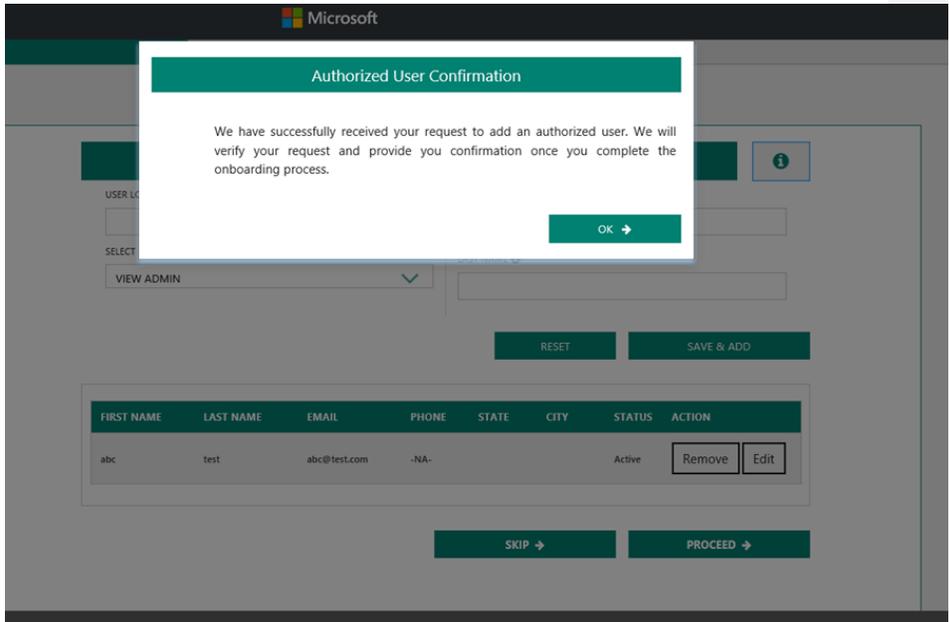
3. Partner: Click '+' icon to add authorized user.



4. Partner: Enter first name, last name, login email, state, and city.

The screenshot shows the 'Create New User' form. It has a title bar 'Create New User' with an information icon. The form is divided into two columns. The left column contains 'USER LOGIN EMAIL' (text input), 'SELECT ROLE' (dropdown menu with 'VIEW ADMIN' selected), and 'VIEW ADMIN' (checkbox). The right column contains 'FIRST NAME' (text input), 'LAST NAME' (text input), 'RESET' (button), and 'SAVE & ADD' (button). Below the form is a table with the following headers: 'FIRST NAME', 'LAST NAME', 'EMAIL', 'PHONE', 'STATE', 'CITY', 'STATUS', and 'ACTION'. At the bottom of the form, there are two buttons: 'SKIP' and 'PROCEED'.

5. Partner: Select the roles and permissions to be provided for the authorized user and click on **Proceed** button
6. Once the changes are saved successfully, an email will be sent to the authorized user (MSA email account) with a hyperlink to log in to MDOS.



16. USER INTAKE FORM

Instruction: Fill out the OA enrollment form to add an authorized user.

Create New User

USER LOGIN EMAIL

SELECT ROLE

VIEW ADMIN

FIRST NAME

LAST NAME

RESET SAVE & ADD

FIRST NAME	LAST NAME	EMAIL	PHONE	STATE	CITY	STATUS	ACTION
------------	-----------	-------	-------	-------	------	--------	--------

SKIP → PROCEED →

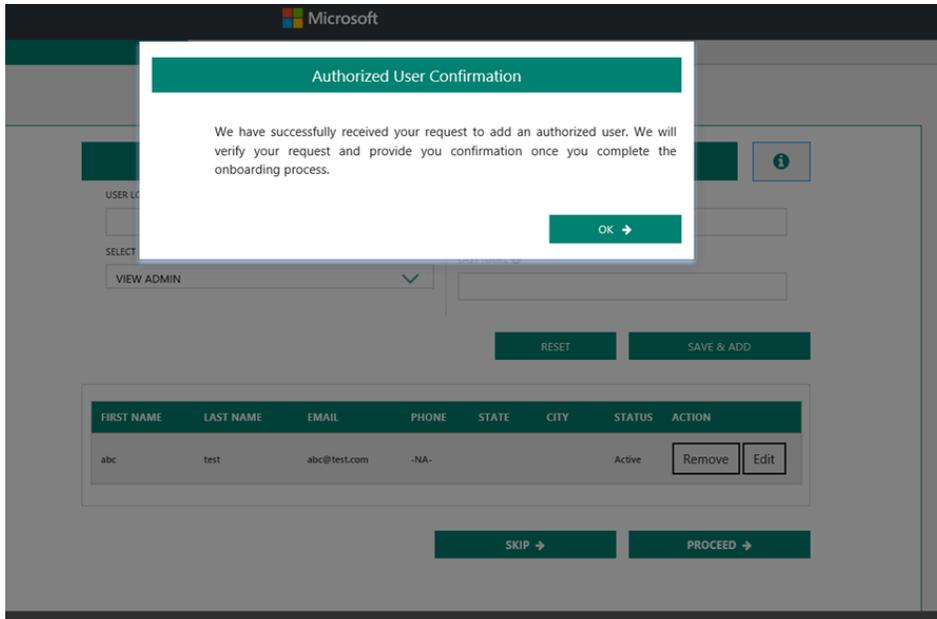
User Intake Form Field Explanation

User Intake Form:

User Intake Form Fields	Explanation
First Name	User first name
Last Name	User last name
Login Email (MSA)	The user’s MSA email account that is used for DOC registration. A Microsoft account (MSA) is an email account used to sign in to Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com). Additional information about MSA email accounts.
State	State where company is based
City	City where company is based
Permissions	MDOS permissions that were set by company admin.

17. SUCCESS MESSAGE FOR NEW USER

Instruction: Your request was successfully received for submitting a new user. Please ensure the user follows their next steps to complete the setup process.



Congratulations!

Your request was successfully received for submitting a new user.

Please follow the next steps carefully to ensure your setup is completed. Once setup is complete you may onboard into the MDOS tool and begin using it for your product key management.

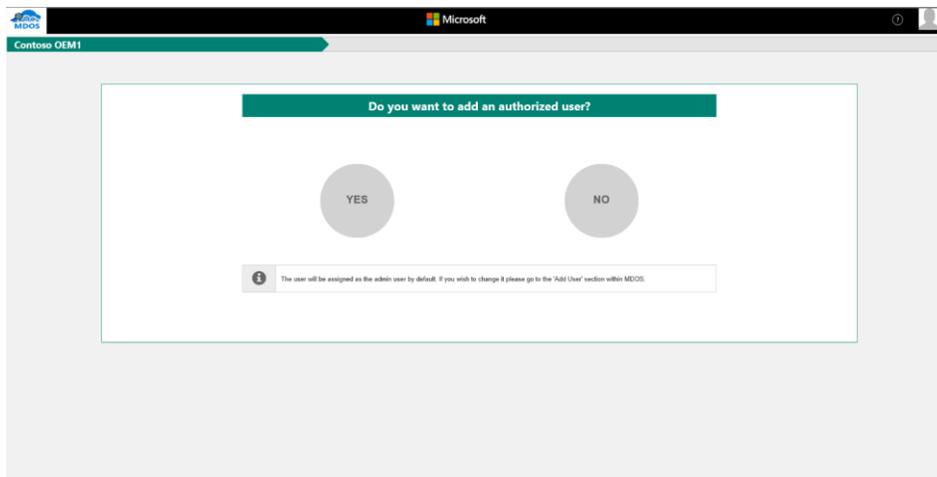
Next steps:

1. Have your authorized user look for the email from MDOS. (Sent to the user's MSA email).
2. Make sure the user reads the [User Manual](#) for MDOS.
3. User should click on the registration link (within the email) to get registered.
4. Ensure your user fills out the New User registration form completely.

NOTE: This process may take up to ~5-10 min. for final approval and activation for this user.

18. ADD ANOTHER AUTHORIZED USER

Instruction: Add an authorized user connected to your MDOS account. An authorized user will have permissions to access MDOS and perform key actions.



What is an Authorized User?

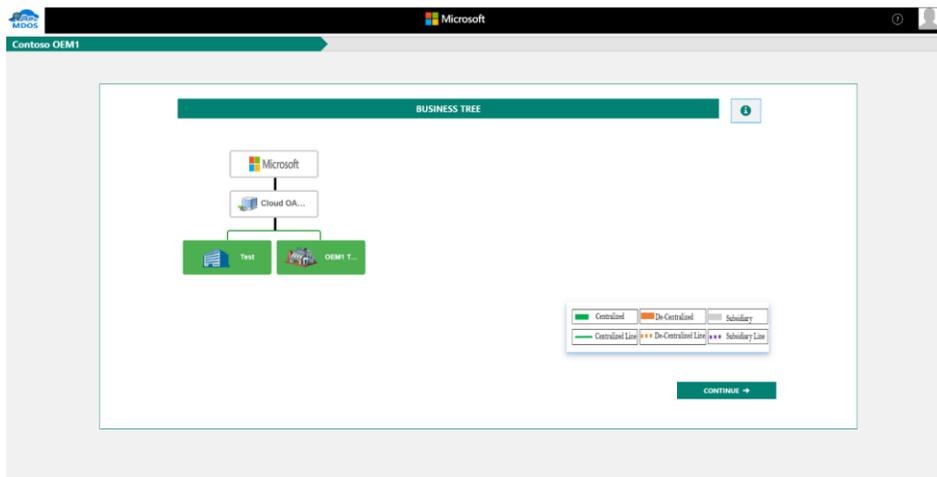
An authorized user will have permissions to access MDOS and perform key actions or read-only access. Access and permissions must be set by the company administrator (admin).

The Admin section in MDOS provides a view of all your authorized user accounts and lets you manage users connected to your account from this dashboard. From the Admin page, under CREATE USERS; you can add, remove, or edit current users. You can also edit user permissions from this section.

Example: Contoso IDH hired a new purchasing manager, and wants to add him as new authorized user in MDOS. The Admin signs into MDOS and clicks on the Admin icon in the top navigation bar to see existing users. From there, the admin clicks on the plus (+) button to add the new user, enters the user's email address, and sets the roles/permissions to "View Admin" with ordering permissions. The user receives an email with instructions on how to onboard to MDOS.

19. DISPLAY BUSINESS SETUP TREES

Instruction: Review your current business setup for accuracy and provide edits if necessary.



Business definition:

A business in MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering. You must select the business/partner you wish to work with from the dropdown menu when you sign into the MDOS dashboard.

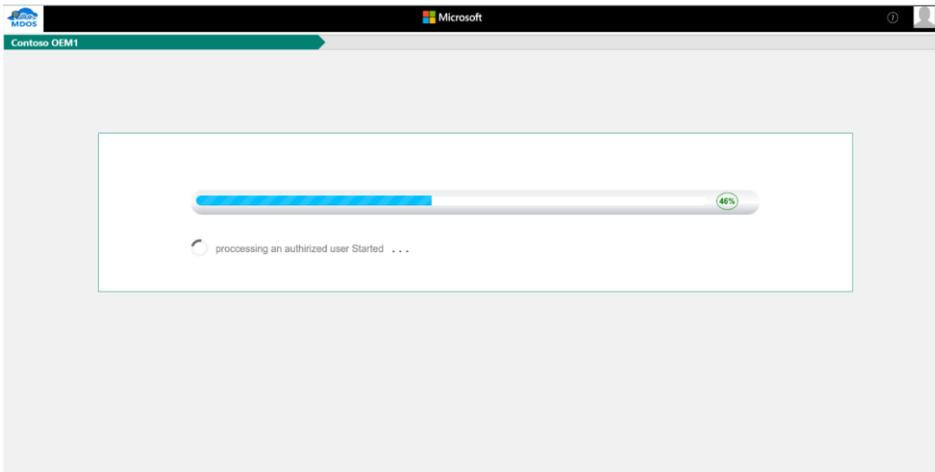
Example: Contoso IDH/ODM has a business where they work with different OEMs; Contoso OEM and ABC OEM had both reached out to Contoso IDH/ODM through an MDOS invitation to invite Contoso IDH/ODM to work with them. Contoso IDH/ODM will setup a centralized business model with Contoso OEM and a decentralized model with ABC OEM. They also have an

additional business because they signed an IDH/ODM agreement with Microsoft. So, they now have three businesses. They are looking to utilize MDOS to help manage all their businesses. MDOS allows Contoso IDH/ODM to easily identify the DPK owners, and better manage multiple businesses.

Tip Tool: A business in MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering. You must select the business/partner you wish to work with from the dropdown menu when you sign into the MDOS dashboard.

20. WAIT SCREEN WHILE DASHBOARD IS CREATED

Instruction: Please stand by while your account is being created in MDOS.



Please stand by while your account is being created in MDOS.

Your account is being set up MDOS. Soon you will have access to the cloud-based digital key distribution and entitlement service for Microsoft partners.

NOTE: This process may take a few minutes. Please do not close this window or refresh your browser.

21. DISABLE/ DELETE DLP

Instruction: This functionality will help to delete or disable the DLP from the list of added IDH/TPI/FFKI/FKI. Up level partner can disable/delete the DLP only when there is no DLP under them and they don't have any keys assigned to them.

Example: Contoso OEM is no longer doing business with ABC Design House and wants to remove it as a down level partner. From the Partner Information page, they select "Disable" for ABC Design House. After successfully disabling the partner permissions, the status next to the partner name changes to "Disabled". Contoso sees the action button for ABC Design House change to ENABLE, so they may easily re-enable the partner at any time if desired.

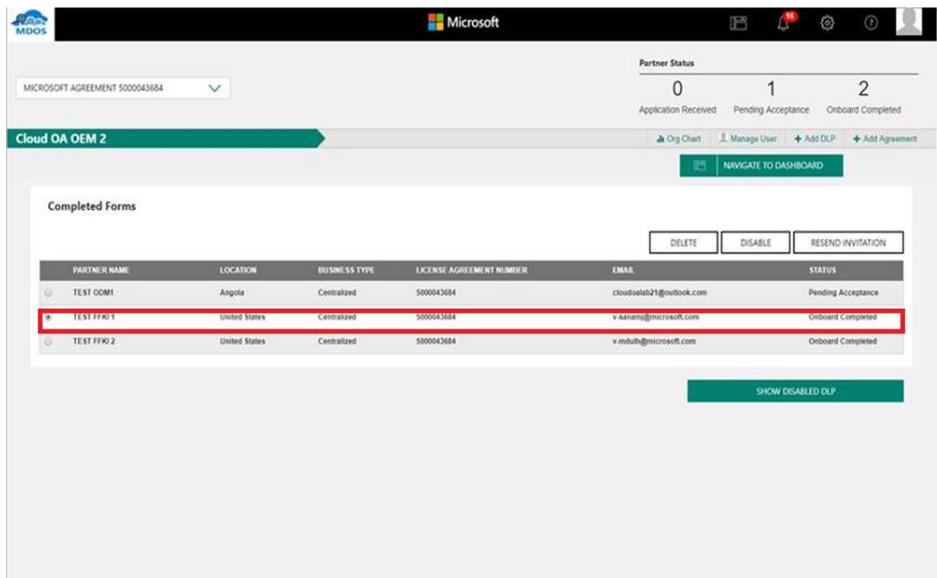
In case partner do not need that DLP in future, they can remove it from list of added DLPs.

To Delete DLP, you need to select partner by clicking on radio button and then click on delete option. A confirmation message box will pop out. After clicking confirm button, selected DLP will be removed from the list.

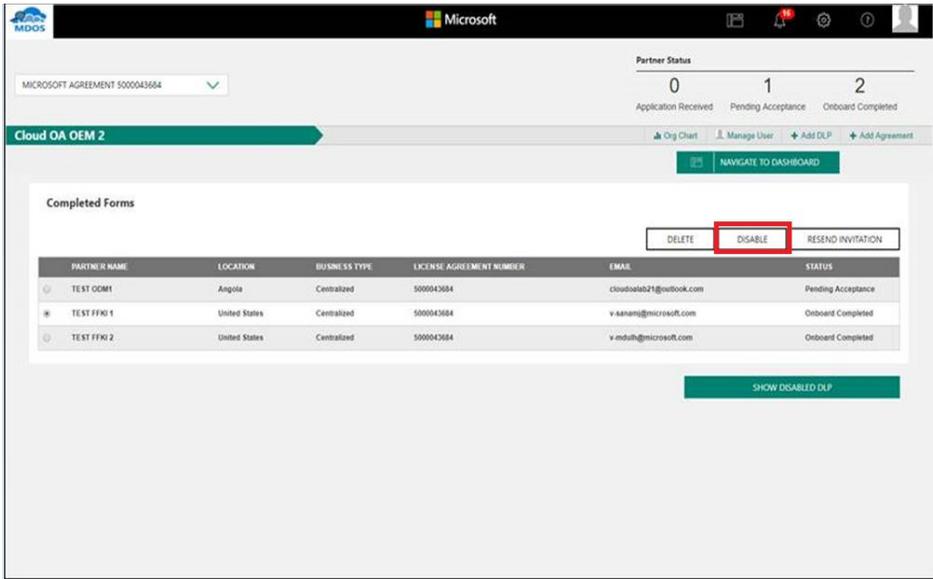
From manage business dashboard, up level partner can delete or disable their down level partner.

DISABLE DLP:

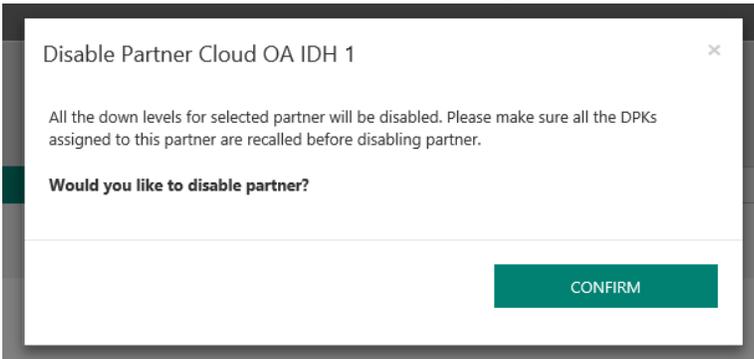
1. From manage business dashboard, select the partner by clicking on radio button that need to be disabled.



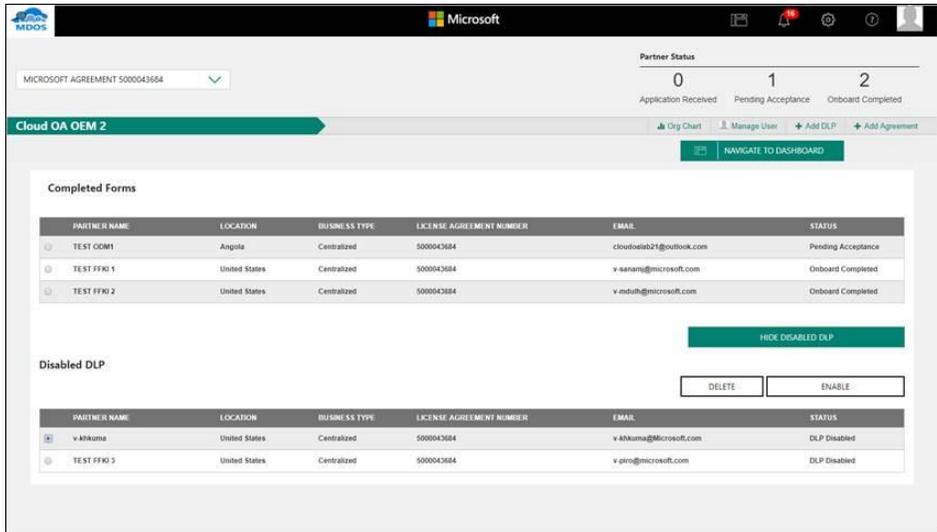
2. Click on disable button.



3. A confirmation window will open to confirm your selection. Click CONFIRM, the request will be processed and the partner will be notified through alert.



4. Once the partner has been disabled successfully, the disabled partner will be moved to 'Disabled DLP' section, the status of the partner will change to "Disabled".



5. To re enable the partner, you need to select the disabled partner from the Disabled DLP list and then click on enable button.

DELETE DLP:

1. From manage business dashboard, select the partner by clicking on radio button that need to be disabled.

Microsoft Digital Operations Services User Manual

The screenshot shows the Microsoft Digital Operations Services (MDDS) dashboard. At the top, there is a navigation bar with the Microsoft logo and user profile. Below the navigation bar, there is a search bar for 'MICROSOFT AGREEMENT 500043684'. The main content area is titled 'Cloud OA OEM 2' and features a 'Partner Status' section with three progress indicators: '0 Application Received', '1 Pending Acceptance', and '2 Onboard Completed'. Below this, there are buttons for 'Org Chart', 'Manage User', 'Add DLP', and 'Add Agreement', along with a 'NAVIGATE TO DASHBOARD' button. The 'Completed Forms' section contains a table with columns: PARTNER NAME, LOCATION, BUSINESS TYPE, LICENSE AGREEMENT NUMBER, EMAIL, and STATUS. The table has three rows: 'TEST ODM1' (Angola, Centralized, 500043684, cloudobab21@outlook.com, Pending Acceptance), 'TEST FFK2' (United States, Centralized, 500043684, v.aaan@microsoft.com, Onboard Completed), and 'TEST FFK2' (United States, Centralized, 500043684, v.mduh@microsoft.com, Onboard Completed). The 'TEST FFK2' row is highlighted in red. Above the table are buttons for 'DELETE', 'DISABLE', and 'RESEND INVITATION'. Below the table is a 'SHOW DISABLED DLP' button.

PARTNER NAME	LOCATION	BUSINESS TYPE	LICENSE AGREEMENT NUMBER	EMAIL	STATUS
TEST ODM1	Angola	Centralized	500043684	cloudobab21@outlook.com	Pending Acceptance
TEST FFK2	United States	Centralized	500043684	v.aaan@microsoft.com	Onboard Completed
TEST FFK2	United States	Centralized	500043684	v.mduh@microsoft.com	Onboard Completed

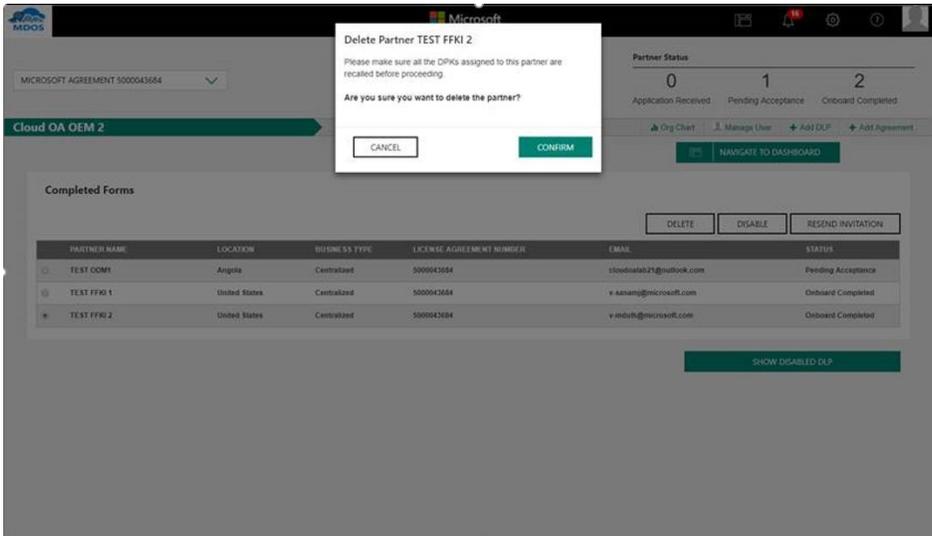
2. Click on Delete button.

The screenshot shows the Microsoft Digital Operations Services (MDDS) dashboard, similar to the previous one. The 'Completed Forms' table is visible, and the 'DELETE' button above it is highlighted in red. The other elements of the dashboard, including the navigation bar, search bar, and progress indicators, remain the same.

PARTNER NAME	LOCATION	BUSINESS TYPE	LICENSE AGREEMENT NUMBER	EMAIL	STATUS
TEST ODM1	Angola	Centralized	500043684	cloudobab21@outlook.com	Pending Acceptance
TEST FFK2	United States	Centralized	500043684	v.aaan@microsoft.com	Onboard Completed
TEST FFK2	United States	Centralized	500043684	v.mduh@microsoft.com	Onboard Completed

3. A confirmation window will open to confirm your selection. Click CONFIRM, the request to delete the DLP will be processed.

Microsoft Digital Operations Services User Manual

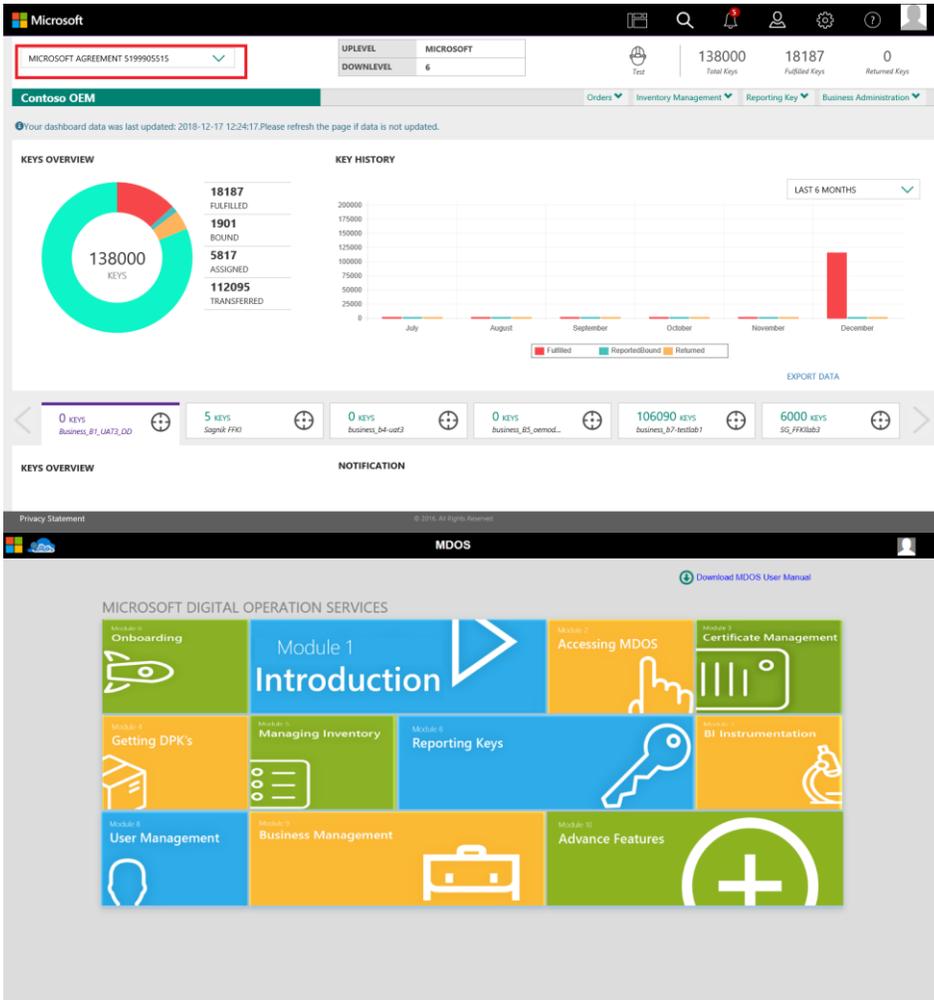


4. Once the request is processed successfully, the partner will be notified with an alert message and the DLP partner will not be visible.

22. MDOS DASHBOARD

Instruction: Please review the readiness materials for MDOS.

Microsoft Digital Operations Services User Manual



Welcome to MDOS

Helpful Information:

Please review the [User Manual](#) before beginning to use MDOS. Refer to the [FAQ](#) section for quick answers to common questions.

23. MDOS SUPPORT (MSOEMOPS@MICROSOFT.COM)

For support, please contact: msoemops@microsoft.com

STEPS FOR ONBOARDING - IDH/ODM

These steps apply to the following personas: IDH/ODM

1. WHAT MAKES AN IDH/ODM PERSONA UNIQUE?

An IDH/ODM persona has a very complex business model that integrates multiples behaviors of different partners. An IDH/ODM may have a combination of functions and business models (centralized & decentralized), creating hundreds of unique scenarios. This can create a challenge for partners as they would need to navigate through a lot of complexity, and can make it difficult for Microsoft to provide specific readiness materials, until that specific business type is determined. However, an IDH/ODM can behave as a traditional OEM, TPI or both at the same time. Hence, an IDH/ODM can pick from the table below, to determine the scenario that fits their business model best. This will provide the step require to onboard to MDOS.

2. DEFINITIAION OF PARTNER TYPES

MDOS definition of partner types

Acronym	Term	Description
FFKI	Factory Floor Key Inventory	Inventory (FFKI) client on the manufacturing floor. The MDOS FFKI client is a software install that will connect to the MDOS cloud via a secure connection through either a VPN or via the Internet or may be manually transferred (e.g. via USB). The MDOS FFKI client manages the DPKs between the MDOS cloud and the physical manufacturing floor. The MDOS FFKI Client will request DPKs from the service and will make those DPKs available for injection into the Windows device being manufactured. The MDOS FFKI client will also capture the Computer Build Report (CBR) required and send that CBR upstream to the Uplevel Partner (ULP), who will relay that to Microsoft directly depending on Centralized or Decentralized business setup.

IDH/ ODM	Independent Design House / Original Design Manufacturer	An original design manufacturer (ODM) or independent design house (IDH) is hired by an OEM. They are a company that designs and manufactures devices (tablet, PC, etc.) based on requirements specified by the OEM, (such as screen size, processor, memory, performance, etc.). The devices manufactured by the ODM/IDH are rebranded by the OEM. ODM/IDH companies allow the firm that owns or licenses the brand to produce products without having to engage in the design or running of a factory.
OEM	Original Equipment Manufacturer	Original equipment manufacturer (OEM) is a term used when one company makes a part or subsystem that is used in another company's product.
TPI	Third-Party Installer	A manufacturer that preinstalls the Windows operating system onto a computer on behalf of an OEM. TPIs are authorized to use the OA 3.0 Tool. The OEM sends the DPKs to the Factories (usually a Third-Party Installer (TPI) factory). TPI may also referred to as "Authorized Subcontractor".

3. IDH/ODM SCENARIOS & ONBOARDING MATERIAL

Refer to the table below to determine the appropriate onboarding guide based on your scenario.

IDH/ODM persona scenario	Onboarding guide
Migrating IDH/ODM with direct MSFT agreement, centralized model & no ULP's	Migrating centralized OEM
Migrating IDH/ODM with direct MSFT agreement, decentralized model & no ULP's	Migrating decentralized OEM
Migrating IDH/ODM with direct MSFT agreement, centralized model & ULP's	Migrating centralized OEM
Migrating IDH/ODM with direct MSFT agreement, decentralized model & ULP's	Migrating decentralized OEM
Migrating IDH/ODM with no direct MSFT agreement, & ULP's	Migrating centralized or decentralized TPI

New IDH/ODM with direct MSFT agreement, centralized model & no ULP's	New centralized OEM
New IDH/ODM with direct MSFT agreement, decentralized model & no ULP's	New decentralized OEM
New IDH/ODM with direct MSFT agreement, centralized model & ULP's	New centralized OEM
New IDH/ODM with direct MSFT agreement decentralized & ULP's	New Decentralized OEM
New IDH/ODM with no direct MSFT agreement & ULP's	New Centralized or Decentralized TPI

Example: Contoso IDH/ODM has multiple ULP's but no direct agreement with Microsoft. Therefore, they will refer to the TPI onboarding materials and will onboard as a TPI.

4. MDOS SUPPORT (MSOEMOPS@MICROSOFT.COM)

For support, please contact: msoemops@microsoft.com

STEPS FOR ONBOARDING – NEW FFKI

These steps apply to the following persona: FFKI

1. INTRODUCTION

1.1 WHAT IS THE FFKI PERSONA IN MDOS?

Description:

Factory Floor Key Inventory (FFKI) refers to the inventory on the factory floor where devices are manufactured on a large scale. The number of keys needed on the manufacturing line is determined by the OEM. The number is based on the line forecast and current inventories on the Factory Floor Key Inventory system on the factory floor. The keys are protected and transmitted from MDOS to the Factory Key Inventory system via HTTPS or may be manually transferred (e.g. via USB). The MDOS FFKI business model does not have a direct agreement with Microsoft, but they do connect to MDOS directly via API or support via an offline model. The FFKI also directly connects to the OA 3.0 tool.

Example: FFKI Mexico works in a centralized business model with Contoso OEM to manufacture their devices on a large scale. FFKI Mexico does not have a direct agreement with

Microsoft. Contoso OEM provides the specs for the devices and forecasts that they will need to build 500 units, so will need 500 keys. Contoso OEM protects and transmits the key information from MDOS to the Factory Key Inventory system via USB, since FFKI Mexico's factory floor does not have a secure internet connection to access MDOS. Once the devices are built and the keys have been injected, FFKI Mexico provides the CBR back to Contoso OEM via USB. Contoso OEM and FFKI Mexico are working to get secure internet connection to the factory floor so they can begin working with keys and reporting in real time.

The MDOS FFKI Client V1.2:

- Interacts with MDOS, and consumes the services relating to key fulfillment, computer build report, product binding report, and key recall.
- Interacts with Microsoft OA3.0 Tool, and provides interface support to its Assemble, Report, and Return through the Key Provider Service (KPS) component.
- Works as a production system in a factory's production line that adopts OA3.0.
- Supports user management, role management, and logging support for security and traceability.

1.2 HIGH-LEVEL STEPS

Instruction: Follow the high-level steps to get set up as an FFKI client in MDOS.

High-level steps for setting up an FFKI:

1. Invitation: Receive email from MDOS.
2. System Requirements: Review minimum software and hardware required and collect if necessary.
3. SQL Server set up: Set up SQL Server on single server or two machines.
4. Installation verification: verify that the MDOS Client Setup is ready to use.
5. FFKI Configuration: Internal web service settings and configuration settings.
6. Advanced functionalities: Diagnosis & testing and network considerations.

2. SYSTEM REQUIREMENTS

Instruction: Review the system requirements and acquire the software and hardware system needed before beginning the MDOS installation process.

2.1 SOFTWARE

The following are the minimum software system requirements for the application server and database servers.

Application Server:

- Windows Server 2008 R2 Enterprise Edition (64-bit) / Windows Server 2012 Enterprise Edition (64-bit) / Windows Server 2012 R2 Enterprise Edition (64-bit)
- IIS 7.0 / IIS 7.5 / IIS 8.0
- .NET Framework 4.5
- ADO.NET Entity Framework 4.1 (available at <http://www.microsoft.com/en-us/download/details.aspx?id=8363>)
- Visual C++® 2013 Redistributable (x86) package (available at <http://www.microsoft.com/en-us/download/details.aspx?id=40784>)
- SQL Server 2012 SP1 Features Packs (available at <http://www.microsoft.com/en-us/download/details.aspx?id=35580>):
 - SQL Server 2012 SP1 Native Client
 - SQL Server 2012 SP1 Command Line Utilities (SQLCMD)
 - CLR Types for SQL Server 2012 SP1 (both x86 and amd64)
 - SQL Server 2012 SP1 Shared Management Objects (SMO) (both x86 and amd64)
 - PowerShell Extensions for SQL Server 2012 SP1

Database Server:

- Windows Server 2008 R2 Enterprise Edition (64-bit) / Windows Server 2012 Enterprise Edition (64-bit) / Windows Server 2012 R2 Enterprise Edition (64-bit)
- SQL Server 2008 R2 / SQL Server 2012 / SQL Server 2012 SP1 / SQL Server 2014 / SQL Server 2014 SP1

Note:

- Application Server and Database Server can be on the same machine or two machines.
- All the above software (EXCEPT the operating system and SQL Server) can be installed automatically by PowerShell script run.ps1 after following preparation steps below.

2.2 HARDWARE

The following are the minimum hardware system requirements for MDOS.

Hardware:

- 64-bit infrastructure processor
- 8GB RAM minimum
- 250GB HD minimum
- 100M Ethernet adapter x 2 minimum

- Screen resolution: 1024*768 minimum

3. SQL SERVER SET UP - PREPARATION STEPS

Instruction: Follow the preparation steps to configure the Application Server and Database Server before installing MDOS Client for a single server or servers on two separate machines

Description: The following preparation steps are required to configure the Application Server and Database Server using PowerShell script “run.ps1”, before MDOS Client V1.2 can be installed. (Note: Machines need to have .Net Framework4 and Microsoft SQL Server installed before script can be run).

The Application Server and Database Servers can be on:

- **Single Server** – both the Application Server and Database Server are on a single machine.
- **Two Machines** – the Application Server and Database Server are on two separate machines.

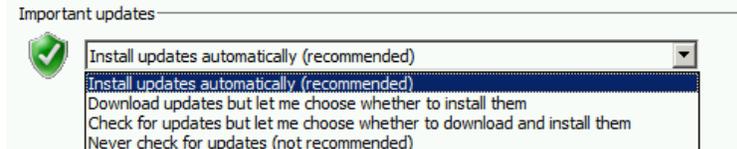
3.1 SINGLE SERVER

Instruction: Follow the preparation steps to configure the Application Server and Database Server when the application and database servers are on a single machine.

Step-by-step:

1. Install the operating system with one of the following server options: Windows Server 2008 R2 Enterprise Edition (64-bit); Windows Server 2012 Enterprise Edition (64-bit); or Windows Server 2012 R2 Enterprise Edition (64-bit).
2. Log on as **administrator**, go to Control Panel -> System and Security -> Windows Update -> Turn automatic Updating on or off -> Select '**Install updates automatically (recommended)**' or others.

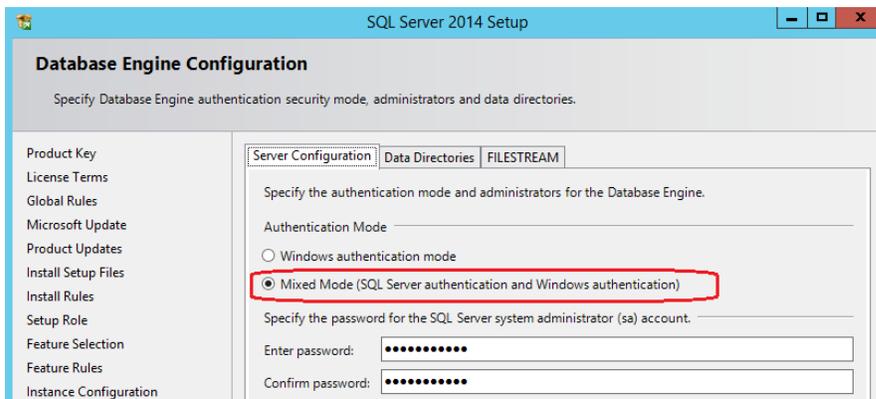
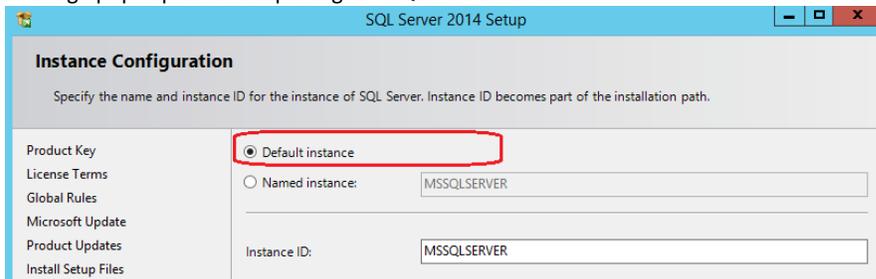
Note: Do **NOT** select 'Never check for updates (not recommended)'.



Note: If your operating system is Windows Server 2008 R2, you must install Windows Management Framework 3.0 (available at <http://www.microsoft.com/en-us/download/details.aspx?id=34595>).

3. Install SQL Server one of the following SQL Server options: SQL Server 2008 R2; SQL Server 2012; SQL Server 2012 SP1; SQL Server 2014; or SQL Server 2014 SP1.

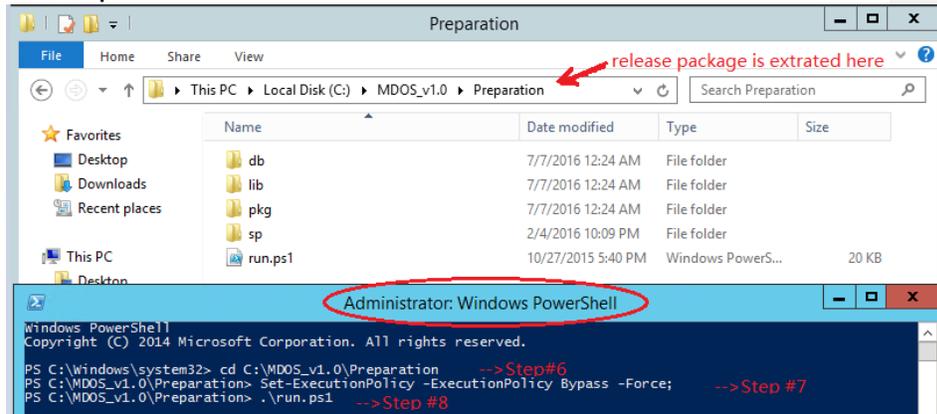
Note: It is highly recommended to select 'Default instance' on the Instance Configuration page and 'Mixed Mode' instead of 'Windows Authentication Mode' on the Database Engine Configuration page. Please restart the machine if a restart prompt message pops up after completing the SQL Server install.



4. Download MDOS Client 1.2 release package from the official channel provided by Microsoft, and extract it to the local machine.
5. From the Start Screen or Start menu, type "PowerShell" in the Search box, and then right click the PowerShell item in the search result list. In the context menu that opens, click "Run as administrator".

6. In the PowerShell prompt window, use the CD command to navigate to the `.\preparation\` sub directory from the home directory of the extracted release package:
`CD [ABSOLUTE PATH TO THE HOME DIRECTORY OF THE INSTALLATION PACKAGE]\preparation\`
7. After navigating to the home directory of the preparation folder, type in the following PS command to enable the PS script execution:
`Set-ExecutionPolicy -ExecutionPolicy Bypass -Force;`
8. In the PowerShell prompt, type in the following command to start the preparation:
`.\run.ps1`

For example:



9. Make sure that there are no errors displayed in the screen output. If there are any errors, copy and record the messages from the screen for issue analysis, then resolve all issues before installing MDOS Client V1.2.
10. Open "Control Panel" -> "All Control Panel Items" -> "Programs and Features" to confirm that the below programs are installed. If some programs are not in the installed list, please install it manually using the program installation package `.\Preparation\pkg\`:

Organize ▾

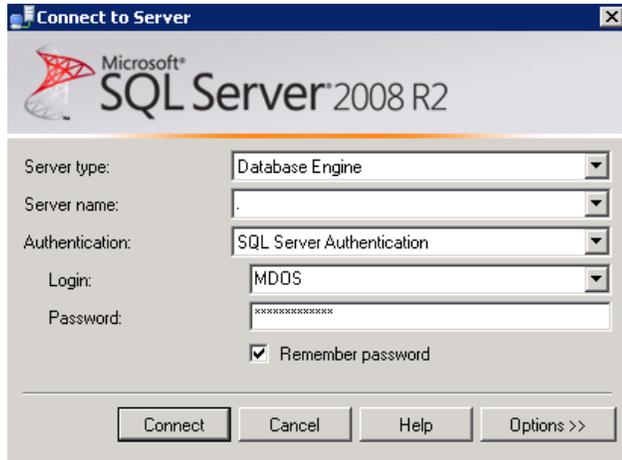
Name	Publisher	Installed On	Size	Version
Digital Operations Services Client	Microsoft Corporation	7/7/2016	49.7 MB	1.0.20160.524
Microsoft SQL Server 2012 Native Client	Microsoft Corporation	6/22/2016	6.85 MB	11.1.3000.0
Microsoft System CLR Types for SQL Server 2012	Microsoft Corporation	5/25/2016	1.15 MB	11.1.3000.0
Microsoft System CLR Types for SQL Server 2012 (x64)	Microsoft Corporation	5/25/2016	1.76 MB	11.1.3000.0
Microsoft ADO.NET Entity Framework 4.1	Microsoft Corporation	5/25/2016	6.58 MB	4.1.10331.0
Microsoft SQL Server 2012 Command Line Utilities	Microsoft Corporation	5/25/2016	879 KB	11.1.3000.0
Microsoft SQL Server 2012 Management Objects (x64)	Microsoft Corporation	5/25/2016	23.3 MB	11.1.3000.0
Microsoft Telemetry/Host Service	Microsoft Corporation	4/6/2016	4.85 MB	2.0.235.2
Microsoft Silverlight	Microsoft Corporation	1/12/2016	100 MB	5.1.41212.0
Windows Firewall Configuration Provider	Microsoft Corporation	10/18/2015	342 KB	1.2.3412.0
Microsoft Pin Tool v5	Microsoft IT (ISRM Tools)	10/18/2015	1.29 MB	5.1.0.1
HelpDesk	MSIT	10/18/2015	3.45 MB	1.0.1
System Center Endpoint Protection	Microsoft Corporation	10/18/2015		4.7.214.0
Microsoft Visual C++ 2005 Redistributable (x64)	Microsoft Corporation	10/10/2015	6.83 MB	8.0.61000
Windows PowerShell Extensions for SQL Server 2012	Microsoft Corporation	10/10/2015	1.23 MB	11.1.3000.0
Microsoft Visual C++ 2013 Redistributable (x86) - 12.0.21005	Microsoft Corporation	10/10/2015	17.1 MB	12.0.21005.1
Microsoft Visual C++ 2013 Redistributable (x64) - 12.0.21005	Microsoft Corporation	10/10/2015	20.5 MB	12.0.21005.1

11. Make sure you **DO NOT** see “SQL SERVER is not installed” on PowerShell prompt window as shown in the red outline below.

```

11.1.3000.0
Microsoft SQL Server 2012 Native Client has been installed
Microsoft SQL Server 2012 Command Line Utilities has been installed
Microsoft System CLR Types for SQL Server 2012 (x64) has been installed
Microsoft System CLR Types for SQL Server 2012 has been installed
Microsoft SQL Server 2012 Management Objects (x64) has been installed
Microsoft Windows PowerShell extensions for Microsoft SQL Server 2012 SP1 has been installed
Microsoft Visual C++ 2013 x86 Minimum Runtime - 12.0.21005 (Redistributable Package) has been installed
Installing Entity Framework 4.1...
SQL Server is not installed on this Application Server, please go to Database Server to execute .\db\run.cmd in order to
complete the environment setup for MDOS.
PS D:\MDOS_v1.0\Preparation>
  
```

12. Open the log file at `.\preparation\db\SQLOutput_SetMDOSDB.txt` to verify there are no errors logged.
13. Open SQL Server Management Studio and make sure that you can log on to the default SQL Server instance with the username of “MDOS” and the password of “D!S@OMSG.msft” in SQL Server Authentication Mode.
 Note: If you are unable to login with an “MDOS” account, please refer to [the Errors and Troubleshooting section of the FAQs for more](#)

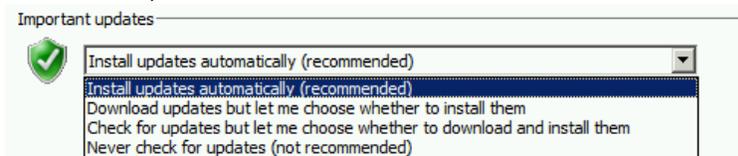


3.2 TWO MACHINES

Instructions: Follow the Configuration steps for the Application Server and Database Server when application and database servers are on two machines.

A. Step-by-step for Application Server:

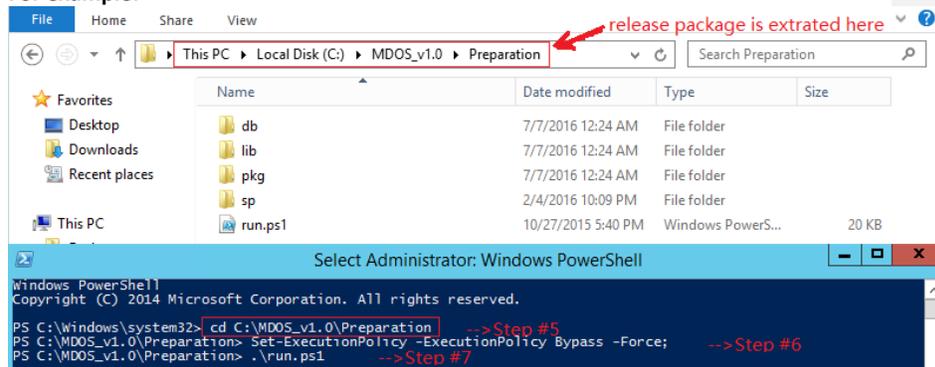
1. Install the operating system with one of the following server options: Windows Server 2008 R2 Enterprise Edition (64-bit); Windows Server 2012 Enterprise Edition (64-bit); or Windows Server 2012 R2 Enterprise Edition (64-bit).
2. Log on as **administrator**, go to Control Panel -> System and Security -> Windows Update -> Turn automatic Updating on or off -> Select 'Install updates automatically (recommended)' or others, but **DO NOT** select 'Never check for updates (not recommended)'.



Note: If your operating system is Windows Server 2008 R2, you must install Windows Management Framework 3.0 (available at <http://www.microsoft.com/en-us/download/details.aspx?id=34595>).

3. Download MDOS Client 1.2 release package from the official channel provided by Microsoft, and extract it.
4. From the Start Screen or Start menu, type in "PowerShell" in the Search box, and then right click the PowerShell item in the search result list. In the context menu popped up, click "Run as administrator".
5. In the PowerShell prompt window, use the CD command to navigate to the `.\preparation\` sub directory of the home directory of the release package extracted: `CD [ABSOLUTE PATH TO THE HOME DIRECTORY OF THE INSTALLATION PACKAGE]\preparation\`
6. After navigating to the home directory of the preparation folder, type in the following PS command to enable PS script execution: `Set-ExecutionPolicy -ExecutionPolicy Bypass -Force;`
7. In the PowerShell prompt, type in the following command to start the preparation: `.\run.ps1`

For example:



8. Make sure that there are no errors displayed in the screen output. If there are any errors, copy and record the messages from the screen for issue analysis, then resolve all the issues before installing MDOS Client 1.2.
9. If there is any error, you will see "**SQL Server is not installed on this Application Server, please go to Database Server to execute `.\db\run.cmd` in order to complete the environment setup for MDOS.**" on the PowerShell prompt window.

```

11.1.3000.0
Microsoft SQL Server 2012 Native Client has been installed
Microsoft SQL Server 2012 Command Line Utilities has been installed
Microsoft System CLR Types for SQL Server 2012 (x64) has been installed
Microsoft System CLR Types for SQL Server 2012 has been installed
Microsoft SQL Server 2012 Management Objects (x64) has been installed
Microsoft Windows PowerShell Extensions for Microsoft SQL Server 2012 SP1 has been installed
Microsoft Visual C++ 2013 x86 Minimum Runtime - 12.0.21005 (Redistributable Package) has been installed
Installing Entity Framework 4.1...
SQL Server is not installed on this Application Server, please go to Database Server to execute .\db\run.cmd in order to
complete the environment setup for MDOS.
PS D:\MDOS_V1.0\Preparation>
    
```

10. Open “Control Panel” -> “All Control Panel Items” -> “Programs and Features” to check if the below programs are installed. If you find some programs are not in the installed list, please install them manually. The program installation package can be found at “. \Preparation\pkg\”.

Name	Publisher	Installed On	Size	Version
Digital Operations Services Client	Microsoft Corporation	7/7/2016	49.7 MB	1.0.20160.524
Microsoft SQL Server 2012 Native Client	Microsoft Corporation	6/22/2016	6.85 MB	11.1.3000.0
Microsoft System CLR Types for SQL Server 2012	Microsoft Corporation	5/25/2016	1.15 MB	11.1.3000.0
Microsoft System CLR Types for SQL Server 2012 (x64)	Microsoft Corporation	5/25/2016	1.76 MB	11.1.3000.0
Microsoft ADO.NET Entity Framework 4.1	Microsoft Corporation	5/25/2016	6.58 MB	4.1.10331.0
Microsoft SQL Server 2012 Command Line Utilities	Microsoft Corporation	5/25/2016	879 KB	11.1.3000.0
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System Center Endpoint Protection	Microsoft Corporation	10/18/2015		4.7.214.0
Microsoft Visual C++ 2005 Redistributable (x64)	Microsoft Corporation	10/10/2015	6.83 MB	8.0.61000
Windows PowerShell Extensions for SQL Server 2012	Microsoft Corporation	10/10/2015	1.23 MB	11.1.3000.0
Microsoft Visual C++ 2013 Redistributable (x86) - 12.0.21005	Microsoft Corporation	10/10/2015	17.1 MB	12.0.21005.1
Microsoft Visual C++ 2013 Redistributable (x64) - 12.0.21005	Microsoft Corporation	10/10/2015	20.5 MB	12.0.21005.1

B. Step-by-step for Database Server:

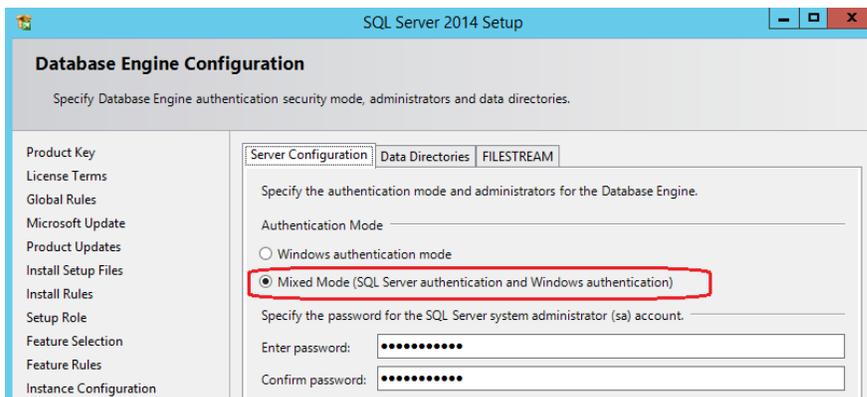
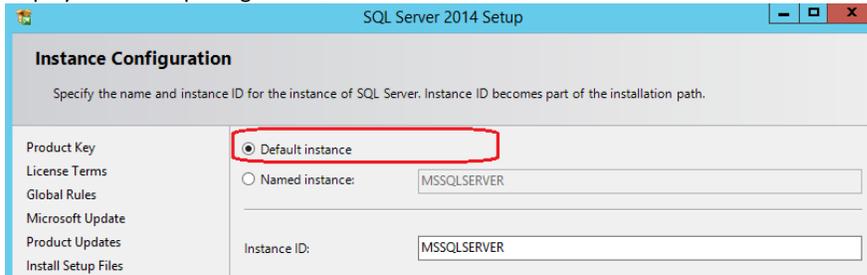
1. Install the operating system with one of the following server options: Windows Server 2008 R2 Enterprise Edition (64-bit); Windows Server 2012 Enterprise Edition (64-bit); or Windows Server 2012 R2 Enterprise Edition (64-bit).

Note: If your operating system is Windows Server 2008 R2, you must install Windows Management Framework 3.0 (available at <http://www.microsoft.com/en-us/download/details.aspx?id=34595>).

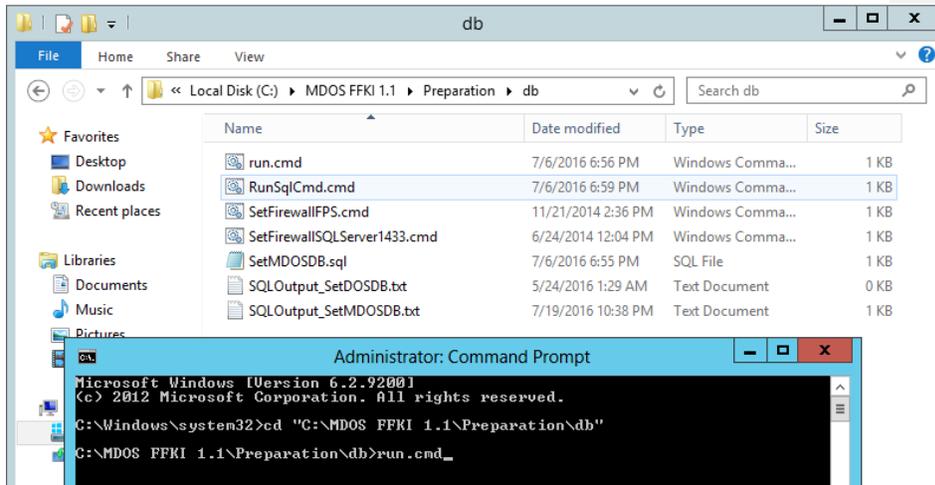
2. Install SQL Server with one of the following SQL Server options: SQL Server 2008 R2; SQL Server 2012; SQL Server 2012 SP1; SQL Server 2014; or SQL Server 2014 SP1.

Note: It is highly recommended to select ‘Default instance’ on the Instance Configuration page and ‘Mixed Mode’ on the Database Engine Configuration instead of

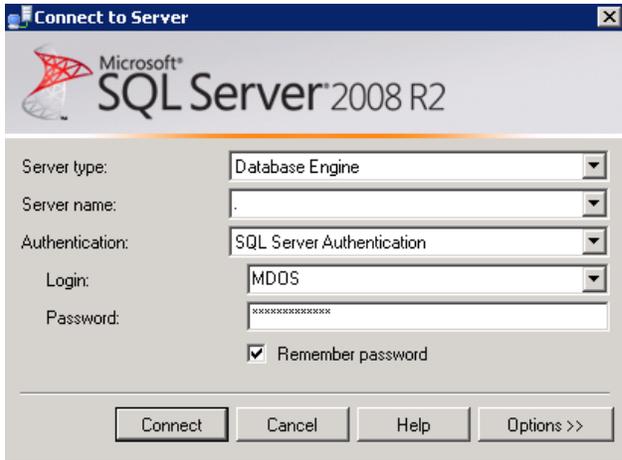
‘Windows Authentication Mode’. Please restart the machine if the restart prompt displays after completing the SQL Server install.



3. Log on to this server as “Administrator”, download MDOS Client 1.2 release package from the official channel provided by Microsoft, and extract it.
4. From the Start Screen or Start menu, type in “CMD” in the Search box, and then right click the cmd.exe item in the search result list. In the context menu that pops up, click “Run as administrator”.
5. In the command window, use the **CD** command to navigate to the `.\preparation\db\` sub directory of the home directory of the release package extracted:
`CD [ABSOLUTE PATH TO THE HOME DIRECTORY OF THE INSTALLATION PACKAGE]\preparation\db\`
6. Run the database server preparation script:
`.\run.cmd`



7. Make sure that there are no error messages displayed in the window output and a log file named **SQLOutput_SetMDOSDB.txt** is created in the `.\preparation\db\` sub directory.
8. Open the log file of `.\preparation\db\SQLOutput_SetMDOSDB.txt`, and verify that there are no errors logged.
9. Open SQL Server Management Studio. Confirm that you can log on to the default SQL Server instance with the username of "MDOS" and the password of "DIS@OMSG.msft" in SQL Server Authentication Mode. You may not be able to connect to SQL Server using SQL Server Authentication, if you selected "Windows Authentication" while installing SQL Server. Please try to restart SQL Server Service (Please refer to [the Errors and Troubleshooting section of the FAQs for more](#) about how to restart SQL Server Service).

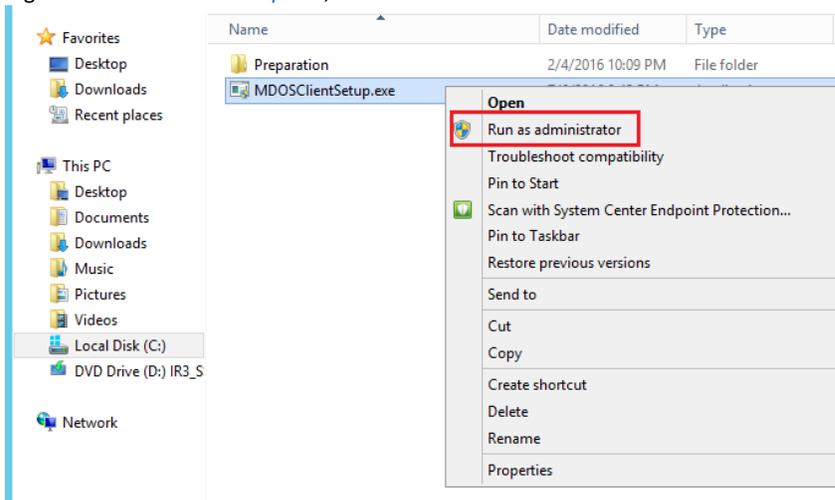


4. MDOS FFKI SET UP - INSTALLATION OF MDOS

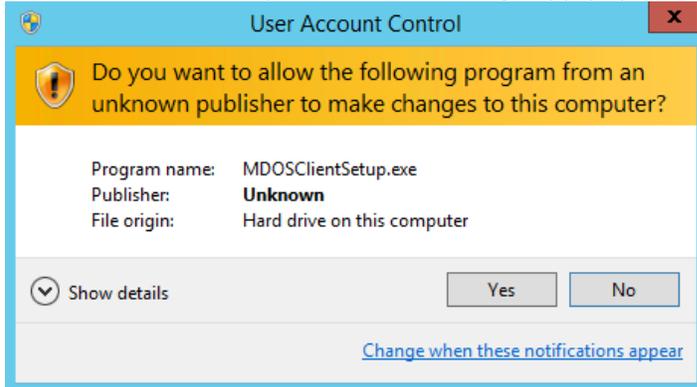
Instruction: Follow the steps to install an FFKI client in MDOS.

Step-by-step:

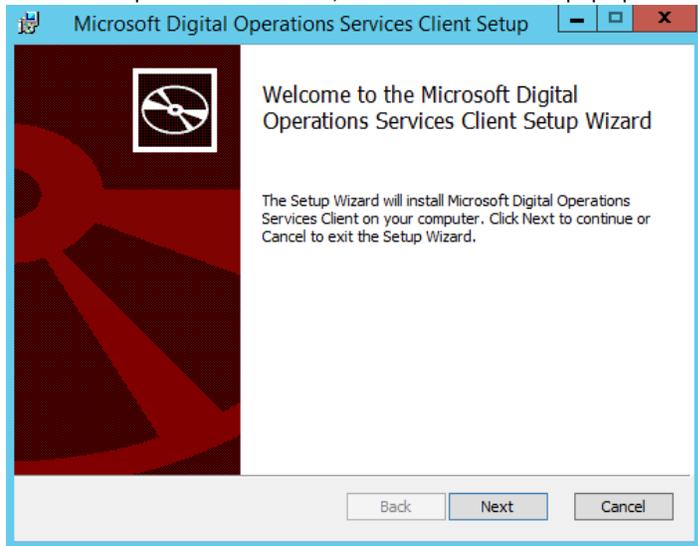
1. Go to the MDOS Client 1.2 release package extraction folder.
2. Right-click *MDOSClientSetup.exe*, and select 'Run as administrator'.



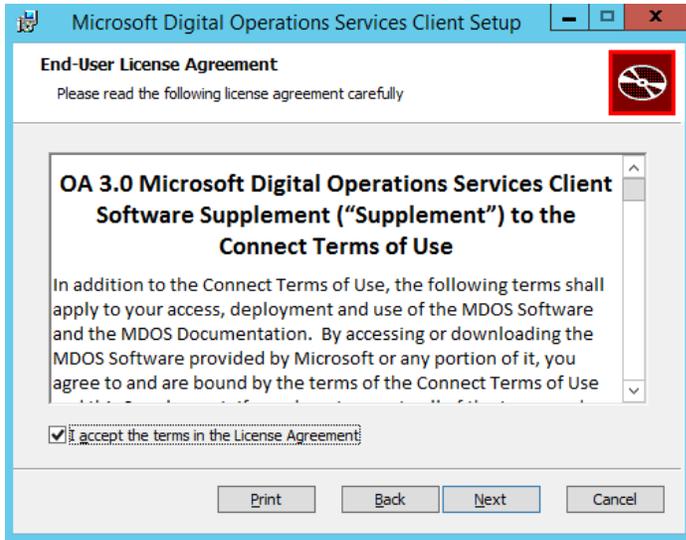
Note: If the UAC is turned on for your machine, this dialog may pop up. Select 'Yes' to continue.



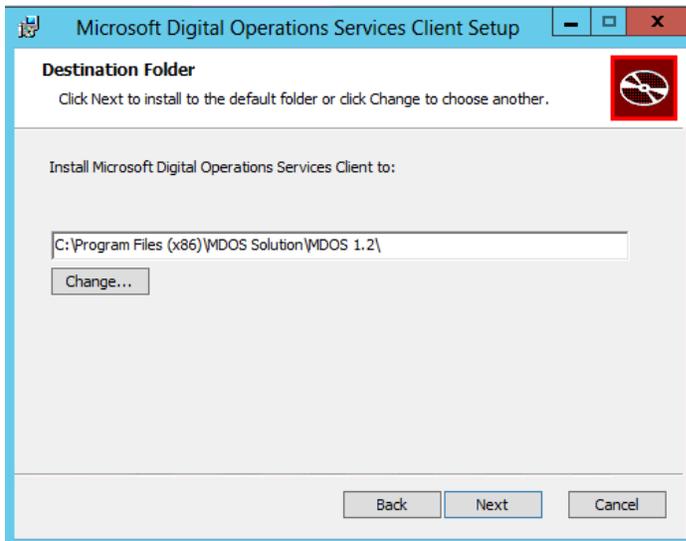
3. After the setup wizard is launched, a welcome screen will pop up. Click Next.



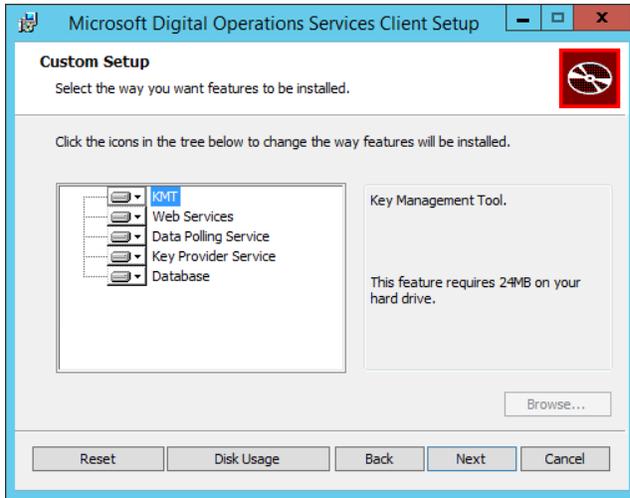
4. When directed to the End-User License Agreement (EULA) window, check the "I accept the terms in the License Agreement" checkbox to accept the terms and conditions in the license agreement, and then click Next.



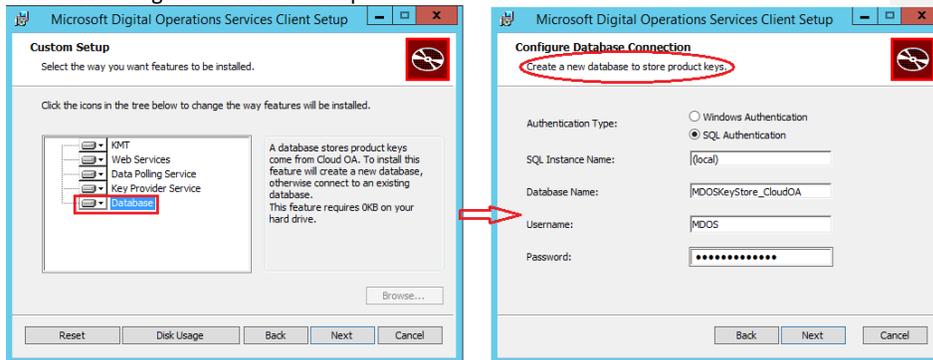
5. In the Destination Folder window, select the installation location by clicking the Change button, or you may accept the default value that is pre-populated, and then click the Next button.



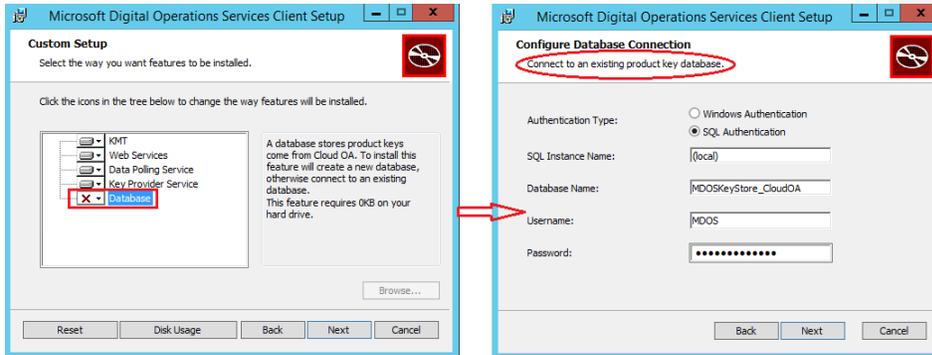
6. In the Custom Setup page (all the components are checked by default), click Next.



Note: For the **Database** feature; If Database is **checked** on this page, it will create one new database. This will be based on the settings that are input in the Configuration Database dialog box in the next step.



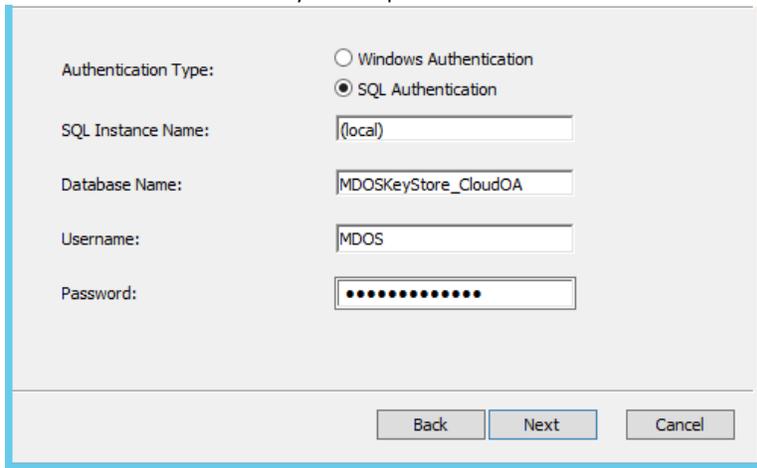
Note: For the **Database** feature; If Database is **unchecked**, then it will connect to one of the existing databases. This will be based on the settings that are input in the Configuration database dialog box in next step.



7. Configure the database connection information and then click Next.

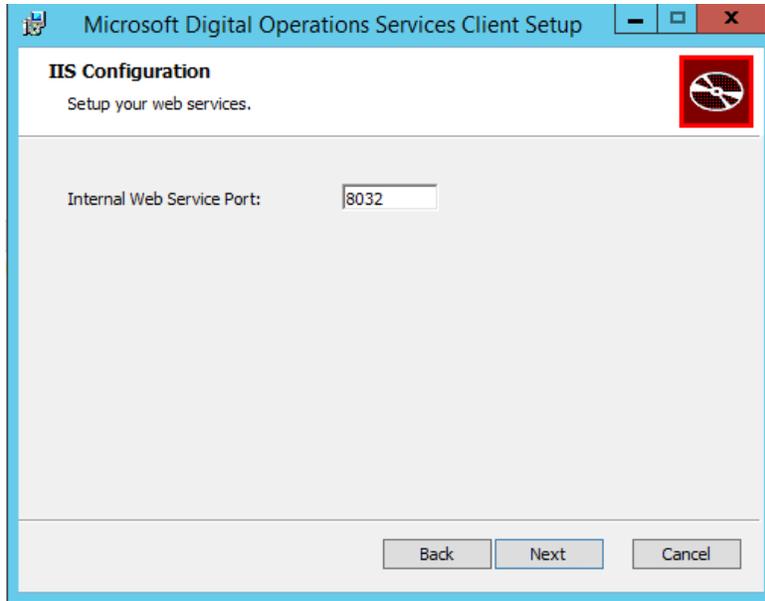
Example: Here are three different potential cases:

- 1) Case 1: You have your database server and application server on the same machine, and have executed run.ps1 successfully. Therefore, all the information on this page will be pre-populated and you just need to click Next.
- 2) Case 2: You set up your database on another machine and already execute run.cmd successfully. Update '**SQL Instance Name**' and keep the other default values as shown in the following screenshot.
- 3) Case 3: You set up the database manually but not through run.cmd. Update all the information based on your setup.



Note: The default password is [DIS@OMSG.msft](#) for MDOS user.

8. On the IIS Configuration page, configure the http port for Internal Web Service. This is to be used by the MDOS Client to interact with MDOS. The default port is 8032. If you want to modify the value, please remember the value you enter. You will need to re-enter the port in the following system setting page again later.



9. On the MDOS Connection page, select the environment and configure MDOS connection information.

The screenshot shows a window titled "Microsoft Digital Operations Services Client Setup" with a sub-header "Cloud OA Connection" and the instruction "Configure Cloud OA Connection Information." The window contains the following fields and controls:

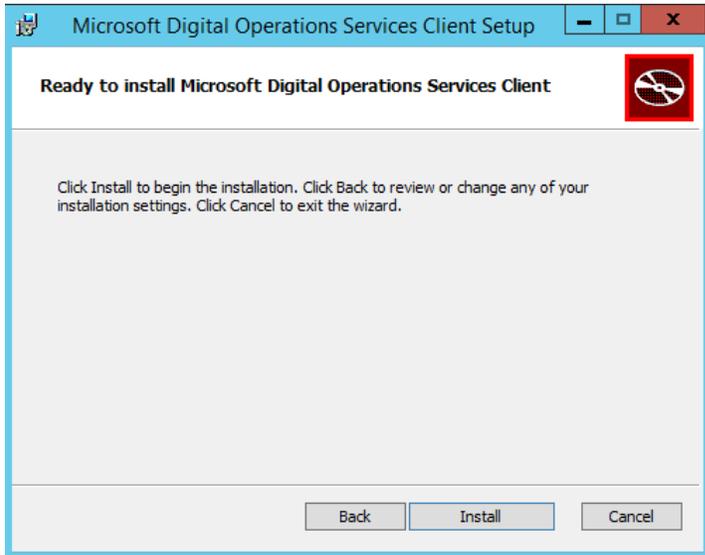
- Environment:** Radio buttons for "Production" (unchecked) and "Test" (checked).
- Business Name:** Text input field containing "Test123".
- Client ID:** Text input field containing "f9a9ce56-197b-494b-abb5-fc5ad20050f".
- Secret ID:** Text input field containing "9cb24df7d4a346aea0e724ceee291a82".
- Site ID:** Text input field containing "3".
- Business ID:** Text input field containing "4".

At the bottom of the window are three buttons: "Back", "Next", and "Cancel".

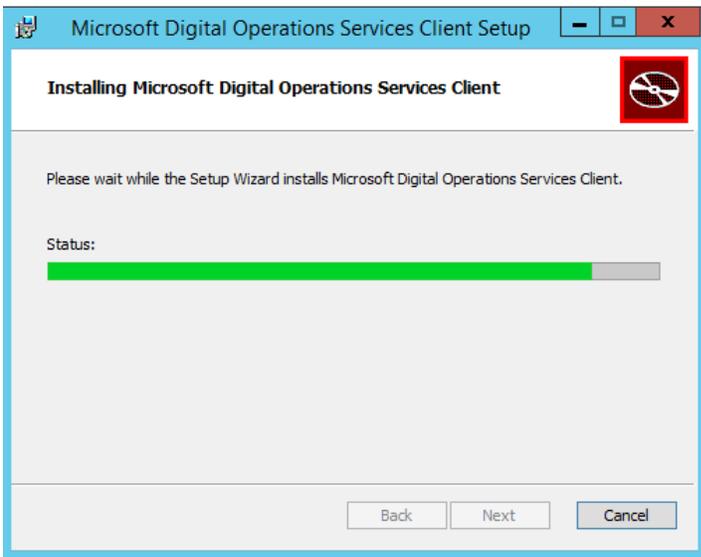
Note:

- The Business Name is self-defined. Other MDOS connection information is provided by your uplevel partner within MDOS, which is sent by email.
- If database is unchecked in the Custom Setup page, you will not see this "MDOS Connection" page.

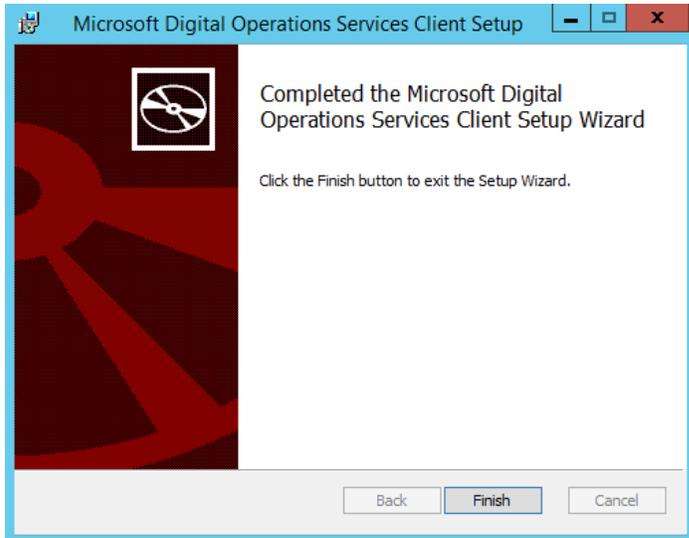
10. In the confirmation page, click the Install button to start the installation.



11. During the installation process, if you see any errors, please be sure to record the error message prompted before you click the Cancel button to roll back the installation for MDOS Client 1.2.



12. When the installation completes, click Finish.



13. Switch to the Desktop view and verify that the shortcut to start the Key Management Tool for MDOS has been created and the icon is showing on the desktop.

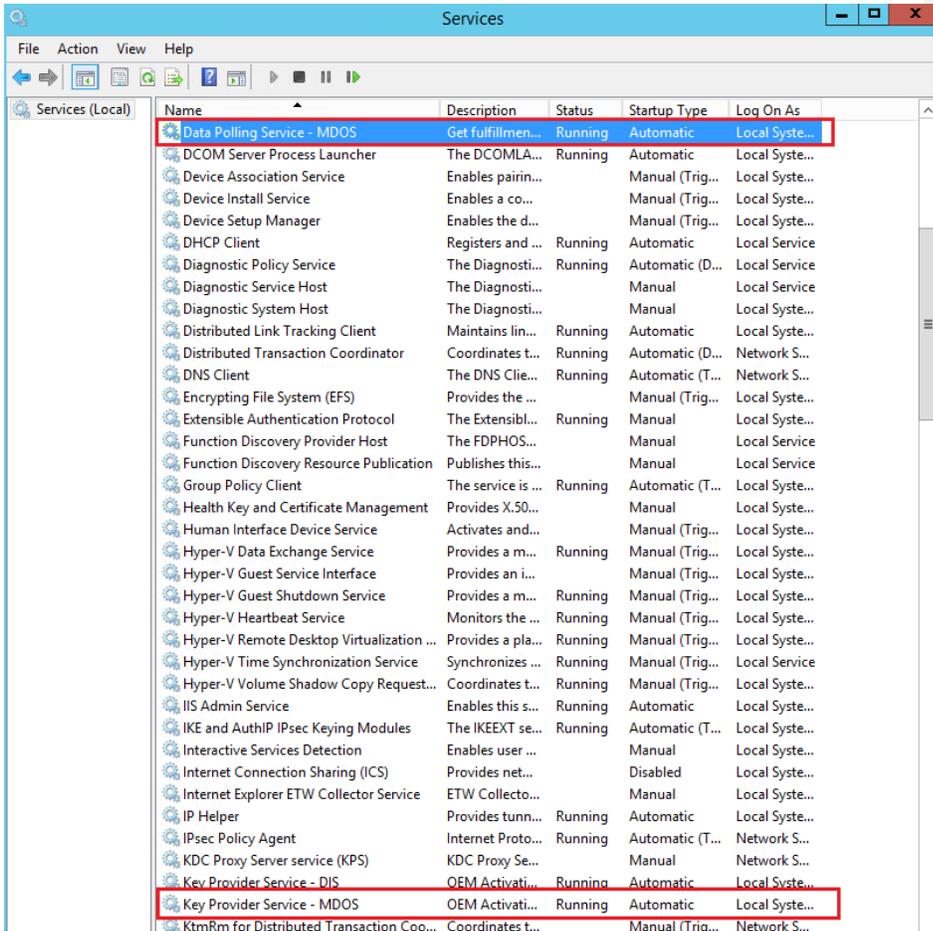


5. INSTALLATION VERIFICATION

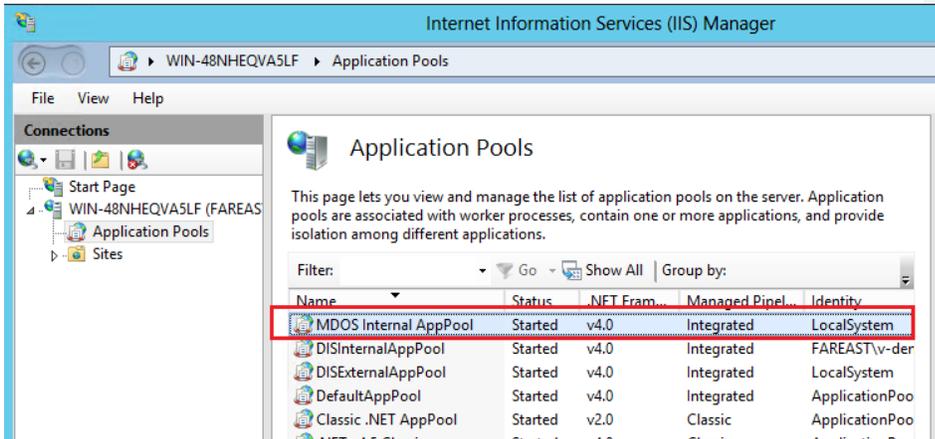
Instruction: Follow these steps to verify that the MDOS Client Setup has been installed and is ready to be used.

Step-by-step:

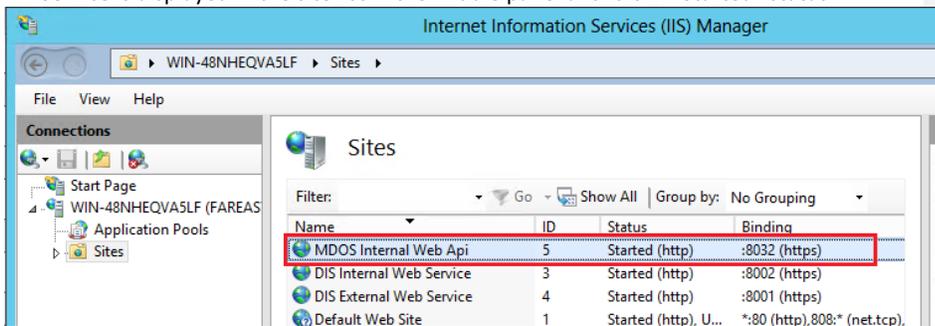
1. Go to the Start Menu and choose "Run" or type "Run" into the Start menu or Task Bar search option to launch Run. Type "services.msc" in the window and press Enter to launch the Services management console. Confirm that the "DataPollingService - MDOS" and "Key Provider Service - MDOS" are both displayed in the service list and both are in "Running" status.



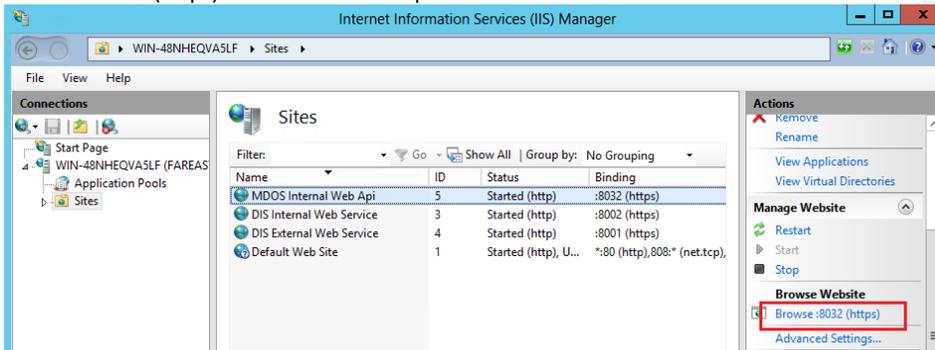
- Go to the Start Menu and choose “Run” or type “Run” into the Start menu or Task Bar search option to launch Run. Type “INetMgr.exe” and press Enter to launch Internet Information Services Manager. In the IIS Manager console, click the “Application Pools” node in the left panel. Confirm that MDOS Internal AppPool is displayed under the application pool list in the middle panel, and it is in “Started” status.



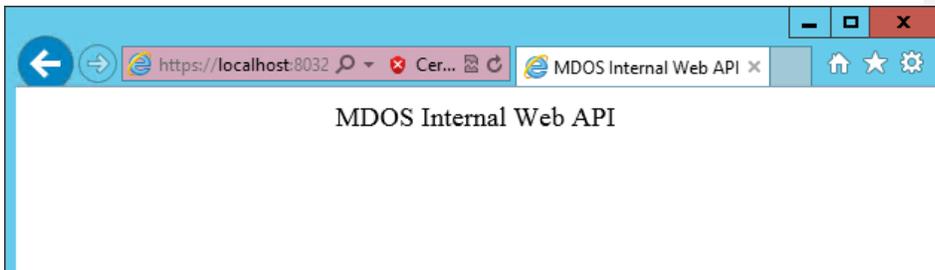
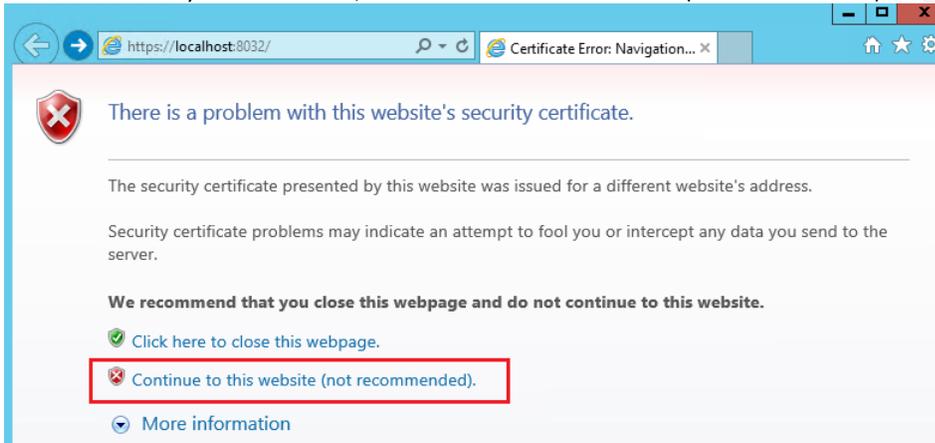
- In IIS Manager, click the “Site” node in the left panel. Confirm that MDOS Internal Web Service is displayed in the site list in the middle panel and it is in “Started” status.



- On the site list of the middle panel, select “MDOS Internal Web Service” and click the “Browse: 8032 (https)” link in the Actions pane.



If there is a security certificate issue, select “Continue to this website (not recommended)”.



6. FFKI CONFIGURATION

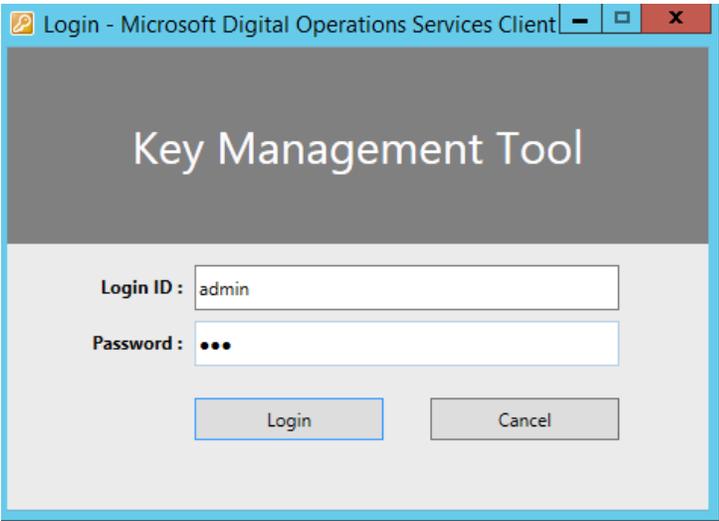
Instruction: Before the MDOS Client is activated and ready for business users, the following configurations for the FFKI must be completed.

6.1 INTERNAL WEB SERVICE SETTING

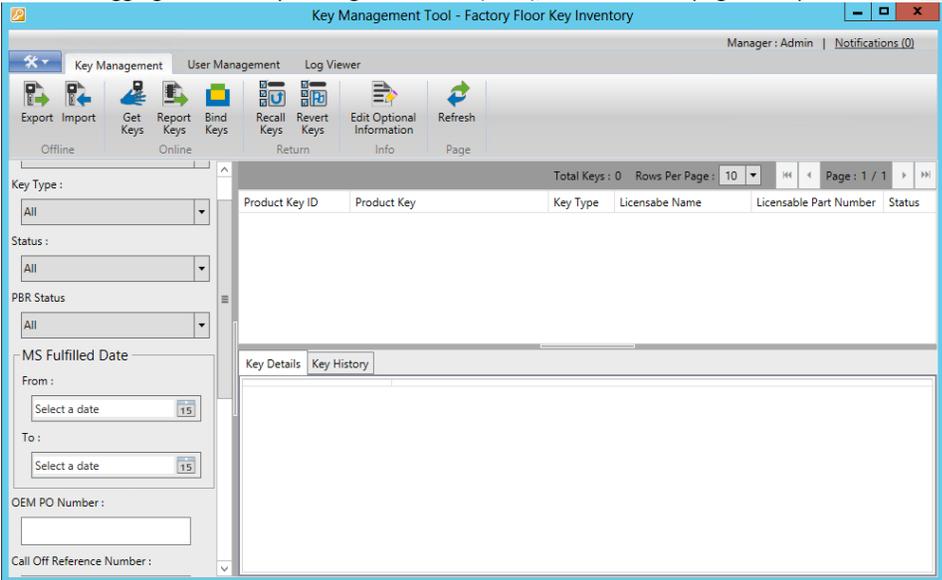
Step-by-step:

1. Double click the shortcut on your desktop to launch the MDOS Client.

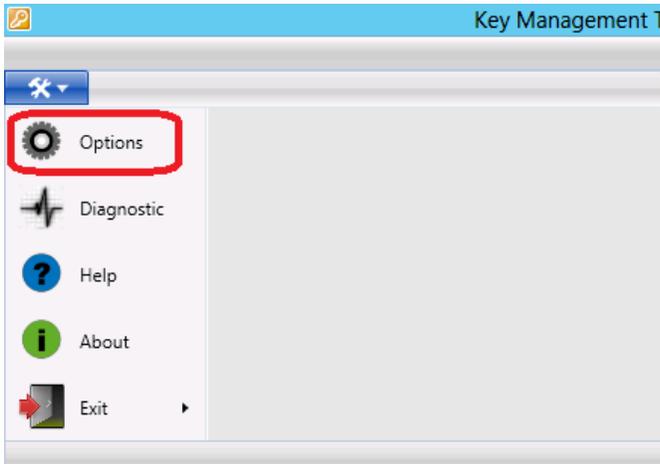
Note: The default Login ID is “Admin” and password is “123”.



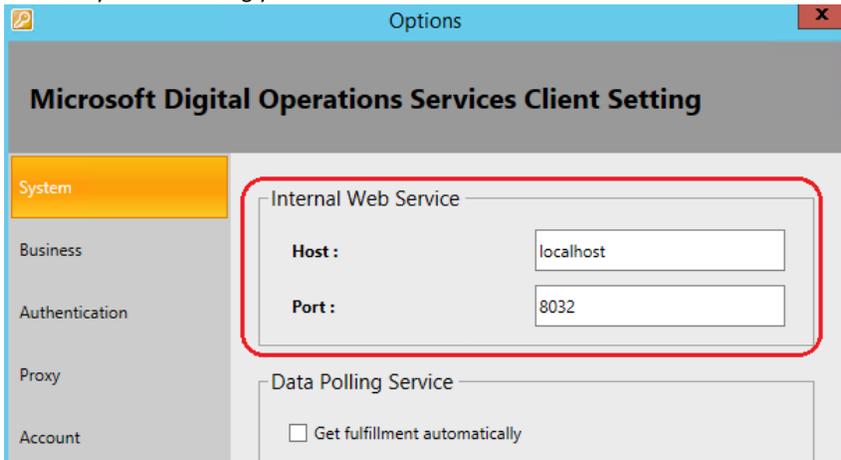
2. After logging into the Key Management Tool (KMT), the KMT main page will open.



3. From the main menu, select Options from the tool icon pulldown menu.



4. When the Options dialog box opens, select System from the left panel and then change the Host and Port for Internal Web Service to the information that corresponds with what you used during your installation.



A. Data Polling Service setting

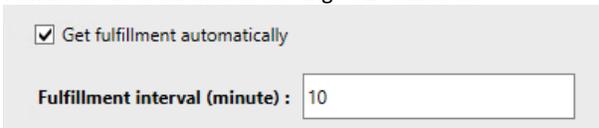
Instructions: Set up the Data Polling Service configurations from the System setting panel.

Step-by-step:

5. **Get Fulfillment Automatically** checkbox:

If this checkbox is checked, MDOS Client will get keys from MDOS per the fulfillment interval (in minutes) that you set.

Note: If this checkbox is left unchecked, MDOS Client will get keys from MDOS per the fulfillment interval default setting of 10 minutes.



The screenshot shows a light gray rectangular control panel. At the top, there is a checked checkbox followed by the text "Get fulfillment automatically". Below this, the text "Fulfillment interval (minute) :" is followed by a text input field containing the number "10".

6. **Report Automatically** checkbox:

If this checkbox is checked, MDOS Client will report CBRs to MDOS per the fulfillment interval (in minutes) that you set.



The screenshot shows a light gray rectangular control panel. At the top, there is a checked checkbox followed by the text "Report automatically". Below this, the text "Report interval (minute) :" is followed by a text input field containing the number "10".

7. **Delete Logs Automatically** checkbox:

If this checkbox is checked, MDOS Client will automatically delete logs (including operation logs and system logs in MDOS Client) which exceed 3 months. MDOS Client will check the log created date every 10 minutes. The main purpose for this option is to provide additional space for the database.



The screenshot shows a light gray rectangular control panel with a checked checkbox followed by the text "Delete logs automatically (more than 3 months)".

B. Old timeline and Hardware Hash length setting

Instructions: Set up the Old timeline and Hardware Hash length configurations from the System setting panel.

Step-by-step:

8. **Old Timeline** setting:

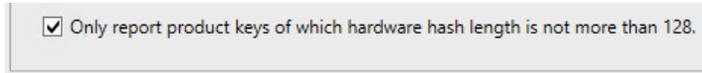
If the key fulfillment date exceeds [old timeline] days (default is 180 days), the key will be displayed as red font in the KMT main window. Meanwhile, the "Exceed timeline" notification will pop up to notify the user. (Note: this doesn't affect the user who will use the keys. The user can also edit this field).



Other

Old timeline (day) :

9. “Only report product keys of which hardware hash length is not more than 128” checkbox:
If this checkbox is checked, MDOS Client will check the hardware hash length while submitting the CBR to MDOS. If the hardware hash length is greater than 128, MDOS Client will not report this key. (Currently Microsoft only supports hardware hash length ≤ 128).



Only report product keys of which hardware hash length is not more than 128.

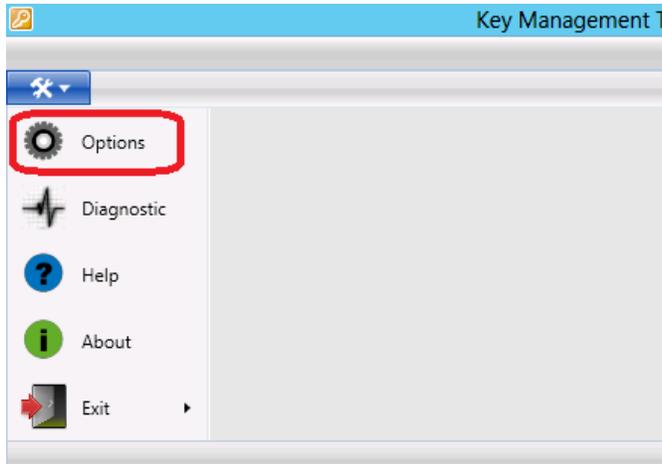
Note: It is highly recommended to check this checkbox until Microsoft accepts CBRs which contain hardware hash length greater than 128 bytes.

6.2 CONFIGURING INTEGRATIONS WITH MDOS API

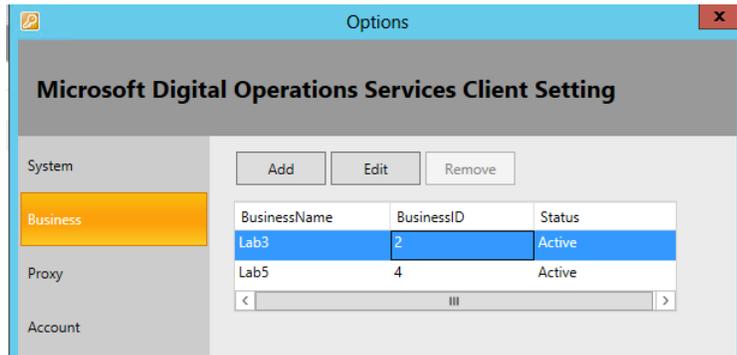
Instruction: Before the MDOS Client is activated and ready for business users, the following integrations with MDOS API and business settings must be configured.

Step-by-step:

1. After logging in to KMT, from the main menu, select Options from the tool icon pulldown menu.



2. When the Options dialog box opens, select Business from the left pane. Then in the right pane, confirm that the information that was input during installation is correct.



3. If you have more than one business, please click Add button to create a new business.
4. If you want to make additional changes, select the Business in the list and then click the Edit button above the list. Confirm any changes, click the Save button on the bottom right to save the changes, and close the dialog.

The screenshot shows a dialog box titled "Edit Business". It contains the following fields and values:

- Business Name : Lab3
- Site ID : 2
- Business ID : 2
- User ID : 1
- Client ID : 2c13b599-720e-4335-8eb2-8cdac6a56272
- Secret ID : 0a6fae53acf44886963001e8adf5cec4
- Status : Active

Buttons: Save, Cancel

Note:

- Businesses will automatically be displayed in alphabetical/numerical order by Business name.
- If you already have received keys from a business, you are unable to remove this business. You are also unable to edit SiteID and BusinessID.

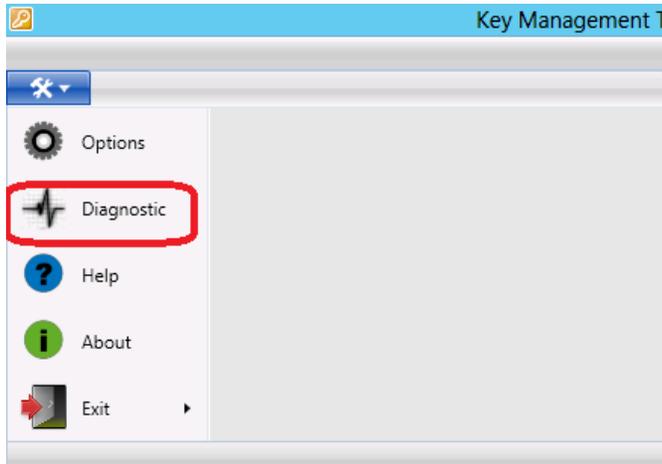
7. ADVANCED FUNCTIONALITIES

7.1 DIAGNOSIS AND TESTING

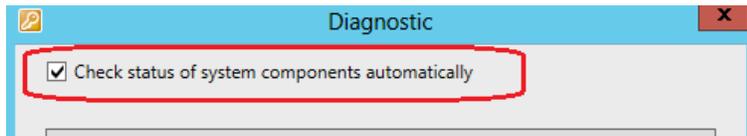
Instructions: Follow the diagnosis and testing steps to confirm a successful set up in MDOS.

Step-by-step:

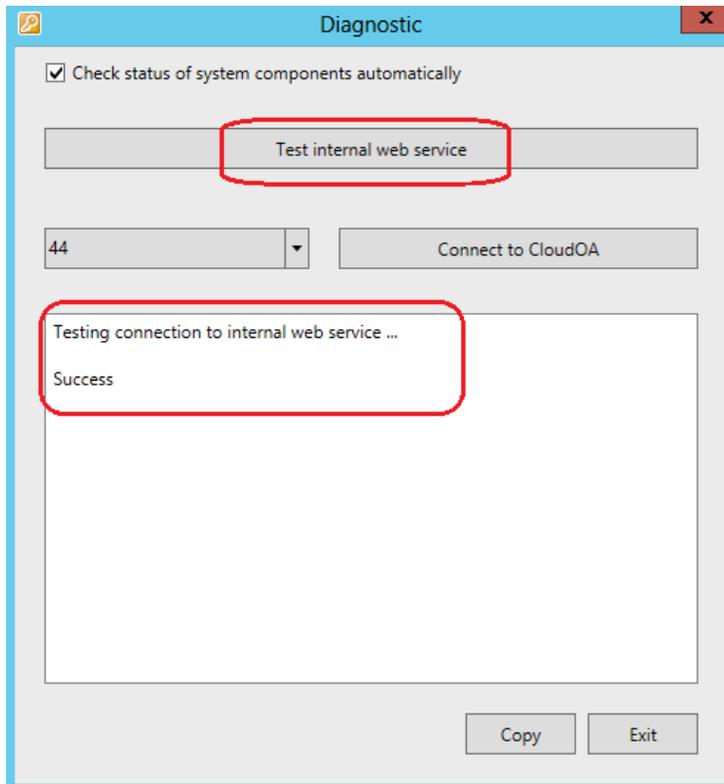
1. From the main menu, select Diagnostic from the tool icon pulldown menu.



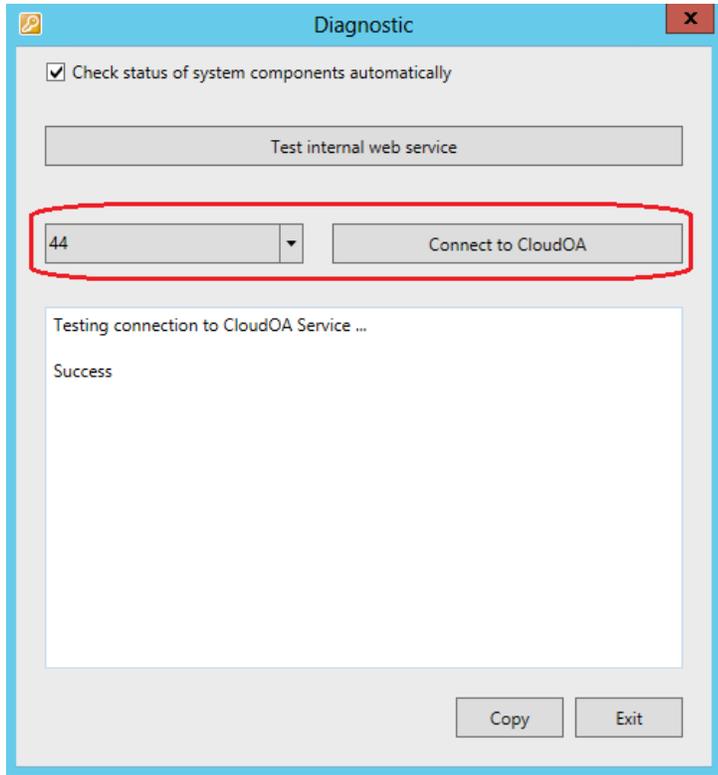
2. In the Diagnostic dialog box, check the checkbox for “Check status of system components automatically”. This will ensure the MDOS Client checks whether the four system components listed below work correctly. If some components don’t work, notification in MDOS Client main page will pop up to prompt the user.
 - Internal Web Service
 - Data Polling Service
 - Key Provider Service
 - Database



3. Click the Test internal web service button to test that the Key Management Tool can successfully establish communication with the Internal Web Service. If it returns unsuccessful results, please check the failure message and go back to “Option” window -> System setting, to check the Internal web service setting.



4. Select the business from the dropdown list, and then click the "Connect to MDOS" button. Ensure that a Success result message is received. If it returns unsuccessful results, please check the failure message and go back to "Option" window, to check the Business setting.



7.2 NETWORK CONSIDERATIONS

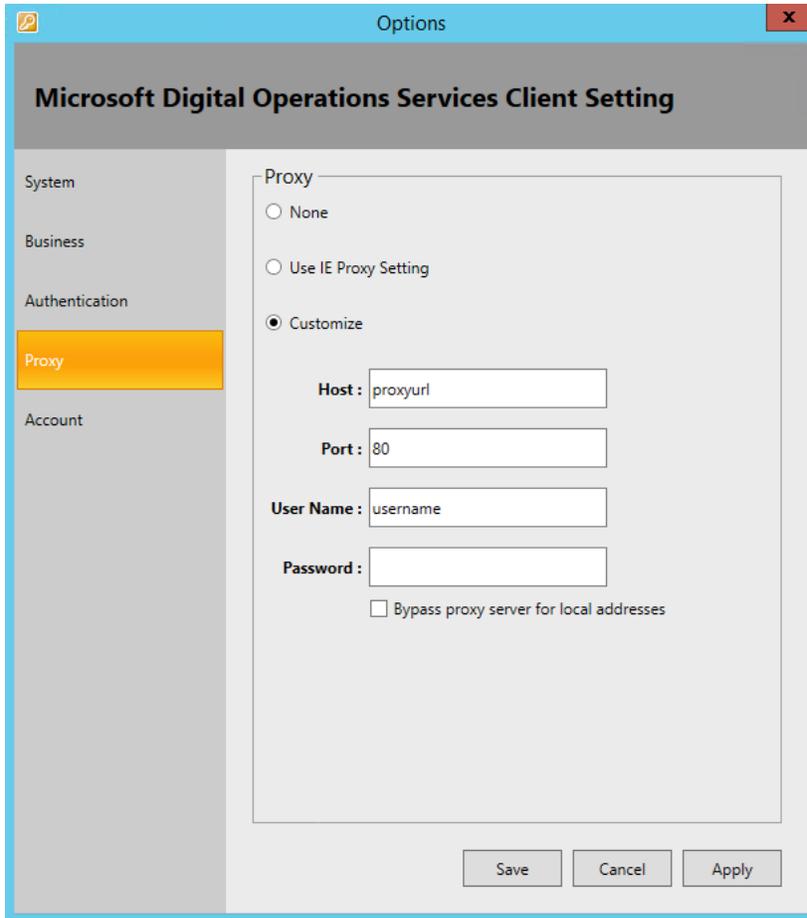
Instructions: Follow the steps below to confirm successful access to MDOS.

(i) A. Accessing MDOS via Proxy

Instructions: Follow the steps below to confirm successful access to MDOS via Proxy.

Step-by-step for Accessing MDOS via Proxy:

1. If there is a proxy server between MDOS and the network segment that MDOS Client is deployed, and all the inbound/outbound access from/to MDOS will first pass through this proxy server. Please be sure to configure the proxy setting in Key Management Tool accordingly.



2. If there is DNS filter configured in the proxy server, please also ensure that the following URLs of MDOS API have been explicitly allowed in the filter policy:
For testing: <http://pg-digitaloperations-api.oa.microsoft.com>
Fort production: <https://digitaloperations-api.oa.microsoft.com>

(ii) B. Production Line Network Planning

Instructions: Follow the steps below to confirm Production Line Network Planning and successful access to MDOS.

Step-by-step for Production Line Network Planning:

1. Deploy Key Provider Service that directly interacts with OA3 Tool in the production line in a dedicated network segment that is separated from the one that has public network access;
2. Use reliable network communication mechanism for DPK assembly and reporting with OA3 Tool as possible;
3. If network is a factor that makes the impediment in your production and OA3.0 process, please consider using OA3 Tool in its file based mode or the extensive approaches based on that.

STEPS FOR ONBOARDING – EXISTING TPI ADDED AS NEW DLP

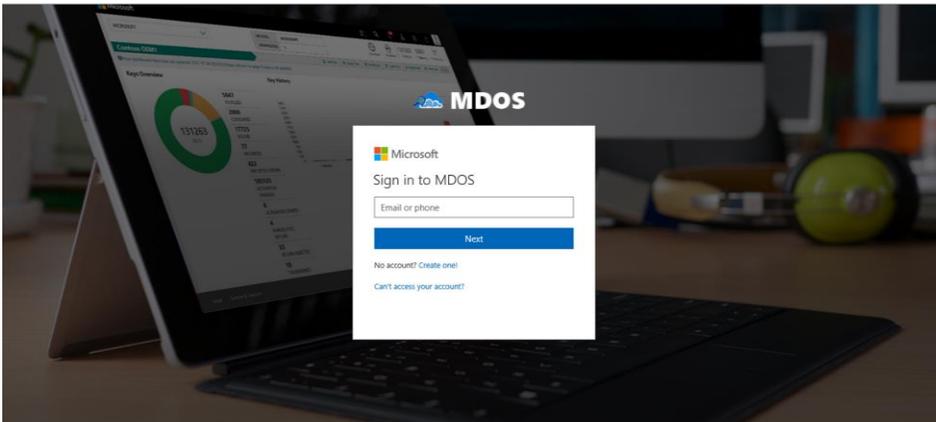
Instruction: Set up an existing TPI as a new DLP in MDOS.

Existing TPI set up as new DLP in MDOS

Once the business is established, to do business with an existing TPI (Third-party Installer), they need to be set up as a new DLP (Downlevel Partner) in MDOS. The TPI partner will then be able to perform key operations.

Step-by-step: (Existing TPI added as a new DLP)

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.



2. Click 'Add DLP' to add an existing TPI as new downlevel partner.

Microsoft Digital Operations Services User Manual

The screenshot displays the MDOS dashboard for a partner named 'mdoscatestlab3 company name'. At the top, there is a 'Partner Status' section with three metrics: 'Application Received' (0), 'Pending Acceptance' (0), and 'Onboard Completed' (2). Below this, there are navigation links for 'Org Chart', 'Manage User', 'Add DLP', and 'Add Agreement', along with a 'NAVIGATE TO DASHBOARD' button. The main content area is titled 'Completed Forms' and contains a table with the following data:

PARTNER NAME	LOCATION	BUSINESS TYPE	LICENSE AGREEMENT NUMBER	EMAIL	STATUS	ACTION
Contoso Subsidiary 2	United States	Subsidiary	500045514	mdoscatestlab31@outlook.com	Onboard Completed	ENABLE
mdoscatestlab3	USA	Controllable	500045514	mdoscatestlab3@outlook.com	Onboard Completed	RENEW BOTFIATION DISABLE

3. Select the 'Decentralized' business model.

The screenshot shows the 'What is your Business Model?' selection screen in the MDOS dashboard. It features three options: 'CENTRALIZED' (with a plus icon), 'DE-CENTRALIZED' (with a double-headed arrow icon), and 'SUBSIDIARY' (with a list icon). The 'DE-CENTRALIZED' option is highlighted with a green circle. Below the options, there is an information message: 'We are sorry, you are not allowed to add New TPI / New Subsidiary in MDOS test environment. If you want to add New TPI / New Subsidiary please click here.'

4. All the existing TPI available for the OEM will be displayed and select the TPI to add under OEM in MDOS and click 'Proceed' button,

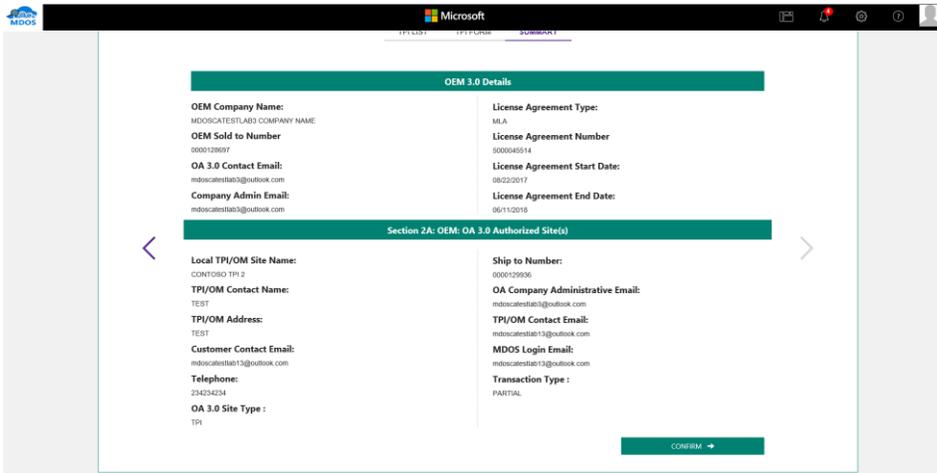
Microsoft Digital Operations Services User Manual

The screenshot shows the MDS interface with a navigation bar at the top. The main content area is titled 'Please select TPI' and contains two side-by-side cards. Each card displays the following information: 'Contoso TPI 2' (or 'Contoso Subsidiary 2'), 'Sold To: 0000128697', 'Ship To: 0000129536', 'Agreement Number: 5000040514', and 'Agreement Type: Master Licensing Agent (2015) for Named'. A green checkmark is visible at the bottom of each card. A 'PROCEED' button with a right-pointing arrow is located at the bottom right of the selection area.

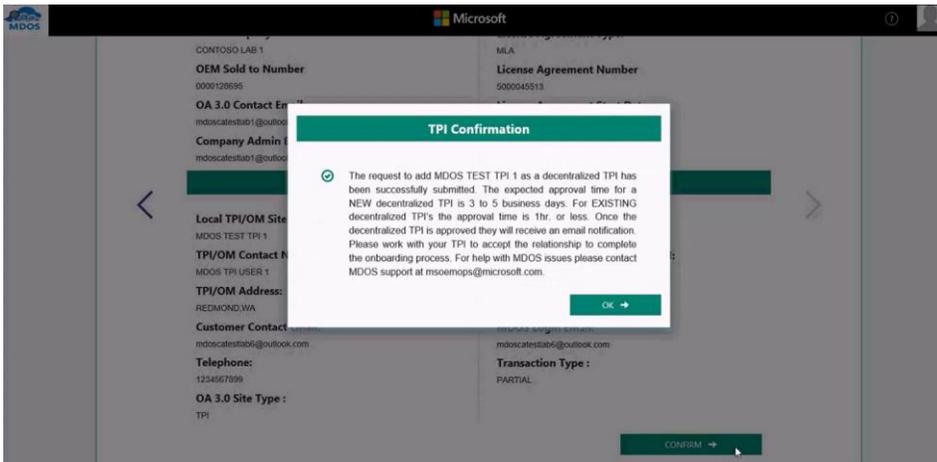
5. Fill the TPI form with all the required information and click 'Proceed' button.

The screenshot displays the 'OEM 3.0 Details' and 'OA TPI FORM' sections. The 'OEM 3.0 Details' section includes the following fields: 'OEM Company Name' (CONTOSO CORP), 'OEM Sold to Number' (0000128693), 'OA 3.0 Contact Email' (mbsab0em11@outlook.com), 'Company Admin Email' (mbsab0em11@outlook.com), 'License Agreement Type' (MASTER LICENSING AGENT (2015) FOR NAMED), 'License Agreement Number' (5000043703), 'License Agreement Start Date' (12/05/2017), and 'License Agreement End Date' (07/31/2016). The 'OA TPI FORM' section includes: 'LOCAL TPIOM SITE NAME' (MDS), 'TPIOM CONTACT NAME' (TEST), 'TPIOM ADDRESS 1' (TEST), 'TPIOM ADDRESS 2' (TEST), 'TPIOM ADDRESS 3' (TEST), 'CITY' (TEST), 'COUNTRY' (ANGOLA), 'OA COMPANY ADMINISTRATIVE EMAIL' (mbsab0em11@outlook.com), 'TPIOM CONTACT EMAIL' (mbsab0em11@outlook.com), 'CUSTOMER CONTACT EMAIL' (mbsab0em11@outlook.com), 'MDS LOGIN EMAIL' (mbsab0em11@outlook.com), 'TELEPHONE' (21314456), and 'TRANSACTION TYPE' (PARTIAL). A confirmation message at the bottom asks: 'We found similar partner names in existing down level partner list. Would you like to add existing TPI or like to continue with NEW TPI request?'. Below this message are two buttons: 'SELECT FROM EXISTING TPI' and 'CONTINUE WITH NEW TPI'.

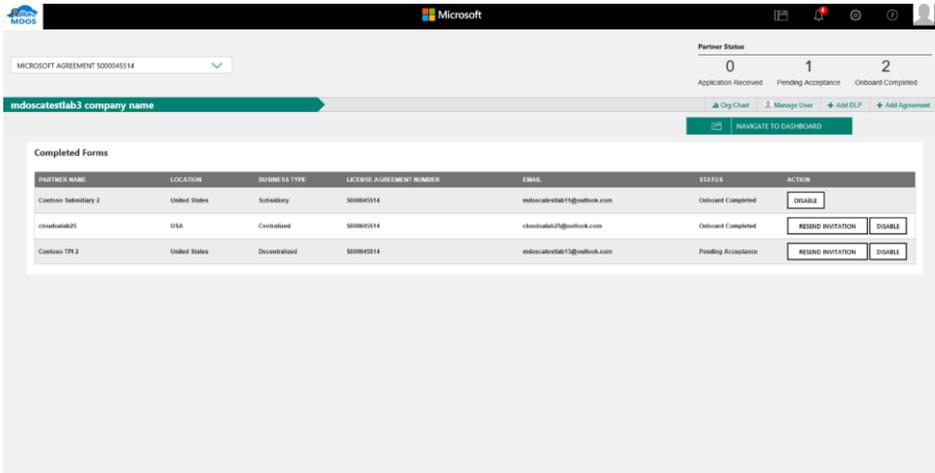
6. Review the summary of the information displayed and click 'Confirm' button to submit the request



7. Once the DLP is added successfully, partner will get the success message confirmation.

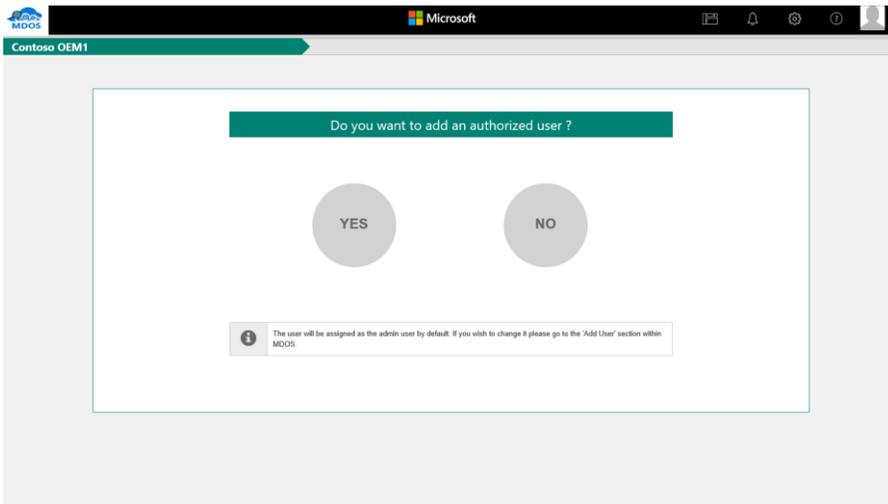


8. Click on 'OK' and partner will be asked if need to add another DLP, if not partner will be redirected to Wizard dashboard,



STEPS FOR ONBOARDING – NEW AUTHORIZED USER

Instruction: Add a new authorized user to your MDOS account. A new authorized user will have to onboard with MDOS to be able to receive permissions to access MDOS and perform key actions.



What is an Authorized User?

Microsoft Digital Operations Services User Manual

An authorized user will have permissions to access MDOS and perform key actions or read-only access. Access and permissions must be set by the company administrator (admin).

The Admin section in MDOS provides a view of all your authorized user accounts and lets you manage users connected to your account from this dashboard. From the Admin page, under CREATE USERS; you can add, remove, or edit current users. You can also edit user permissions from this section.

Pre-Requirement: Authorized user should create a profile in DOC.

Below are the steps to activate DOC Account:

You will receive an email to join MDOS via the MSA email account provided to the GPO.

STEP 1: Find your sign-in PIN (Personal Identification Number). After this welcome email, you will receive an additional email containing a first-time sign-in PIN .Please make note of the PIN; it is a six-digit number.

Important information regarding your new Microsoft DOC account



STEP 2: Select your preferred sign-in method. The Digital Operations Center supports several types of sign-in methods: depending on your user account type. You may select any qualifying account of your choice or create a new one.

STEP 3: Sign in for the first time. Supported sign-in credentials Windows Live ID Microsoft Corp Net with the information from Steps 2 and 1, You are ready to sign in to DOC by clicking www.microsoftoem.com where you will be asked to select a preferred sign-in method. After making your selection, you will be directed to the sign-in page.

STEP 4: Enter your PIN. Once you have successfully signed in, you will be asked to provide the PIN number obtained in Step 1. After entering PIN, you will be taken to the Home Page. The invitation mail will provide you the detailed step (as per below screen).

Microsoft Digital Operations Services User Manual

Subject: Welcome to the Microsoft Digital Operations Center

Welcome to the Microsoft Digital Operations Center (DOC)!

Your new DOC account has been created. To begin using DOC applications, you will need to complete the following five steps the first time you sign in.

STEP 1 – Find your sign-in PIN (Personal Identification Number).
After this welcome email, you will receive an additional email containing a first time sign-in PIN. Please make note of the PIN; it is a six-digit number.

STEP 2 – Select your preferred sign-in method.
The Digital Operations Center supports several types of sign-in methods, depending on your user account type. You may select any qualifying account of your choice or create a new one. Please note that your company may have policy guidelines regarding this account selection.

User Account Type	Supported sign-in credentials	
Microsoft Partner Extranet <i>yourdomain\userid</i>	Windows Live ID <i>yourname@live.com</i>	Microsoft CorpNet <i>yourname@corpnet.com</i>
External customer (OEM, Distributor, etc.)	✓	✓
External partner (AR, SPV, etc.)	✓	✓
Internal Microsoft employee or vendor		

STEP 3 – Sign in for the first time.
With the information from Steps 1 and 2, you are ready to sign in to DOC by clicking the following link: [<first time sign-in link>](#). You will be asked to select a preferred sign-in method. After making your selection, you will be directed to the sign-in page.

STEP 4 – Enter your PIN.
Once you have successfully signed in, you will be asked to provide the PIN number obtained in Step 1. After entering your PIN, you will be taken to the Home Page.

STEP 5 – Browser Configuration.
After you have successfully completed your first-time login, please follow the steps outlined in Section 1 of our "About DOC" guide to ensure DOC runs smoothly within Internet Explorer: [About DOC](#). You are now ready to start using the Microsoft Digital Operations Center!

Note: *Your account must be activated within 30 days of receipt of this email, otherwise your account will be suspended.*

Note: *If your account is suspended or if your account becomes locked after three unsuccessful sign-in attempts, please contact your Company Administrator. The Company Administrator is a designated person within your organization defined in your Microsoft agreement.*

To learn more about the functionality of various applications within DOC, click here: [About DOC](#)

Thank you,
Microsoft DOC Support Team

If you have received this email in error, please notify us using the following link: [<Digital Operations Center Portal Helpdesk link>](#)

If you have any difficulties with the first time sign-in or using DOC, please contact your Company Administrator or click here: [<Digital Operations Center Portal Helpdesk link>](#)

[Privacy Statement](#)

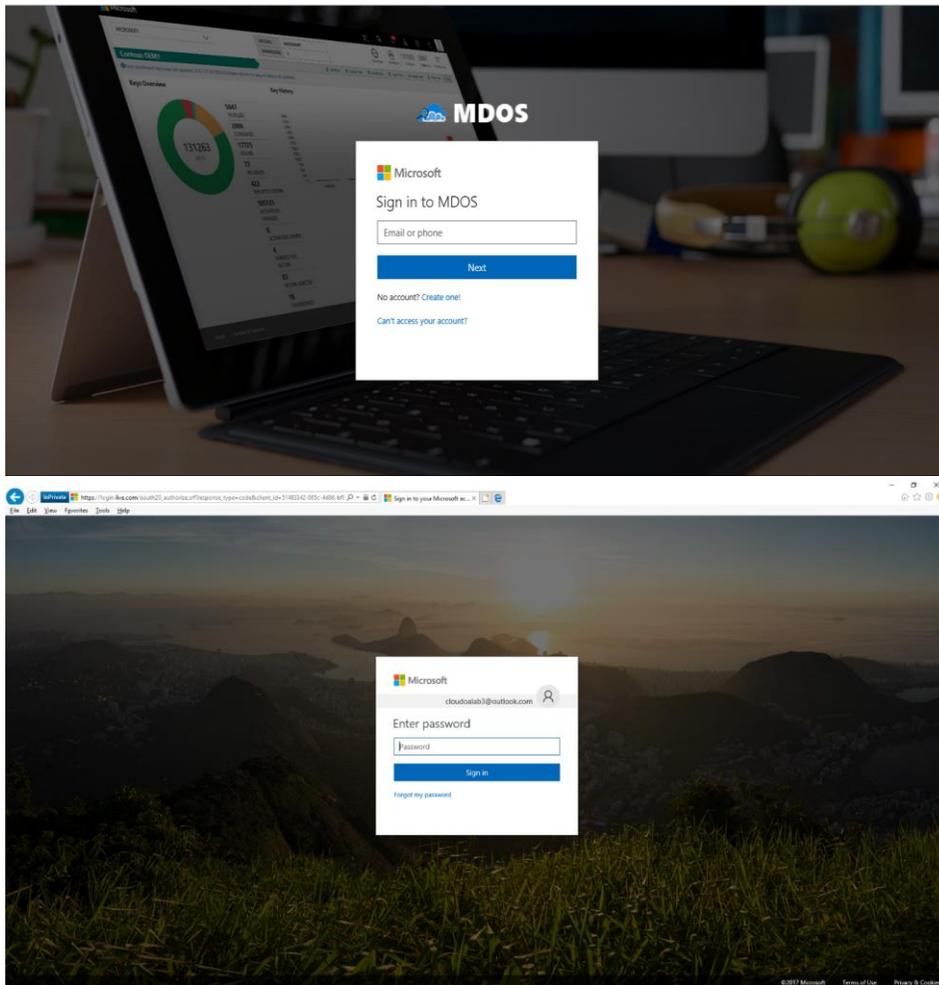
Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

PLEASE DO NOT REPLY TO THIS E-MAIL, AS IT IS AN UNMONITORED ALIAS.

Step-by-step: (New authorized user persona)

1. User logs in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

Microsoft Digital Operations Services User Manual

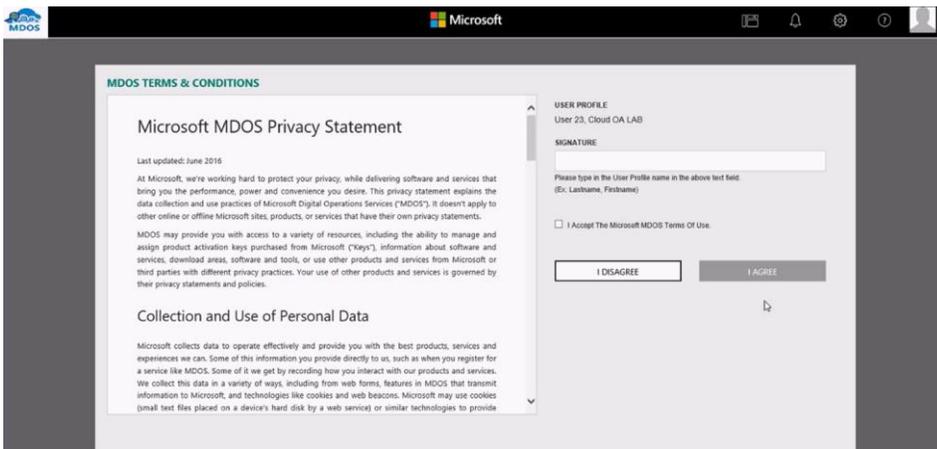


2. User will be greeted with a welcome to MDOS message.

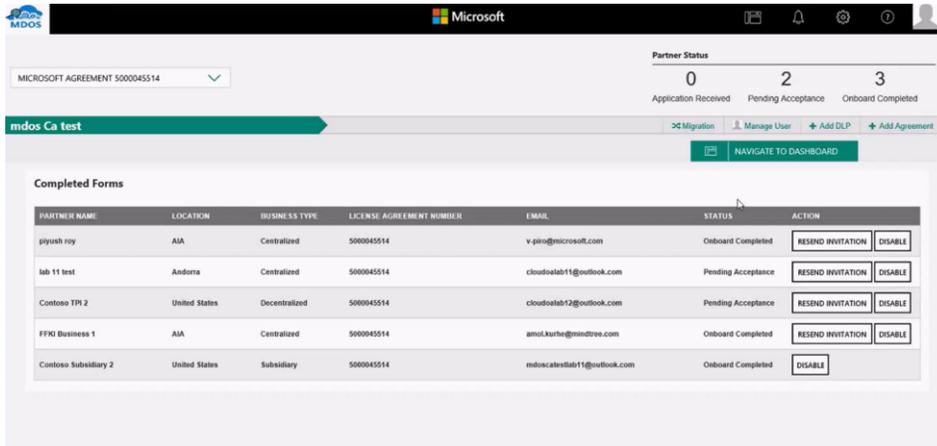
Microsoft Digital Operations Services User Manual



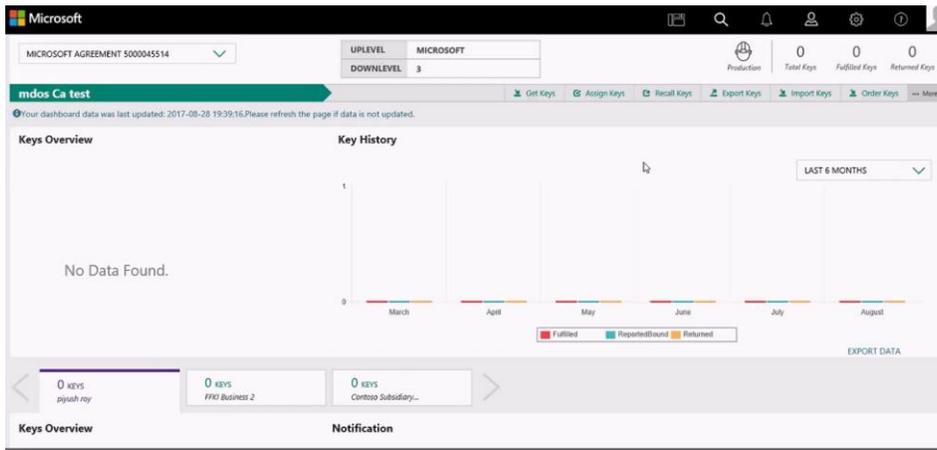
3. User must accept the Terms and Conditions (if they agree) to continue with the MDOS application.



4. Once the Terms and Conditions are accepted, the user will be able to login to MDOS application.



- Click on 'Navigate to Dashboard' so that partner can navigate to dashboard application to perform the key operations.



SECTION 1. INTRODUCTION

1.1. MDOS OVERVIEW

Welcome to Microsoft Digital Operations Services (MDOS)

MDOS is a web based service that provides Microsoft partners (OEM, ODM/IDH and Third-Party Installers) the ability to complete the OEM Activation Services 3.0 (OA 3.0) end-to-end process that is required to order and ship devices installed with Microsoft Windows. The MDOS service provides partners the ability to digitally order, fulfill, transfer and return digital product keys (DPKs) as part of doing business with Microsoft. Microsoft is discontinuing physical Certificate of Authority (COAs) licensing stickers as a way of licensing products. Beginning with Microsoft Windows 8, partners are now required to use DPKs to manufacture and pre-license the device at manufacturing time. The MDOS system is a cloud service that can be used by partners to complete these transactions with Microsoft.

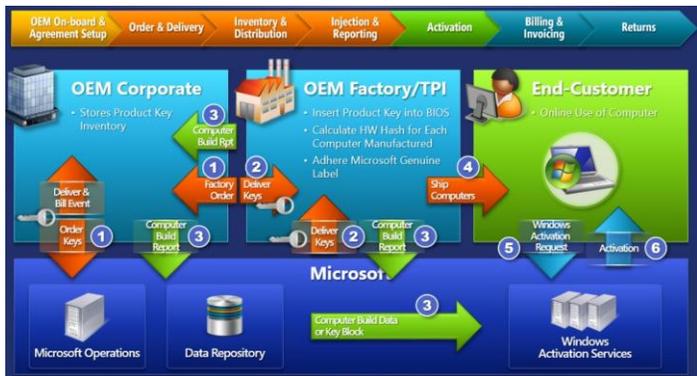
In order to transact with Microsoft, new and existing partners will need to onboard onto the MDOS system and begin transacting in a digital way. The OA 3.0 activation process is a new way to license and activate Windows. Before beginning to use this new model, it is important to understand some key concepts and requirements. Below, is a high-level overview of both the new OA 3.0 end-to-end process requirements, as well a high-level overview of the capabilities of the MDOS service.

OEM Activation 3.0 End-to-End

OA 3.0 as noted is a new digital way of manufacturing, pre-licensing, and shipping windows-based systems. OA 3.0 provides an entire framework for how OEM/ODM partners transact with Microsoft, as well their downstream manufacturing partners and entities. In OA 3.0, the process starts by an OEM/ODM, who has already completed a Microsoft License Agreement (GPA) with Microsoft. If you do not have GPA or Licensing agreement with Microsoft, please contact your Customer Operations Manager (COM) or your Microsoft Sales Manager to understand what is required to complete a direct licensing agreement with Microsoft.

Once a partner has an agreement signed with Microsoft to sell Microsoft Windows and/or additional products, the next step is understanding the end-to-end process that is required to complete the OA 3.0 process for Windows shipments. The process starts with a toolset required to digitally connect to Microsoft. Today, the partner has a choice of whether to build an OA 3.0 client or leverage the existing solution offered by Microsoft, called MDOS. The MDOS solution is provided for partners that complete under one million transactions a year. For all other partners, building an OA 3.0 client is required. The remainder of this manual will detail aspects of the MDOS system, as well provide overview, step-by-step examples, tips, and details about the specific functionality available in the MDOS service. Below, we discuss the OA 3.0 end-to-end process for understanding. We will then discuss at a high level how to use MDOS to ensure your continued success purchasing, manufacturing, and shipping Microsoft Windows to your end users.

The OA 3.0 feature set end-to-end process that is required



The Digital licensing and entitlement process starts with the OEM/ODM placing an order to Microsoft for Microsoft Windows digital product keys (DPKs). This order can either be a form of credit card at Microsoft, which allows the OEM’s designated partners to order against (Call Off Order), or it is a direct order from the OEM to Microsoft (Standard Order), either type is supported. The order process can be completed within the MDOS service, or direct to Microsoft DOC Portal site. Once the digital order is placed to the Microsoft services, the OA 3.0 DPKs for Windows will be fulfilled into the MDOS system. The OEM then chooses a partner to complete the manufacturing portion of the project and will deploy (transfer) the digital product keys from their system to the factory, where the factory may be owned by the OEM or is a third-party Installer (TPI). Once the keys have been deployed to the factory, the factory will manufacture the Windows device and will be required to inject the DPK into the firmware (BIOS/UEFI) of the device. Once the DPK is injected, the factory will capture a Computer Build Report (CBR), which contains complete hardware information shipping with the device, as well information about the now injected DPK. This CBR is sent to Microsoft and is recorded prior to the device reaching the end user. Once the end user purchases that device and powers on, Windows will request a machine activation, which ensures the device is a Genuine Microsoft Windows device. The activation event occurs and completes and the OA 3.0 process completes. If the machine is returned for any reason within 365 days, the OEM is able to request a refund and must send Microsoft information about the specific DPK being returned and the reason for the return.

There are a variety of use cases and scenarios that are supported by the OA 3.0 end-to-end process and requires some general understanding before beginning to complete the process with Microsoft. The OEM/ODM, the entity with a direct relationship and contract with Microsoft is in control of deciding how much involvement they will have in the end-to-end process. There are three ways to setup your relationship with your downstream partners (subsidiaries, servicing centers and/or factories for manufacturing). In MDOS, we define the relationship of the OEM/ODM and its partners as a Business relationships as a Business. A business within MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering. The OEM/ODM, those that have a direct contract with

Microsoft, choose the type of control and involvement they will have in the OA 3.0 end-to-end process. The OEM/ODM can choose to have a centralized or decentralized relationship with its business entities. In a centralized business setup, the OEM chooses to have total control of the process from Order to Return and all functions in between. The OEM will order, fulfill and transfer the DPKs to their downstream partners called DLP (Downlevel Partners), as well will handle all returns on their own behalf. The centralized model allows the parent entity (OEM/ODM) full control throughout the MDOS system and the end-to-end process. The other type of business setup is a Decentralized model. The decentralized model requires the OEM to place the Call Off order with Microsoft. The OEM does not need to manage the order or the digital product keys at all, instead this model relies on the DLP to manage all DPK orders, fulfillments, transfers and returns on behalf of their OEM partner. The OEM does not need to “manage” anything except the call off order with Microsoft, but is responsible for any audits required by Microsoft and as such the OEM should check in with their DLP’s on a regular basis to understand what is happening within their business.

In summary, the OA 3.0 end-to-end process is setup by the OEM/ODM, the entity with the direct contract with Microsoft. The OEM/ODM is required to define the business and yet can choose to manage the entire end-to-end process directly (centralized) or choose to outsource the process to their DLP (decentralized).

MDOS Service Overview

Now that you have familiarity with the OA 3.0 end-to-end process requirements and available business related options, we will explore the high level MDOS capabilities as a tool to complete your digital business transactions with Microsoft. The MDOS service offering is available to our smaller OEM/ODM partners, those that complete less than one million shipments of Windows. The MDOS service is currently free to use for these partners including support of the service and its feature offerings. MDOS provides electronic email based support from the vendor hired by Microsoft to complete the service offering, please see support section within the MDOS manual for additional details and the specific contact information.

As noted above, partners can choose to onboard to the MDOS service or complete a build of their own OA 3.0 client, connecting to Microsoft backend web service directly. The MDOS service is an Azure Cloud based solution that also requires a physical client for the factory floor manufacturing requirements. MDOS provides the end-to-end solution required to order, fulfill, deploy, report and return Digital Product Keys required to manufacture Windows devices. Below we will explore some of the high-level features of the MDOS service offering, and walk through the onboarding requirements.

Onboarding to MDOS

MDOS provides everything required to complete the digital pre-licensing requirements set by Windows since Windows 8. To onboard to the MDOS service, you will need to complete your GPA contract with Microsoft. Once the contract has been signed, Microsoft will send you an email with your MDOS Registration information, including a link to the DOC site. The DOC is used to “register” your MSA email account and corporate email account with the system.

Because MDOS is a cloud service, you do not need to “install” any software for the OEM/ODM entity, rather you access the MDOS service via a browser URL address that will be sent to you once you have completed your contract with Microsoft. The link you will receive will direct you to register with DOC and choose which type of partner you identify as. Once the DOC registration is complete, you will be sent the MDOS direct link URL in order to login for the first time.

Defining an MDOS Business

Once the OEM/ODM have registered and successfully logged into the MDOS system, the next step is to define the type of Business that will be used (centralized or decentralized), and which entities (DLP’s) you will work with to complete your Windows device end-to-end process for manufacturing and device shipment. Setting up the business is a critical step and one that should be thought through prior to attempting to setup your Business within MDOS. MDOS supports multiple businesses; which means that for one business the OEM may choose to work with Manufacturing Partner A and for another business the OEM may choose Manufacturing Partner B. The OEM may choose to setup one business as centralized and the other as decentralized. Each business is secured and keeps all details regarding that business separate, whether it be DPKs, Log files, and/or Alerts. An OEM can also define how the business behaves with regard to DPK fulfillment and/or CBR submissions to Microsoft. In other words, the OEM may choose to order and then manually download DPKs for one business, while setting up automatic DPK fulfillment for their other business. There are a variety of settings and options defined within this manual and we encourage you to explore the details of each for a thorough understanding.

Manufacturing with MDOS

As part of setting up the MDOS Businesses, the OEM/ODM can choose the manufacturing partner(s) they will work with. Adding the manufacturing partners into the MDOS Business requires the OEM/ODM to invite the manufacturing entity as a business entity within your defined business. The OEM/ODM will “invite” the manufacturing partner (TPI) into the business via the DLP setup within the MDOS service. Once the manufacturing partner accepts the invite, they are ready to transact on behalf of the OEM/ODM partner. The MDOS service requires the manufacturing partner to “configure” themselves within the MDOS cloud service (as a TPI) and then requires the manufacturing partner to install the physical MDOS Factory Floor Key Inventory (FFKI) client on the manufacturing floor. The MDOS FFKI client is a software install that will connect to the MDOS cloud via a secure connection through either a VPN or via the Internet. The MDOS FFKI client manages the DPKs between the MDOS cloud and the physical manufacturing floor. The MDOS FFKI Client will request DPKs from the service and will make those DPKs available for injection into the Windows device being manufactured. The MDOS FFKI client will also capture the Computer Build Report (CBR) required and send that CBR upstream to the Up level Partner (ULP), who will relay that to Microsoft directly depending on Centralized or Decentralized business setup.

Conclusion

In order to manufacture and ship Windows devices, our OEM and ODM partners are now required to complete these transactions in a digital way, no longer using the COA's of the past. The OEM Activation 3.0 end-to-end process is a defined set of steps that are required to purchase, fulfill, deploy and/or return digital product from Microsoft. The OA 3.0 process requires the parent entity, that is the entity that has a direct licensing agreement with Microsoft to connect, order and fulfill digital product keys. The OEM/ODM has a choice of whether to build their own OA 3.0 client software, or leverage the MDOS service for completing transactions. The MDOS service is for use by OEM/ODM partners who complete one million or more Microsoft Windows device shipments per year. Onboarding to MDOS occurs once the OEM or ODM have successfully completed a licensing agreement with Microsoft. The MDOS service provides these entities and partners with a system to use to complete end-to-end digital orders, fulfillments, deployments and returns electronically with Microsoft. The MDOS service supports setting up Businesses that allow the OEM/ODM the ability to manage their business in a way that meets their business needs—either centralized, decentralized or a combination of both—as a subsidiary in a secure way. The OEM/ODM can invite downlevel partner (DLP's) into their business to complete functions such as servicing and manufacturing. The remainder of this manual will provide overviews, examples, step by step instructions and tips for completing your MDOS features and functions.

1.2. CAPABILITES & BENEFITS

MDOS Capabilities and Benefits

Microsoft Digital Operations Service (MDOS) is a cloud-based digital key distribution and entitlement service for Microsoft partners. It gives partners the ability to order, deploy, manage, bind, return, and recall Digital Product Keys (DPKs) as needed. MDOS is a self-service tool that provides easy access to new capabilities and allows partners to scale.

The key benefits of moving to MDOS include:

- Flexible platform: Easy to add new partners and scale your business
- Self-service capabilities
- Efficient inventory management
- User-friendly interface
- Software as a service – no need to upgrade software, always up to date
- Integrated with other Microsoft platforms

MDOS provides the following capabilities:

- Basic OA 3.0 infrastructure (order, fulfill, transfer, return, report, etc.)
- Automated setup/onboarding
- ERP system integration*
- Integration with other Microsoft platforms (DOC and Connector)*
- Low cost scalability to support new Microsoft programs (pricing configurator, DA, cloud attachments, etc.)
- Business Intelligence reporting*

- Self-serve capabilities (Pop-up support, tip tool, chat support, form integration, support forums, link to documentation, etc.)
- Offline run mode (File-based DPKs)
- MES system integration* (API for FF EMS/MES)

*Some features may not be available today but will be available at a future date.

Example: Contoso OEM has a growing business where they work with multiple downlevel partners (DLPs) including TPI, IDH/ODM, and FFKIs. The businesses run in different business models where some are centralized and some are decentralized. Contoso OEM was using the DIS Chinasoft legacy system, but they are now migrating over to MDOS for its many benefits.

Contoso OEM will now be able to:

- take advantage of the flexible platform that allows them to easily add new partners as their business grows.
- navigate across different views depending on each business' structure with a user-friendly interface.
- use the self-service tool to easily perform key functions (order, fulfill, transfer, return, report, etc.).
- manage inventory for each business and see a real-time view of inventory levels, key status details, as well as access business intelligence data—all in one place.

Additionally, Contoso OEM knows that MDOS is also an online service, so updates are made automatically and they will never have to manually update their software to have the latest version.

1.3. TERMINOLOGY DEFINITION

Acronyms & Definitions:

Acronym	Term	Description
BIOS	Basic Input / Output System	The BIOS is a type of firmware used to perform hardware initialization during the booting process (power-on startup) on IBM PC compatible computers, and to provide runtime services for operating systems and programs. The BIOS firmware is built into personal computers (PCs), and it is the first software they run when powered on.
	Business	A business within MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering.

BI	Business Intelligence	Business intelligence (BI) can be described as "a set of techniques and tools for the acquisition and transformation of raw data into meaningful and useful information for business analysis purposes".
	Centralized Business	<ul style="list-style-type: none"> • OEM Corporate conducts all transactions with Microsoft directly • OEM Corporate places orders, receives DPKs, distributes DPKs to OEM or TPI manufacturing sites • OEM /TPI manufactures device and returns the Computer Build Report (CBR) and Product Bind Report (PBR) • OEM Corporate submits CBRs to Microsoft
CBR	Computer Build Report	A Computer Build Report (CBR) is a mandatory report that is sent to Microsoft notifying which keys have been used (bound), so they can be activated. (See CBR Computer Build Report section for more details).
COA	Certificate of Authority	Microsoft is discontinuing physical Certificate of Authority (COAs) licensing stickers as a way of licensing products. Beginning with Microsoft Windows 8, partners are now required to use DPKs to manufacture and pre-license the device at manufacturing time. The MDOS system is a cloud service that can be used by partners to complete these transactions with Microsoft.
COM	Customer Operations Manager	Microsoft employees who manage one or more channel partner accounts.
	Decentralized Business	<ul style="list-style-type: none"> • OEM Corporate creates relationship with Microsoft, but third parties can conduct transactions on behalf of OEM • OEM Corporate places blanket orders with Microsoft • TPI places call-off orders, receives DPKs from Microsoft, manufactures devices • TPI submits CBR to Microsoft, and a copy to OEM
DOC		New content library and portal created by Microsoft for Partners. Visit the DOC to access resources or learn more.
DIS	Digital Inventory System	DIS is a client server solution for OA 3.0, which has been retired and replaced by MDOS

DOC	Digital Operations Center	An OEM portal website that includes applications and content used by the OEM Operations team and its customers to conduct business.
DPK	Digital Product Key	A digital product key, also known as a product key or software key, is a specific software-based key for a computer program. It certifies that the copy of the program is original.
DLP	Downlevel Partner	The entity that receives keys from the uplevel entity. Downlevel entities can deploy keys to downstream partners, manufacture devices, and/or submit CBR/PHR reports. A Downlevel partner can be: <ul style="list-style-type: none"> - ODM/IDH or TPI in a centralized relationship - ODM/IDH or TPI in a decentralized relationship - Factory Floor (FFKI end entity in business)
ERP	Enterprise Resource Planning	Enterprise resource planning (ERP) is business process management software that allows an organization to use a system of integrated applications to manage the business and automate many back-office functions related to technology, services and human resources.
FFKI	Factory Floor Key Inventory	Inventory (FFKI) client on the manufacturing floor. The MDOS FFKI client is a software install that will connect to the MDOS cloud via a secure connection through either a VPN or via the Internet or may be manually transferred (e.g. via USB). The MDOS FFKI client manages the DPKs between the MDOS cloud and the physical manufacturing floor. The MDOS FFKI Client will request DPKs from the service and will make those DPKs available for injection into the Windows device being manufactured. The MDOS FFKI client will also capture the Computer Build Report (CBR) required and send that CBR upstream to the Uplevel Partner (ULP), who will relay that to Microsoft directly depending on Centralized or Decentralized business setup.
HW Hash	Hardware Hash	A series of alphanumeric characters that identifies the hardware device. Most of the information used for hardware hash is based on motherboard and its onboard devices.
LRM	Licensing & Revenue Management	Team within MS that oversees licensing process. (SMP accounts, TPI creation, etc.).
MAT	Multiple Activation Test Key	Multiple Activation Test Key is also referred to as Test Key or TKY.

MBR	Mother Board Replacement	
MS (or MSFT)	Microsoft	Microsoft Corporation
MSA	Microsoft Account	A Microsoft account (MSA) enables improved personalization, provides seamless experiences across Microsoft products, and allows you to access enhanced features and settings. A Microsoft account (MSA) is an email account used to sign in to Microsoft services and is required to sign in to MDOS. (i.e. name@outlook.com, name@hotmail.com, name@msn.com). Or use an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com).
MDOS	Microsoft Digital Operation Services	MDOS is a fully cloud based digital key distribution and entitlement service for Microsoft partners. It provides the ability to order, deploy, manage, bind, return, and recall Digital Product Keys as needed.
NDA	Non-Disclosure Agreement	A nondisclosure agreement (NDA) is a legal contract between two or more parties that signifies a confidential relationship exists between the parties involved.
OA 3.0	Original Equipment Manufacturer Activation 3.0 (OEM Activation 3.0)	OEM Activation 3.0 is a trusted way to uniquely bind software and service entitlements to hardware, unlocking rich opportunities across the OEM Ecosystem.
ODM/IDH	Original Design Manufacturer/ Independent Design House	An original design manufacturer (ODM) or independent design house (IDH) is hired by an OEM. They are a company that designs and manufactures devices (tablet, PC, etc.) based on requirements specified by the OEM, (such as screen size, processor, memory, performance, etc.). The devices manufactured by the ODM/IDH are rebranded by the OEM. ODM/IDH companies allow the firm that owns or licenses the brand to produce products without having to engage in the design or running of a factory.
OEM	Original Equipment Manufacturer	Original equipment manufacturer (OEM) is a term used when one company makes a part or subsystem that is used in another company's product.
OHR	OEM Hardware Report	The OEM Hardware Report (OHR) generally follows the Computer Build Report (CBR) and includes additional hardware data required by Microsoft, such as model number, screen size, touch screen. Contrary to the name,

		the OHR is not optional, but is now required by Microsoft. (Refer to your agreement for details).
OPN	OEM Part Number	The number assigned by the Original Equipment Manufacturer (OEM) for a part they manufacture.
PBR	Product Bind Report	The Product Bind Report (PBR) is the report that is generated after keys are bound. The bind keys process links service keys (such as Office 365) with Windows keys (such as Windows 10 OS).
PC	Personal Computer	A personal computer is a multi-purpose electronic computer whose size, capabilities, and price make it feasible for individual use. PCs are intended to be operated directly by an end-user, rather than by a computer expert or technician.
PO	Purchase Order	A purchase order is a commercial document and first official offer issued by a buyer to a seller, indicating types, quantities, and agreed prices for products or services.
RTM	Release To Manufacturing	RTM is a term used to describe the version of software first released to hardware manufacturers for bundling. The RTM process is beneficial in that it helps developers work out any bugs before general release via manufacturer refinement of the software.
RMA	Return Material Authorization	A return merchandise authorization (RMA), return authorization (RA) or return goods authorization (RGA) is a part of the process of returning a product in order to receive a refund, replacement, or repair during the product's warranty period.
SKU	Stock Keeping Unit	In the field of inventory management, a stock keeping unit or SKU is a distinct type of item for sale, such as a product or service, and all attributes associated with the item type that distinguish it from other item types.
TPI	Third-Party Installer	A manufacturer that is licensed through a TPI agreement to preinstall the Windows operating system onto a computer on behalf of an OEM. TPIs are authorized to use the OA 3.0 Tool. The OEM sends the DPKs to the Factories (usually a Third-Party Installer (TPI) factory).

ULP	Uplevel Partner	The entity above the downlevel entity. Keys will flow from this entity to downstream entities. An upper level (uplevel) partner can be: <ul style="list-style-type: none"> - Microsoft agreement (GPA, IDH/ODM or Embedded) - OEM, ODM/IDH or TPI in a centralized relationship - OEM, ODM/IDH or TPI in a decentralized relationship
UI	User Interface	The user interface, in the industrial design field of human-machine interaction, is the space where interactions between humans and machines occur. The goal of this interaction is to allow effective operation and control of the machine from the human end, whilst the machine simultaneously feeds back information that aids the operators' decision-making process.

SECTION 2. ACCESSING MDOS

2.1. LOG IN TO MDOS

Description:

To access MDOS (Microsoft Digital Operation Services), go to the url:

<https://digitaloperations.oa.microsoft.com>

The log in to MDOS requires using a Microsoft account (MSA) email account and password, and requires an agreement to the MDOS Terms & Conditions. (See the [Onboarding Manual](#) for more details). From this location, partners may order, deploy, manage, bind, return, and recall Digital Product Keys as needed.

2.1.1. MSA ACCOUNT

Description:

A Microsoft account (MSA) enables improved personalization, provides seamless experiences across Microsoft products, and allows you to access enhanced features and settings. An MSA is an email account (formerly known as Windows Live ID) that is used to sign in to Microsoft services such as Outlook.com (or Hotmail), Office, OneDrive, Skype, Xbox, Windows and more. An MSA is also required to sign in to MDOS.

You can use any email address as the user name for your new Microsoft account, including addresses from Outlook.com, Yahoo!, or Gmail. If you already sign into Windows PC, tablet, or phone, Xbox Live, Outlook.com, or OneDrive, use that account to sign in.

A complete list of MSAs includes:

- Outlook
- Hotmail
- Live
- MSN
- Other emails registered as MSA (i.e. Yahoo! or Gmail)

Examples: name@outlook.com, name@hotmail.com, name@msn.com. Or an email account that is registered as an MSA (i.e. name@yahoo.com, name@gmail.com, name@qq.com, name@163.com).

Resources:

- To learn how to sign up for a new Microsoft account set up, go to [Microsoft Accounts](#).
- To sign into your account, go to the [sign in](#) page
- If you're looking for help with your Microsoft account, refer to the [Microsoft support website](#).
- For additional questions regarding Microsoft accounts and to see Frequently asked question, go to [Microsoft Account FAQs](#)

What you'll need to set up your account:

- Create a new account name
- Choose your platform (i.e. @outlook.com)
- Create a new password

What you can do with your account

- Manage how you sign in to Microsoft
- Edit your personal information (i.e. first and last name, billing info, etc.)
- Edit your billing information
- Go to your Xbox profile
- Go to your Skype profile
- Access MDOS

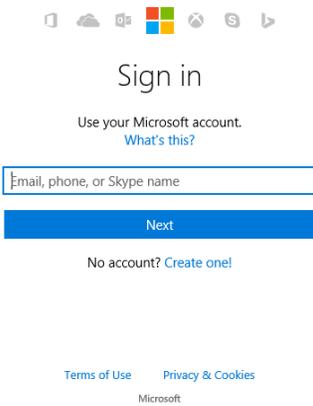
2.1.2. INITIAL LOG IN TO MDOS

Description:

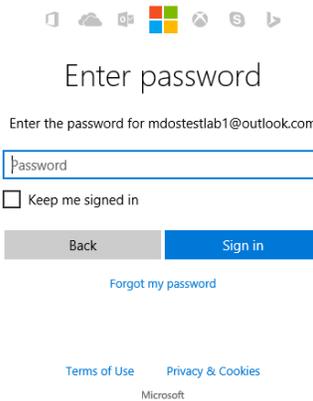
The initial log in to MDOS requires using a Microsoft account (MSA) email account and password, and requires agreement to the MDOS Terms & Conditions. After the MDOS Terms & Conditions have been reviewed and agreed to, the log in will go directly to the dashboard UI view.

Step-by-Step:

1. Go to <https://digitaloperations.oa.microsoft.com> URL and the log in window will open.
- 2.



2. Enter Login ID and Password information in input box and click on the Sign in button.

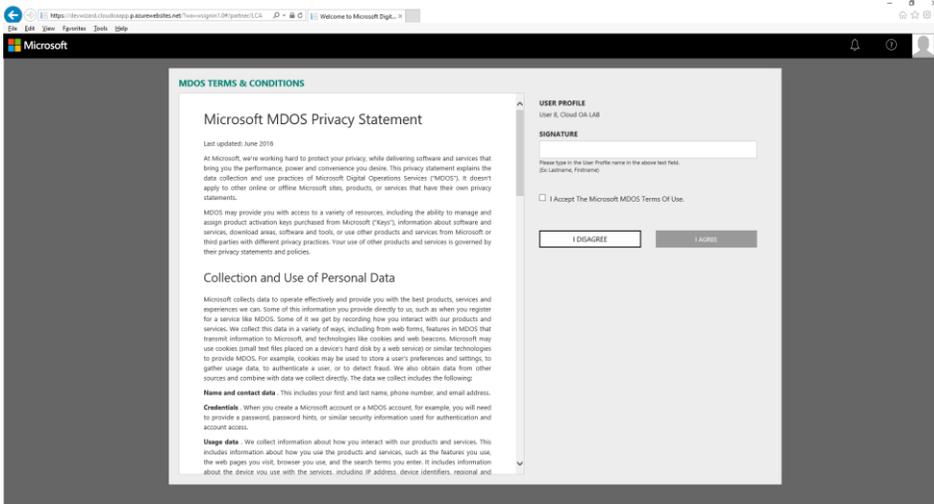


3. If logging in for the first-time, the MDOS Terms & Conditions page will open.

Microsoft Digital Operations Services User Manual

4. Enter the last name, comma, first name and check the 'I AGREE' button.

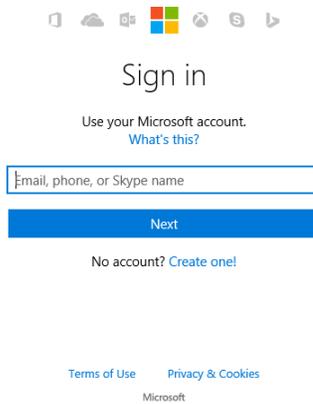
5. Click the 'I AGREE' button to accept the terms and conditions if you agree.



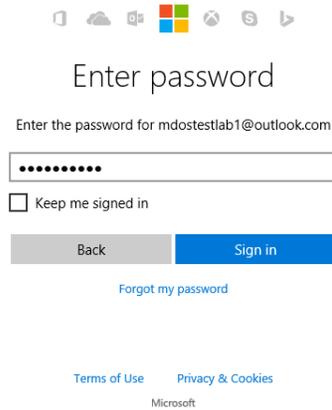
2.1.3. SUBSEQUENT LOG IN TO MDOS

Step-by-Step:

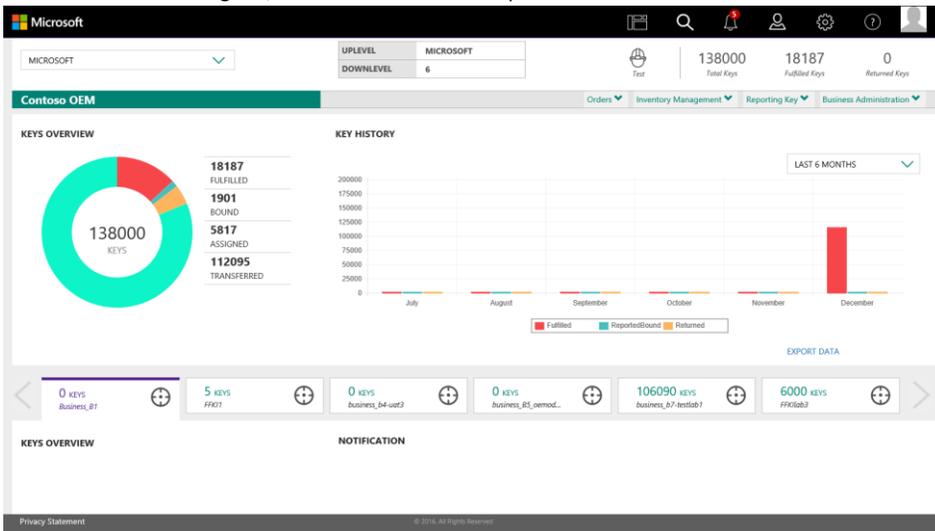
1. Go to <https://digitaloperations.oa.microsoft.com> URL and the log in window will open.



2. Enter Login ID and Password information in input box and click on the Sign in button.

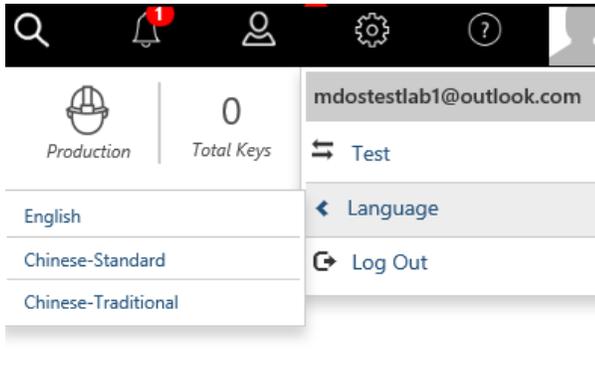


3. After a successful sign in, the Dashboard UI will open.



4. The default language can be set by selecting the language from the Log In icon.

5. On subsequent sign ins, using the same user login information, the Dashboard UI will display in the selected language.



2.1.4. BROWSERS SUPPORTED BY MDOS

Description:

MDOS supports all browsers including:

- Microsoft Internet Explorer (IE)
- Microsoft Edge
- Mozilla Firefox
- Apple Safari
- Google Chrome

Although MDOS supports all browsers, it is recommended to use Microsoft Internet Explorer/Edge in private browser to have better user experience.

2.2. MDOS SECURITY & SUPPORT

2.2.1 SECURITY AT MICROSOFT

Description:

The security of the MDOS system is backed by Microsoft. Security is built into all Microsoft products and services from the start to ensure a comprehensive, agile platform to better protect your endpoints, move faster to detect threats, and respond to security breaches across even the largest of organizations.

Find out more about security at Microsoft:

- **Prevent identity compromise** – Help protect against compromise while uncovering potential breaches. [Learn more](#)
- **Secure apps and data** – Boost productivity with cloud access while helping keep information protected. [Learn more](#)
- **Expand device controls** – Deliver enhanced security across both company and personal devices. [Learn more](#)
- **Safeguard infrastructure** – Enforce policies that help keep cloud resources and hybrid environments safe. [Learn more](#)

2.2.2 SECURITY WITHIN MDOS

Description:

MDOS relies on data encryption, multi-factor authentication and security measures to protect you and your company data.

Here are a few of the ways your information is protected:

- A vetting system is used to confirm information is not compromised and account information is not stolen.
- A backup system is built into MDOS to prevent data loss.
- There is a 99.9% service availability Service Level Agreement (SLA) in place.

Layers of security within MDOS:

- Logical isolation (vs. physical isolation)
- Hardware-backed encryption through Microsoft Azure Key Vault
- End-to-end encryption

2.2.3 SUPPORT FOR MDOS

Description:

Microsoft is committed to providing its partners with the highest service quality. We are proud to offer the following support services for MDOS:

- 2 years of free support (MDOS service/features)
- Support is available in English 12x5 via email
- Support is available in Chinese 12x5 via email

How to access support documentation

To gain access to the support and training documentations partners MUST request access to DOC, and MDOS. Partners can access the training content here:

1. DOC: microsoftoem.com
2. MDOS: digitaloperations.oa.microsoft.com

Contact msoemops@microsoft.com for email support.

To find answers to commonly asked questions, please refer to the FAQ section that can be found in the [MDOS FAQs](#) document.

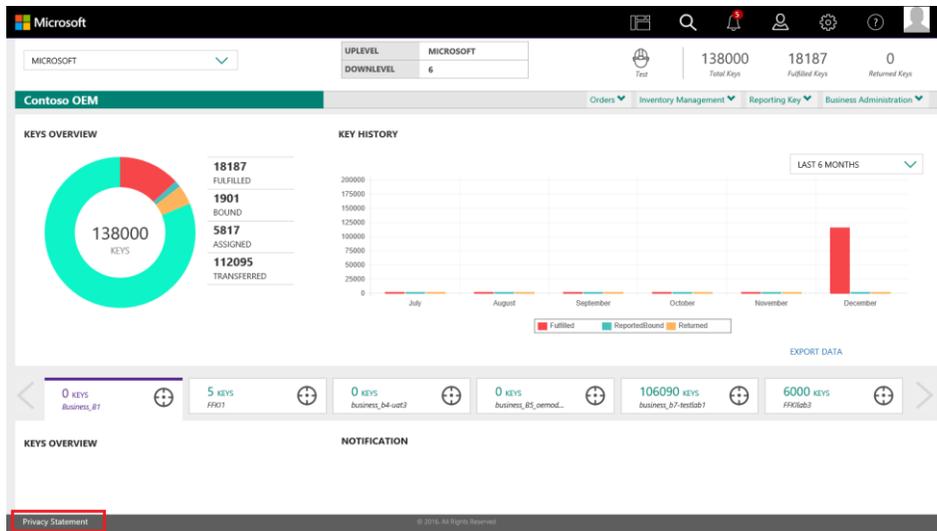
2.3. PRIVACY STATEMENT

Description:

Partner's privacy is important, and this privacy statement explains what personal data Microsoft collects from you, through our interactions with you and through our products, and how we use that data.

Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. Partner will see the Privacy Statement link at the bottom of the MDOS page.



3. On clicking the link will redirect partner to the Microsoft Privacy Statement page.



Microsoft Privacy Statement

Last Updated: April 2018 [What's new?](#)

[Expand All](#)
[Print](#)

Your privacy is important to us. This privacy statement explains what personal data Microsoft collects from you, through our interactions with you and through our products, and how we use that data.

Microsoft offers a wide range of products, from server products used to help operate enterprises worldwide, devices you use in your home, software students use at school, and services developers use to create and host what's next. References to Microsoft products in this statement include Microsoft services, websites, apps, software, servers and devices.

Please read the product-specific details in this privacy statement, which provide additional information about some of Microsoft products. This statement applies to Microsoft's interactions with you and the Microsoft products listed below, as well as other Microsoft products that display this statement.

- Personal Data We Collect
- How We Use Personal Data
- Reasons We Share Personal Data
- How to Access & Control Your Personal Data
- Cookies & Similar Technologies
- Notice to End Users
- Microsoft account
- Other Important Privacy Information
- Product-specific details:
 - Enterprise & Developer Products
 - Productivity & Communications Products
 - Search & Artificial Intelligence
 - Windows

Personal Data We Collect

Microsoft collects data to operate effectively and provide you the best experiences with our products. You provide some of this data directly, such as when you create a Microsoft account, administer your organization's licensing account, submit a search query to Bing, register for a Microsoft event, speak a voice command to Cortana, upload a document to OneDrive, purchase an MSDN subscription, sign up for Office 365, or contact us for support. We get some of it by recording how you interact with our products by, for example, using technologies like cookies, and receiving error reports or usage data from software running on your device. We also obtain data from third parties.

[Learn More](#)
[Top of page](#)

How We Use Personal Data

Microsoft uses the data we collect to operate our business and provide you the products we offer, which includes using data to improve our products and personalize your experience. We also may use the data

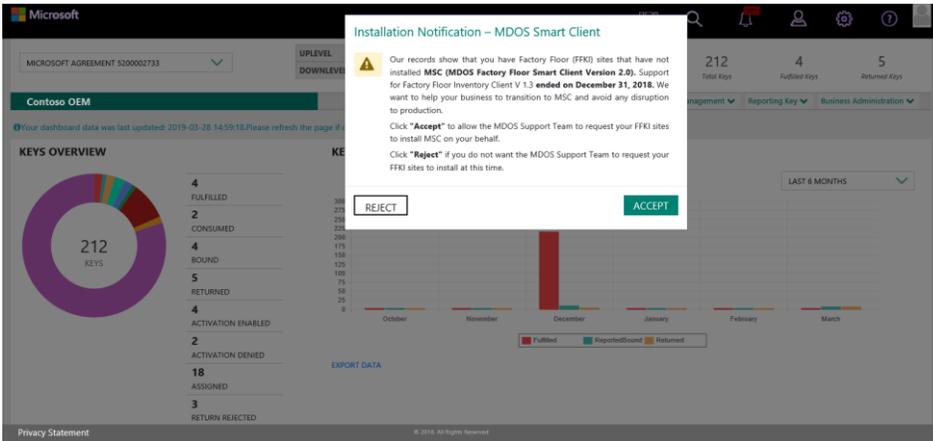
2.3. CONSENT POP-UP FOR MSC MIGRATION INVITATION FOR DLPS

Description:

To support OEMs migrating Down Level Partners (DLPs) to MSC, a "consent pop-up" will appear when Upper Level Partners (ULPs) log into MDOS requesting them to click accept if they consent to Microsoft pushing out the MSC invitation email to DLP's on their behalf. This pop-up will be displayed to all the ULPs when they login to MDOS, if they have any FFKIs who are still using FFK11.x tool.

If ULPs click accept on the consent pop-up, Microsoft will send an MSC onboarding email to all FFKIs who have not upgraded to MSC. If ULPs click reject on the consent pop-up, no email will be triggered and ULP will not see the pop-up unless MDOS wants to notify the partners again.

Upper Level Partners need to click accept or reject on the consent pop-up to view the MDOS dashboard.

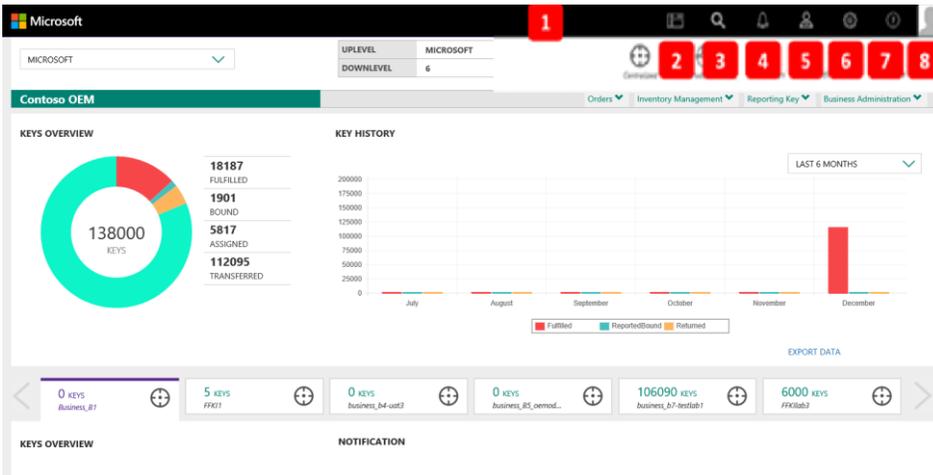


2.4. DASHBOARD UI OVERVIEW

Description:

The dashboard provides quick links to direct you to key functions. This is the MDOS landing page and it provides a top navigation bar, status bar, action ribbon, and the main dashboard.

Full dashboard view.



2.4.1 PRIMARY RIBBON – TOP NAVIGATION BAR

Description:

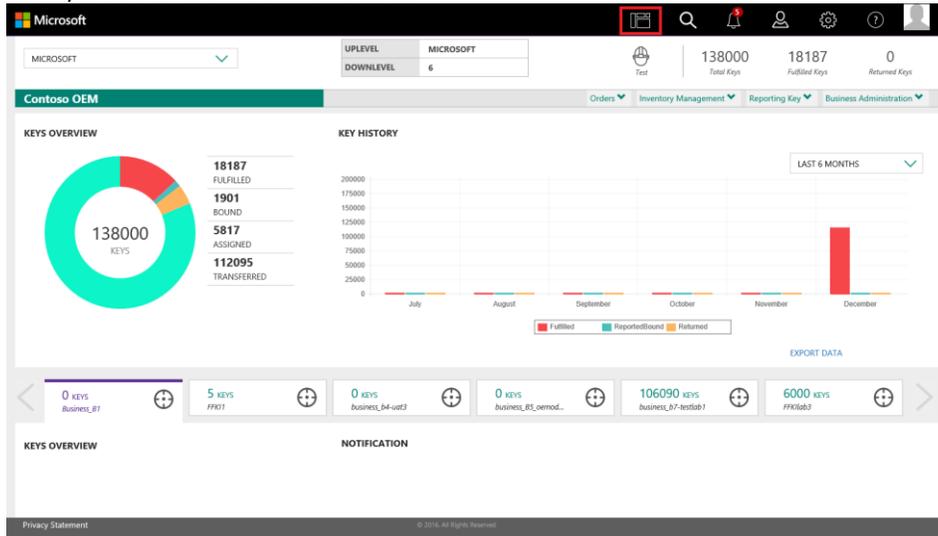
1 The top navigation bar provides quick links to key actions:



- **Dashboard** – Get a quick visual glimpse of your key (DPK) inventory by group.
- **Search** – Locate keys using search criteria.
- **Alert** – See a quick status list of your most recent key actions and updates.
- **Admin (Administrator)** – Manage users or add and remove partners (DLP and ULP).
- **Settings** – Get a System UI view of automatic reporting functions.
- **Help** – Link to the online User Manual for detailed descriptions and step-by-step instructions.
- **Log in/Account info** – View log in info, log out or log back in under different account, switch account environments, or change language preferences.

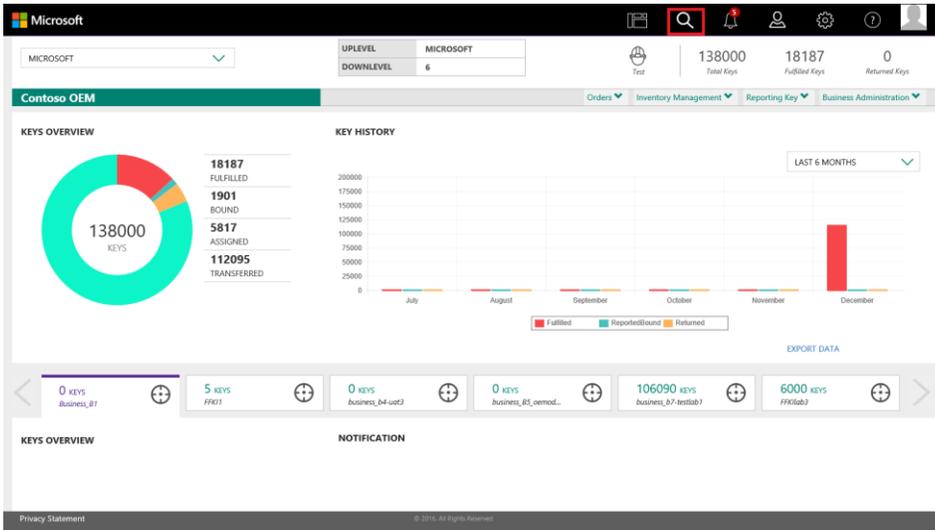
2 Dashboard:

Get a quick visual glimpse of your keys counts, grouped by status by clicking on the dashboard icon (boxes image). This visual display shows you inventory in an easy-to-understand and interactive chart view. Bar charts and donut charts provide a visual breakdown by color, and allow you to click to drill down on a status.



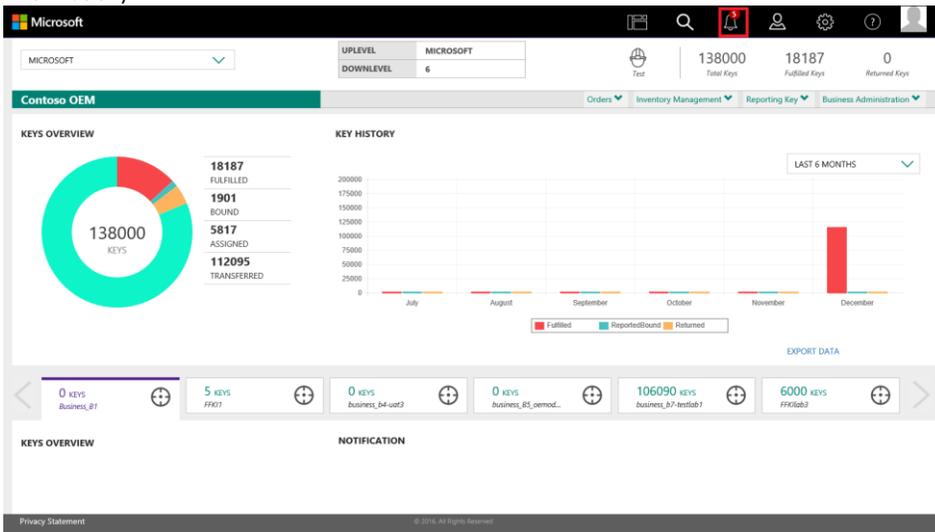
3 Search:

Use Search icon (magnifying glass image) to find product keys based on search parameters and perform key operations such as ASSIGN, RECALL, REPORT, RETURN, etc. from the search screen. You may also search with advanced search functionality. For more information on the search capabilities, see the [Search Keys](#) section in this manual.



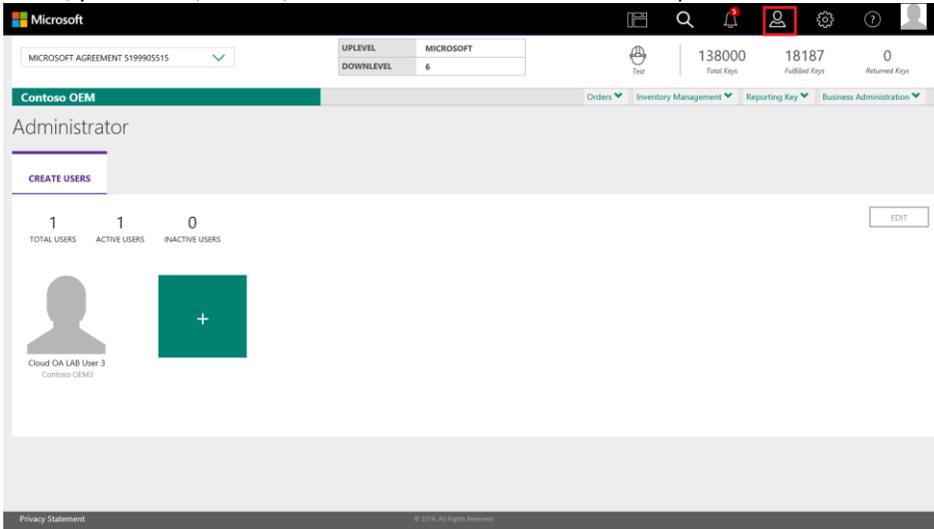
4 Alert Icon:

See a quick status list of your most recent key actions and updates by clicking on the Alert icon (bell image). When a number shows up or changes, click on the alert icon to see a notification dropdown that contains a summary list of your most recent actions and updates. Click on the SHOW ALL button to see a complete list. (See [Alert Explanation](#) in this manual for more information)



5 Admin (Administrator) Tool:

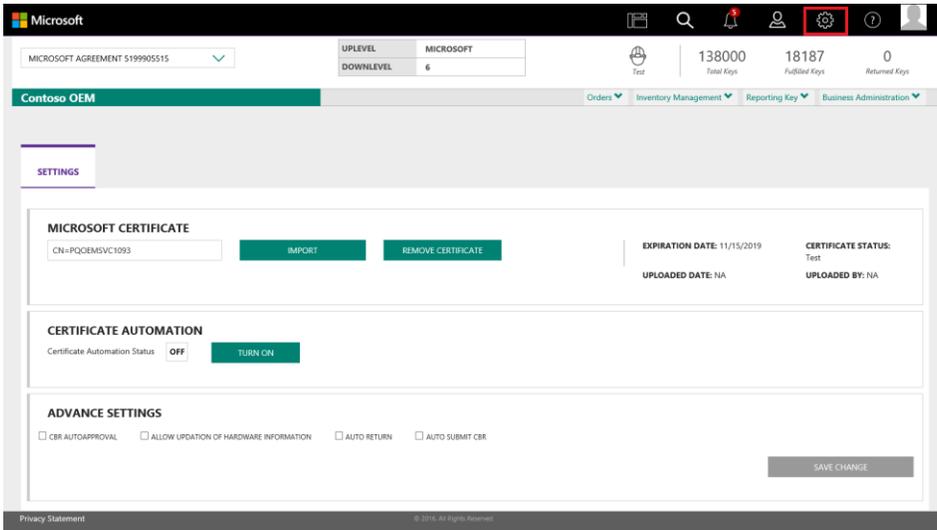
The Admin icon (person image) provides a view of all your user accounts and lets you manage users connected to your account from this dashboard. From the Admin page, under CREATE USERS, you can add, remove, or edit current users. You can also edit permissions.



6 Settings:

Go to this page to view such as CBR AUTOAPPROVAL, ALLOW UPDATES OF HARDWARE INFORMATION, AUTO SUBMIT CBR, and set time or make adjustment to the time these updates are pulled and reported each day. (See [AUTO SUBMIT CBR](#), sections in this manual for more information). Microsoft Certificate no longer required to perform key transactions in MDOS. The certificate upload section has been disabled and will be removed from MDOS in future release. MDOS will notify the same to the partners on setting page.

Microsoft Digital Operations Services User Manual

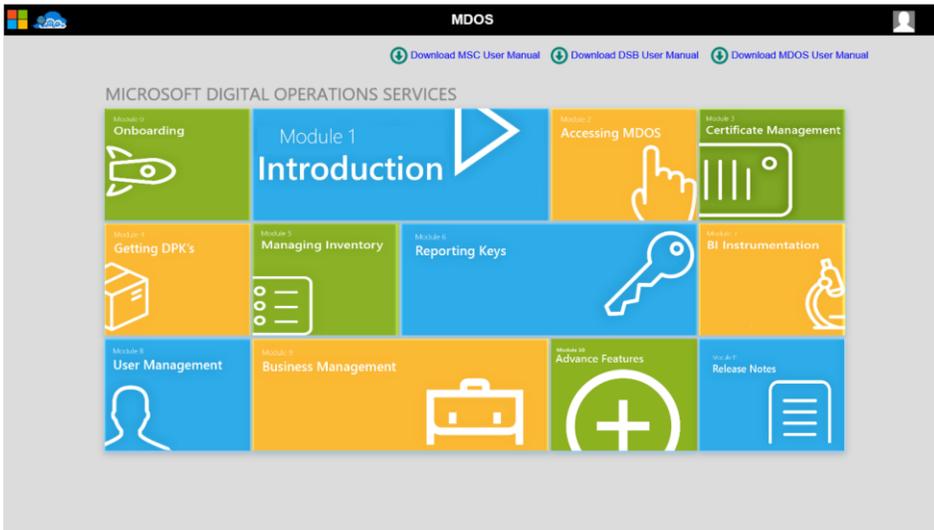


7 Help:

The Help Icon (Question mark symbol) provides a link to the online User Manual. The User Manual is a comprehensive resource of descriptions, examples, and step-by-step instructions for all the capabilities available in MDOS. You can also find definitions for acronyms, and links to other sources, such as FAQs. (See [User Manual](#) section below for more information). You may also find helpful information under the [DOC](#) site.

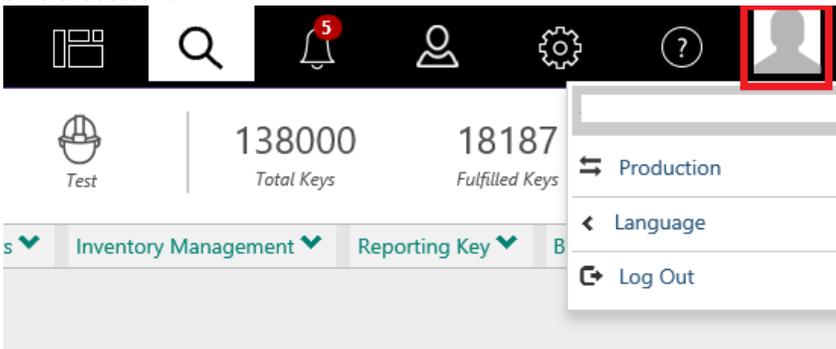


Microsoft Digital Operations Services User Manual



8 Log in:

From the Log In/Account profile icon (person image on far right), you can view which account you are currently logged on as. The Production link allows you to switch environments, while the Language link lets you choose language preferences (English, Chinese-Simplified, or Chinese-Traditional), and the Log Out link lets you log out of your current account or log back in under a different account.



2.4.2 SECONDARY RIBBON – STATUS BAR

Description:

From the secondary ribbon the status bar will display a recap of your current account information and key status.



1 Business Dropdown menu – Select the business/partner you wish to work with from the dropdown menu.



- Business definition: A secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering. (For more information about businesses and how to set up a business is available in the onboarding section of this guide.
- From the Business dropdown menu, you may:
 - Edit business name
 - Navigate across businesses
 - View number of downlevel partners
 - Easily identify selected business

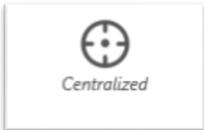
2 UPLEVEL / DOWNLEVEL box – Get a quick view of the ULP and DLP partners you are working with in this account.

UP LEVEL	MICROSOFT
DOWN LEVEL	2

- **Upper Level Partner or Uplevel Partner (ULP):** Is the entity above the down level entity. Keys will flow from this entity to downstream entities. An Upper level partner can be:
 - Microsoft agreement (GPA, IDH/ODM or IoT)
 - OEM, ODM/IDH or TPI in a centralized relationship
 - OEM, ODM/IDH or TPI in a decentralized relationship
- **Down Level Partner or Downlevel Partner (DLP):** Is the entity that receives keys from the up-level entity. Down level entities can deploy keys to downstream partners, manufacture devices, and/or submit CBR/PBR reports. A Down level partner can be:

- ODM/IDH or TPI in a centralized relationship
- ODM/IDH or TPI in a decentralized relationship
- Factory Floor (FFKI end entity in business)

3 Centralized vs. Decentralized Business Models – See the status of which business model you are currently working with.



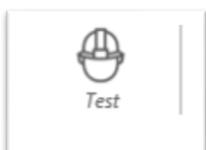
- **Centralized Model**
 - OEM conducts all transactions with Microsoft directly.
 - OEM places orders, receives DPKs, distributes DPKs to OEM or TPI manufacturing sites.
 - OEM/TPI manufactures device and returns computer build report (CBR) to OEM.
 - OEM submits CBRs to Microsoft.
- **Centralized Requirements**
 - All supply chain members must register in MDOS.
 - No special hardware required unless FFKI is required. (Windows client station).
- **Decentralized Business Model**
 - OEM creates relationship with Microsoft, but third parties (TPI, FFKI, etc.) can conduct transactions (such as order keys) on behalf of OEM.
 - OEM places blanket orders with Microsoft.
 - TPI places call-off orders (based on blanket orders), receives DPKs from Microsoft, and manufactures devices.
 - TPI submits CBR to Microsoft and a copy to OEM.
- **Decentralized Requirements**
 - All supply chain members must be registered in MDOS, including OEM.
 - No special hardware required.

Example: Centralized Business: Contoso OEM is in a centralized business model with ABC Factory. Contoso OEM has a direct agreement and relationship with Microsoft and a direct relationship with ABC Factory. Contoso OEM places orders with Microsoft to receive their Digital Product Keys (DPKs) directly from Microsoft and sends the keys to ABC Factory. The factory manufactures the devices and injects the keys. The Computer Build Reports (CBR) is created by ABC Factory and sent to Contoso OEM for approval

and submission to Microsoft. Contoso OEM chose this model because they want to be in control of their business, and manage their DPKs and CBRs directly.

Example: Decentralized Business: OEM ABC is in a decentralized business model with Mexico Factory and China Factory. OEM ABC places Blanket Orders with Microsoft for each factory that will be manufacturing client PCs (in this case Mexico Factory and China Factory). The factories receive the keys directly, manufacture the devices, and inject the keys. Both factories create their Computer Build Reports (CBR) and submit the CBRs directly to Microsoft. OEM ABC chose a decentralized model because it has trusted relationship with both factories, and does not want to manage any of the daily operations of DPKs. OEM ABC understands their liable for all the operations performed by their factories on their behalf.

4 Account Environment Status – See the status of which MDOS environment you are currently working in. This should be displayed as Test or Production.



- **Production** – This is the environment where all key activity occurs (order, fulfillment, etc.) and will be invoiced to the partner. All keys can be activated by the end user.
 - NOTE: You should use this environment for all key activity for it to occur. This should not be used as a test environment.
- **Test or Partner Quality (PQ)** – This is the environment that may be used to test updates before they go to production for implementation. Keys will not be invoiced and in most cases, cannot be activated by the end user.
 - NOTE: You should not use this environment for actual key activity as this is for testing scenarios only.

Production vs. Test or Partner Quality (PQ) environment

Example:

TPI ABC is new to MDOS and about to begin working with Contoso OEM in a centralized relationship. Contoso OEM wants to do a test-run scenario with their new DLP, before they officially begin working with them in MDOS. Contoso OEM goes into the partner quality test environment to place a test Standard Order for keys and assigns the DPKs to TPI ABC. TPI ABC will set up their MDOS account in the MDOS test environment called partner quality test environment. The TPI will receive the DPKs, manufacture the devices, and submit the CBR back to Contoso OEM. Once they confirm the set up and how they will work together, they both move to the production environment to begin placing actual orders and using key functions.

5 Key Counts / Key Inventory – see a default view current count of product keys by Total Keys, Fulfilled Keys, and Returned Keys. (Refer to the [Business Intelligence section](#) for details on customizable key count & inventory searches).



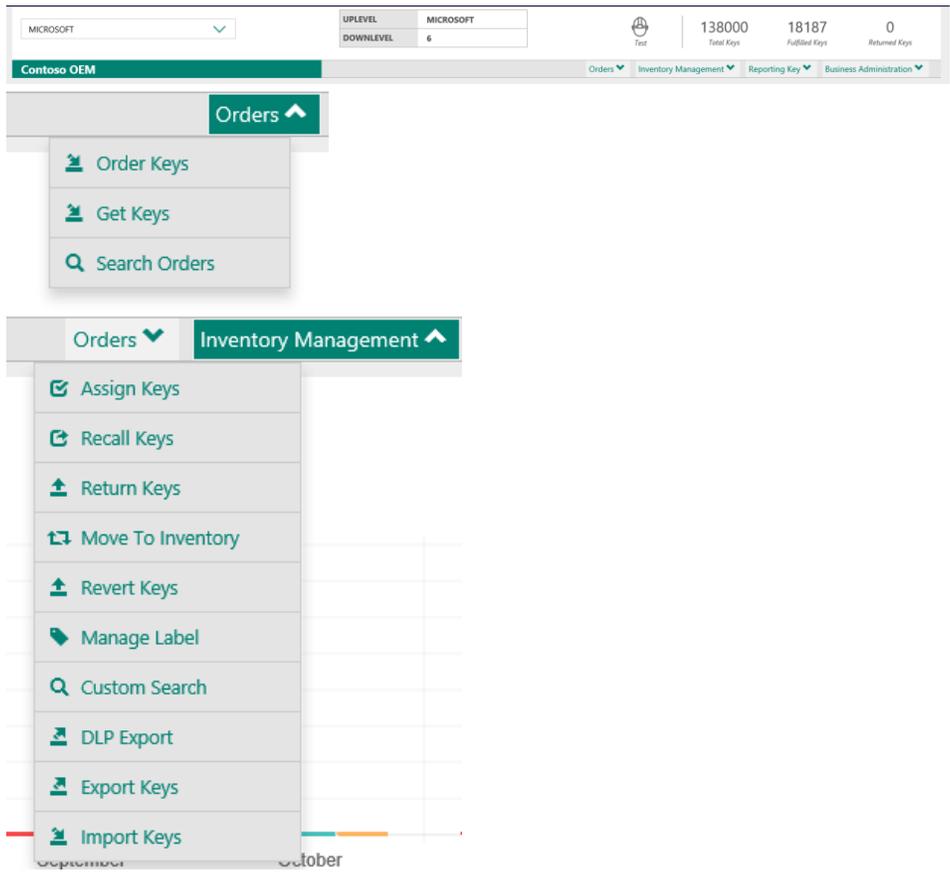
All Key Statuses –

Fulfilled	Ordered keys have been downloaded through MDOS to the OEM. (Note: All partner DPKs that are ordered, are automatically downloaded to the MDOS platform).
Assigned	Keys allocated by ULP to their DLP from current inventory. (ULP view)
Transferred	Keys allocated by ULP to their FFKI from current inventory. (ULP view)
FFKI Fulfilled	Keys have been assigned to FFKI (FFKI view)
Consumed	Keys have been exported and can be bound/injected by DLP.
Bound	Keys injected to device. Keys need to be reported in CBR so they can be activated. CBR is automatically created in MDOS.
Marked For Submit	Bound keys selected in background process and are ready for CBR submission (CBR has not been submitted to Microsoft yet).
Reported Bound	Bound key submitted to Microsoft and waiting for Microsoft acknowledgment.
Activation Enabled	CBR acknowledgement by Microsoft. Keys ready to be activated for consumption. (final status)
Activation Denied	CBR rejected by Microsoft. Keys status changes to Activation Denied.
Marked For Return	Keys have been returned to Microsoft. (Still awaiting Microsoft acknowledgment and approval and possible account credit).
Reported Return	Keys submitted for return to Microsoft, pending approval.
Returned	Keys have been returned to Microsoft.
Return Rejected	Return has been rejected by Microsoft. Keys status changes to Return Rejected
Product Bound	PBR acknowledgement by Microsoft for service keys.

2.4.3 TERTIARY RIBBON – ACTION RIBBON

Description:

The tertiary ribbon is the Action Ribbon. This ribbon will display the most commonly used actions for product keys:



- **Get Keys** – Download keys that have been ordered and pull them into your inventory. For direct Microsoft partners or decentralized TPIs. (See [Getting DPKs](#) section for more information – for direct partners and OEMs only).
- **Assign Keys** – Assign keys to downlevel partners (DLP) from inventory; by quantity, key, or search criteria. (See [Assign Keys](#) section for more information).

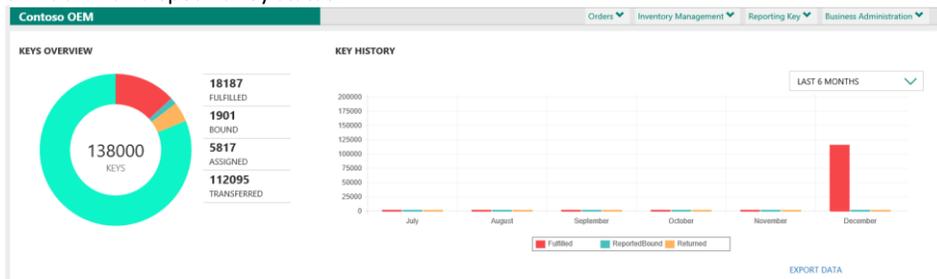
- **Recall Keys** – Allows OEM/IDH/TPI users to recall the keys from downlevel partners. (See [Recall Keys](#) section for more information).
- **Export Keys** – Export keys from MDOS into a zip file and store in a secure location for future use. (See [Export Keys](#) section for more information).
- **Import Keys** – Import keys into the MDOS system from an external file location. (See [Import Keys](#) section for more information).
- **Order Keys** – Order keys from MDOS for consumption with a standard, blanket, or call off order. (See [Order Keys](#) section for more information).



2.4.4 QUATERNARY SECTION – MAIN DASHBOARD

Description:

The main dashboard view provides a quick visual glimpse of your keys counts, grouped by status. This visual display shows you inventory in an easy-to-understand and interactive chart view. Bar charts and donut charts provide a visual breakdown by color, and allow you to click to drill down on a specific key status.

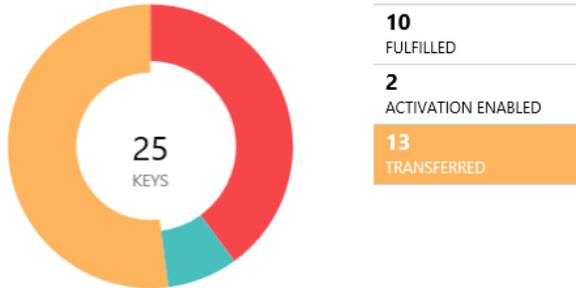


- **Key Overview** – See a breakdown of keys by status (Fulfilled, Activation Enabled, Bound, Returned, etc.) and counts for each in a color-coded donut chart.

- **Key History** – Select a date range in the pulldown menu to see a breakdown of keys by status (Fulfilled, Activation Enabled, ReportedBound, and Returned) and counts for each in a color-coded bar chart view.

Example: Contoso OEM is looking for a high-level overview of their key status. Contoso OEM goes to the MDOS dashboard and looks at the Key Overview image to see their total keys, the donut chart for a quick view by color for each status, and actual counts for each status in the summary section. By clicking on the yellow section in the chart, they can see that there are 13 keys in transferred status and this is highlighted in the summary section outside the donut chart. Contoso then clicks on the transferred status in the summary section to go directly to the search page and see results based on the transferred key status.

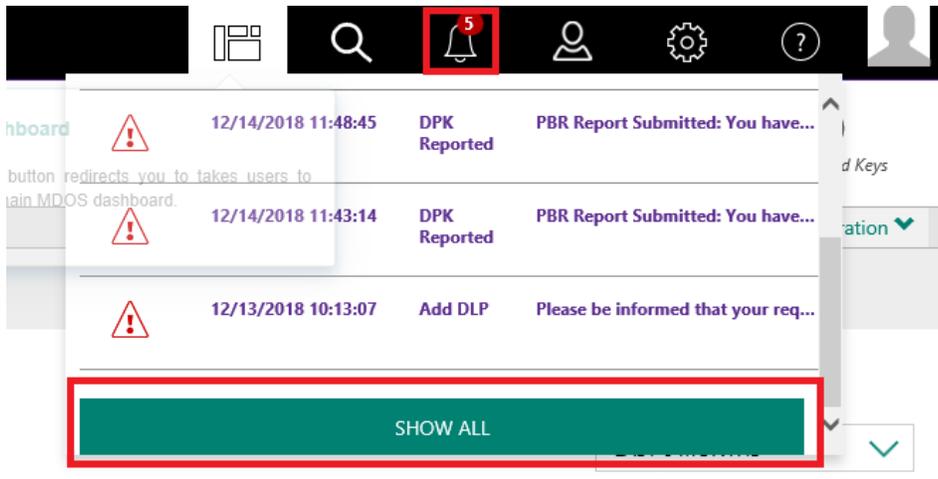
Keys Overview



2.5. ALERT EXPLANTION

Description:

Confirmation notifications will appear under the Alert icon (bell image) indicating recent changes. When a number shows up or changes in the red circle on the Alert icon, click on the icon to see a notification dropdown that contains a summary list of your most recent actions and updates. Recent changes may include key status changes, order placement confirmations, and links to the Download Center exports. Click on the SHOW ALL button to see a complete list of all recent changes.



Functions that generates MDOS Alerts:

- ULP request accepted by DLP
- DPK Download
- Export Key
- Import Key
- Key Return
- PBR Report
- Key Return Rejected
- Assign Keys To DLP
- Recall Keys By ULP
- Order Keys
- DLP Export Keys

Example: Contoso OEM assigns keys to their downlevel partner, ABC TPI using the Assign Keys - by Search functionality, so they can search for their fulfilled keys. Once the keys are assigned, the key status for those keys would then be changed from fulfilled to assigned and would not show up until searched again. Contoso OEM can easily see that the assign function was successful as a number shows up or changes in the red circle on the the Alert icon (bell image) in the top navigation bar. They click on the Alert icon to see a quick status list of their most recent key actions and updates, then click on the Show All button to see a full list of all key actions and updates in their history.

Tip Tool: See a quick status list of your most recent key actions and updates.

Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.

Microsoft

MICROSOFT AGREEMENT 5000043775 ✓

Microsoft Agreement 5000043775

Microsoft Agreement 5000043832

UPLEVEL MICROSOFT

DOWNLEVEL 10

59. Please refresh the page if data is not updated.

Keys Overview

39
KEYS

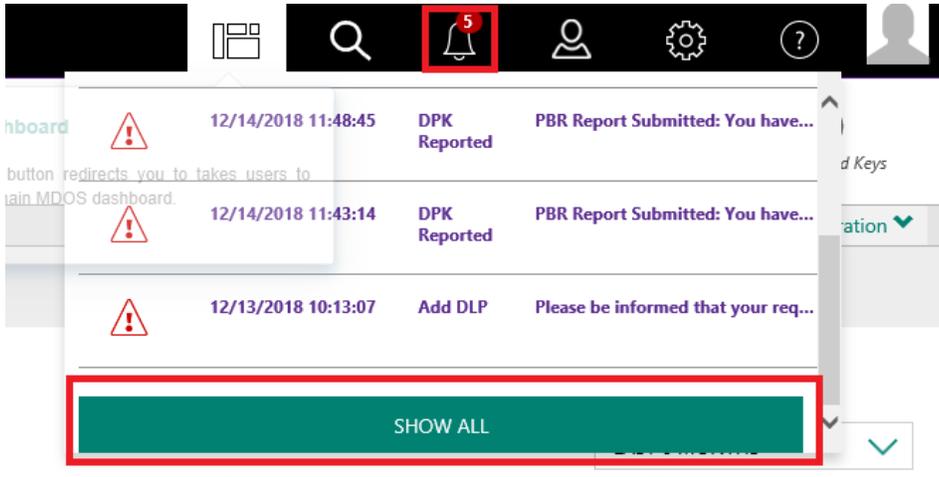
- 16** FULFILLED
- 2** CONSUMED
- 2** RETURNED
- 1** ACTIVATION ENABLED
- 18** TRANSFERRED

Key History

40
35
30
25
20
15
10
5
0

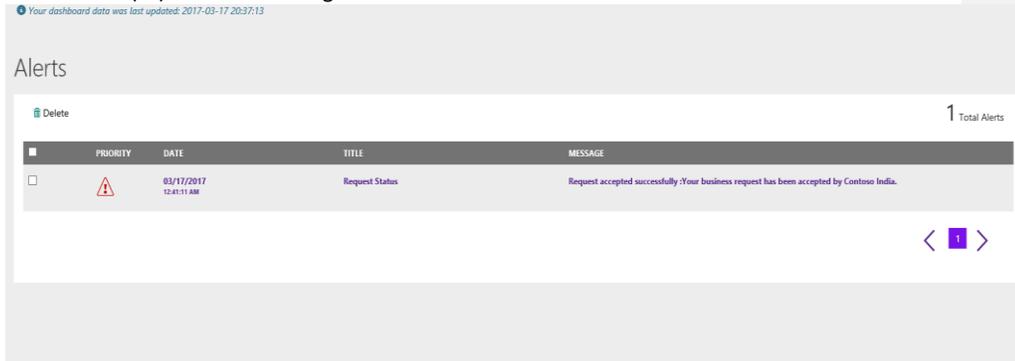
December January

3. Click on the Alert icon (bell image) in the top navigation bar to see a quick status list of your most recent key actions and updates.
4. Click on the SHOW ALL button to see a complete list of all recent changes.



5. From the Alerts page, a complete list of all recent changes will display.

6. Check box(es) to select messages and delete once finished.



SECTION 3. GETTING DPKS

3.1. ORDER KEYS

Description:

The Order Keys functionality in MDOS allows the user to order keys for consumption with a standard, blanket, or call off order.

- **Standard order** - A standard order is an order placed by an OEM, specifying a single ship-to location (OEM or TPI site), and includes a given quantity and requested delivery date for each line item.
- **Blanket order** - A blanket order is an order for a product placed by an OEM, specifying a single delivery location (OEM or TPI site) and an expiration date. Each line item on the blanket order specifies a maximum quantity of product keys, which the designated receiving organization can request while the order remains active.
- **Call off order** - A call off transaction is placed against a blanket order by the ship-to location (OEM or TPI) that is specified on the blanket order. Each line item on a call off transaction must specify a requested delivery date and a quantity. The quantity ordered must be less than or equal to the remaining blanket order quantity for that product.

Before you can order and receive digital product keys from Microsoft, the Company Administrator at your organization must login to the Microsoft DOC portal and activate your account using the PIN received in mailbox.

To download product keys, use the Get Keys functionality to download the product keys ordered in the DOC portal. (See [Getting DPKs](#) section for more information).

Direct order model and reduced stock requirements:

- OEMs order keys directly from Microsoft
- Large stock levels not required – a small safety stock is sufficient

Decentralized order model:

- OEMs/TPIs can place standard orders and blanket/call-off orders under a single bill-to/payer (matches current process)

Example:

In a decentralized business model, OEM ABC places a blanket order for 100 keys in MDOS and selects their downlevel partner (ship to) as Contoso TPI. The order is placed in January 2017 and OEM ABC sets an expiration date for April 1, 2017. Contoso TPI could go into MDOS in February 2017 and place a call off order to receive (or fulfill) 50 of the keys from the order for consumption, and place another call off order in March 2017 for the remaining 50 keys.

Therefore, the amount in the call off orders is less than or equal to the amount available in the blanket order and is called off before the expiration date. Additionally, the OEM would receive

an invoice for 50 keys in March and a second invoice for another 50 keys in April as that is when the keys are consumed.

Tip Tool: Order Keys from Microsoft for consumption via a standard, blanket, or call off order.

NOTE:

- Standard orders can only be placed by OEMs, for both centralized and decentralized businesses.
- Blanket order can only be placed by OEMs. Primarily for decentralized businesses.
- Call-off order primarily placed by IDHs. Primarily for Decentralized business model after a blanket order has been placed.

3.1.1 STANDARD ORDER

Description:

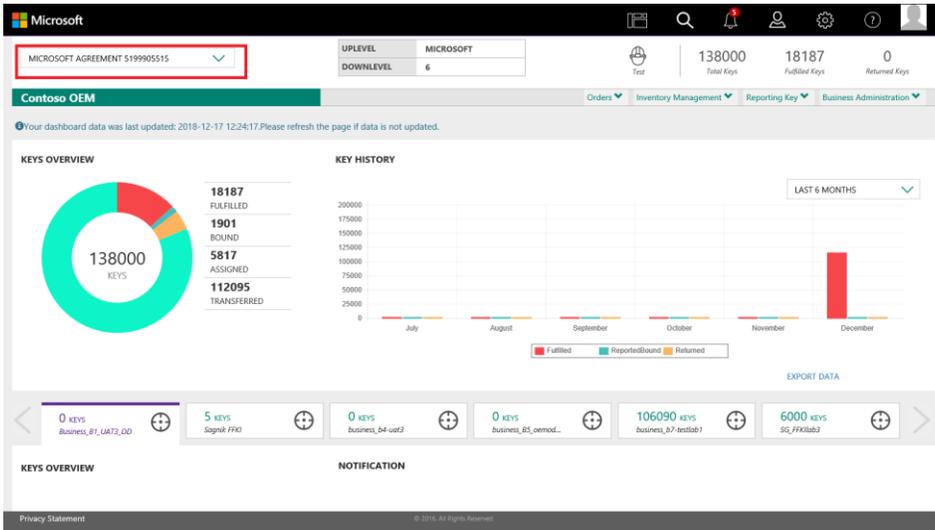
A standard order is an order placed by an OEM, specifying a single ship-to location (OEM or TPI site), and includes a given quantity and requested delivery date for each line item. Standard orders can only be placed for both centralized and decentralized businesses.

Tip Tool: Order Keys from MDOS with a standard order. A standard order can only be placed by OEMs, with either centralized or decentralized business models.

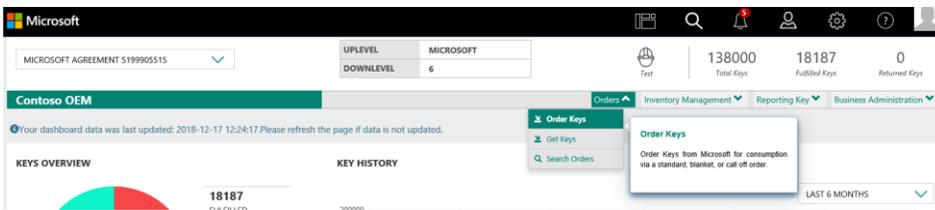
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the **Business dropdown** menu in the upper left corner.

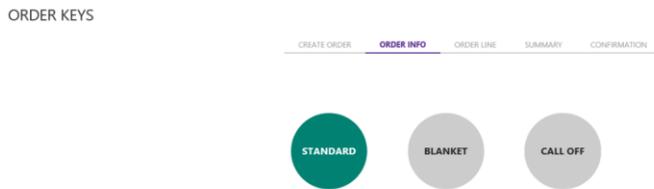
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3. From the dashboard view, click on Order Keys (under orders menu) from the action ribbon in the menu bar.



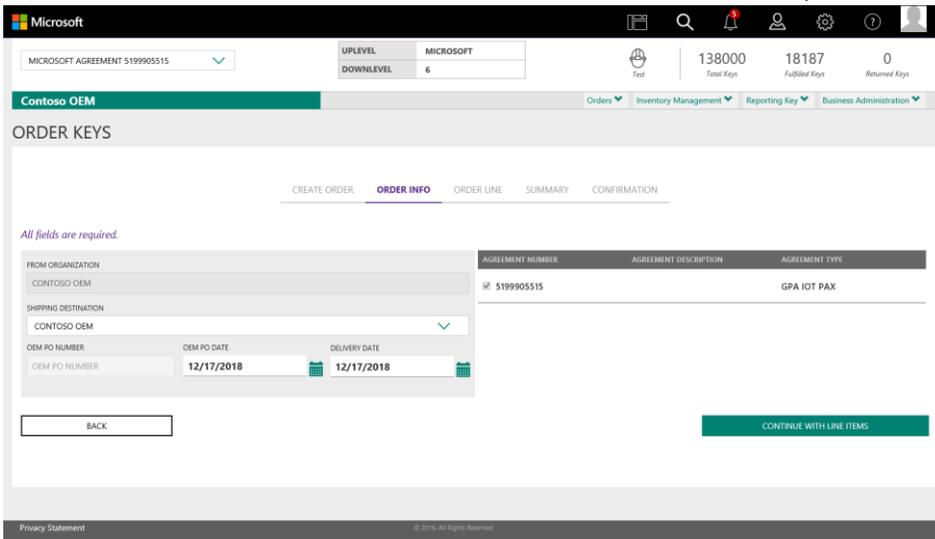
4. From the ORDER KEYS menu, select **STANDARD** from the options under CREATE ORDER.



5. From the ORDER KEYS – ORDER INFO screen, fill in required fields. (OEM PO Number, PO Date, Delivery Date).

6. Then the click CONTINUE WITH LINE ITEMS button.

NOTE: The ORGANIZATION (Ship To) and SHIPPING DESTINATION (Sold To) IDs and associated agreement details will display. The IDs will vary for decentralized business models, but will remain the same for centralized business models and these fields will be read-only.



7. From the ORDER KEYS – ORDER LINE screen, check the box(es) to select line number(s).

If partner is not seeing the line items or could not find the latest SKU's added to their agreement, partners can click on 'Refresh' icon to sync up newly added SKUs in DOC.

Partner can also search the licensable part number by entering the name or number of that license in the search box and search accordingly.

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ORDER KEYS

CREATE ORDER ORDER INFO **ORDER LINE** SUMMARY CONFIRMATION

SEARCH LICENSABLE NAME / PART NUMBER Click 'Refresh' icon to sync your line items

LINE NUMBER	LICENSABLE PART NUMBER	LICENSABLE NAME	START DATE	END DATE
<input type="checkbox"/> 10	209-9865	OFFICE PRO 2016 OLC OA3 PTK AFOLB	05/24/2018	05/05/2019
<input type="checkbox"/> 20	714-00013	O365P Sub OLC OA3 PTK AFOLB	05/24/2018	05/05/2019
<input type="checkbox"/> 30	7NM-00087	PK6 Office 365 Personal WW 03081 OA3 OEM	05/24/2018	05/05/2019
<input type="checkbox"/> 40	FGC-08800	WIN PRO 10 OLC OA3 PTK	05/24/2018	05/05/2019
<input type="checkbox"/> 50	KW9-00004	WIN HOME 10 OLC OA3 PTK	05/24/2018	05/05/2019
<input type="checkbox"/> 60	KW9-00458	WIN HOME 10 OLC OA3 NonAct PTK	05/24/2018	05/05/2019

SELECTED LINE ITEMS
No Items Selected

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8. Enter quantity, then click CONTINUE WITH SUMMARY.

SELECTED LINE ITEMS

PO LINE NUMBER	LICENSABLE PART NUMBER	LICENSABLE NAME	OEM PART NUMBER	QUANTITY	DELIVERY DATE	
10	WIN7-00902	WIN 8.1 OLC OA3 PTK		<input type="text" value="1"/>	11/30/2016	<input type="button" value="REMOVE"/>

9. From the ORDER KEYS – SUMMARY screen, review your order then click the CONFIRM MY ORDER button.

ORDER KEYS

CREATE ORDER ORDER INFO ORDER LINE **SUMMARY** CONFIRMATION

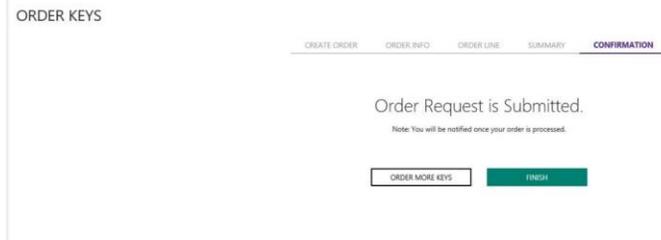
DEM PO NUMBER	FROM ORGANIZATION	AGREEMENT DETAILS	TOTAL ORDER AMOUNT
ss	MDOS SPE Account-0000130389	5000044083 - Master Licensing Agmt (2015) for Named - 2019-05-05T07:00:00	0.00USD
DEM PO DATE	SHIPPING DESTINATION	DELIVERY DATE	
6/19/2018	MDOS SPE Account-0000130389	6/19/2018	

PO LINE NUMBER	LICENSABLE PART NUMBER	LICENSABLE NAME	OEM PART NUMBER	QUANTITY	UNIT PRICE	EXTENDED PRICE
10	KUP-00004	WIN HOME SL 10 OLC OA3 PTK EM		1	0.00	0.00

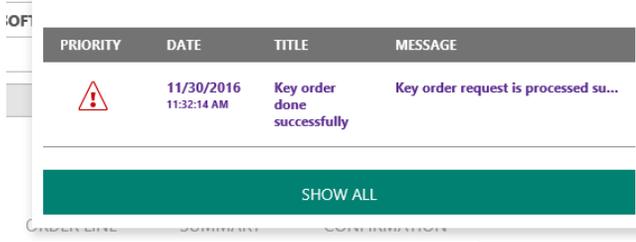
Unit prices shown are:
 Inclusive of applicable discounts
 Exclusive of any taxes which may apply
 Subject to change for future dated deliveries
 Not final until such time as invoicing occurs

10. A final confirmation page will display after your order request is submitted for processing. Click FINISH or you may click ORDER MORE KEYS.

NOTE: It can take approximately 30 minutes to obtain actual keys. Keys can then be downloaded and added to inventory.



11. A confirmation notification will also appear under the Alert icon, indicating recent changes.



3.1.2 BLANKET ORDER

Description:

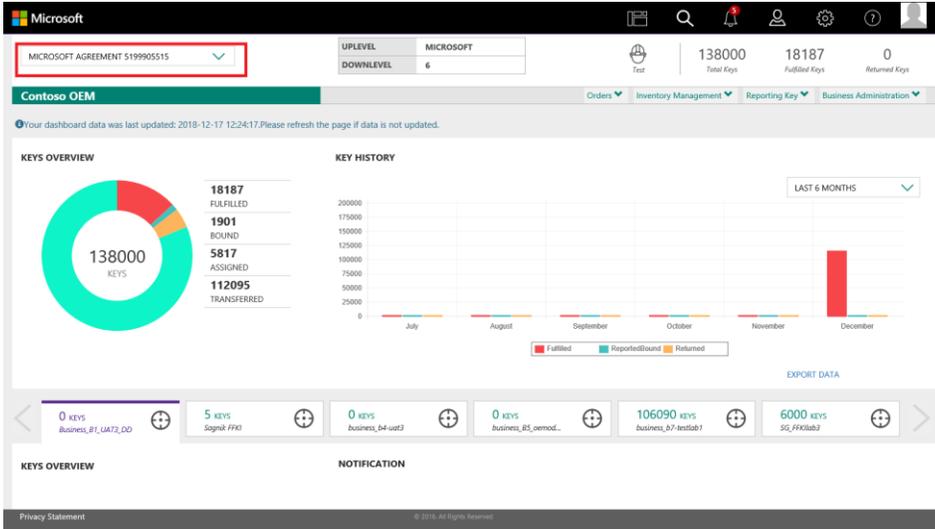
A blanket order is an order for a product placed by an OEM, primarily with decentralized business models, specifying a single delivery location (OEM or TPI site) and an expiration date. Each line item on the blanket order specifies a maximum quantity of product keys, which the designated receiving organization can request while the order remains active.

Tip Tool: Order keys from MDOS with a blanket order (larger bulk order). A blanket order can only be placed by OEMs, primarily with decentralized business models.

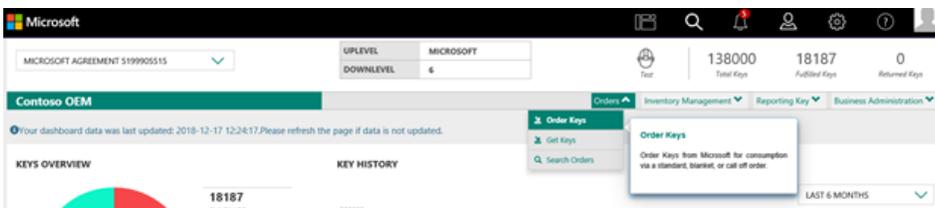
NOTE: Blanket Orders follow the same procedure as that of Standard Orders with the an additional "Expiry Date" field on the ORDER INFO page.

Step-by-step:

- Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
- From the dashboard view, select the business from the **Business dropdown** menu in the upper left corner.



- From the dashboard view, click on Order Keys (under orders menu) from the action ribbon in the menu.



- From the ORDER KEYS menu, select **BLANKET** from the options under CREATE ORDER.

ORDER KEYS

CREATE ORDER **ORDER INFO** ORDER LINE SUMMARY CONFIRMATION



7. From the ORDER KEYS – ORDER INFO screen, fill in required fields. (OEM PO Number, PO Date, Expiry Date).
8. Click the CONTINUE WITH LINE ITEMS button.

Microsoft

MICROSOFT AGREEMENT 5199905515

UPLEVEL MICROSOFT
DOWNLEVEL 6

Test 138000 Total Keys 18187 Fulfilled Keys 0 Returned Keys

Cantoso OEM Orders Inventory Management Reporting Key Business Administration

ORDER KEYS

CREATE ORDER **ORDER INFO** ORDER LINE SUMMARY CONFIRMATION

All fields are required.

FROM ORGANIZATION	AGREEMENT NUMBER	AGREEMENT DESCRIPTION	AGREEMENT TYPE
CONTOSO OEM	<input checked="" type="checkbox"/> 5199905515		GPA IOT PAX

SHIPPING DESTINATION
CONTOSO OEM

OEM PO NUMBER OEM PO DATE DELIVERY DATE

OEM PO NUMBER 12/17/2018 12/17/2018

BACK CONTINUE WITH LINE ITEMS

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8. From the ORDER KEYS – ORDER LINE screen, check the box(es) to select line number(s).

If partner is not seeing the line items or could not find the latest SKU's added to their agreement, partners can click on 'Refresh' icon to sync up newly added SKUs in DOC.

Partner can also search the licensable part number by entering the name or number of that license in the search box and search accordingly.

ORDER KEYS

CREATE ORDER ORDER INFO **ORDER LINE** SUMMARY CONFIRMATION

SEARCH LICENSABLE NAME / PART NUMBER Click 'Refresh' icon to sync your line items

LINE NUMBER	LICENSABLE PART NUMBER	LICENSABLE NAME	START DATE	END DATE
<input type="checkbox"/> 10	269-16965	OFFICE PRO 2016 OLC OA3 PTK AFOLB	05/24/2018	05/05/2019
<input type="checkbox"/> 20	714-00013	O365P Sub OLC OA3 PTK AFOLB	05/24/2018	05/05/2019
<input type="checkbox"/> 30	7NM-00087	PK6 Office 365 Personal WW 03081 OA3 OEM	05/24/2018	05/05/2019
<input type="checkbox"/> 40	FOC-08800	WIN PRO 10 OLC OA3 PTK	05/24/2018	05/05/2019
<input type="checkbox"/> 50	KW9-00004	WIN HOME 10 OLC OA3 PTK	05/24/2018	05/05/2019
<input type="checkbox"/> 60	KW9-00458	WIN HOME 10 OLC OA3 NonAct PTK	05/24/2018	05/05/2019

SELECTED LINE ITEMS
No Items Selected

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9. Enter the quantity, then click CONTINUE WITH SUMMARY.

SELECTED LINE ITEMS

PO LINE NUMBER	LICENSABLE PART NUMBER	LICENSABLE NAME	OEM PART NUMBER	QUANTITY	DELIVERY DATE	
10	WIN7-00902	WIN 8.1 OLC OA3 PTK		<input type="text" value="1"/>	11/30/2016	<input type="button" value="REMOVE"/>

10. From the ORDER KEYS – ORDER LINE screen, review your order then click the CONFIRM MY ORDER button.

SELECTED LINE ITEMS

PO LINE NUMBER	LICENSABLE PART NUMBER	LICENSABLE NAME	OEM PART NUMBER	MAX QUANTITY	EXPIRY DATE	
10	269-16965	OFFICE PRO 2016 OLC OA3 PTK AFOLB	<input type="text"/>	<input type="text" value="1"/>	3/20/2017	<input type="button" value="REMOVE"/>

11. A final confirmation page will show up after your order request is submitted. Click FINISH.

NOTE: Takes approximately 30 minutes to obtain actual keys. Keys can then be downloaded and added to inventory.

ORDER KEYS

CREATE ORDER ORDER INFO ORDER LINE **SUMMARY** CONFIRMATION

OEM PO NUMBER TestKeyBlan	FROM ORGANIZATION Contoso OEM-0000127047	AGREEMENT DETAILS 5000041895 : Master Licensing Agmt (2015) for Named : 2017-07-31T07:00:00	TOTAL ORDER AMOUNT 0 USD
OEM PO DATE 3/20/2017	SHIPPING DESTINATION Contoso OEM-0000127047	EXPIRY DATE 3/20/2017	

PO LINE NUMBER	LICENSABLE PART NUMBER	LICENSABLE NAME	OEM PART NUMBER	MAX QUANTITY	UNIT PRICE	EXTENDED PRICE
10	269-16965	OFFICE PRO 2016 OLC OAS PTK AFOLB		5	0	0

BACK CONFIRM MY ORDER

3.1.3 CALL OFF ORDER

Description:

A call off order is placed against a blanket order by the ship-to location (OEM or TPI) that is specified on the blanket order. Call off orders are primarily placed by IDHs with a decentralized business model after a blanket order has been placed. Each line item on a call off transaction must specify a requested delivery date and a quantity. The quantity ordered must be less than or equal to the remaining blanket order quantity for that product.

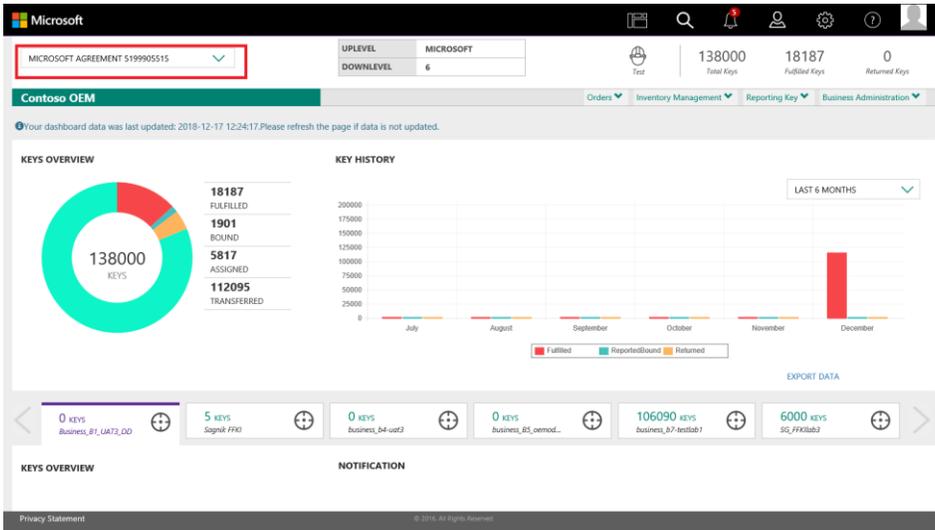
Tip Tool: Order selected keys (i.e. call off a portion) from a blanket order previously placed in MDOS. Call off orders are primarily placed by IDHs with a decentralized business model after a blanket order has been placed.

NOTE: It should take approximately 15 minutes after a blanket order is placed before a call off order can be made.

Step-by-step:

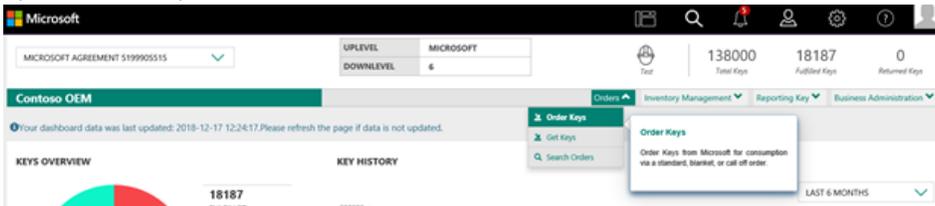
1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the **Business dropdown** menu in the upper left corner.

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3. From the dashboard view, click on Order Keys (under orders menu) from the action ribbon in the menu.

NOTE: Blanket Order must be placed by the uplevel partner before a Call Off order can be made by the downlevel partner.



4. From the ORDER KEYS menu, select CALL OFF from the options under CREATE ORDER.

ORDER KEYS



5. From the ORDER KEYS – ORDER INFO screen; all available account information will be displayed.

6. Fill in required fields. (Call Off Reference Number, Delivery Date).

7. Click the radio button to select the order number to call off, then click the CONTINUE WITH LINE ITEMS button.

ORDER KEYS

The screenshot displays the 'ORDER INFO' screen. At the top, a navigation bar includes 'CREATE ORDER', 'ORDER INFO' (highlighted), 'ORDER LINE', 'SUMMARY', and 'CONFIRMATION'. Below the navigation bar, a message states 'All fields are compulsory'. The form is divided into two main sections. The left section contains input fields for 'FROM ORGANIZATION' and 'SHIPPING DESTINATION', both with the value 'CONTOSO DEM-0000127947'. Below these are fields for 'CALL OFF REFERENCE NUMBER' (with the value 'CALL OFF REFERENCE NUMBER') and 'DELIVERY DATE' (with a calendar icon). The right section features a table with the following data:

MICROSOFT ORDER NUMBER	OEM PO NUMBER	OEM PO DATE	EXPIRY DATE	
<input checked="" type="radio"/>	1140030972	TESTKEYBLAN	20/03/2017	20/03/2017

At the bottom of the screen, there is a 'BACK' button on the left and a 'CONTINUE WITH LINE ITEMS' button on the right.

8. From the ORDER KEYS – ORDER LINE screen, check the box to select the order you would like to pull from.

9. Under SELECTED LINE ITEMS, enter quantity desired.

NOTE: Quantity must be less than or equal to the maximum. Maximum quantity set by uplevel partner.

10. Click CONTINUE WITH SUMMARY.

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ORDER KEYS

CREATE ORDER ORDER INFO **ORDER LINE** SUMMARY CONFIRMATION

<input checked="" type="checkbox"/>	TOTAL	LICENSABLE PART NUMBER	LICENSABLE NAME	MAX QUANTITY	AVAILABLE QTY	START DATE	END DATE
<input checked="" type="checkbox"/>		269-16965	OFFICE PRO 2016 OLC OA3 PTK AFOLB	5	5		

SELECTED LINE ITEMS

LICENSABLE PART NUMBER	LICENSABLE NAME	QUANTITY	DELIVERY DATE	
269-16965	OFFICE PRO 2016 OLC OA3 PTK AFOLB	<input type="text" value="5"/>	03/20/2017	<input type="button" value="REMOVE"/>

11. From the ORDER KEYS – SUMMARY screen, review the call off order then click the CONFIRM MY ORDER button.

ORDER KEYS

CREATE ORDER ORDER INFO ORDER LINE **SUMMARY** CONFIRMATION

FROM ORGANIZATION	TOTAL ORDER AMOUNT
Contoso OEM-0000127047	

SHIPPING DESTINATION	DELIVERY DATE	
Contoso OEM-0000127047	03/20/2017	0 USD

LICENSABLE PART NUMBER	LICENSABLE NAME	QUANTITY	UNIT PRICE	EXTENDED PRICE
269-16965	OFFICE PRO 2016 OLC OA3 PTK AFOLB	5	0	0

12. A final confirmation page will show up after your order request is submitted. Click FINISH.

NOTE: It takes approximately 30 minutes to obtain actual keys. Keys can then be downloaded and added to inventory.

ORDER KEYS

CREATE ORDER ORDER INFO ORDER LINE SUMMARY **CONFIRMATION**

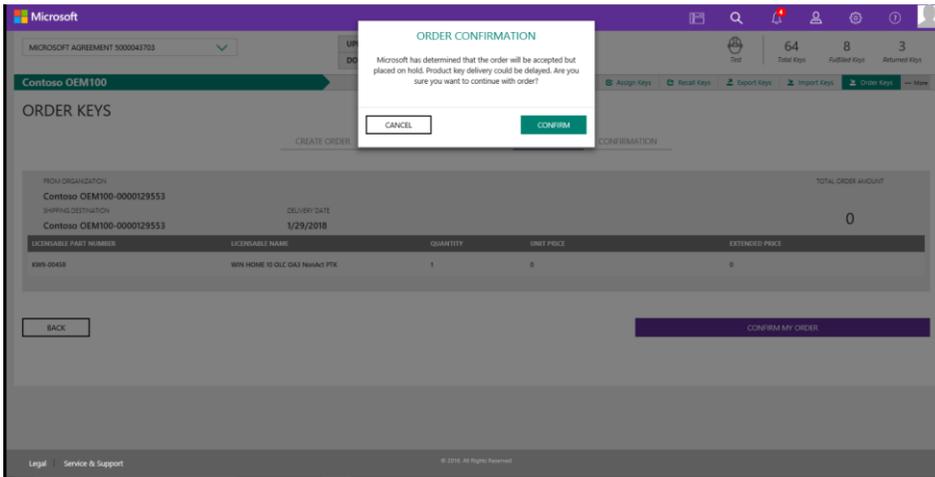
Order Request is Submitted.
Note: You will be notified once your order is processed.

3.1.4 CREDIT HOLD

Description:

If the partners account has a credit hold, then the order placed by partner will go on hold which means partners can place their order, but the product key delivery could be delayed.

Partners need to work with their account managers to remove the hold from the account, once the hold is removed from their account, partners will receive an email confirmation on removal of delivery hold post which partners can login to MDOS and hit 'Get Keys' so that the keys can be downloaded successfully in MDOS.



3.1.5 SEARCH ORDER

Description:

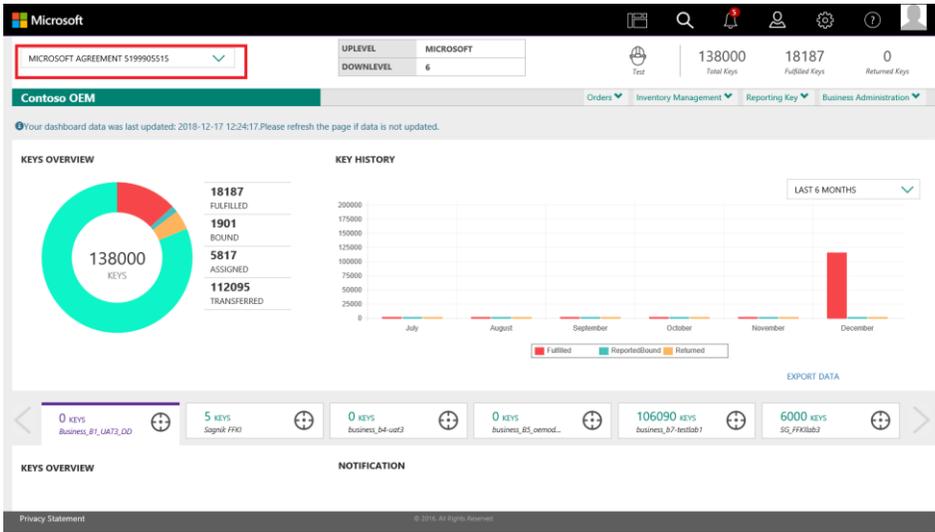
The Search order allows users to search the status of the standard order, blanket order and call off order placed in MDOS based on search parameters like PO Number, Agreement Number, MS Order Number, status, submitted date, type of order etc.

Tip Tool: View ordered keys using search functionality.

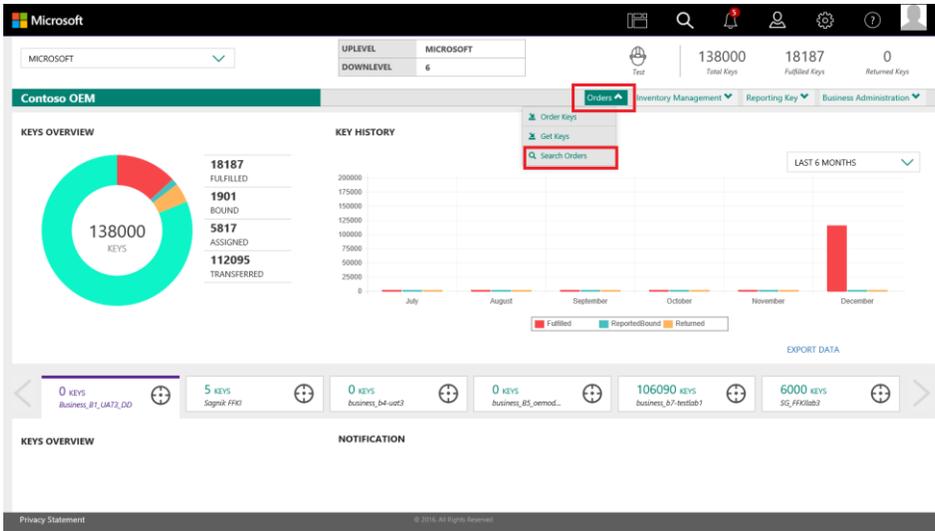
Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.

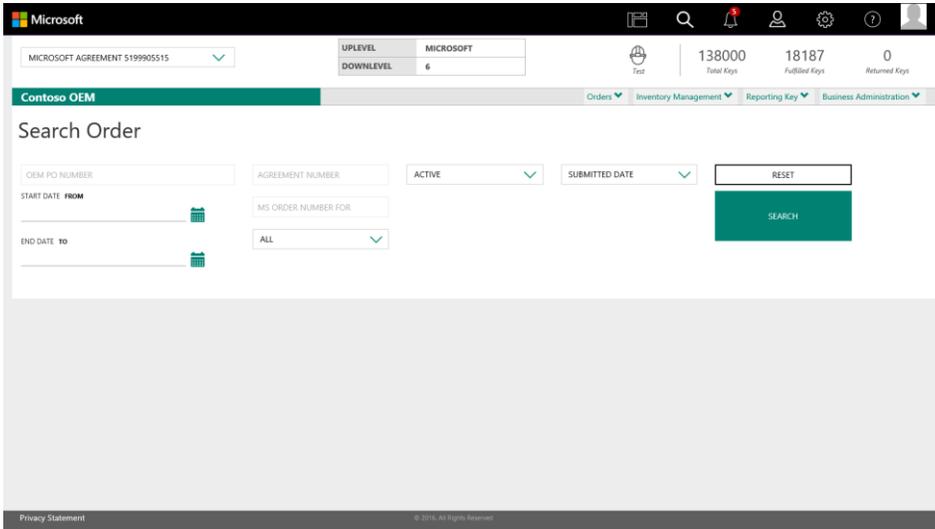
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3. From the Orders menu, select Search Orders.



4. Under Search Order, the user will see the different search criteria like : PO Number, Agreement Number, MS Order Number, status, submitted date, type of order etc. Enter search criteria and click on the SEARCH button.



5. Search results will display all the orders based on the search criteria. MDOS has newly introduced quantity column, which will let the partners know the total keys placed for a particular order. Also, user can differentiate the pending and fulfilled orders based on color of the quantity column.

- **Purple** indicates the order is pending for acknowledgement from Microsoft and keys are not downloaded in MDOS.
- **Green** indicates the order is approved and the keys are fulfilled in MDOS.

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Microsoft

Search Order

OEM PO NUMBER: AGREEMENT NUMBER: MS ORDER NUMBER FOR: ACTIVE SUBMITTED DATE: RESET

START DATE FROM: END DATE TO: ALL SEARCH

MS ORDER NUMBER	OEM PO NUMBER	QUANTITY	SHIP TO ORGANIZATION	SOLD TO ORGANIZATION	ORDER TYPE	ORDER STATUS	SUBMITTED DATE
1101714785	Bulk_101	10 *	TPJ_internal_0000129029	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/21/2018
1101714785	Bulk_101	10 *	TPJ_internal_0000129029	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/21/2018
1101714785	Bulk_101	10 *	TPJ_internal_0000129029	CluJD OA LAB18	Standard	ACTIVE	09/21/2018
1101714785	Bulk_101	10 *	TPJ_internal_0000129029	CluJD OA LAB18	Standard	ACTIVE	09/21/2018
1120097896		2 *	Microsoft Corporation - OEM Internal	Microsoft Corporation - OEM Internal	Call of reference	ACTIVE	09/20/2018
1140059872	20 sep blank	2 *	Microsoft Corporation - OEM Internal	Microsoft Corporation - OEM Internal	Blanket	ACTIVE	09/20/2018
1101716183	Bulk_20_Service	3000 *	Microsoft Corporation - OEM Internal	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/20/2018
1101716683	20SEP_01	3000 *	Microsoft Corporation - OEM Internal	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/20/2018
1101716683	20SEP_01	3000 *	CluJD OA LAB18	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/20/2018
1101716683	20SEP_01	3000 *	Microsoft Corporation - OEM Internal	CluJD OA LAB18	Standard	ACTIVE	09/20/2018
1101716683	20SEP_01	3000 *	CluJD OA LAB18	CluJD OA LAB18	Standard	ACTIVE	09/20/2018
1140059872	20SEP_BLA01	20 *	TPJ_internal_0000129029	Microsoft Corporation - OEM Internal	Blanket	ACTIVE	09/20/2018

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Microsoft

1140059872	20SEP_BLA01	20 *	TPJ_internal_0000129029	Microsoft Corporation - OEM Internal	Blanket	ACTIVE	09/20/2018
1140059872	20SEP_BLA01	20 *	TPJ_internal_0000129029	CluJD OA LAB18	Blanket	ACTIVE	09/20/2018
1101712599	OEM_TPJ025EP	20 *	TPJ_internal_0000129029	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/20/2018
1101712599	OEM_TPJ025EP	20 *	TPJ_internal_0000129029	CluJD OA LAB18	Standard	ACTIVE	09/20/2018
1120097596		15 *	Microsoft Corporation - OEM Internal	Microsoft Corporation - OEM Internal	Call of reference	ACTIVE	09/19/2018
1120098096		15 *	Microsoft Corporation - OEM Internal	Microsoft Corporation - OEM Internal	Call of reference	ACTIVE	09/19/2018
1101715884	Bulk_19_2000	4000 *	Microsoft Corporation - OEM Internal	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/19/2018
1101710311	bulk_19	6000 *	Microsoft Corporation - OEM Internal	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/19/2018
1101707888	bulk_19	6000 *	Microsoft Corporation - OEM Internal	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/19/2018
1101714584	5646	100 *	Microsoft Corporation - OEM Internal	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/19/2018
1101708072	23234	20 *	TPJ_internal_0000129029	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/19/2018
1101715983	34345	20 *	Microsoft Corporation - OEM Internal	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/19/2018
1101715883	5435	20 *	TPJ_internal_0000129029	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/19/2018
1101715683	dlgdlg	3 *	Microsoft Corporation - OEM Internal	Microsoft Corporation - OEM Internal	Standard	ACTIVE	09/19/2018

1* - Order is pending | 1* - Order is fulfilled

25 < 2 3 >

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6. Click on MS Order Number value, user will be able to see the ordered licensable partner number and the quantity of that licensable partner number.

Order Details

ORGANIZATION MICROSOFT CORPORATION - OEM INTERNAL-000003001	MS ORDER NUMBER 1101714785	OEM PO NUMBER BLK_101
AGREEMENT	SHIP TO ORGANIZATION TPI_INTERNAL_0000129029	OEM PO DATE 09/21/2018

Order Line Items

MS ORDER LINE NUMBER	LICENSABLE PART NUMBER	LICENSABLE NAME	OEM PART NUMBER	QUANTITY	REQUESTED DELIVERY DATE
10	269-16965	OFFICE PRO 2016 OLC OAJ FTK AFOLB		5	2018-09-20T00:00:00
20	KW9-00004	WIN HOME 10 OLC OAJ FTK		5	2018-09-20T00:00:00

[RETURN TO SEARCH](#)

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3.2. FULFILLMENT

3.1.5 FULFILLMENT OVERVIEW

Description:

Fulfillment is the process of Microsoft sending keys to the OEM account through MDOS (Microsoft Digital Operation Services) after an order is placed.

The MDOS process is a much quicker way to fulfill keys than the previous legacy system, DIS (Digital Inventory System). Where DIS used to take up to 4 to 10 hours, MDOS takes between 15 minutes and 4 hours. The SLA is shorter for MDOS because it automatically checks for keys on a scheduled basis.

The Get Keys functionality in MDOS speeds up the process, as it bypasses the scheduled update and fulfills the keys to MDOS instantly, if the keys are available. This process usually takes 2-3 minutes, and will populate the keys in the dashboard once complete. (See the [Get Keys](#) section for more info).

Example:

ABC OEM has an active DOC Account registered within MDOS so they can begin ordering and receiving keys. After keys have been ordered in MDOS, the OEM user goes to the main

dashboard. The user selects Get Keys from the menu bar (action ribbon) to speed up the usual programmed process and instantly download the keys ordered into MDOS. The OEM's ordered keys are not available yet, so the user wait 10 minutes to let the system refresh and try again. The next time, the keys are ready, so they see a message confirming key request was successful and the keys populate in the dashboard once complete under the fulfilled status. (Note: Had the user not pressed Get Keys the process could take up to 4 hours with the timed schedule).

3.1.6 GET KEYS

Description:

Fulfillment is the process of Microsoft sending keys to the OEM account on MDOS (Microsoft Digital Operation Services) after an order is placed. Get Keys allows keys that have been ordered to be downloaded to MDOS instantly if the keys are available.

The Get Keys functionality in MDOS speeds up the usual programmed process, as it bypasses the scheduled update and fulfills the keys to MDOS instantly if they are available. This process usually takes 2-3 minutes and will populate the keys in the dashboard once complete.

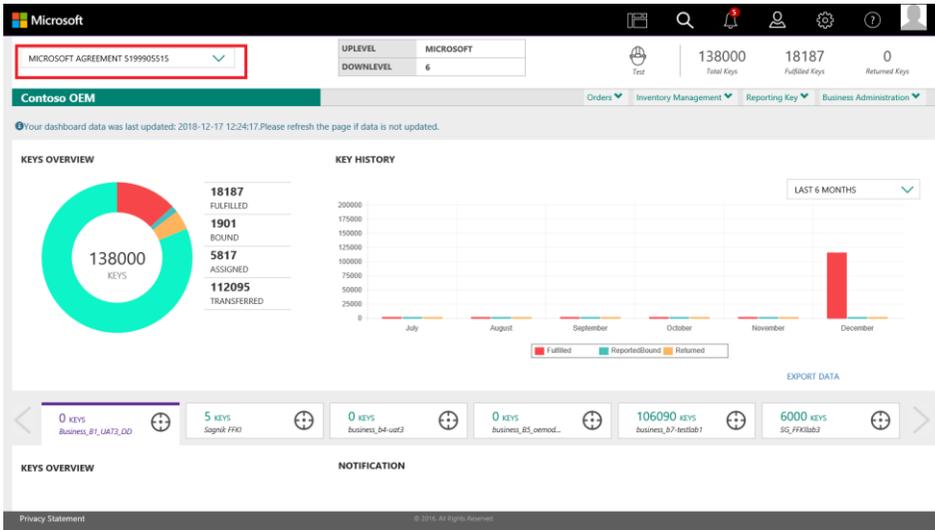
NOTE: If keys are not available for fulfillment, you may need to go through the steps again after 10 minutes to refresh system.

Tip Tool: Use Get Keys to instantly download the keys ordered in the MDOS if they are available.

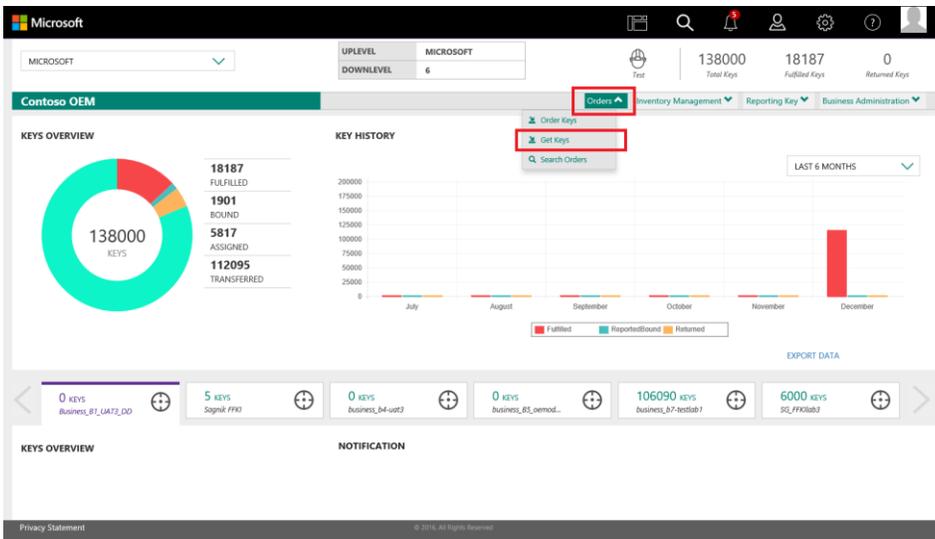
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the **Business dropdown** menu in the upper left corner.

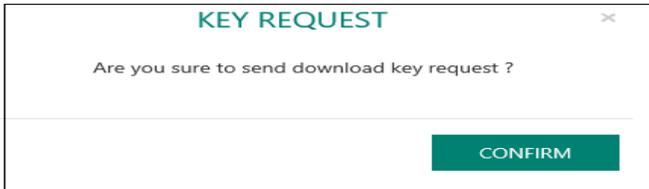
Microsoft Digital Operations Services User Manual



3. From the dashboard view, click on Get Keys (under Orders menu) from the action ribbon in the menu.



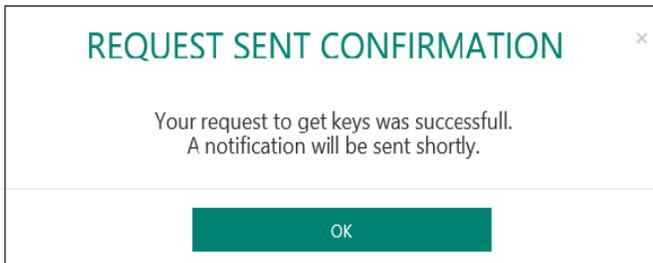
4. A confirmation window will pop up to confirm your Key Request. Click CONFIRM.



5. A message confirming key request was sent will pop up. Click OK.

6.a. If keys are available, they will show up in dashboard within 2-3 minutes. You may need to refresh your dashboard (press F5)

6.b. If keys are not yet available for fulfillment, you may need repeat steps again after 10 minutes.



SECTION 4. MANAGING INVENTORY

4.1. ASSIGN KEYS

Description:

The Assign keys functionality provides the ability for uplevel partners (ULP) to allocate keys to their downlevel partners (DLP) from current inventory. Keys may be assigned by quantity, specific key, search criteria, tag/label. Keys must be in FULFILLED status in order to assign. Once the keys are assigned, the status will change from FULFILLED to ASSIGNED.

Example: In a centralized model, the uplevel partner (ULP), ABC OEM, has 1000 keys in fulfilled status in their current inventory. ABC OEM wants to assign a specific number of keys to their downlevel partner (DLP), Contoso FFKI for manufacturing. ABC OEM goes into their MDOS account and selects Assign Keys and selects the By Quantity tab. The OEM then allocates 500

keys to Contoso FFKI. The key status for the 500 keys would then be changed from fulfilled to assigned.

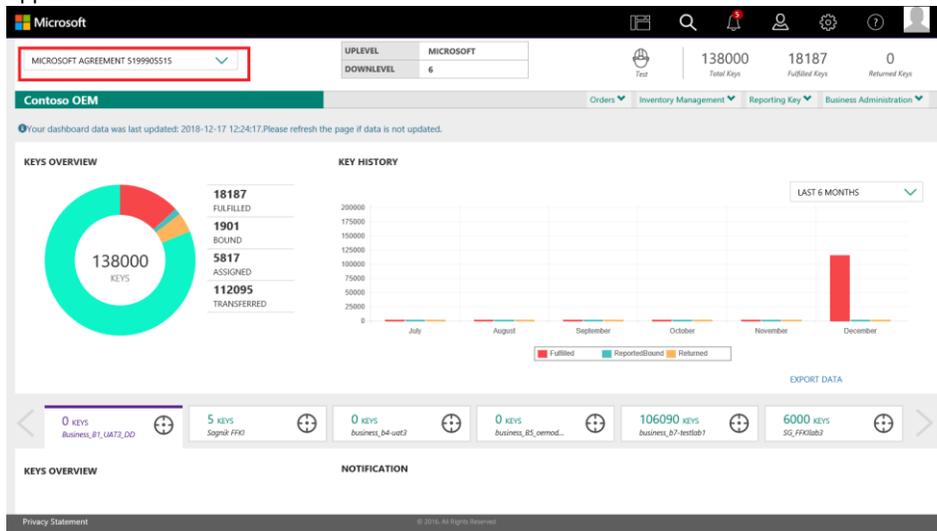
Tip Tool: Assign keys to downlevel partners (DLP) from inventory; by quantity, key, or search criteria.

4.1.1 ASSIGN KEYS BY QUANTITY

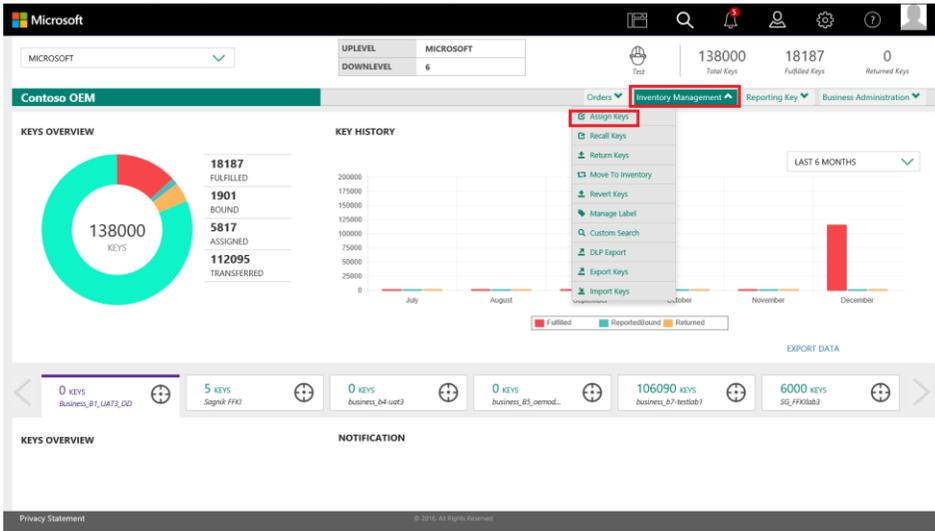
Tip Tool: Assign keys by quantity available in inventory to downlevel partners (DLP).

Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the **Business dropdown** menu in the upper left corner.

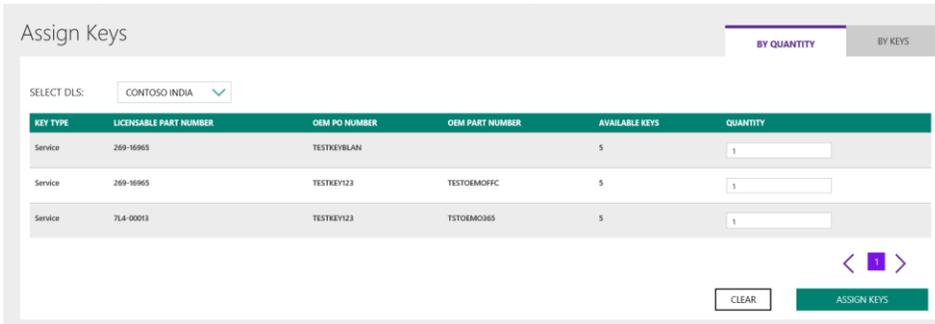


3. Click on Assign Keys under Inventory Management Menu.

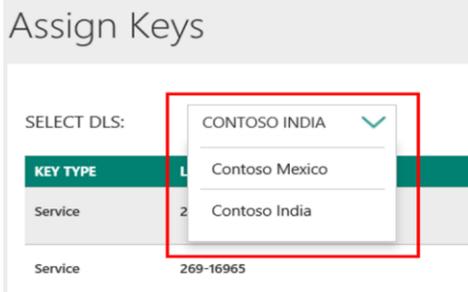


4. From the Assign Keys screen, click on the BY QUANTITY tab.

NOTE: Keys must be FULFILLED status in order to assign.

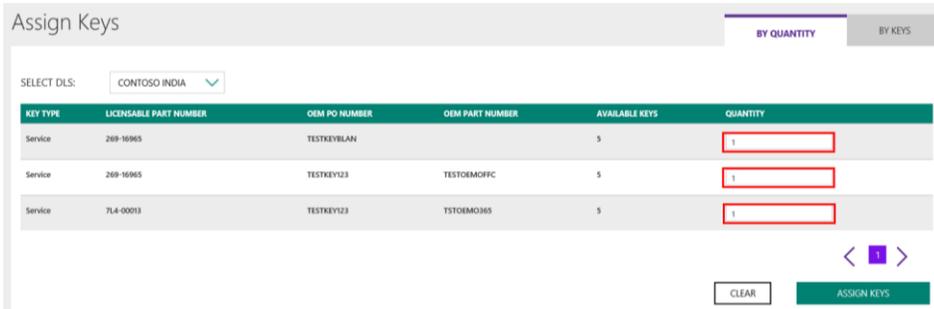


5. Select the DLP (Downlevel Partner) from the SELECT DLP dropdown menu.

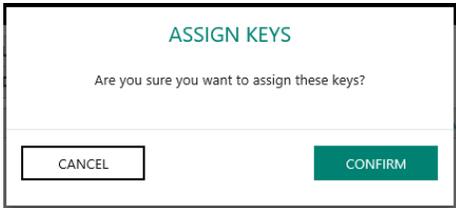


6. Enter the quantity of keys to be assigned.

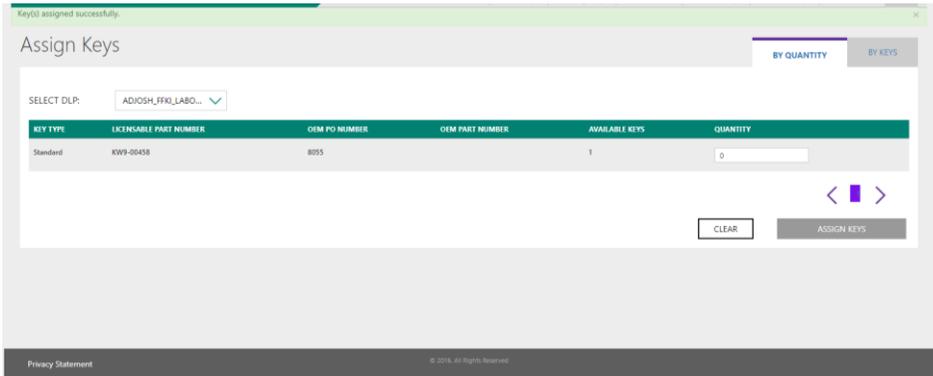
7. Click on the ASSIGN KEYS button.



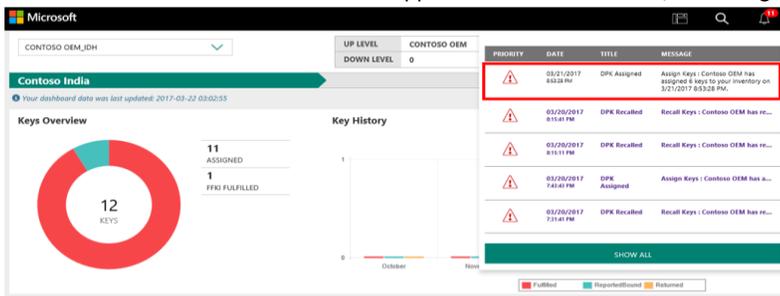
8. A confirmation window will pop up to confirm your selection. Click CONFIRM.



9. Once the keys are assigned, a “Key(s) assigned successfully” message will briefly pop up in the green highlighted banner.



10. A confirmation notification will also appear under the Alert icon, indicating recent changes.



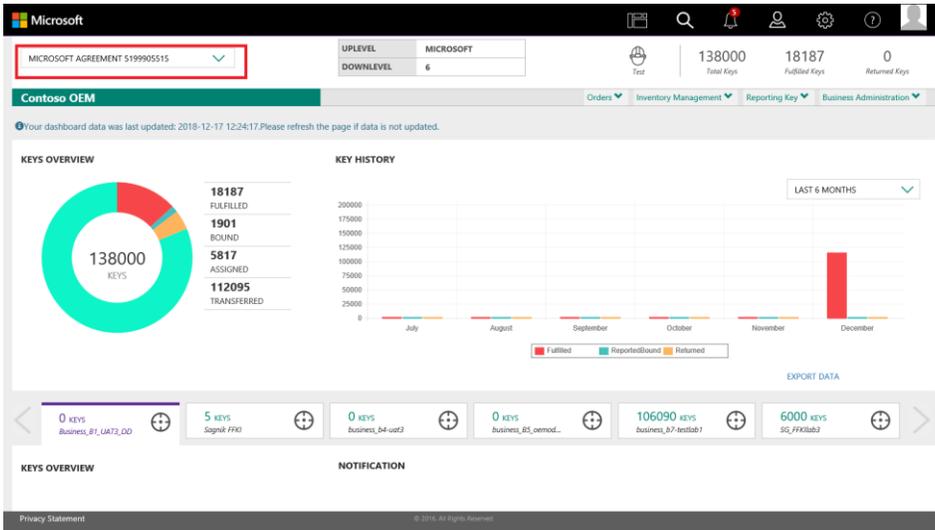
4.1.2 ASSIGN KEYS BY KEYS

Tip Tool: Assign keys by product key number or other criteria to downlevel partners (DLP) from inventory.

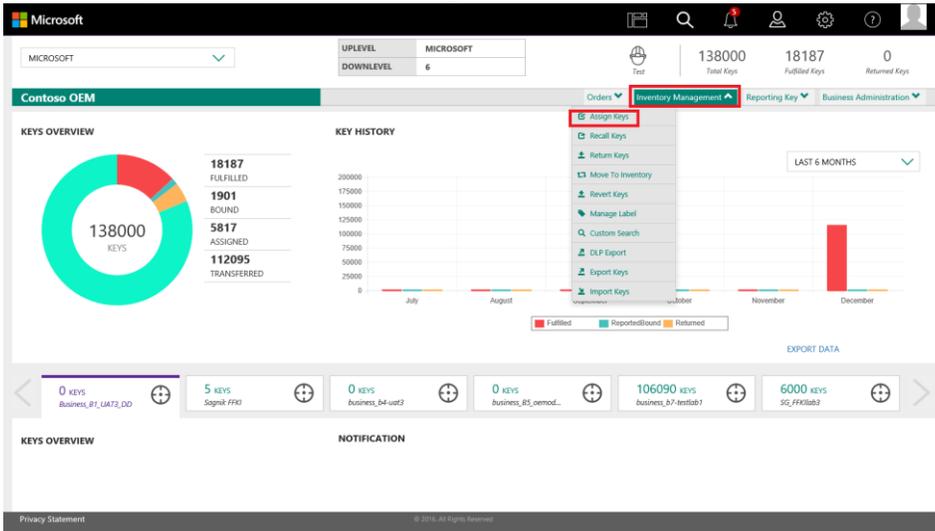
Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.

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3. Click on Assign Keys under Inventory Management Menu.



4. From the Assign Keys screen, click on the BY KEYS tab.

Contoso OEM Orders ▾ Inventory Management ▾ Reporting Key ▾ Business Administration ▾

Assign Keys

BY QUANTITY BY KEYS

MICROSOFT FULFILLED DATE FROM	MICROSOFT FULFILLED DATE TO	OEM PO NUMBER Eg: BulkKeys_20_PO_No	OEM PART NUMBER Eg: BulkKeys_20_Part_No	LICENSABLE PART NUMBER Eg: FOC_0000	PRODUCT KEY Eg: pk_123456	RESET
RMA DATE FROM	RMA DATE TO	KEY TYPE KEY TYPE ▾	MS PRODUCT KEY ID Eg: 80000009090909	MS PRODUCT KEY ID FROM Eg: 1234567890	MS PRODUCT KEY ID TO Eg: 1234567890	SEARCH

5. Select the criteria that you want to search by, if desired, then click on the **SEARCH** button to view all keys eligible for assigning.

Assign Keys BY QUANTITY BY KEYS

MICROSOFT FULFILLED DATE FROM	MICROSOFT FULFILLED DATE TO	OEM PO NUMBER Eg: BulkKeys_20_PO_No	OEM PART NUMBER Eg: BulkKeys_20_Part_No	LICENSABLE PART NUMBER Eg: FOC_0000	PRODUCT KEY Eg: pk_123456	RESET
RMA DATE FROM	RMA DATE TO	KEY TYPE KEY TYPE ▾	MS PRODUCT KEY ID Eg: 80000009090909	MS PRODUCT KEY ID FROM Eg: 1234567890	MS PRODUCT KEY ID TO Eg: 1234567890	SEARCH

SELECT DLP: MIDOFFUSER_OEMOEM ▾

	MS PRODUCT KEY ID	PRODUCT KEY	KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER
<input type="checkbox"/>	80000000171586	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	269-16952		CFV9SDF8
<input type="checkbox"/>	297530195691	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	269-16965		TUFUT
<input type="checkbox"/>	297530195692	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	269-16965		TUFUT
<input type="checkbox"/>	297530195693	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	269-16965		TUFUT
<input type="checkbox"/>	80000000149094	XXXXX-XXXXX-XXXXX-XXXXX-BC629	Standard	K09-00001		Q2AQ
<input type="checkbox"/>	2975277901169	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	269-16951		CFV9SDF8
<input type="checkbox"/>	3314010750747	XXXXX-XXXXX-XXXXX-XXXXX-14663	Standard	K07-00004		1345435
<input type="checkbox"/>	194400218782	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	929-00009		STD

6. Select the DLP (Downlevel Partner) from the SELECT DLP dropdown menu.

SELECT DLP: MDOSFFKIUSER ▼

<input type="checkbox"/>	MS PRODU	
<input type="checkbox"/>	8000000001	ffki_112
<input type="checkbox"/>	2975301195	FFKI11
<input type="checkbox"/>	2975301195	cloudoalab17 idh - UAT3
<input type="checkbox"/>	2975301195	Business_B1_UAT3_DD
<input type="checkbox"/>	2975301195	business_b3
<input type="checkbox"/>	800000000149094	XXXXX-XXXXX-XXXXX-XXXXX-8C629
<input type="checkbox"/>	2975277001169	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX
<input type="checkbox"/>	3314010750747	XXXXX-XXXXX-XXXXX-XXXXX-Y4G63

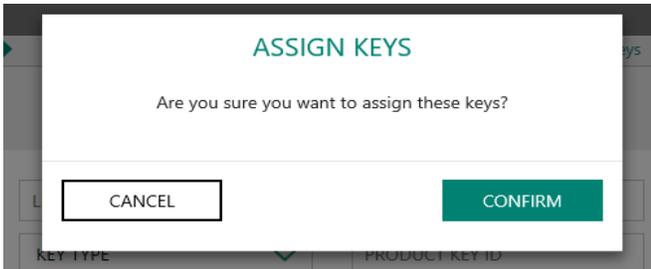
7. Check the box(es) to select the KEY IDs that you would like to assign.

8. Click on the ASSIGN KEYS button.

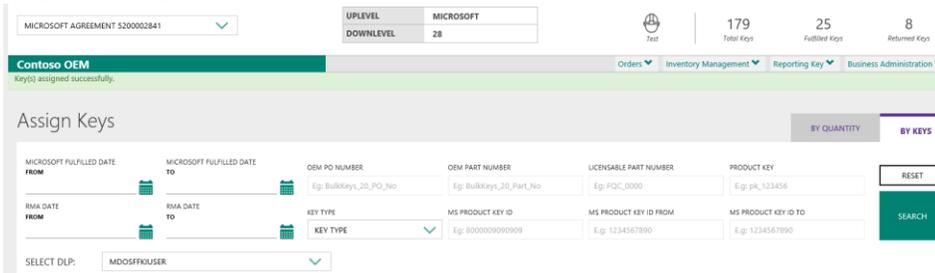
<input type="checkbox"/>	194002866614	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	929-00010	DSZ
<input type="checkbox"/>	194002866615	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	929-00010	DSZ
<input checked="" type="checkbox"/>	194002866616	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	929-00010	DSZ
<input checked="" type="checkbox"/>	194002866617	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	929-00010	DSZ
<input type="checkbox"/>	194002866618	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	929-00010	DSZ
<input type="checkbox"/>	2975250993409	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	TSD-02652	DSZ
<input type="checkbox"/>	2975250993410	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	TSD-02652	DSZ
<input type="checkbox"/>	2975250993411	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Service	TSD-02652	DSZ

25 ▼ < 1 2 >

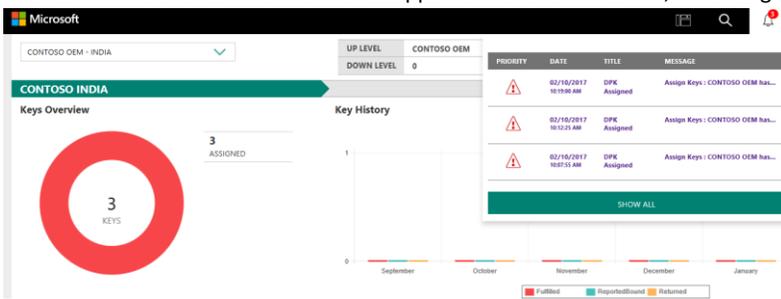
9. A confirmation window will pop up to confirm your selection. Click CONFIRM.



10. Once the keys are assigned, a “Key(s) assigned successfully” message will briefly pop up in the green highlighted banner.



11. A confirmation notification will also appear under the Alert icon, indicating recent changes.

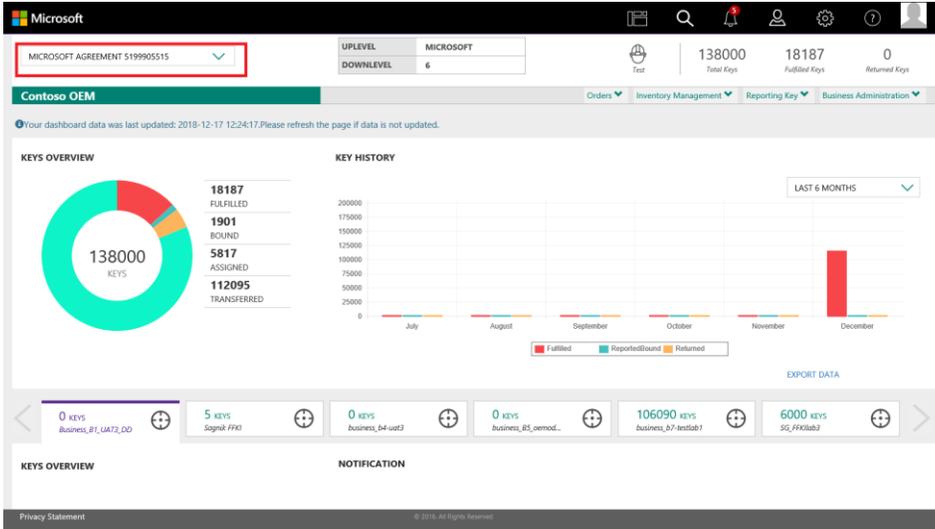


4.1.3 ASSIGN KEYS BY SEARCH

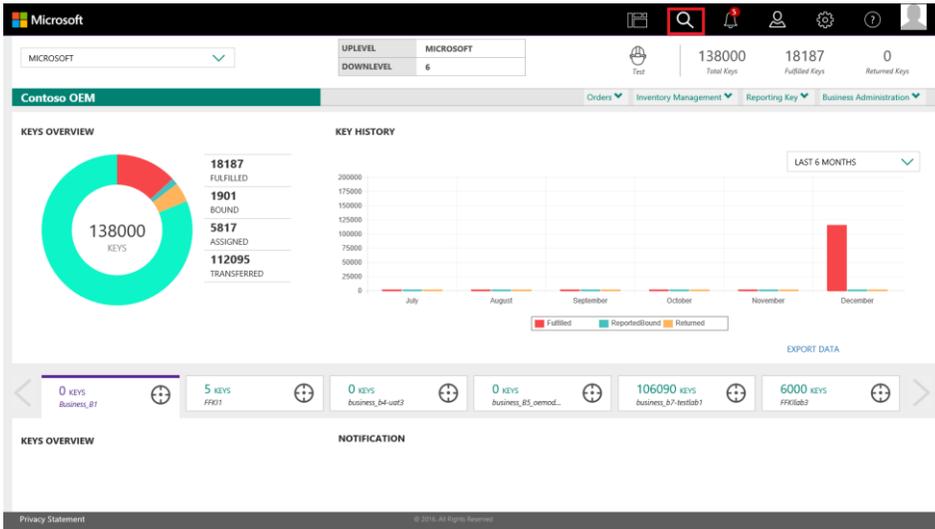
Tip Tool: Assign keys using search functionality to downlevel partners (DLP) from inventory.

Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the **Business dropdown** menu in the upper left corner.



3. Click on the search icon in the top navigation bar.



4. Select the criteria, if desired, then click on the **SEARCH** button to view all keys eligible for assigning.

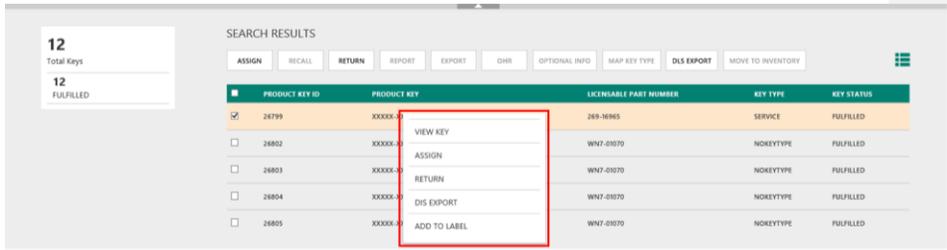
NOTE: Keys must be FULFILLED status to assign.

5. Results will display all the keys based on the search criteria or will default to show all keys if no parameters are selected.

MS PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/> 3258505987406	XXXXX-XXXXX-XXXXX-XXXXX-898VD	KW9-0004	STANDARD	FULFILLED
<input type="checkbox"/> 3258505987413	XXXXX-XXXXX-XXXXX-XXXXX-W4393	KW9-0004	STANDARD	FULFILLED
<input type="checkbox"/> 3258505987414	XXXXX-XXXXX-XXXXX-XXXXX-H6DDQ	KW9-0004	STANDARD	FULFILLED
<input type="checkbox"/> 3258505987415	XXXXX-XXXXX-XXXXX-XXXXX-6CQDQ	KW9-0004	STANDARD	FULFILLED
<input type="checkbox"/> 3258505989203	XXXXX-XXXXX-XXXXX-XXXXX-WFG3Q	KW9-0004	STANDARD	FULFILLED

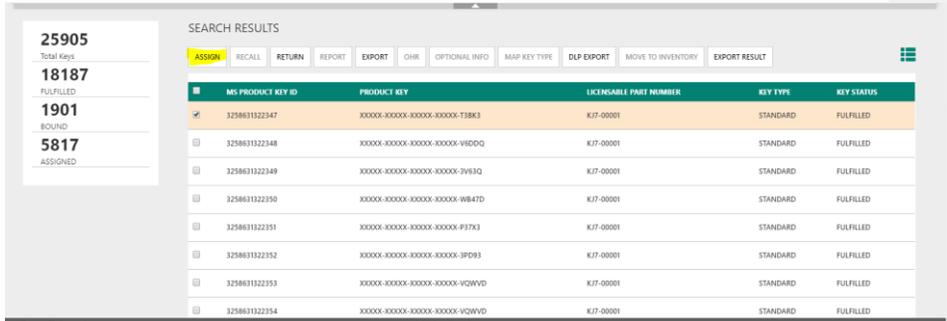
6. There are two ways to select a key for assignment from search results table:
 Option 1) Check the box(es) to select the KEY IDs that you would like to assign. Then hover over and right click to display menu and click on the option "ASSIGN".

NOTE: Keys must be in FULFILLED status to assign.

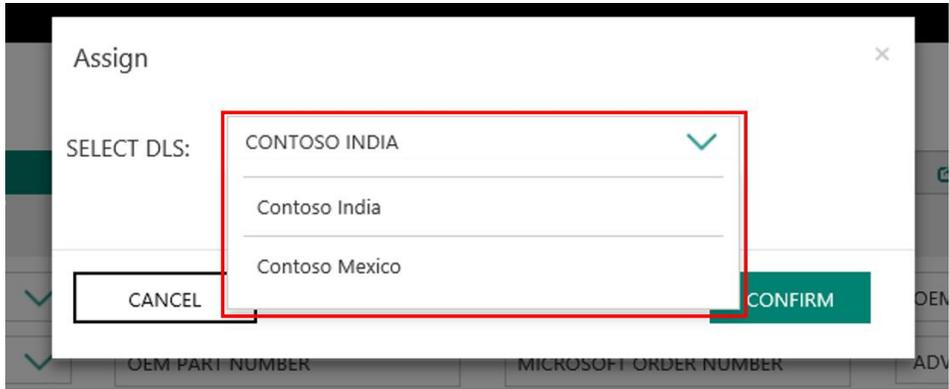


Option 2) Check the box(es) to select KEY IDs that you would like to assign. Then click on the ASSIGN button above your selection.

NOTE: Keys must be in FULFILLED status to assign.



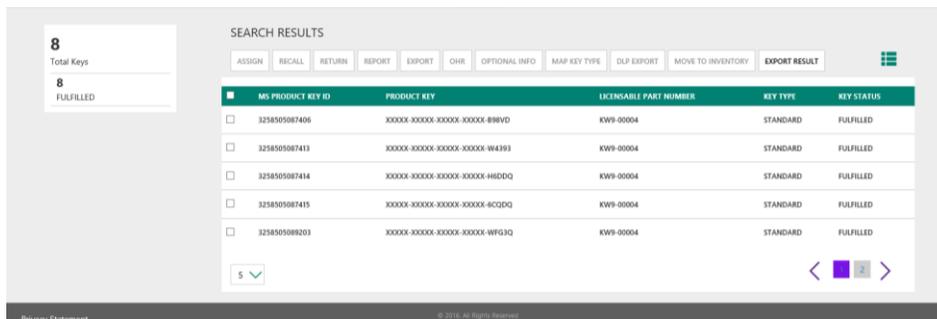
7. The Assign popup box will open. Select the DLP (Downlevel Partner) from the SELECT DLP dropdown menu, then click CONFIRM.



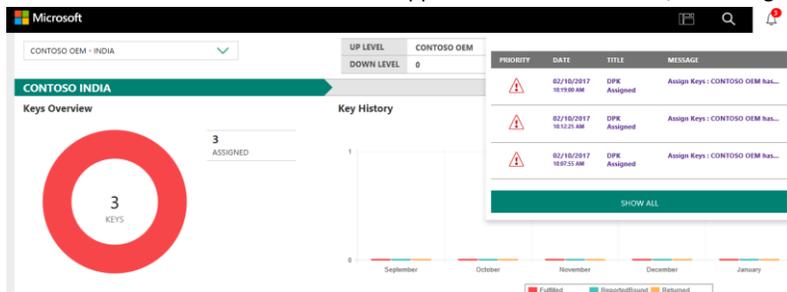
8. Once the keys are assigned, a “Key(s) assigned successfully” message will briefly pop up in the green highlighted banner.

9. Once the keys are assigned and ASSIGNED is selected under the KEY STATUS drop down menu, you can view assigned keys in the search table. The status will also be reflected with ASSIGNED in the status box of the dashboard.

NOTE: Number of total keys and fulfilled keys will also be reduced in the key count view and dashboard view.



10. A confirmation notification will also appear under the Alert icon, indicating recent changes.



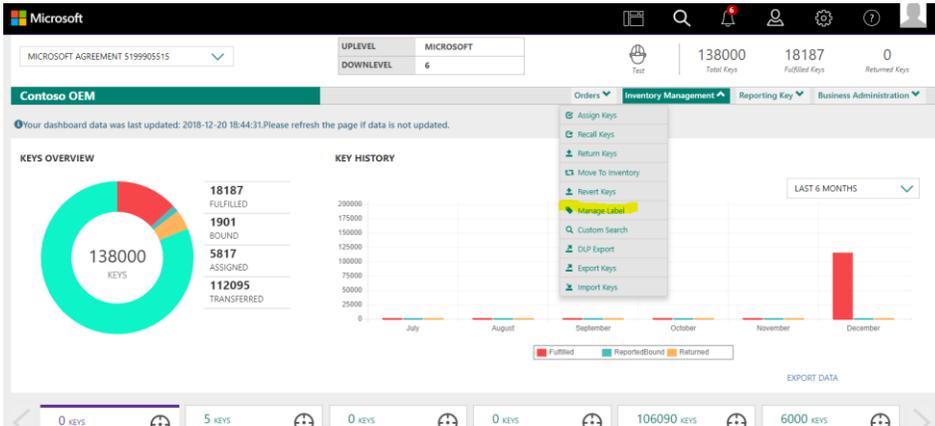
4.1.4 ASSIGN KEYS BY TAG

Tip Tool: Assign keys by tag (label) to downlevel partners (DLP) from inventory.

Step-by-step:

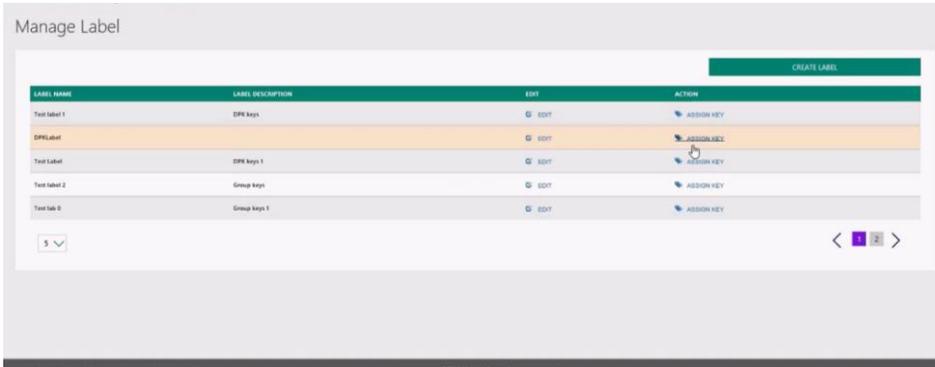
1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

2. Select the Manage Label option under Inventory Management menu.

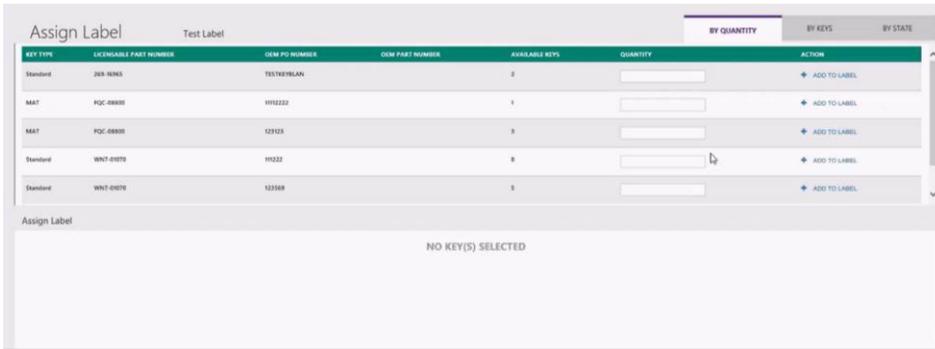


3. Choose the label in which you want to assign keys or create a new label by clicking on the CREATE LABEL button.

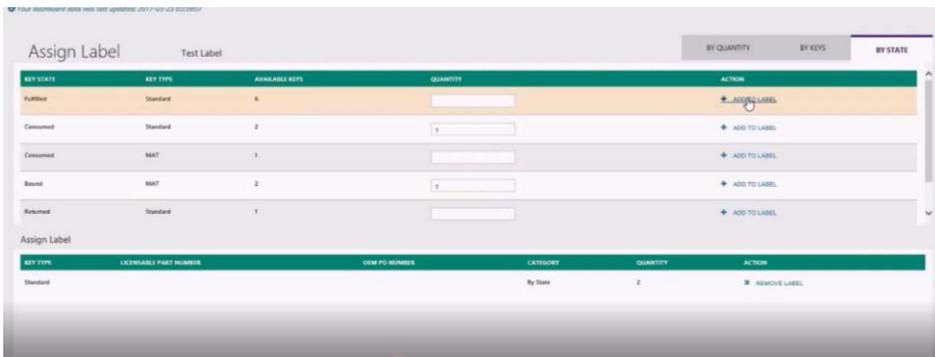
NOTE: Keys must be FULFILLED status to assign.



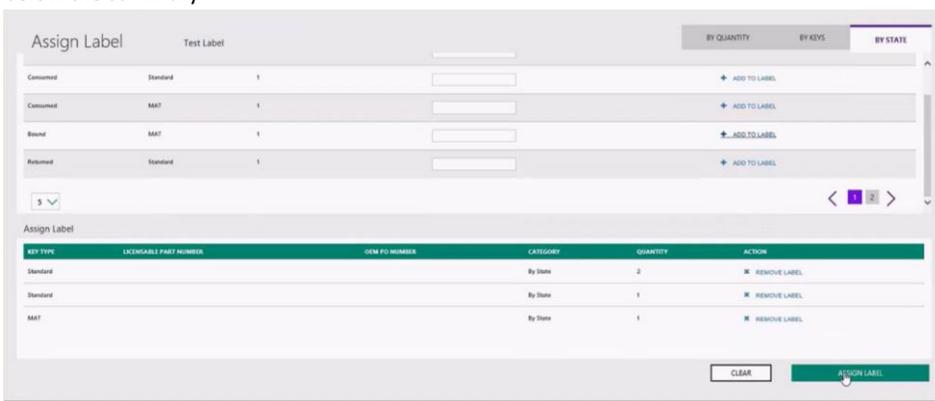
5. After selecting the label, a list of keys that can be assigned to that label will be displayed.



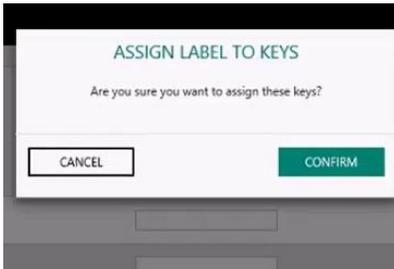
6. Enter the quantity of keys which needs to be assigned and click the ADD TO LABEL link button.



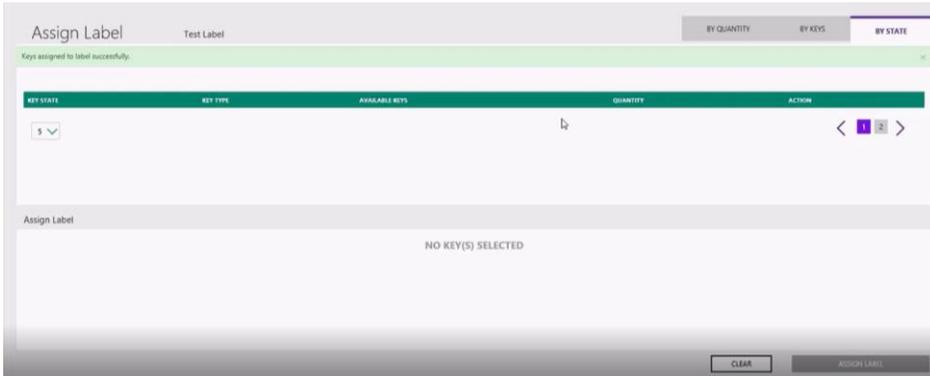
7. After adding the quantity of keys to the label for each line, click on the ASSIGN LABEL button below the summary.



8. A confirmation window will pop up to confirm your selection. Click CONFIRM.

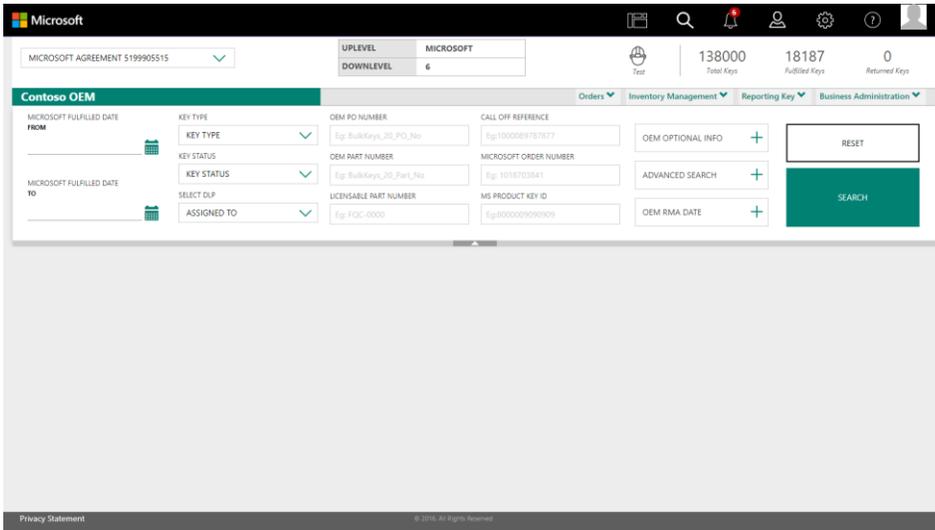


9. Once the keys are assigned, a “Keys assigned to label successfully” message will briefly pop up in the green highlighted banner.



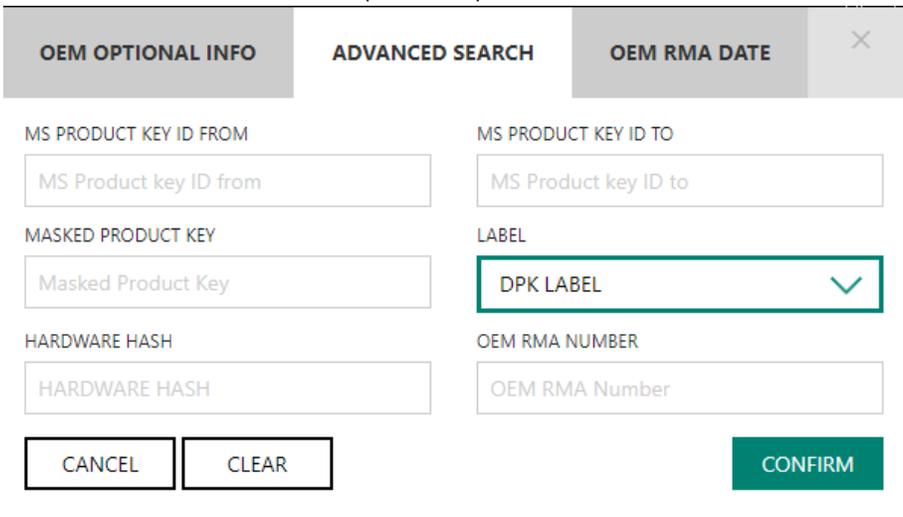
10. To search the assigned keys in a label. Click on the SEARCH button from the dashboard and then click on Advanced Search.

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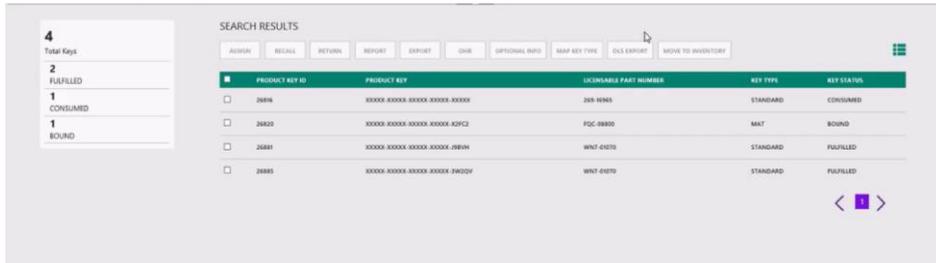
11. A pop up window will display. Select the DPK LABEL pulldown menu.

12. Select the desired label from the pulldown options.



13. Click the CONFIRM button.

14. All the keys assigned to that label will be displayed in the SEARCH RESULTS window.



4.2. RECALL KEYS

Description:

The recall keys functionality allows IDH/TPI users to recall the keys that have not been allocated by downlevel partners. Uplevel partners can recall keys from downstream partners in one simple click where the process was more complicated and required more steps in the past. Keys must be ASSIGNED status in order to recall. Once the keys are recalled, the status will automatically change to FULFILLED and then can be assigned to a different DLP.

Example: Contoso IDH wants to recall the keys that have not been used by their downlevel partner, Contoso FFKI, so the keys can be allocated to another partner. Contoso IDH sees that there are 100 keys in ASSIGNED status. They click on Recall Keys from the action ribbon in the menu, then click on the BY QUANTITY tab in the Recall Keys screen. Contoso IDH selects Contoso FFKI as the DLP (Downlevel Partner) from the SELECT DLP dropdown menu, enters "100" as the quantity of keys to be recalled, and clicks on RECALL KEYS. From the main dashboard, Contoso IDH now sees that the key status has changed to recalled for those keys.

Tip Tool: Allows OEM/IDH/TPI users to recall unused keys from downlevel partners.

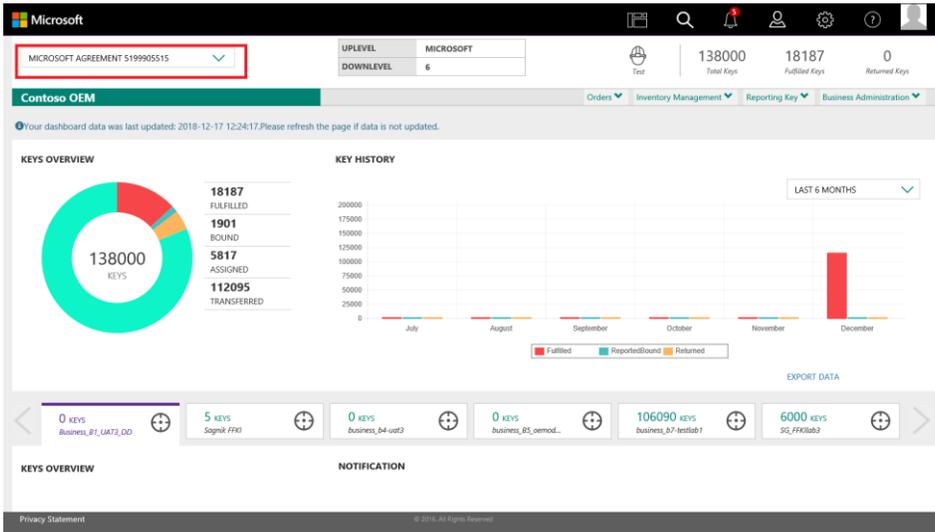
4.2.1 RECALL KEYS BY QUANTITY

Tip Tool: Recall keys that have not been allocated by downlevel partner by quantity.

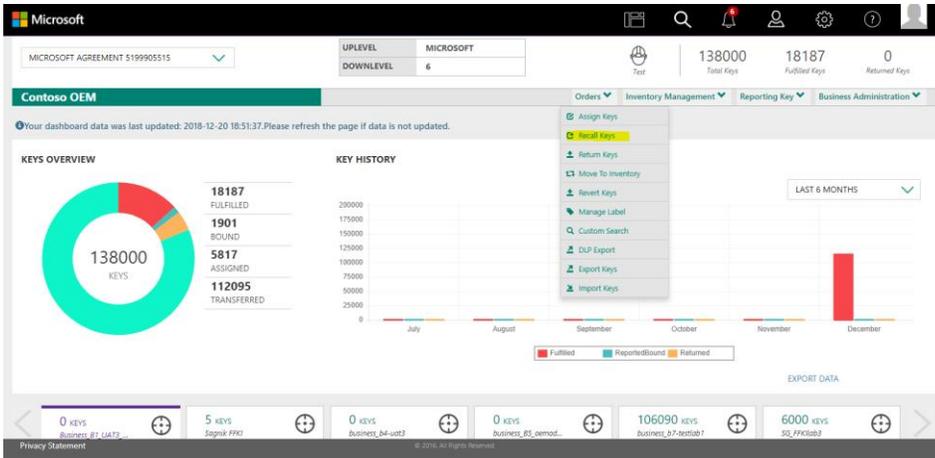
Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

2. From the dashboard view, select the business from the **Business dropdown** menu in the upper left corner.

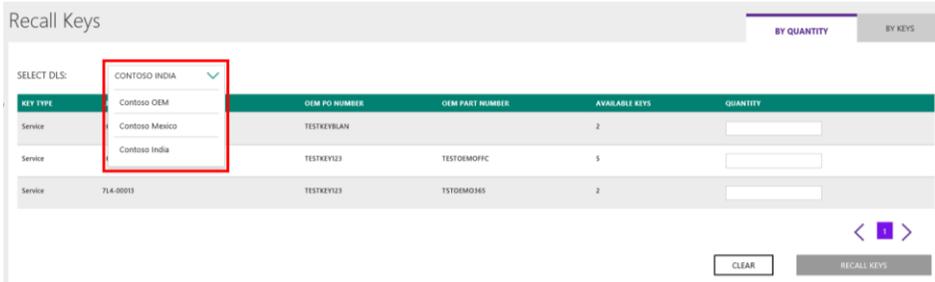


3. Click on Recall Keys from the action ribbon in the menu.



4. From the Recall Keys screen, click on the BY QUANTITY tab.

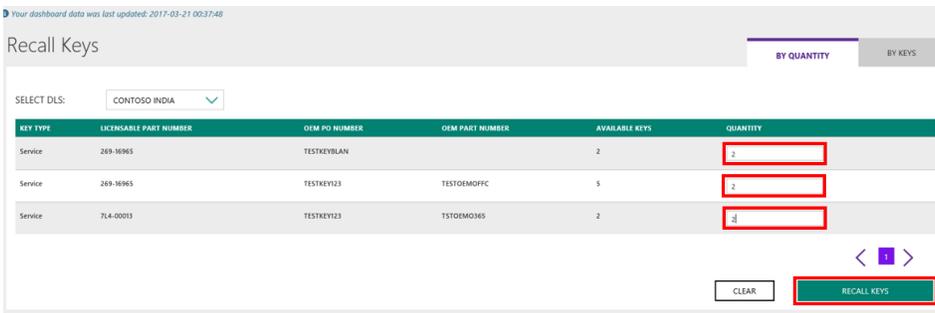
5. Select the DLP (Downlevel Partner) from the SELECT DLP dropdown menu.



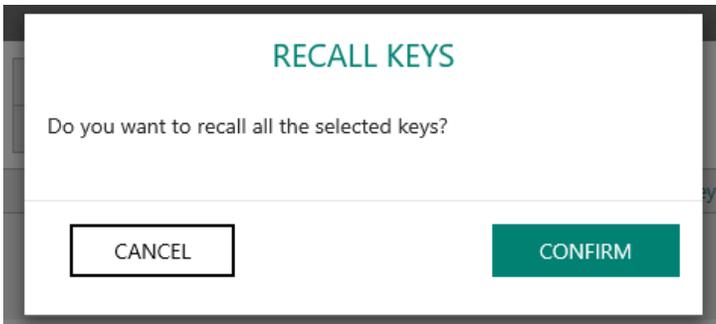
6. Enter the quantity of keys to be recalled.

NOTE: Keys must be ASSIGNED status in order to recall.

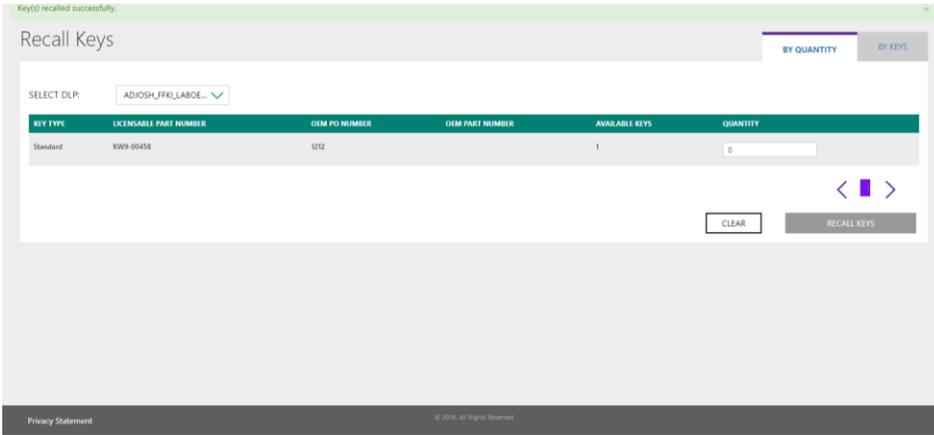
7. Click on the RECALL KEYS button.



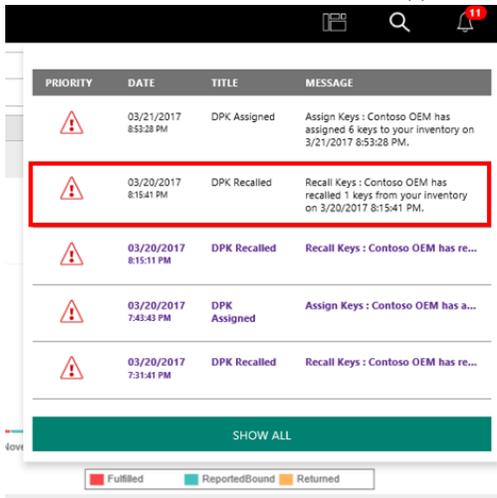
8. A confirmation window will pop up to confirm your selection. Click CONFIRM.



9. Once the keys are recalled, a "Key(s) recalled successfully" message will briefly pop up in the green highlighted banner.



11. A confirmation notification will also appear under the Alert icon, indicating recent changes.



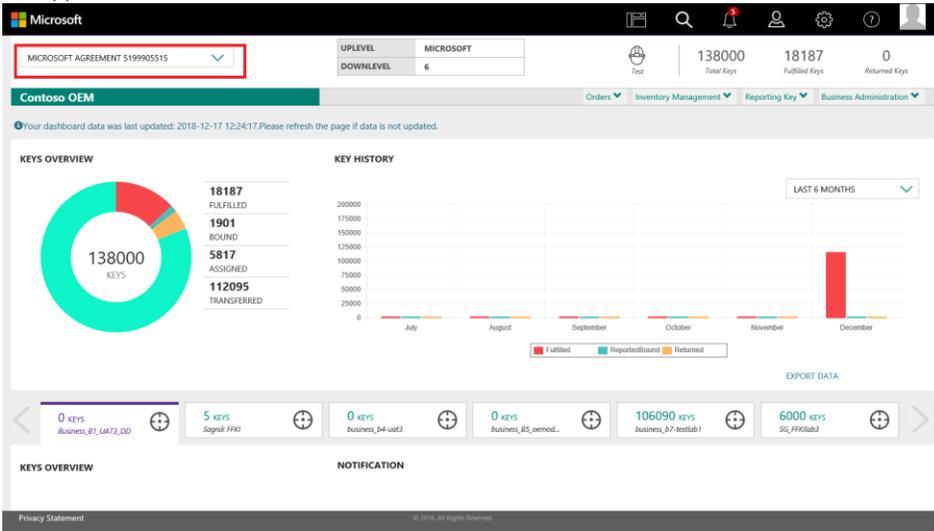
4.2.2 RECALL KEYS BY KEYS

Tip Tool: Recall keys that have not been allocated by downlevel partner by product key number.

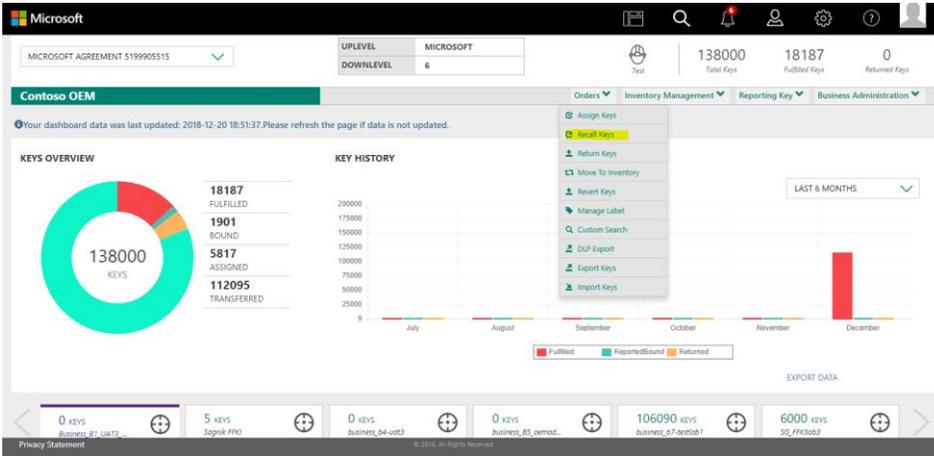
Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

- From the dashboard screen, select the business from the **Business dropdown** menu in upper left corner.



- Click on Recall keys from the menu.



4. From the Recall Keys screen, click on the BY KEYS tab.

The screenshot shows the 'Recall Keys' interface with the 'BY KEYS' tab active. The form includes the following fields:

- MICROSOFT FULFILLED DATE FROM: [Empty]
- MICROSOFT FULFILLED DATE TO: [Empty]
- OEM PO NUMBER: [Eg: BulkKeys_20_PO_No]
- OEM PART NUMBER: [Eg: BulkKeys_20_Part_No]
- LICENSABLE PART NUMBER: [Eg: FQC_0000]
- KEY TYPE: [KEY TYPE (dropdown)]
- MS PRODUCT KEY ID FROM: [Empty]
- MS PRODUCT KEY ID TO: [Eg: 80000009090909]
- PRODUCT KEY: [Eg: 190870]
- MS PRODUCT KEY ID: [Eg: 80000009090909]
- RMA DATE FROM: [Empty]
- RMA DATE TO: [Empty]
- SELECT DLS: [BUSINESS_B1_UAT3_DD (dropdown)]
- Buttons: RESET, SEARCH

5. Enter search criteria, if desired, and click on the SEARCH button.

NOTE: Keys must be in ASSIGNED status to recall.

This screenshot is identical to the previous one, but a red rectangular box highlights the search criteria input fields, including the date ranges, OEM numbers, part numbers, key types, and product keys.

6. All keys eligible for recall will display in the table.

	MS PRODUCT KEY ID	PRODUCT KEY	KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	SITE NAME
<input type="checkbox"/>	325850589204	XXXXXX-XXXXXX-XXXXXX-PRCHD	Standard	KW9-00004		10001	MDS LAB3
<input type="checkbox"/>	297530037458	XXXXXX-XXXXXX-XXXXXX-XXXXXX	Service	289-10965		10001	MDS LAB3

Navigation: < [Active] >

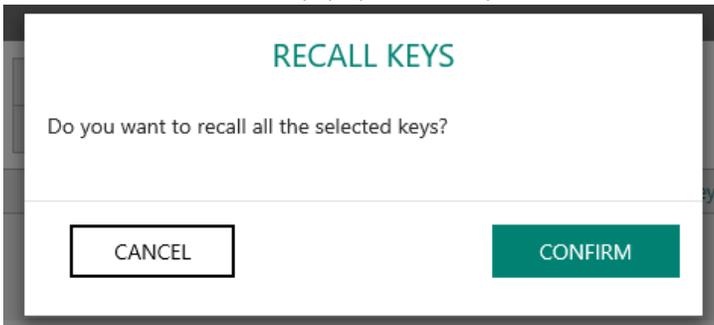
Buttons: CLEAR, RECALL KEYS

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7. Check the box (es) to select the KEY IDs you would like to recall, then click the RECALL KEYS button.

MS PRODUCT KEY ID	PRODUCT KEY	KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	SITE NAME
<input checked="" type="checkbox"/> 329830089204	XXXXXX-XXXXXX-XXXXXX-XXXXXX-PRCHD	Standard	K3W9-00004	TESTING KEY	10001	MDOS LAB3
<input type="checkbox"/> 297530037458	XXXXXX-XXXXXX-XXXXXX-XXXXXX-XXXXXX	Service	289-16965	TESTING KEY	10001	MDOS LAB3

8. A confirmation window will pop up to confirm your selection. Click CONFIRM.



9. Once the keys are recalled, a “Key(s) recalled successfully” message will briefly pop up in the green highlighted banner.

Key(s) recalled successfully.

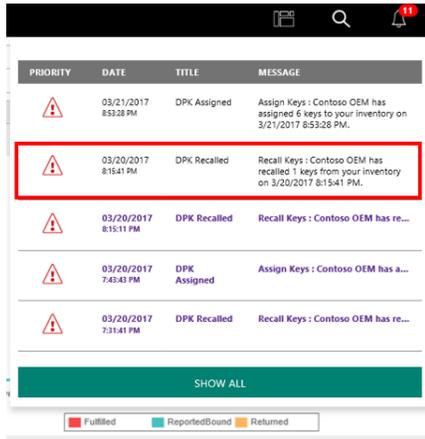
Recall Keys

BY QUANTITY | BY KEYS

MICROSOFT FULFILLED DATE FROM	OEM PO NUMBER	LICENSABLE PART NUMBER	PRODUCT KEY	RMA DATE FROM	<input type="button" value="RESET"/>
MICROSOFT FULFILLED DATE TO	OEM PART NUMBER	KEY TYPE	MS PRODUCT KEY ID	RMA DATE TO	<input type="button" value="SEARCH"/>
	MS PRODUCT KEY ID FROM	MS PRODUCT KEY ID TO	ADIOSH_FFRL_LABOEM1_D...		

NO DATA FOUND.

10. A confirmation notification will also appear under the Alert icon, indicating recent changes.



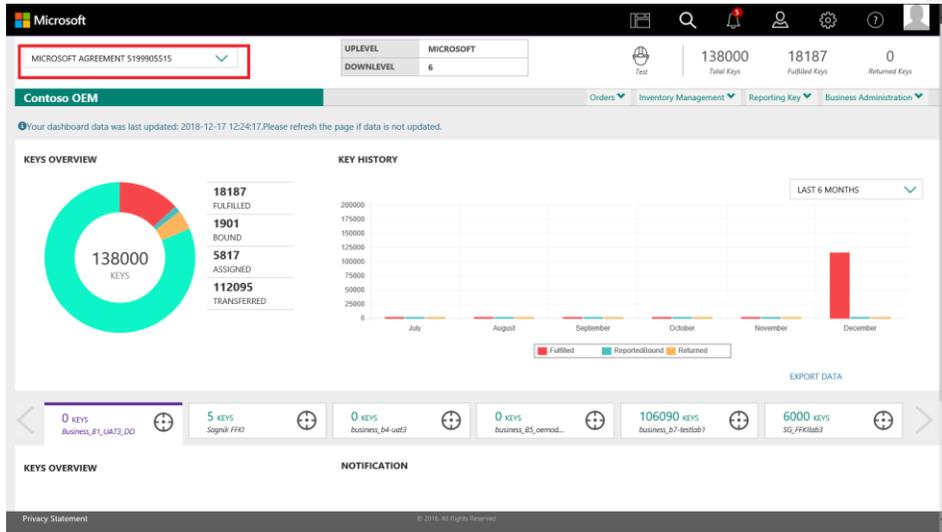
4.2.3 RECALL KEYS BY SEARCH

Tip Tool: Recall keys that have not been allocated by downlevel partner using search functionality.

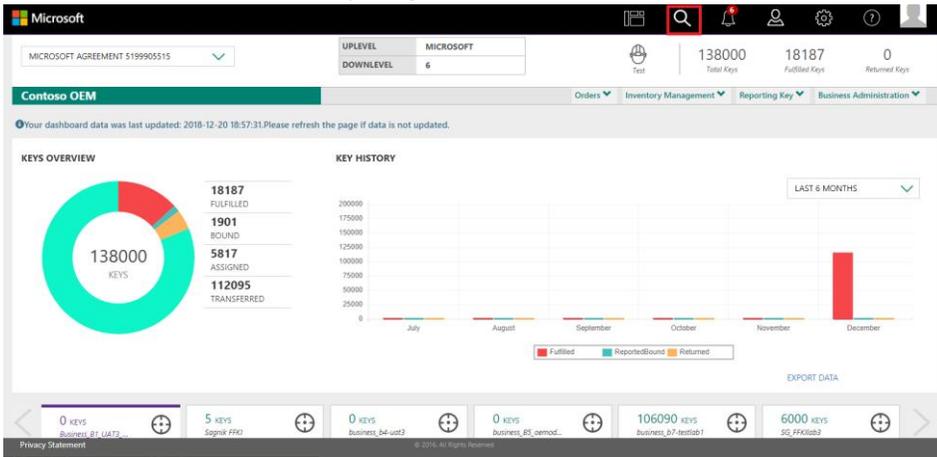
Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard screen, select the business from the **Business dropdown** menu in upper left corner.

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3. Click on the Search icon in the top navigation bar.



4. From the search screen, enter search criteria, if desired, and click on the SEARCH button.

NOTE: Keys must be in ASSIGNED status to recall.

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MICROSOFT AGREEMENT 5199905515

UPLEVEL MICROSOFT
DOWNLEVEL 6

138000 Total Keys | 18187 Fulfilled Keys | 0 Returned Keys

Contoso OEM

MICROSOFT FULFILLED DATE FROM: []

MICROSOFT FULFILLED DATE TO: []

KEY TYPE: []

KEY STATUS: []

SELECT DLP: []

- FFKI
- business_b4-uat3
- business_b5_oemadm_DD
- business_b7-testlab1
- SG_FFKIlab3

OEM PO NUMBER: []
CALL OFF REFERENCE: []

OEM PART NUMBER: []
MICROSOFT ORDER NUMBER: []

LICENSEABLE PART NUMBER: []
MS PRODUCT KEY ID: []

OEM OPTIONAL INFO: []

ADVANCED SEARCH: []

OEM RMA DATE: []

RESET

SEARCH

5. Results will display all the keys based on the search criteria.

7 Total Keys
7 ASSIGNED

SEARCH RESULTS

ASSIGN | RECALL | RETURN | REPORT | EXPORT | OHR | OPTIONAL INFO | MAP KEY TYPE | DLS EXPORT | MOVE TO INVENTORY

PRODUCT KEY ID	PRODUCT KEY	LICENSEABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/> 26797	XXXXX-XXXXX-XXXXX-XXXXX	269-9695	SERVICE	ASSIGNED
<input type="checkbox"/> 26798	XXXXX-XXXXX-XXXXX-XXXXX	269-9695	SERVICE	ASSIGNED
<input type="checkbox"/> 26799	XXXXX-XXXXX-XXXXX-XXXXX	269-9695	SERVICE	ASSIGNED
<input type="checkbox"/> 26800	XXXXX-XXXXX-XXXXX-XXXXX	269-9695	SERVICE	ASSIGNED
<input type="checkbox"/> 26801	XXXXX-XXXXX-XXXXX-XXXXX	269-9695	SERVICE	ASSIGNED

6. Check the box(es) to select the KEY IDs that you would like to Recall. Then click on the RECALL button above your selection.

3 Total Keys
3 ASSIGNED

SEARCH RESULTS

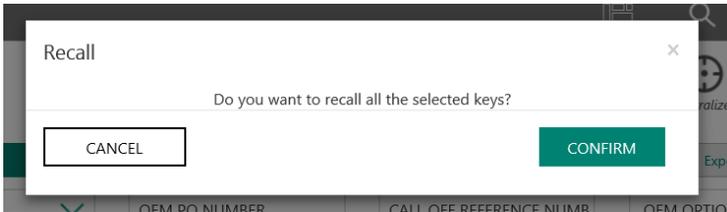
ASSIGN | RECALL | RETURN | REPORT | EXPORT | OHR | OPTIONAL INFO | MAP KEY TYPE | DLP EXPORT | MOVE TO INVENTORY | EXPORT RESULT

MS PRODUCT KEY ID	PRODUCT KEY	LICENSEABLE PART NUMBER	KEY TYPE	KEY STATUS
<input checked="" type="checkbox"/> 3258505987406	XXXXX-XXXXX-XXXXX-XXXXX-899VD	KW9-0004	STANDARD	ASSIGNED
<input type="checkbox"/> 3258505987413	XXXXX-XXXXX-XXXXX-XXXXX-W4393	KW9-0004	STANDARD	ASSIGNED
<input type="checkbox"/> 3258505987414	XXXXX-XXXXX-XXXXX-XXXXX-H6DDQ	KW9-0004	STANDARD	ASSIGNED

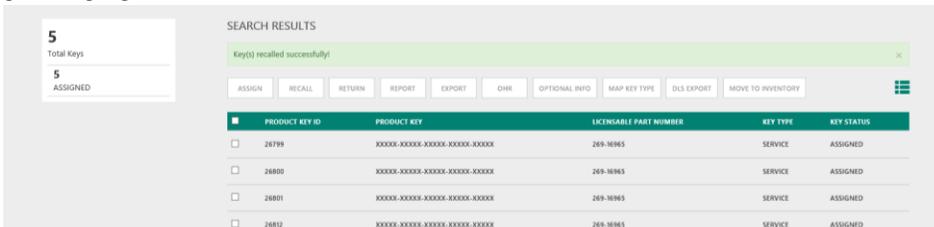
< [] >

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7. The Recall popup box will open. Click CONFIRM.



8. Once the keys are recalled, a “Key(s) Recalled successfully” message will briefly pop up in the green highlighted banner.



9. Once the keys are recalled, a confirmation notification will also appear under the Alert icon, indicating recent changes.

4.3. RETURN KEYS

Description:

Downlevel partners (OEM/IDH/TPI users) may be able to return keys to Microsoft due to different potential scenarios. In a centralized model, downlevel partners will notify uplevel partner (OEM) via MDOS, of which keys can be returned. The OEM can then return keys to Microsoft. In decentralized models, keys are returned directly to Microsoft by the downlevel partner (DLP) on behalf of their ULP.

Possible Return Scenarios

Return scenario	Credit approved	Terms
Stock Balancing (CBR not submitted)	Yes	10% limit & if returned within the same month as DPK fulfillment
Manufacturing Damage (CBR submitted)	Yes	365-day rule
Standard DPKs used for testing purposes	Yes	365-day rule
End user return	Yes	365-day rule

End of License / Agreement expiration	Yes	90-day rule & 365-day rule
Agreement termination	Yes	10-day rule
OA 3.0 replacement DPKs (MBR)	No	
OA 3.0 multiple activation test keys (TKY)	No	
Lost or stolen DPKs	No	

The returns process has been simplified. A return reason must be selected, but a reason code is not needed. The product key ID and integrated credit check are required. The OEM assembles product keys in batches to request credits for keys returned to Microsoft.

Reasons and rules for returns:

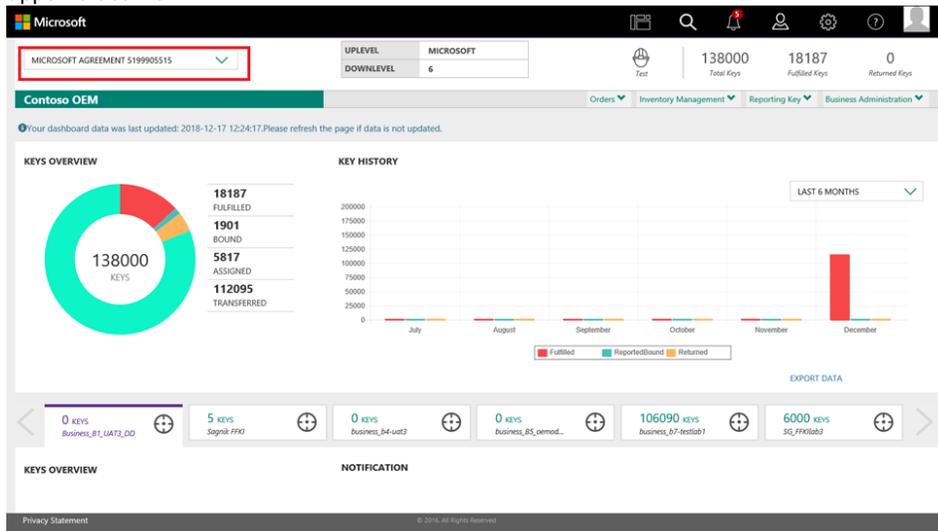
Returns Reason	Reason Code	Supported Return	CBR Required	Supplemental Documentation
No Documentation Required	ZOA	Agreement Termination Agreement Expiration Product End of Life Stock Balancing TKY MBR	No	No
End User Return	ZOB	End User Return	Yes	Yes
Manufacturing Damage	ZOC	Manufacturing Damage	Yes	Yes
Test Key	ZOD	Standard DPKs used for testing purposes	Yes	Yes
Lost or Stolen	ZOE	Lost or Stolen DPKs	n/a	Yes
Other	ZOF	Used only when explicitly instructed to do so by Microsoft	n/a	No
Store Product Return	zos	Used when returning Digital Attach products (DA) only.	PBR	No

The return reason codes will be visible in the MDOS Returns UI when a partner hovers over each return reason code.

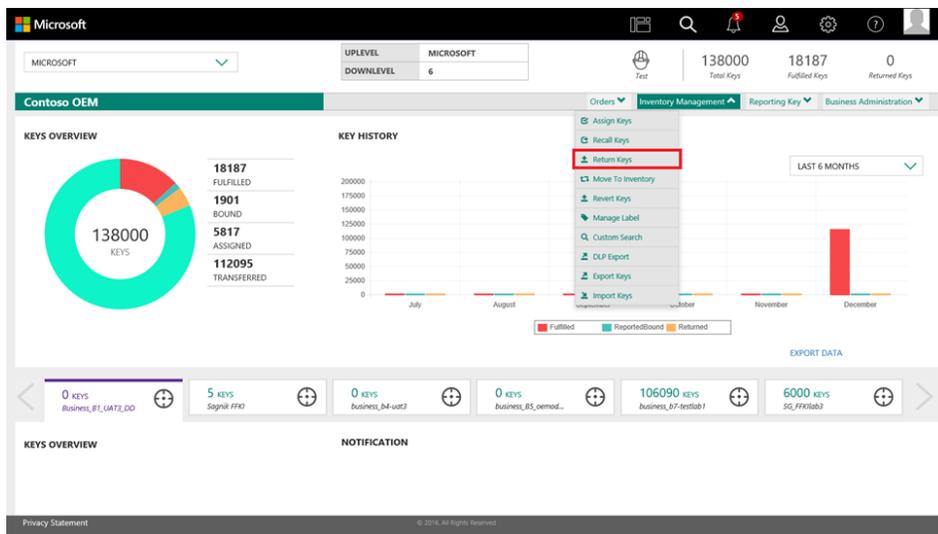
Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.



3. From the Inventory management menu, select Return Keys.



4. From the Return Keys page, you can see the detailed description of return reason when partner mouse hover on any return reason.

The screenshot shows the 'Return Keys' interface for Contoso OEM100. At the top, there are filters for 'MICROSOFT AGREEMENT 5000044785', 'UPLEVEL MICROSOFT', and 'DOWNLEVEL 20'. Summary statistics show 115261 Total Keys, 4746 Fulfilled Keys, and 11 Returned Keys. The main table lists keys with columns: KEY TYPE, LICENSABLE PART NUMBER, OEM PO NUMBER, OEM PART NUMBER, and AVAILABLE KEYS. A tooltip is displayed over the 'NO DOCUMENTATION REQUIRED' return type description, providing details: Return Code = ZOA, Supported key state = Fulfilled, and instructions on when to use this reason code.

KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	AVAILABLE KEYS
Service	269-16965	27MAR		1
Standard	KW9-00458	NEW BULK KEYS	NEW KEYS	4744
Standard	KW9-00458	17JAN01		1

Note
 **If "No" is selected, keys that will not receive credit will not be processed for return with the exception of "Lost/Stolen" or "Other" returns. "Lost/Stolen" and "Other" returns will be returned regardless of selection. Please ensure the return request is submitted correctly.

MDOS will also display a return disclaimer for 'keys that will not receive credit', to add clarity to the partner for keys that will not receive credit when returned, based on the reason code that has been selected for the keys being returned.

This screenshot is similar to the previous one but includes a 'QUANTITY' column in the table and a dropdown menu for 'RETURN TYPE DESCRIPTION' for each row. The dropdown menu is set to 'NO DOCUMENTATION REQUIRED'.

KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	AVAILABLE KEYS	QUANTITY	RETURN TYPE DESCRIPTION
Service	269-16965	27MAR		1		NO DOCUMENTATION REQUIRED
Standard	KW9-00458	NEW BULK KEYS	NEW KEYS	4744		NO DOCUMENTATION REQUIRED
Standard	KW9-00458	17JAN01		1		NO DOCUMENTATION REQUIRED

Note
 **If "No" is selected, keys that will not receive credit will not be processed for return with the exception of "Lost/Stolen" or "Other" returns. "Lost/Stolen" and "Other" returns will be returned regardless of selection. Please ensure the return request is submitted correctly.

Example: Contoso OEM has a decentralized business model. They order 300 keys from Microsoft in early October, but do not use 20 of the keys that were ordered. Since Contoso

OEM is able to return up to 10% of volume of keys invoiced volume from previous calendar month and fulfilled from 2 months prior, Contoso requests stock balancing from Microsoft at the end of October (the fulfilment month), and they request a return through MDOS in late October. They select Return Keys - By Keys from the Return Keys menu, and select the specific keys they want to return that are in fulfilled status. Contoso selects the return reason of "No Documentation Required" from the RETURN TYPE dropdown menu. A "Key(s) returned successfully" message pops up. Meanwhile, Microsoft reviews the OEM's request. There is no request for credit since this was a stock balancing situation. Contoso OEM sees the key status change to "Returned" in MDOS and via the Returns Acknowledgement email.

Tip Tool: Allows the return of keys to Microsoft. Credit eligibility depends on the age of key and the return reason.

4.3.1 RETURN KEYS BY QUANTITY

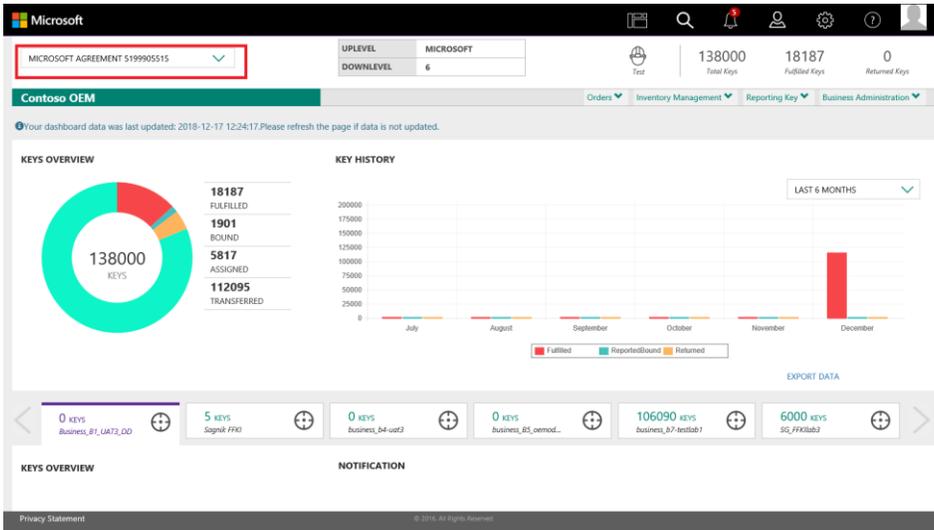
Tip Tool: Return unused keys to Microsoft or uplevel partner by quantity.

Step-by-step:

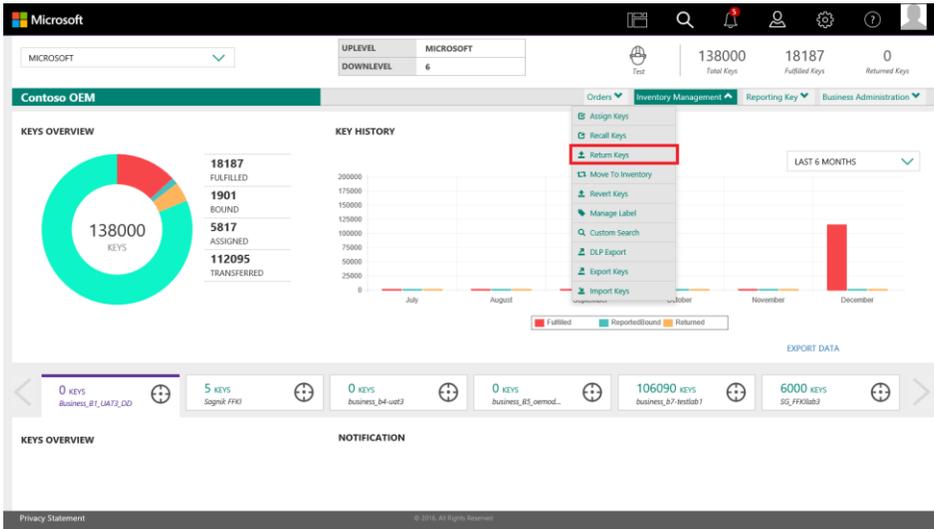
1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the **Business dropdown** menu in the upper left corner.

NOTE: In centralized model, TPI user will notify uplevel partner of which keys are eligible for return. In decentralized model, keys are returned to Microsoft.

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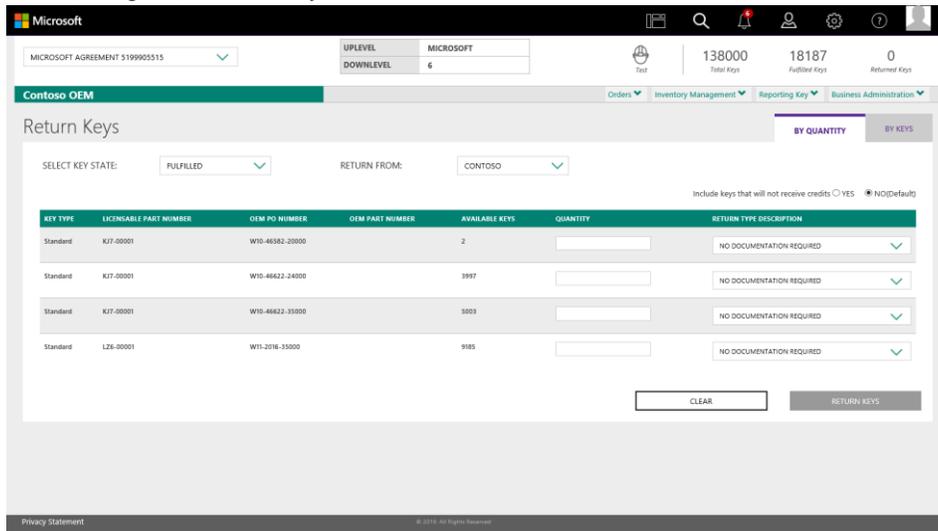
3. From the Inventory management menu, select Return Keys.



4. From the Return Keys screen, click on the BY QUANTITY tab.

5. Select the radio button for “Include keys that will not receive credits” if desired. Default will not include these.

NOTE: In order to return keys, they must be in Fulfilled, Bound, Activation Enabled, Activation Denied, Assigned, or Return Rejected status.



6. Enter the quantity of keys to be returned.

7. Select the return reason for each of the keys from the RETURN TYPE dropdown menu.

8. MDOS allows partners to return only store products alone without returning the keys. Partner has to select the return description as 'Return of Store Products Only' which will return only the store products from MDOS.

9. Click on the RETURN KEYS button.

Return Keys BY QUANTITY **BY KEYS**

SELECT KEY STATE: FULFILLED

Include keys that will not receive credits YES NO(Default)

KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	AVAILABLE KEYS	QUANTITY	RETURN TYPE DESCRIPTION
Service	269-16965	TESTKEYBLAN		4	<input type="text" value="1"/>	NO DOCUMENTATION REQUIRED
Service	269-16965	TESTKEYI23	TESTDEMOFFC	2	<input type="text"/>	NO DOCUMENTATION REQUIRED
Service	714-00013	TESTKEYI23	TSTDEMO345	4	<input type="text"/>	NO DOCUMENTATION REQUIRED

10. Partner can return any number of keys in MDOS, if the key count is more than 5000 keys, then MDOS will process the key return in batches from the backend and submit it to Microsoft in batches.

11. A confirmation window will pop up to confirm your selection. Click CONFRIM.

RETURN KEYS

Are you sure you want to return these keys?

12. Once the keys are returned, a “Key(s) returned successfully” message will briefly pop up in the green highlighted banner.

Return Keys BY QUANTITY **BY KEYS**

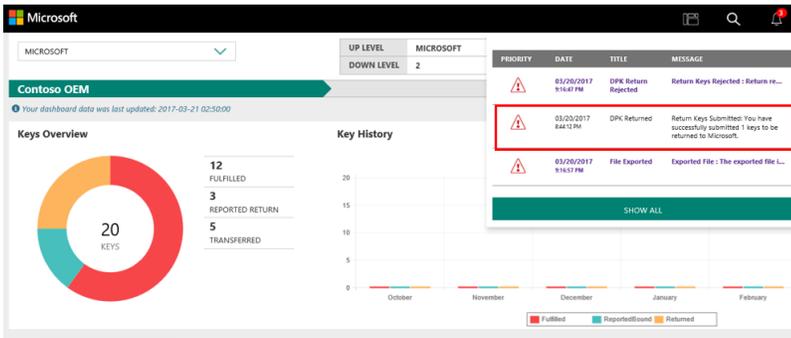
SELECT KEY STATE: FULFILLED

Key(s) returned successfully

Include keys that will not receive credits YES NO(Default)

KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	AVAILABLE KEYS	QUANTITY	RETURN TYPE DESCRIPTION
Service	269-16965	TESTKEYBLAN		3	<input type="text"/>	NO DOCUMENTATION REQUIRED
Service	269-16965	TESTKEYI23	TESTDEMOFFC	2	<input type="text"/>	NO DOCUMENTATION REQUIRED
Service	714-00013	TESTKEYI23	TSTDEMO345	3	<input type="text"/>	NO DOCUMENTATION REQUIRED

13. A confirmation notification will also appear under the Alert icon, indicating recent changes.



14. Partner can return any number of keys in MDOS, if the key count is more than 5000 keys, then MDOS will process the key return in batches from the backend and submit it to Microsoft in batches.

4.3.2 RETURN KEYS BY KEYS

Tip Tool: Return unused keys to Microsoft or uplevel partner by selected product key number.

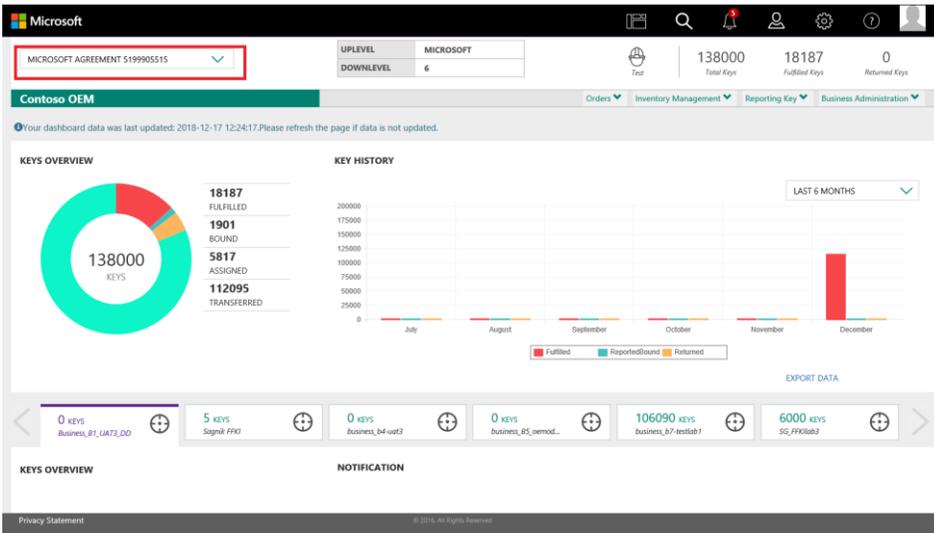
Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

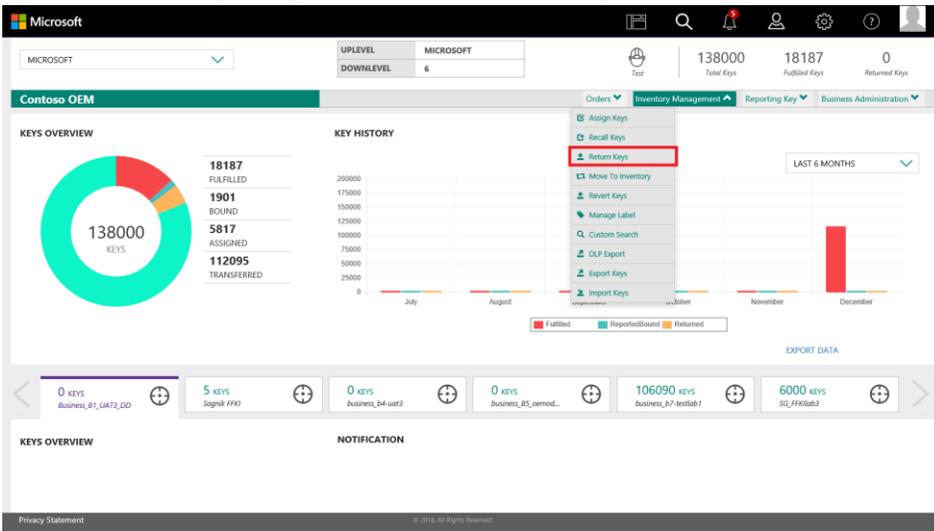
2. From the dashboard view, select the business from the **Business dropdown** menu in the upper left corner.

NOTE: In centralized model, TPI user will notify uplevel partner of which keys are eligible for return. In decentralized model, keys are returned to Microsoft.

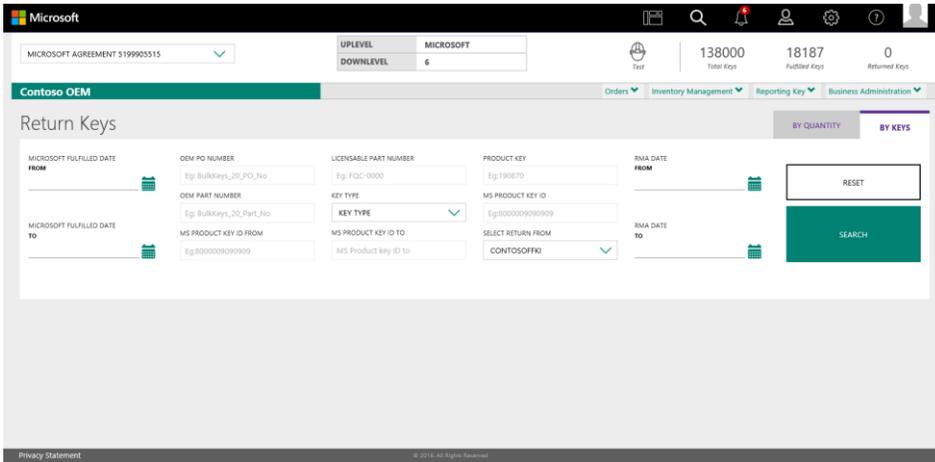
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4. From the Inventory management menu, select Return Keys.



4. From the Return Keys menu, click on the BY KEYS tab.



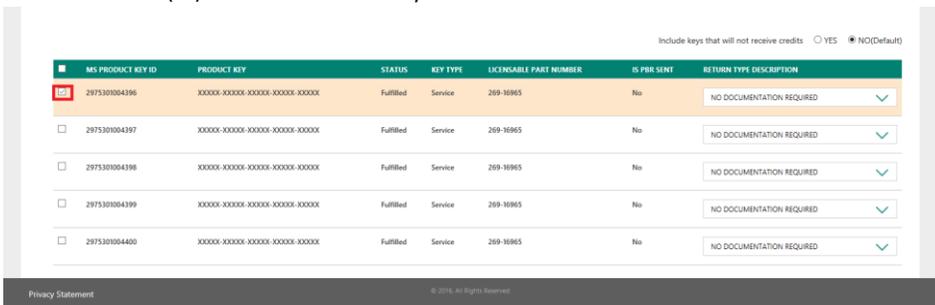
5. Enter the search criteria and Click on the SEARCH button.

NOTE: A key is only eligible for return if it is in Fulfilled, Bound, Activation Enabled, Activation Denied, Assigned, or Return Rejected status.

6. All keys eligible for return will display in the table.

7. Select the radio button for “Include keys that will not receive credits” if desired. Default will not include these.

8. Check the box(es) to the select KEY IDs you would like to return.



9. Select the return reason for each of the keys from the RETURN TYPE dropdown menu.

10. MDOS allows partners to return only store products alone without returning the keys. Partner has to select the return description as 'Return of Store Products Only' which will return only the store products from MDOS.

Include keys that will not receive credits YES NO(Default)

MS PRODUCT KEY ID	PRODUCT KEY	STATUS	KEY TYPE	LICENSABLE PART NUMBER	IS PBR SENT	RETURN TYPE DESCRIPTION	
<input type="checkbox"/>	900523000009546	XXXXXXXX-XXXXXX-XXXXXX-DD560	Activation Enabled	Standard	KW9-00001	No	NO DOCUMENTATION REQUIRED
<input type="checkbox"/>	900523000009547	XXXXXXXX-XXXXXX-XXXXXX-85E75	Return Rejected	Standard	KW9-00001	No	No documentation required End user return w/required documentation
<input type="checkbox"/>	900523000009553	XXXXXXXX-XXXXXX-XXXXXX-9CF95	Return Rejected	Standard	KW9-00001	No	Mfg damage w/required documentation
<input type="checkbox"/>	900523000009554	XXXXXXXX-XXXXXX-XXXXXX-EE8B	Return Rejected	Standard	KW9-00001	No	Test key w/required documentation Lost or stolen w/required documentation
<input type="checkbox"/>	900523000009555	XXXXXXXX-XXXXXX-XXXXXX-EASD6	Return Rejected	Standard	KW9-00001	No	Other Return of Store Products Only
<input type="checkbox"/>	900523000009556	XXXXXXXX-XXXXXX-XXXXXX-AA8DC	Fulfilled	Standard	KW9-00001	No	NO DOCUMENTATION REQUIRED
<input type="checkbox"/>	900523000009558	XXXXXXXX-XXXXXX-XXXXXX-23B12	Assigned	Standard	KW9-00001	No	NO DOCUMENTATION REQUIRED
<input type="checkbox"/>	900523000009559	XXXXXXXX-XXXXXX-XXXXXX-EF3C1	Assigned	Standard	KW9-00001	No	NO DOCUMENTATION REQUIRED

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11. Click the RETURN KEYS button.

Include keys that will not receive credits YES NO(Default)

MS PRODUCT KEY ID	PRODUCT KEY	STATUS	KEY TYPE	LICENSABLE PART NUMBER	IS PBR SENT	RETURN TYPE DESCRIPTION	
<input checked="" type="checkbox"/>	899902315131465	XXXXXXXX-XXXXXX-XXXXXX-MFRH1	Fulfilled	Standard	KW9-00458	No	NO DOCUMENTATION REQUIRED
<input type="checkbox"/>	899902315131466	XXXXXXXX-XXXXXX-XXXXXX-JCVH	Fulfilled	Standard	KW9-00458	No	NO DOCUMENTATION REQUIRED
<input type="checkbox"/>	2961048219578	XXXXXXXX-XXXXXX-XXXXXX-XXXXX	Fulfilled	Service	7L4-00013	Yes	NO DOCUMENTATION REQUIRED
<input type="checkbox"/>	2961048219579	XXXXXXXX-XXXXXX-XXXXXX-XXXXX	Fulfilled	Service	7L4-00013	No	NO DOCUMENTATION REQUIRED
<input type="checkbox"/>	2961048219580	XXXXXXXX-XXXXXX-XXXXXX-XXXXX	Fulfilled	Service	7L4-00013	No	NO DOCUMENTATION REQUIRED

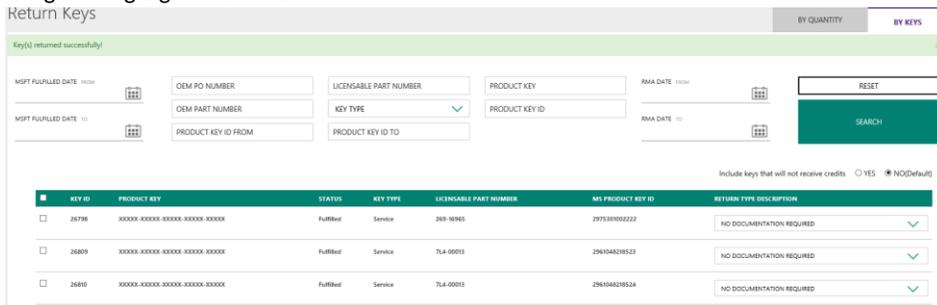
5

12. A confirmation window will pop up to confirm your selection. Click CONFIRM.

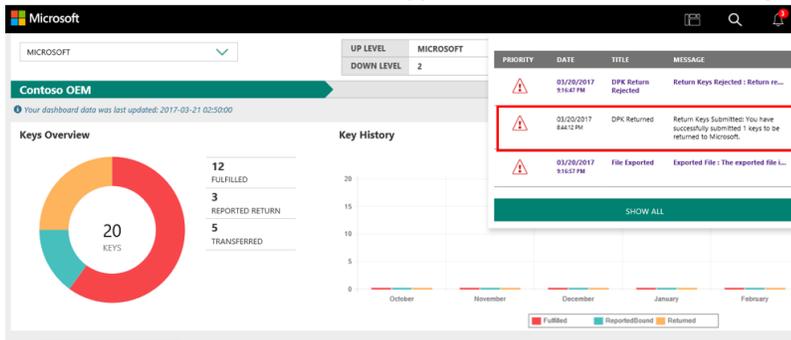
RETURN KEYS

Are you sure you want to return these keys?

13. Once the keys are returned, a “Key(s) returned successfully” message will briefly pop up in the green highlighted banner.



14. A confirmation notification will also appear under the Alert icon, indicating recent changes.



4.3.3 RETURN KEYS BY SEARCH

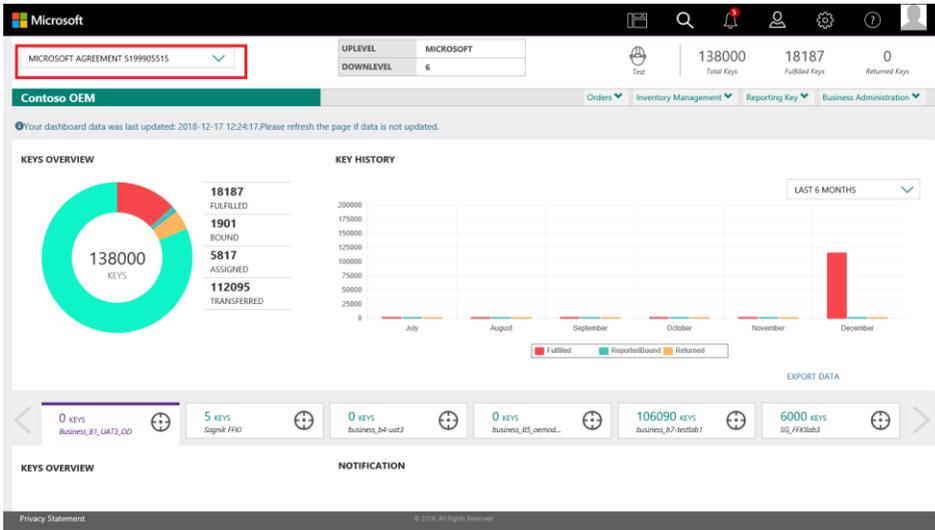
Tip Tool: Return unused keys to Microsoft or uplevel partner using search functionality.

Step-by-step:

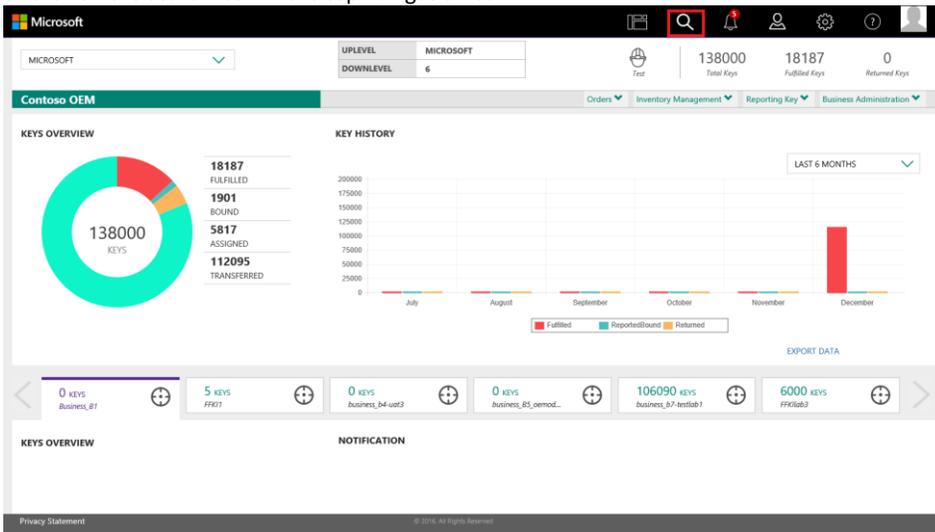
1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.

NOTE: In centralized model, TPI user will notify uplevel partner of which keys are eligible for return. In decentralized model, keys are returned to Microsoft.

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3. Click on the search icon in the top navigation bar.



4. From the search screen, enter the search criteria, if desired, and click on the SEARCH button.

NOTE: Keys must be in Fulfilled, Bound, Activation Enabled, Activation Denied, Assigned, or Return Rejected status to return.

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5. The search result will display all the keys that are eligible for return based on the criteria.

MS PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/>	3259631322347	XXXXX-XXXXX-XXXXX-XXXXX-T38K3	K17-00001	STANDARD FULFILLED
<input type="checkbox"/>	3259631322348	XXXXX-XXXXX-XXXXX-XXXXX-W6DQ	K17-00001	STANDARD FULFILLED
<input type="checkbox"/>	3259631322349	XXXXX-XXXXX-XXXXX-XXXXX-3VE1Q	K17-00001	STANDARD FULFILLED
<input type="checkbox"/>	3259631322350	XXXXX-XXXXX-XXXXX-XXXXX-W94TD	K17-00001	STANDARD FULFILLED
<input type="checkbox"/>	3259631322351	XXXXX-XXXXX-XXXXX-XXXXX-P37K3	K17-00001	STANDARD FULFILLED
<input type="checkbox"/>	3259631322352	XXXXX-XXXXX-XXXXX-XXXXX-3P093	K17-00001	STANDARD FULFILLED
<input type="checkbox"/>	3259631322353	XXXXX-XXXXX-XXXXX-XXXXX-VQWVQ	K17-00001	STANDARD FULFILLED

6. Check the box(es) to select the keys you would like to return.

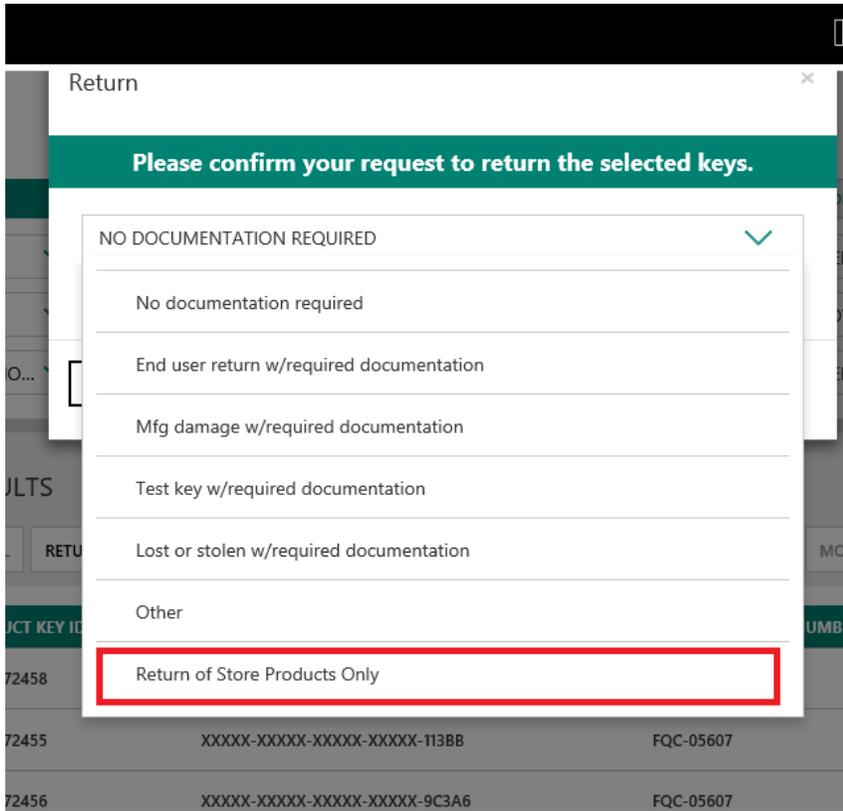
7. Click on the RETURN button above your selection.

The screenshot displays the Microsoft Digital Operations Services interface. On the left sidebar, there are four key counts: 25905 Total Keys, 18187 FULFILLED, 1901 BOUND, and 5817 ASSIGNED. The main area is titled 'SEARCH RESULTS' and features a navigation bar with buttons: ASSIGN, RECALL, RETURN (highlighted with a red box), REPORT, EXPORT, OHR, OPTIONAL INFO, MAP KEY TYPE, DLP EXPORT, MOVE TO INVENTORY, and EXPORT RESULT. Below the navigation bar is a table with the following columns: MS PRODUCT KEY ID, PRODUCT KEY, LICENSABLE PART NUMBER, KEY TYPE, and KEY STATUS. The table contains 15 rows of data, with the second and third rows highlighted in orange and having their checkboxes selected.

MS PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/>	3258631322347	XXXXXX-XXXXXX-XXXXXX-XXXXXX-73BK3	K37-00001	STANDARD FULFILLED
<input checked="" type="checkbox"/>	3258631322348	XXXXXX-XXXXXX-XXXXXX-XXXXXX-V6DDQ	K37-00001	STANDARD FULFILLED
<input checked="" type="checkbox"/>	3258631322349	XXXXXX-XXXXXX-XXXXXX-XXXXXX-3V63Q	K37-00001	STANDARD FULFILLED
<input type="checkbox"/>	3258631322350	XXXXXX-XXXXXX-XXXXXX-XXXXXX-W847D	K37-00001	STANDARD FULFILLED
<input type="checkbox"/>	3258631322351	XXXXXX-XXXXXX-XXXXXX-XXXXXX-P37X3	K37-00001	STANDARD FULFILLED
<input type="checkbox"/>	3258631322352	XXXXXX-XXXXXX-XXXXXX-XXXXXX-3P093	K37-00001	STANDARD FULFILLED
<input type="checkbox"/>	3258631322353	XXXXXX-XXXXXX-XXXXXX-XXXXXX-VQWVD	K37-00001	STANDARD FULFILLED
<input type="checkbox"/>	3258631322354	XXXXXX-XXXXXX-XXXXXX-XXXXXX-VQWVD	K37-00001	STANDARD FULFILLED
<input type="checkbox"/>	3258631322355	XXXXXX-XXXXXX-XXXXXX-XXXXXX-76DDQ	K37-00001	STANDARD FULFILLED
<input type="checkbox"/>	3258631322356	XXXXXX-XXXXXX-XXXXXX-XXXXXX-9T7PHD	K37-00001	STANDARD FULFILLED
<input type="checkbox"/>	3258631322357	XXXXXX-XXXXXX-XXXXXX-XXXXXX-W4393	K37-00001	STANDARD FULFILLED
<input type="checkbox"/>	3258631322358	XXXXXX-XXXXXX-XXXXXX-XXXXXX-M7YS3	K37-00001	STANDARD FULFILLED
<input type="checkbox"/>	3258631322359	XXXXXX-XXXXXX-XXXXXX-XXXXXX-MP7EHD	K37-00001	STANDARD FULFILLED

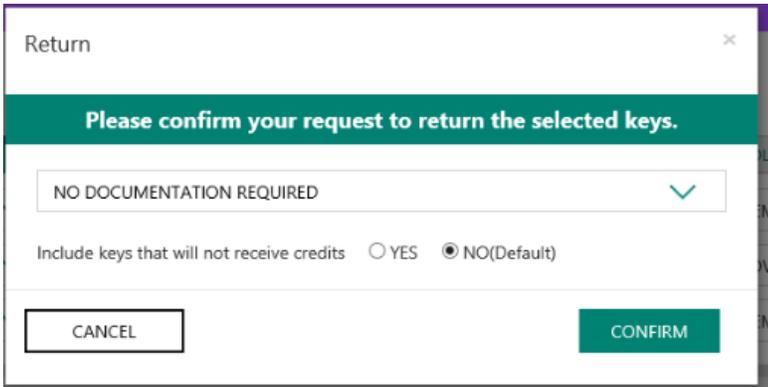
8. A Return confirmation box will popup. Select the return reason for each of the keys from the RETURN TYPE dropdown menu.

NOTE:MDOS allows partners to return only store products alone without returning the keys. Partner has to select the return description as 'Return of Store Products Only' which will return only the store products from MDOS.



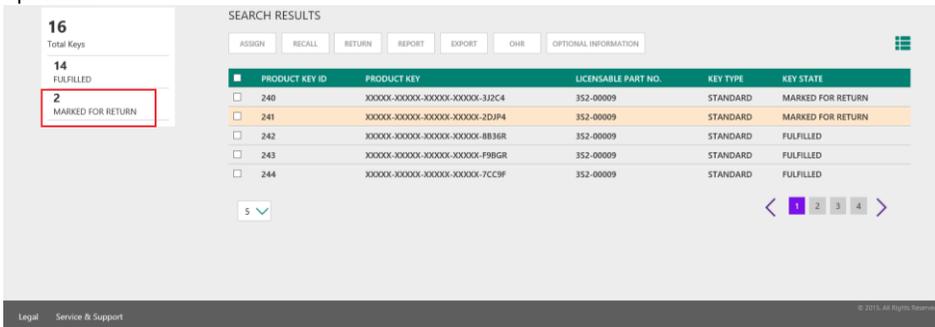
10. Select the radio button for YES to “Include keys that will not receive credits”. Default will not include these.

11. Click CONFIRM. After clicking confirm the keys will be sent to the uplevel for return.

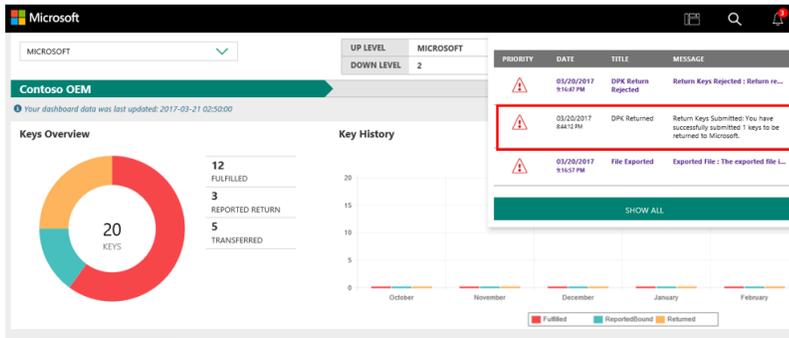


12. Once the keys are returned, a “Key(s) returned successfully” message will briefly pop up in the green highlighted banner.

12. From the dashboard view, KEY STATUS will be updated to MARKED FOR RETURN. The number of keys in MARKED FOR RETURN status in the key count box on the left will also be updated.



13. A confirmation notification will also appear under the Alert icon, indicating recent changes.



4.3.4 MOVE TO INVENTORY

Description:

The Move to Inventory functionality provides the ability to move product keys back into the main inventory if the return fails or is rejected, resulting in keys that are in Return Rejected status.

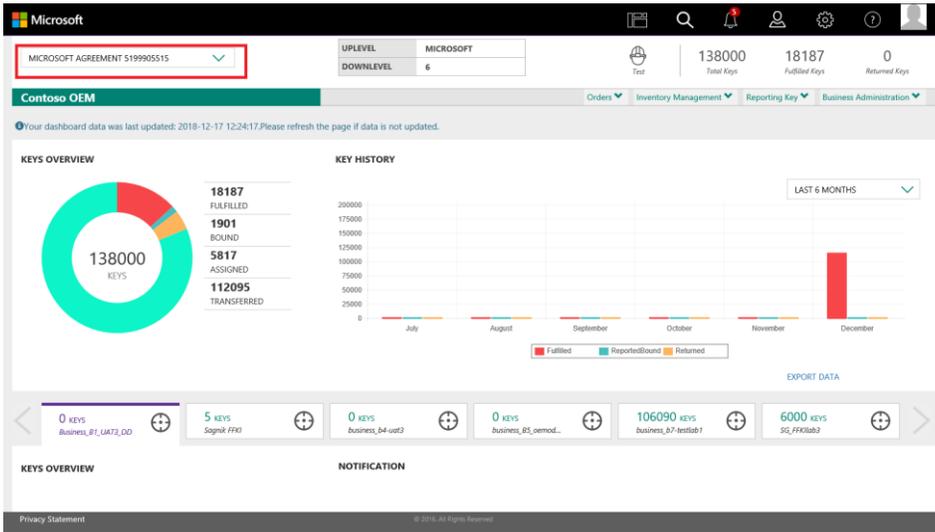
Returns may be rejected if there is incorrect information supplied (such as incorrect part number, the key has already been returned, etc.). Once the keys are moved back to the main inventory location by the downlevel partner, the status will be changed from RETURN REJECTED to it's previous key status. The key count under the Return Rejected status will also be reduced by the same amount.

Tip Tool: Move to Inventory functionality provides the ability to move product keys back into the main inventory if the return fails or is rejected.

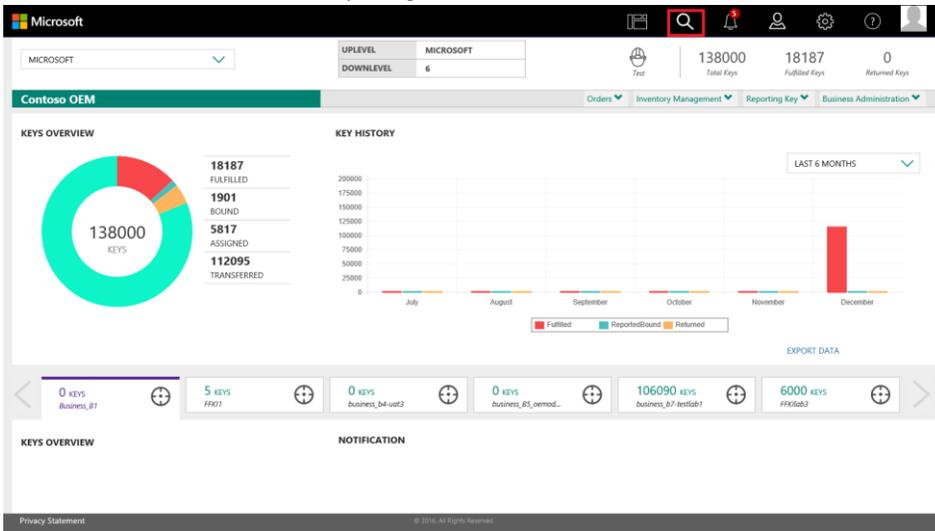
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.



3. Click on the search icon in the top navigation bar.



4. Select the criteria, of RETURN REJECTED from the KEY STATUS pulldown menu, then click on the **SEARCH** button to view all keys eligible for moving.

NOTE: Keys must be RETURN REJECTED status in order to move.

The screenshot shows the Microsoft Digital Operations Services interface. At the top, there's a header with the Microsoft logo and navigation icons. Below that, there are several input fields and buttons. The main area is titled 'Contoso OEM' and contains a search form with various filters and a table of search results.

Search Criteria:

- MICROSOFT AGREEMENT: S199905515
- UPLEVEL: MICROSOFT
- DOWNLEVEL: 6
- Total Keys: 138000
- Fulfilled Keys: 18187
- Returned Keys: 0

Search Results Table:

MS PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/>	325861322347	XXXXXX-XXXXXX-XXXXXX-XXXXXX-T3B8K3	K7J-00001	STANDARD FULFILLED
<input checked="" type="checkbox"/>	325861322348	XXXXXX-XXXXXX-XXXXXX-XXXXXX-WEDDQ	K7J-00001	STANDARD FULFILLED
<input checked="" type="checkbox"/>	325861322349	XXXXXX-XXXXXX-XXXXXX-XXXXXX-3V63Q	K7J-00001	STANDARD FULFILLED
<input type="checkbox"/>	325861322350	XXXXXX-XXXXXX-XXXXXX-XXXXXX-W647D	K7J-00001	STANDARD FULFILLED
<input type="checkbox"/>	325861322351	XXXXXX-XXXXXX-XXXXXX-XXXXXX-P37K3	K7J-00001	STANDARD FULFILLED

5. Results will display all the keys based on the search criteria.

The screenshot shows the search results page. On the left, there's a summary box showing '2 Total Keys' and '2 RETURN REJECTED'. The main area is titled 'SEARCH RESULTS' and contains a table of search results with checkboxes for selection.

Search Results Table:

PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/>	26797	XXXXXX-XXXXXX-XXXXXX-XXXXXX-XXXXXX	SERVICE	RETURN REJECTED
<input type="checkbox"/>	26808	XXXXXX-XXXXXX-XXXXXX-XXXXXX-XXXXXX	SERVICE	RETURN REJECTED

6. Check the box(es) to select the KEY IDs that you would like to assign.

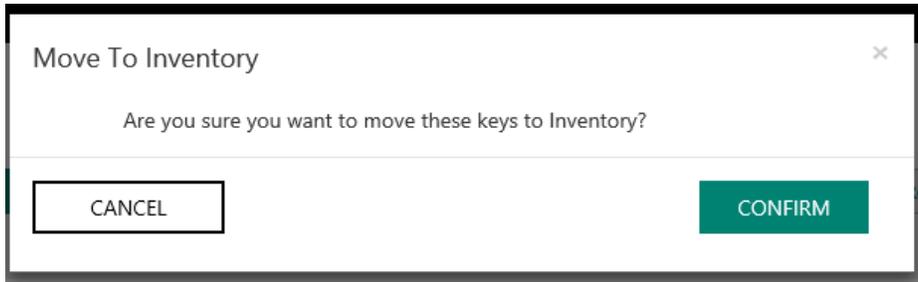
7. Click on the MOVE TO INVENTORY button above your selection.

The screenshot shows the search results page with the 'MOVE TO INVENTORY' button highlighted in a red box. The table of search results is the same as in the previous screenshot, but now the checkboxes for the two keys are checked.

Search Results Table:

PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input checked="" type="checkbox"/>	26797	XXXXXX-XXXXXX-XXXXXX-XXXXXX-XXXXXX	SERVICE	RETURN REJECTED
<input checked="" type="checkbox"/>	26808	XXXXXX-XXXXXX-XXXXXX-XXXXXX-XXXXXX	SERVICE	RETURN REJECTED

8. A confirmation window will pop up to confirm your selection. Click CONFIRM.



9. Once the keys are assigned, a “Key(s) moved to inventory successfully” message will briefly pop up in the green highlighted banner.

10. A confirmation notification will also appear under the Alert icon, indicating recent changes.

4.3.5 RETURN DESCRIPTION

Pop up return descriptions in MDOS

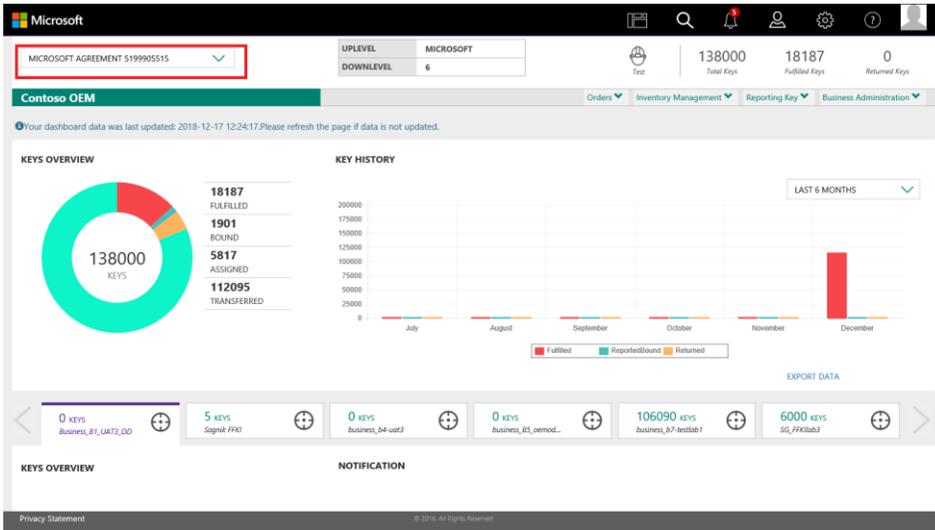
Partners can see more information on the return reason by hovering the mouse over each reason, this will allow the partner decide which return reason they need to select to return the keys successfully.

Step-by-step:

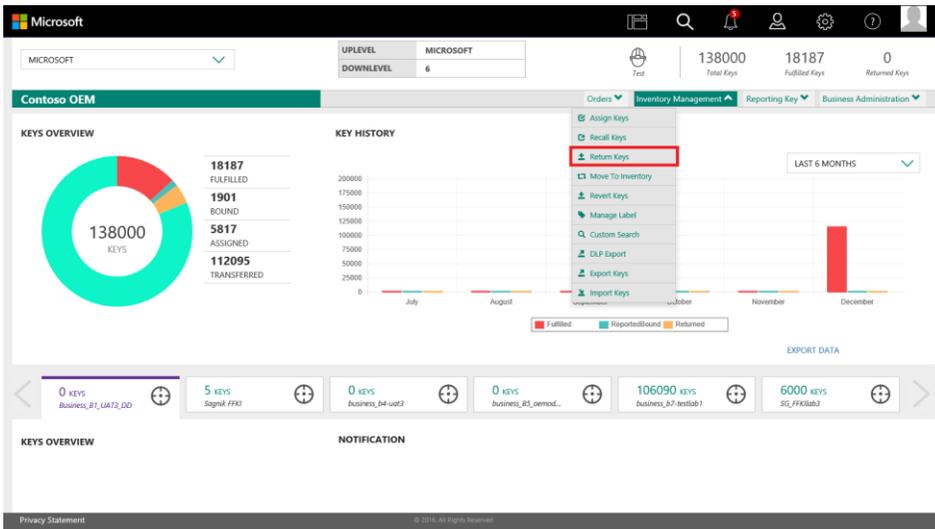
1. Log in to <https://digitaloperations.oa.microsoft.com> using a valid Microsoft account credentials.

2. From the dashboard view, select the business from the **Business dropdown** menu in the upper left corner.

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5. From the Inventory management menu, select Return Keys.



4. From the Return Keys page, hover over the return code to display a detailed description of return reason.

The screenshot shows the 'Return Keys' page for 'Contoso OEM100'. The table below lists the return keys:

KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	AVAILABLE KEYS
Service	269-10865	27MAR		1
Standard	K9W-00458	NEW BULK KEYS	NEW KEYS	4744
Standard	K9W-00458	17JAN01		1

The tooltip for 'NO DOCUMENTATION REQUIRED' contains the following text:

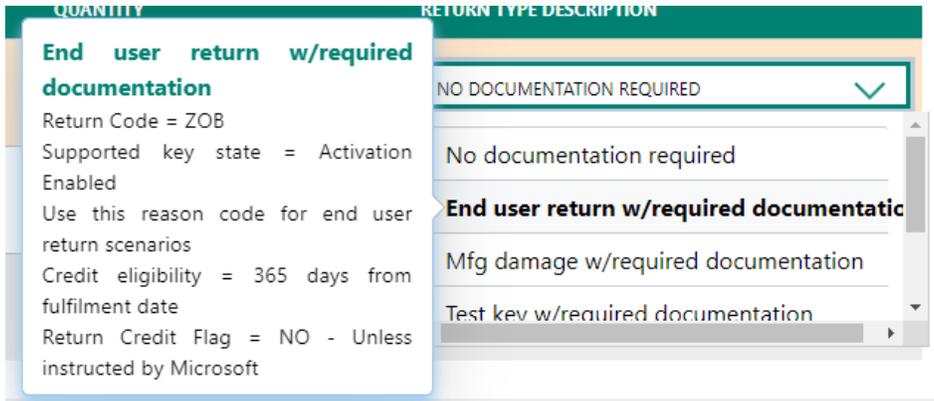
- No documentation required**
- Return Code = ZOA
- Supported key state = Fulfilled
- Use this reason code for stock balancing, agreement expiration / termination, product end of life, TKY, MBR return scenarios
- Credit eligibility = 365 days from fulfillment date + Applicable Program
- Eligibility guide rules
- Return Credit Flag = NO - Unless instructed by Microsoft

This close-up shows the tooltip and the dropdown menu for the 'NO DOCUMENTATION REQUIRED' return type description. The tooltip text is as follows:

- No documentation required**
- Return Code = ZOA
- Supported key state = Fulfilled
- Use this reason code for stock balancing, agreement expiration / termination, product end of life, TKY, MBR return scenarios
- Credit eligibility = 365 days from fulfillment date + Applicable Program
- Eligibility guide rules
- Return Credit Flag = NO - Unless instructed by Microsoft

The dropdown menu for 'RETURN TYPE DESCRIPTION' includes the following options:

- NO DOCUMENTATION REQUIRED (selected)
- No documentation required
- End user return w/required documentation
- Mfg damage w/required documentation
- Test key w/required documentation



4.3.6 DISCLAIMER

Disclaimer message in MDOS for Returns that will not receive credit

MDOS will display the disclaimer message to partners on return screens for the credits that will be received for the keys.

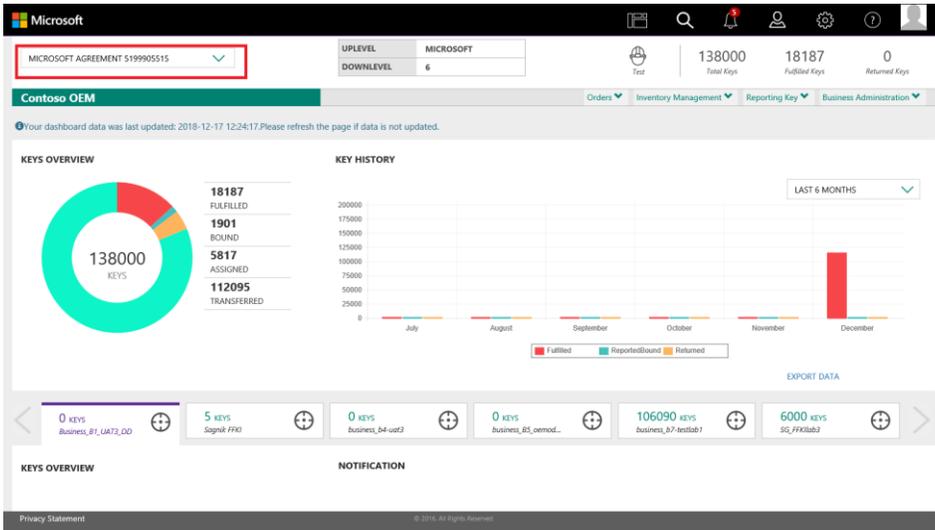
Note

**If "No" is selected, keys that will not receive credit will not be processed for return with the exception of "Lost/Stolen" or "Other" returns. "Lost/Stolen" and "Other" returns will be returned regardless of selection. Please ensure the return request is submitted correctly.

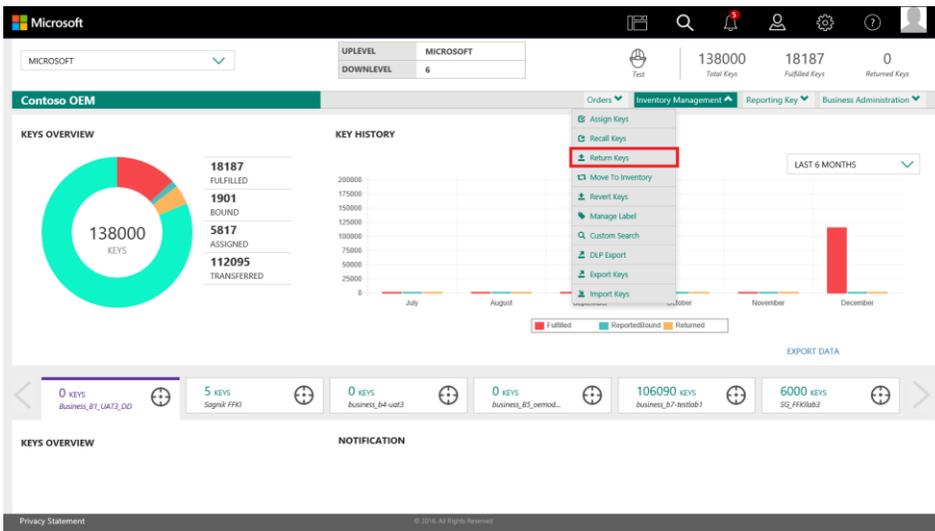
Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using a valid Microsoft account credentials.
2. From the dashboard view, select the business from the **Business dropdown** menu in the upper left corner.

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1. From the Inventory management menu, select Return Keys.



4. From the Return Keys page, the partner can see the return disclaimer message on the left bottom side of the page.

The screenshot displays the 'Return Keys' interface. At the top, there are navigation tabs: 'Orders', 'Inventory Management', 'Reporting Key', and 'Business Administration'. The main content area is titled 'Return Keys' and includes a filter for 'SELECT KEY STATE' set to 'FULFILLED' and 'RETURN FROM' set to 'CONTOSO OEM100'. Below this is a table with the following data:

KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	AVAILABLE KEYS	QUANTITY	RETURN TYPE DESCRIPTION
Service	269-16965	27MAR		1		NO DOCUMENTATION REQUIRED
Standard	KW9-00458	NEW BULK KEYS	NEW KEYS	4744		NO DOCUMENTATION REQUIRED
Standard	KW9-00458	17JAN01		1		NO DOCUMENTATION REQUIRED

Below the table, there is a 'Note' section:

**If "No" is selected, keys that will not receive credit will not be processed for return with the exception of "Lost/Stolen" or "Other" returns.

"Lost/Stolen" and "Other" returns will be returned regardless of selection. Please ensure the return request is submitted correctly.

Buttons for 'RETURN KEYS' and 'CLEAR' are located at the bottom right of the table area.

4.4. EXPORT KEYS

Description:

The export keys functionality provides the user the ability to export keys from MDOS, so they can work with the files offline. In order to export keys, keys must be in Fulfilled status. Keys can be exported by quantity, by key, or by using search functionality.

Keys are exported into a zip file and stored in a secure location for future download and use. (secure method could include FTP site, USB stick, etc.). The user will be notified of the location where the keys can be downloaded in the notifications section or the download center. (see the [Download Center](#) section for more information).

Example: Contoso TPI’s factory floor needs to work with keys offline because they don’t have a secure and reliable internet connection to their factory floor. Contoso TPI decides to export only specific keys from MDOS at this time. Contoso TPI goes to the main dashboard, clicks on Export Keys from the action ribbon in the menu, and selects the BY KEYS tab. They search for standard

keys in fulfilled status and then select the desired key IDs they would like to export and click the EXPORT KEYS button. After successful export, A confirmation notification appears under the Alert icon. Contoso TPI clicks the link to access the secure zip file of decrypted keys. (The location link will be provided via email as well as the Download Center). They can then share the file with their downlevel factory for production via a secured USB stick.

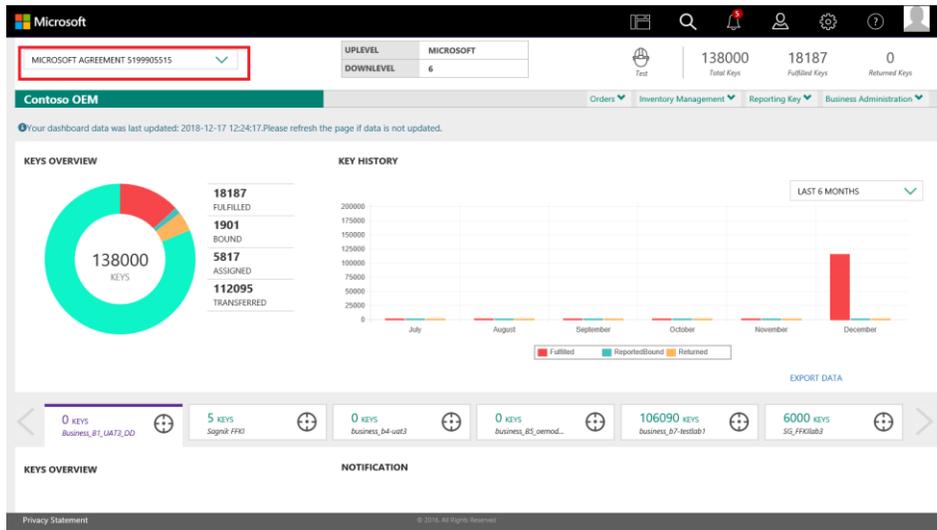
Tip Tool: Export keys from MDOS into a zip file and store in a secure location for future download and use. User will be notified of the location from where the user can download the keys.

4.4.1 EXPORT KEYS BY QUANTITY

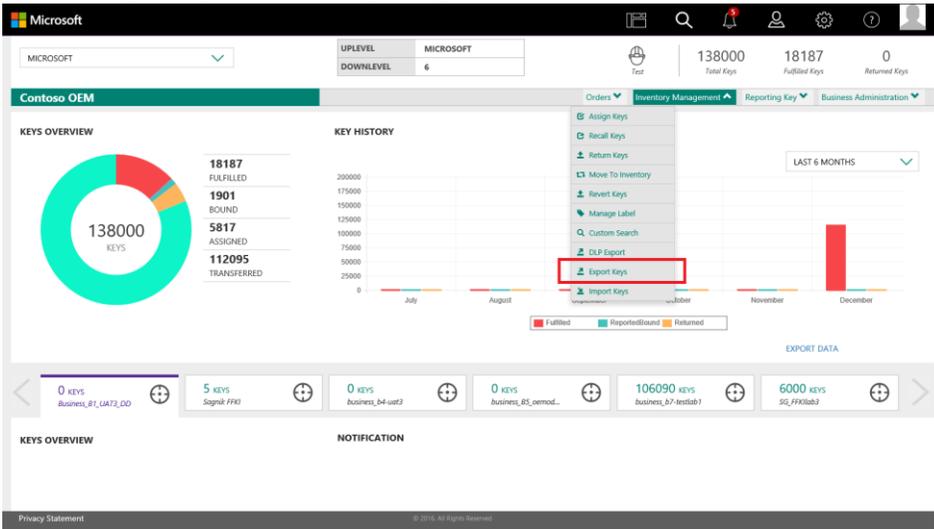
Tip Tool: Export keys by quantity into a secure location for future download and use.

Step-by-Step:

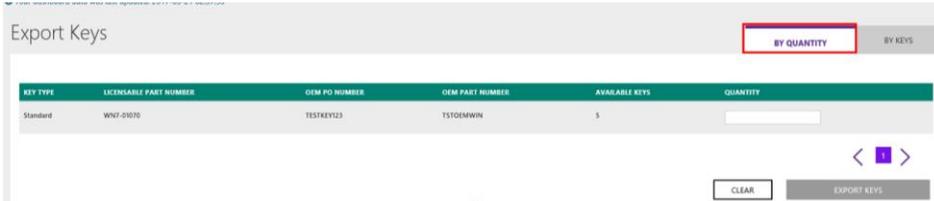
1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.



3. Click on Export Keys from Inventory management menu.



4. From the Export Keys screen, click on the BY QUANTITY tab.



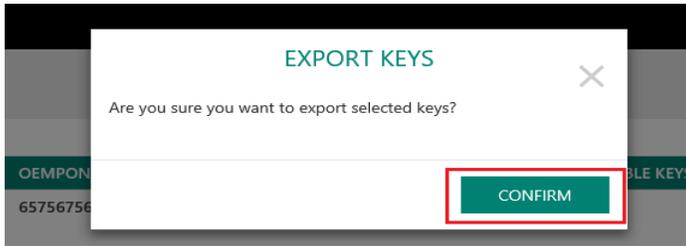
5. Enter the quantity of keys to be exported.

6. Click on the EXPORT KEYS button.

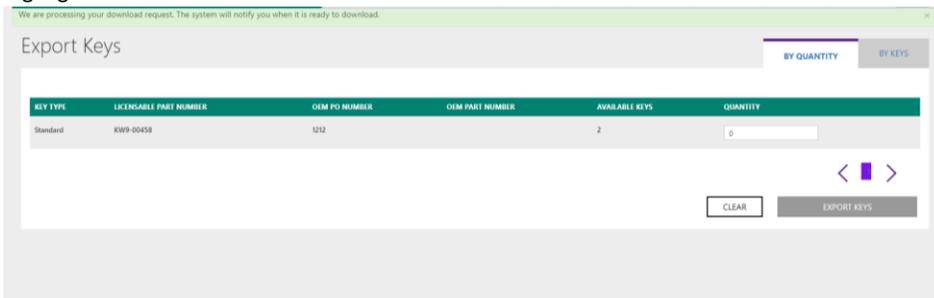
NOTE: In order to export keys, keys must be in Fulfilled status.



7. A confirmation window will pop up to confirm your selection. Click CONFIRM.

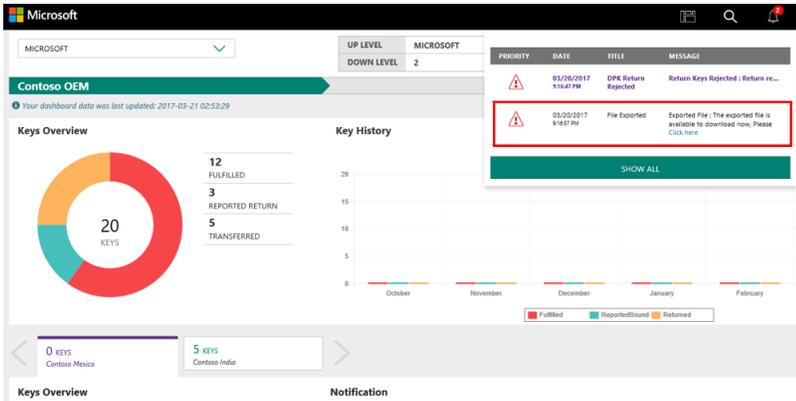


8. Once the keys are exported, a “We are processing your download request, the system will notify you as soon as it is ready to download.” message will briefly pop up in the green highlighted banner.

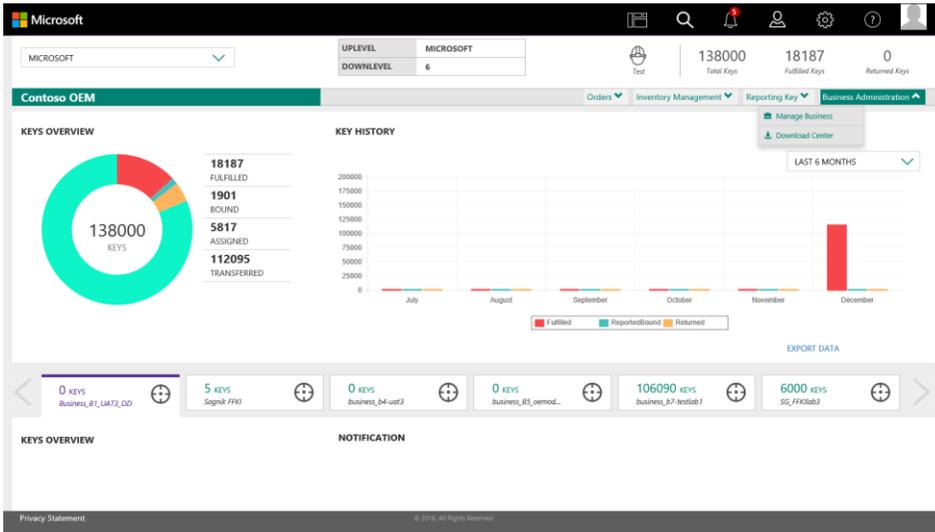


9. After successful export, the keys will be retrieved, decrypted, zipped and saved into a secure location. The location link will be provided via email.

10. A confirmation notification will appear under the Alert icon, where you may also access the link.



11. Exported keys can also be downloaded at any time by accessing the Download Center from the Business Administration menu.



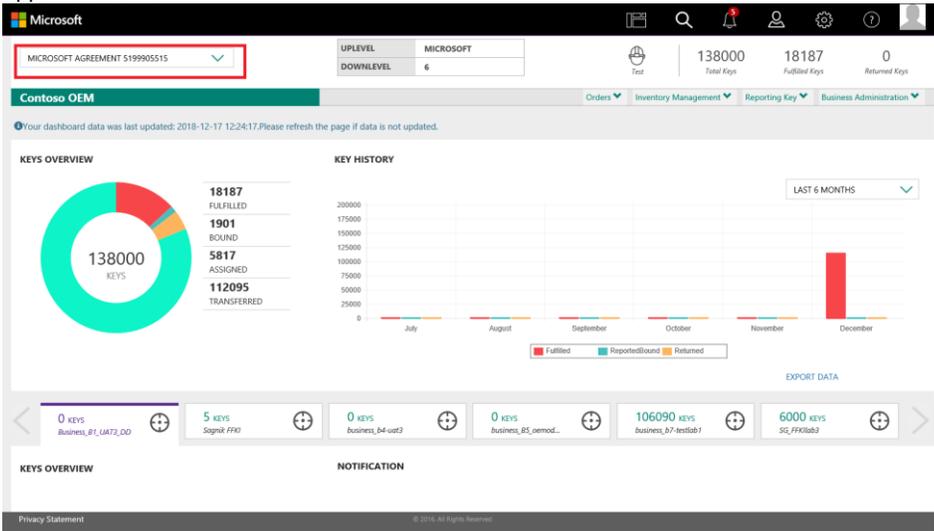
4.4.2 EXPORT KEYS BY KEYS

Tip Tool: Export keys by product key number into a secure location for future download and use.

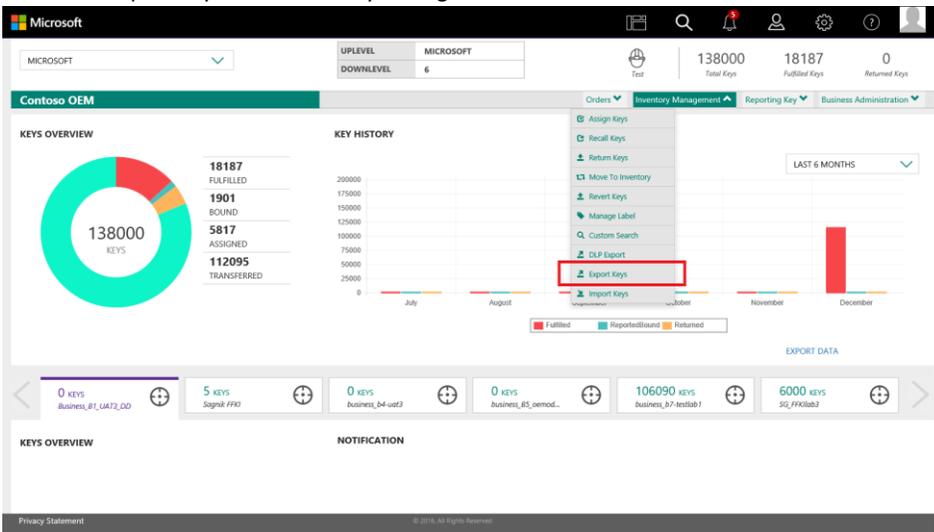
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

2. From the dashboard view, select the business from the **Business dropdown** menu in the upper left corner.



3. Click on Export Keys from Inventory management menu.



4. From the Export Keys screen, click on the BY KEYS tab.

5. Enter search criteria, if desired, and click on the SEARCH button.

NOTE: In order to export keys, keys must be in Fulfilled status and key type must be Standard.

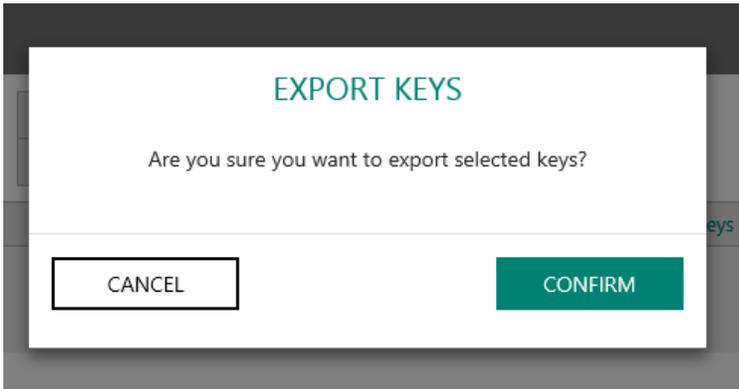
6. All keys eligible for export will display in the table.

MS PRODUCT KEY ID	PRODUCT KEY	KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	CALL OFF REFERENCE
<input type="checkbox"/>	3258631322347	Standard	KJ7-0001	W10-4622-24000		
<input type="checkbox"/>	3258631322348	Standard	KJ7-0001	W10-4622-24000		
<input type="checkbox"/>	3258631322349	Standard	KJ7-0001	W10-4622-24000		
<input type="checkbox"/>	3258631322350	Standard	KJ7-0001	W10-4622-24000		
<input type="checkbox"/>	3258631322351	Standard	KJ7-0001	W10-4622-24000		
<input type="checkbox"/>	3258631322352	Standard	KJ7-0001	W10-4622-24000		
<input type="checkbox"/>	3258631322353	Standard	KJ7-0001	W10-4622-24000		
<input type="checkbox"/>	3258631322354	Standard	KJ7-0001	W10-4622-24000		
<input type="checkbox"/>	3258631322355	Standard	KJ7-0001	W10-4622-24000		
<input type="checkbox"/>	3258631322356	Standard	KJ7-0001	W10-4622-24000		

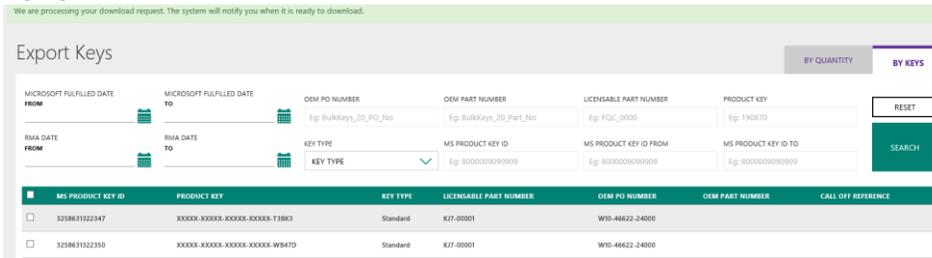
7. Check the box(es) to select the KEY IDs you would like to export and click the EXPORT KEYS button.

KEY ID	PRODUCT KEY	KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	CALL OF REFERENCE	MS PRODUCT KEY ID
<input checked="" type="checkbox"/>	26803	Standard	WN7-01070	TESTKEY123	TSTOEMWIN		89990120374012
<input checked="" type="checkbox"/>	26804	Standard	WN7-01070	TESTKEY123	TSTOEMWIN		89990120374013
<input checked="" type="checkbox"/>	26805	Standard	WN7-01070	TESTKEY123	TSTOEMWIN		89990120374014
<input type="checkbox"/>	26806	Standard	WN7-01070	TESTKEY123	TSTOEMWIN		89990120374015

8. A confirmation window will pop up to confirm your selection. Click CONFIRM.

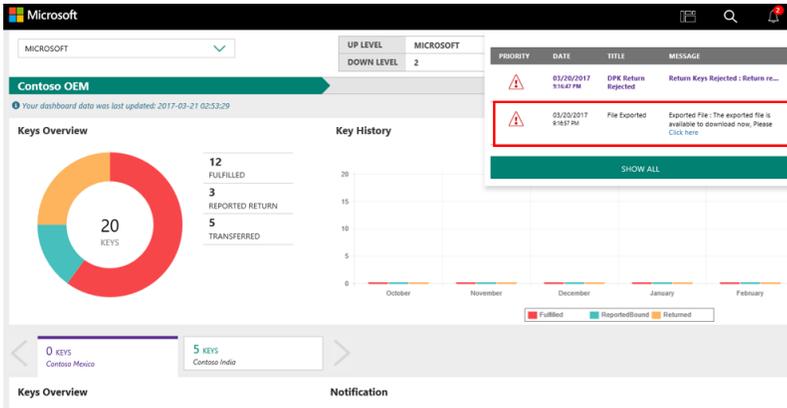


9. Once the keys are exported, a “We are processing your download request. The system will notify you as soon as it is ready to download.” message will briefly pop up in the green highlighted banner.

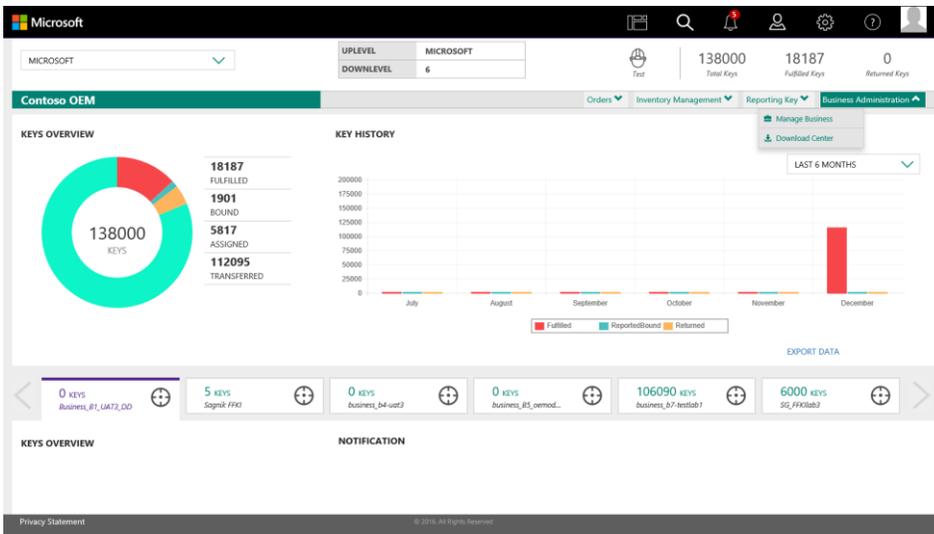


10. After successful export, the keys will be retrieved, decrypted, zipped and saved into a secure location. The location link will be provided via email.

11. A confirmation notification will appear under the Alert icon, where you may also access the link.



11. Exported keys can also be downloaded at any time by accessing the Download Center from the Business Administration menu.



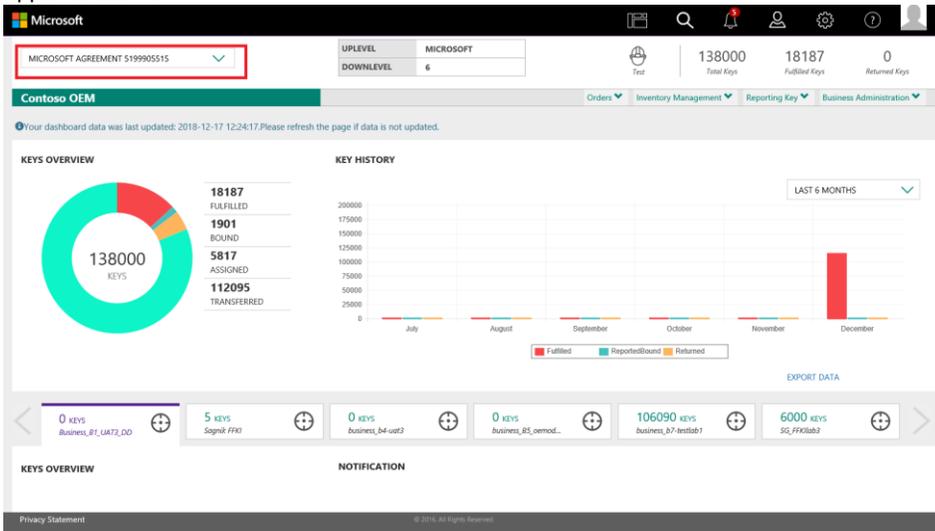
4.4.3 EXPORT KEYS BY SEARCH

Tip Tool: Export keys using search functionality into a secure location for future download and use.

Step-by-Step:

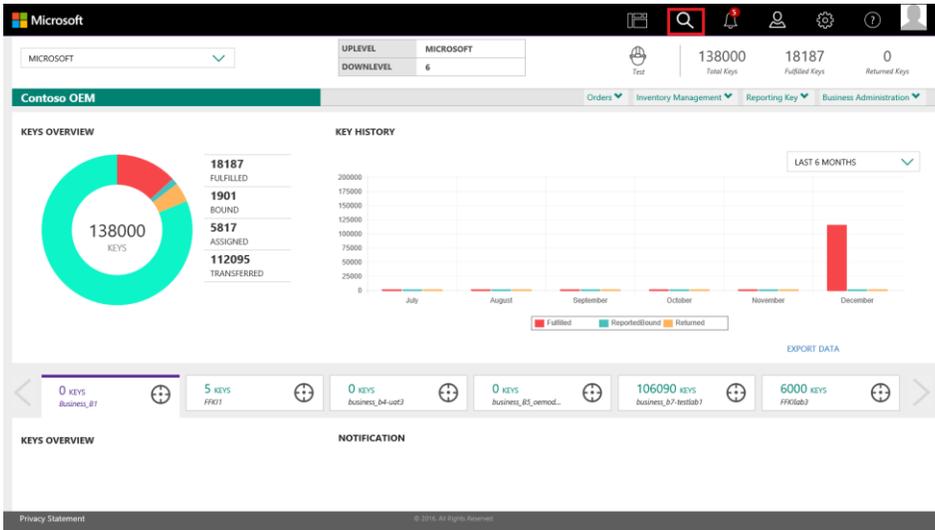
1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

2. From the dashboard view, select the business from the **Business dropdown** menu in the upper left corner.



3. Click on the search icon in the top navigation bar.

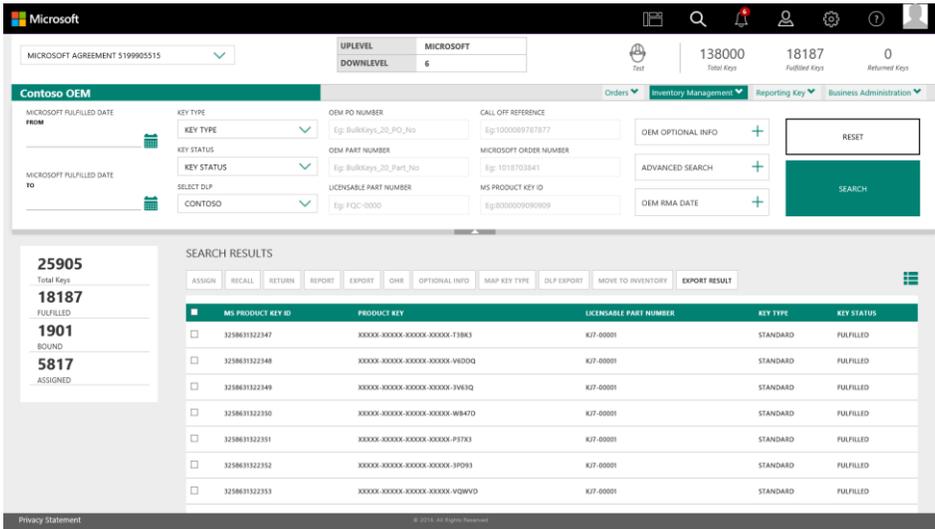
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4. From the search screen, enter search criteria, if desired, and click on the SEARCH button.

NOTE: In order to export keys, keys must be in Fulfilled, Consumed, or Assigned status and key type must be Standard.

5. The search results will display all the keys that are eligible for export based on the criteria.



6. Check the box(es) to the select the keys you would like to export.

7. Click on the EXPORT button above your selection.

The screenshot shows a 'SEARCH RESULTS' interface. On the left, a summary box indicates 15 total keys, with 10 fulfilled, 2 consumed, and 3 return rejected. The main area contains a table with columns: PRODUCT KEY ID, PRODUCT KEY, LICENSABLE PART NUMBER, KEY TYPE, and KEY STATUS. The 'EXPORT' button in the top navigation bar is highlighted with a red box. In the table, the rows for product key IDs 26802 and 26803 have their checkboxes selected and are highlighted in orange.

PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/>	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	269-86965	SERVICE	RETURN REJECTED
<input type="checkbox"/>	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	269-86965	SERVICE	FULFILLED
<input checked="" type="checkbox"/>	XXXXX-XXXXX-XXXXX-XXXXX-W077H	WN7-01070	STANDARD	CONSUMED
<input checked="" type="checkbox"/>	XXXXX-XXXXX-XXXXX-XXXXX-H9K17	WN7-01070	STANDARD	CONSUMED
<input type="checkbox"/>	XXXXX-XXXXX-XXXXX-XXXXX-196DV	WN7-01070	STANDARD	FULFILLED

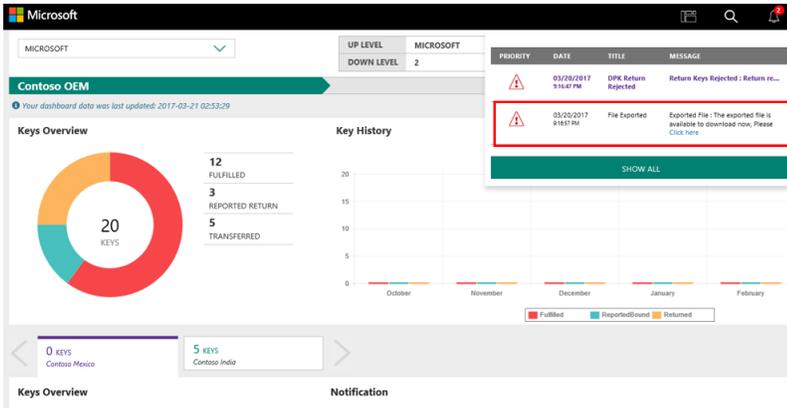
8. A confirmation window will pop up to confirm your selection. Click CONFIRM.

The screenshot shows a confirmation dialog box titled 'Export'. The text inside the dialog asks, 'Are you sure you want to export selected keys?'. There are two buttons at the bottom: 'CANCEL' and 'CONFIRM'.

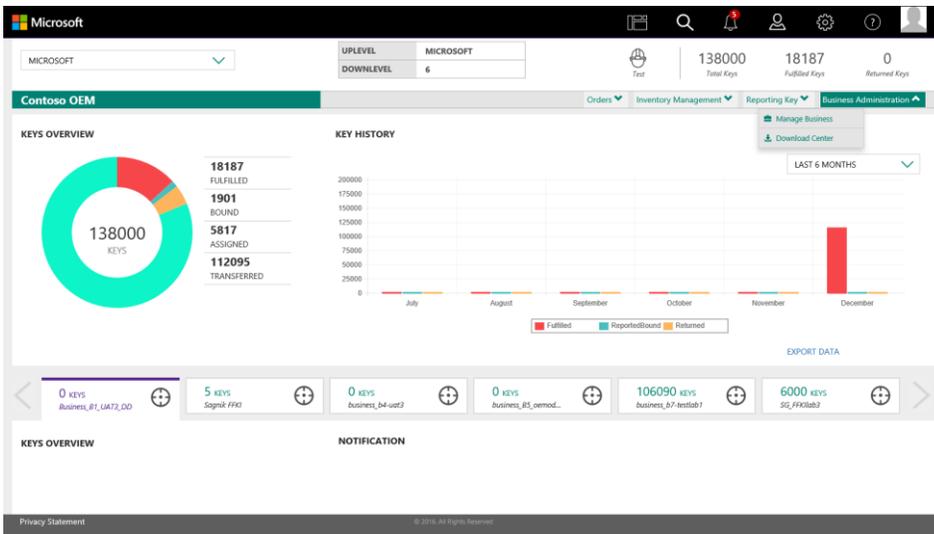
9. Once the keys are exported, a “We are processing your download request. The system will notify you as soon as it is ready to download.” message will briefly pop up in the green highlighted banner.

10. After successful export, the keys will be retrieved, decrypted, zipped and saved into a secure location. The location link will be provided via email.

11. A confirmation notification will appear under the Alert icon, where you may also access the link.



12. Exported keys can also be downloaded at any time by accessing the Download Center from the Business Administration menu.



4.5. IMPORT KEYS

Description:

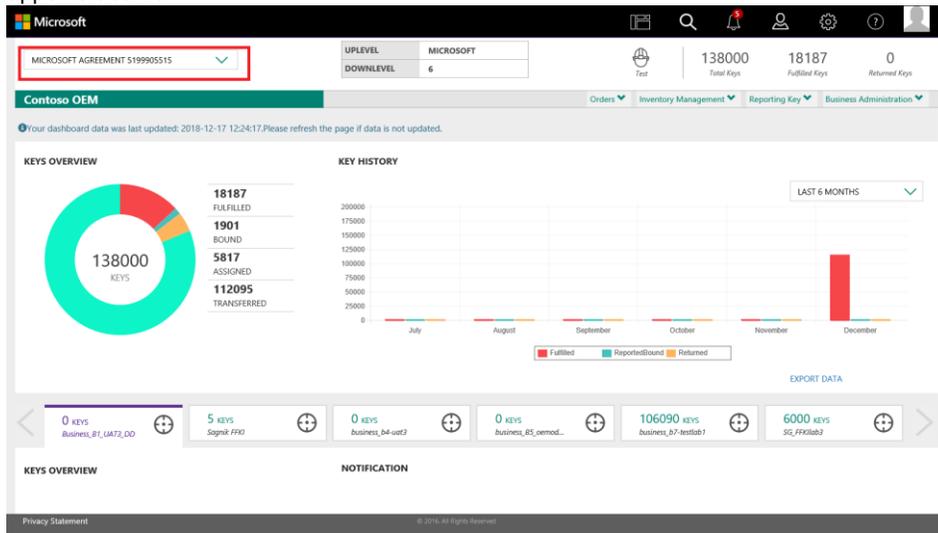
The Import keys functionality allows a downlevel partner (DLP) to import keys into the MDOS system from an external file location. The keys must be in Consumed status to be imported and the file format from where the keys are being imported must be XML or ZIP.

Example: Contoso Factory is the FFKI for ABC Design House (the IDH). Contoso Factory would like to import keys that were previously exported from MDOS and have been bound (in bound status). The keys are saved in two separate XML files, so they are both put into a ZIP file. Contoso Factory imports the keys into MDOS by going into the dashboard and selecting the Import Keys from the action ribbon in the menu. They browse to locate and select the “1234567890.xml” file and click the IMPORT button. Contoso Factory sees a confirmation message that the import was successful.

Tip Tool: Import keys into the MDOS system from an external file location.

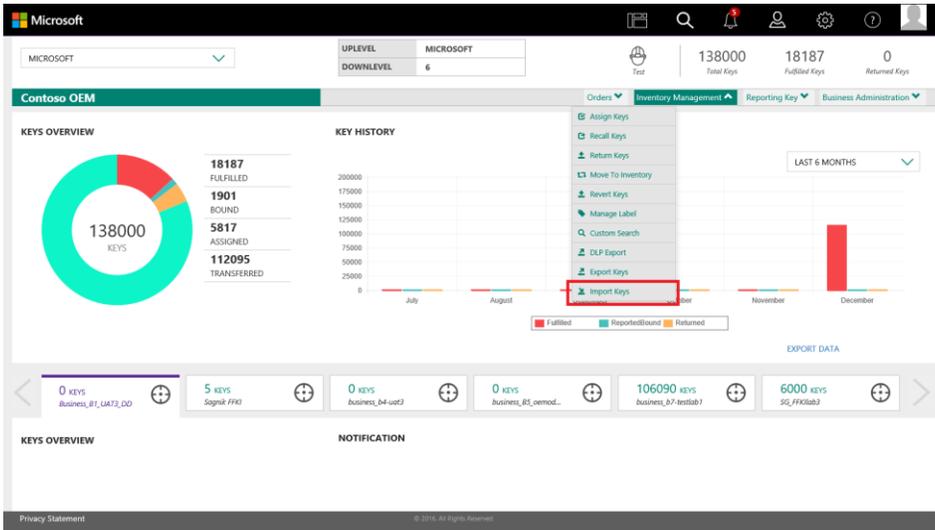
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.



3. Click on Import Keys from Inventory management menu.

NOTE: Keys must be in Consumed status to be imported.

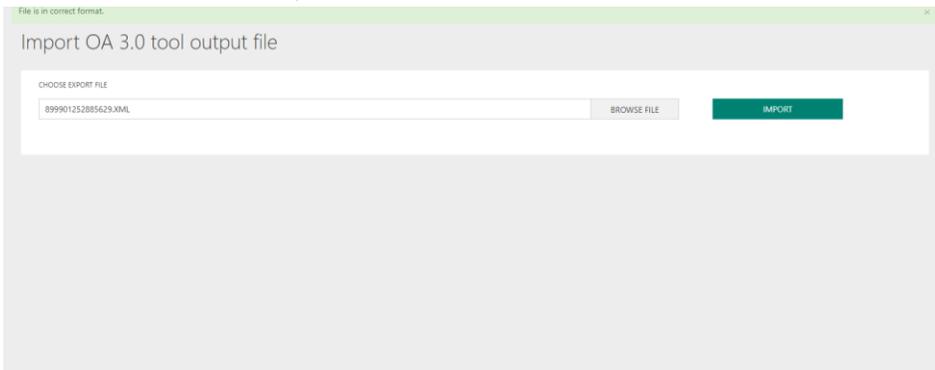


4. From the Import Keys screen, click BROWSE FILE to select the file to import.

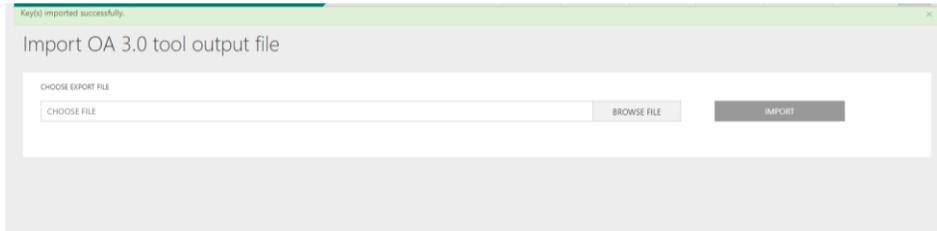
NOTE: File format must be XML or ZIP to import.



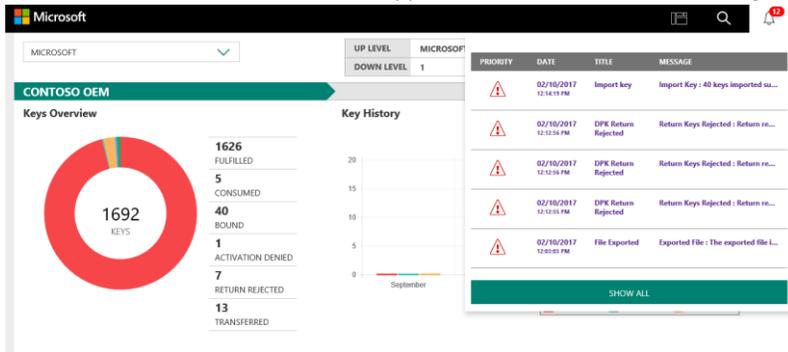
5. Once file has been selected, click the IMPORT button.



6. Once the file is imported a “File imported successfully” message will briefly pop up in the green highlighted banner.



7. A confirmation notification will also appear under the Alert icon, indicating recent changes.



SECTION 5. REPORTING KEYS

5.1. CBR (COMPUTER BUILD REPORT)

Description:

A Computer Build Report (CBR) is a mandatory report that is sent to Microsoft notifying which keys have been used (bound), so they can be activated. This report is required by Microsoft to obtain the following details: OEM ID, Hardware Hash, Product Key ID, and Key State. Once the CBR is submitted and validated, Product Key IDs will be registered in Microsoft’s activation service, and Windows can be activated by the end user. The CBR process is manual, unless you are set up for auto reporting. (See [Auto-submit CBR](#) section for more details).

CBRs can be sent by an OEM or other OA 3.0 Authorized Party. CBRs are also accepted from Third-Party Installers (TPI) on decentralized model with an OEM. TPI’s are required to have their active DOC Account to communicate with Microsoft services.

A CBR is followed by an OEM Hardware Report (OHR) which includes additional hardware data, such as screen size, processor touchscreen, PEV (promotion code). OEM Hardware Report, provides additional optional reporting fields that can be reported as part of the CBR and OHR.

Example: Contoso OEM works in a decentralized business model with FFKI Mexico to manufacture their devices. Contoso OEM has provided the key information to the factory and the devices are manufactured and the keys have been injected. Therefore, Contoso OEM needs to submit a Computer Build Report (CBR) to Microsoft to activate the keys for the consumer. FFKI Mexico provides the CBR back to Microsoft directly on behalf of Contoso OEM. The factory provides the OEM ID, Hardware Hash, Product Key ID, and Key State (which is now bound) in MDOS. Contoso OEM now has the ability to search for keys that are in Bound status or Marked for Submit status. Contoso OEM will be able to check the key status in real time and perform other services like return or entitle keys with services.

Tip Tool: Computer Build Report (CBR) submits a usage report to Microsoft for keys that are in Bound status. Once validated, keys will be activated for use.

NOTE: Always use durable, reliable and secure communication methods when submitting a CBR to ensure all complete and accurate data is submitted to Microsoft. Valid Computer Build Reports must be submitted by the earlier of; (a) within 24 hours after shipping the device, or (b) 4 hours prior to end user activation.

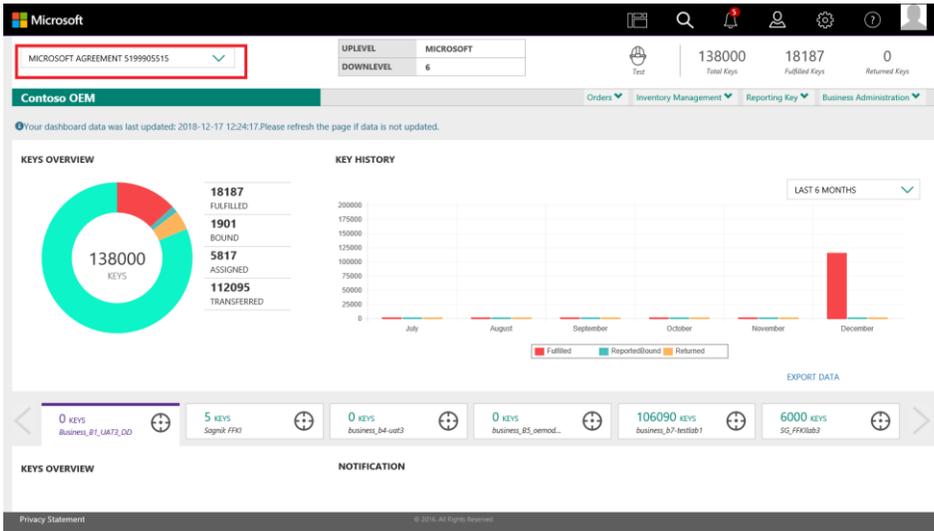
5.1.1 SUBMIT CBR BY SEARCH

Tip Tool: Submit Computer Build Report (CBR) to Microsoft using search functionality to locate bound keys.

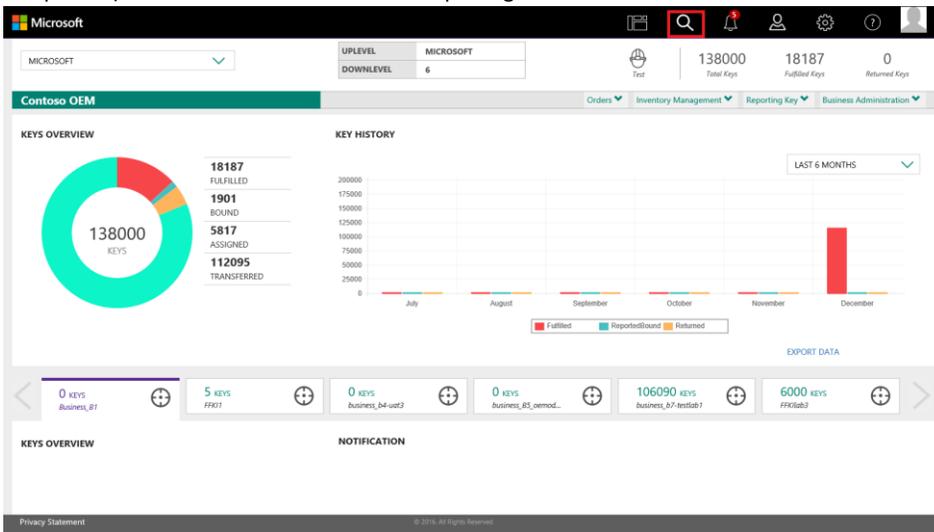
Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

2. From the dashboard view, select the business from the **Business dropdown** menu.



3. Option 1) Click on the search icon in the top navigation bar.



3. Option 2) You may also click on the Bound Keys in the Key Overview from the dashboard view.



4. From the search screen, select BOUND status from the KEY STATUS pulldown menu and click on the SEARCH button.

NOTE: Keys must be in Bound status to be sent in CBR.

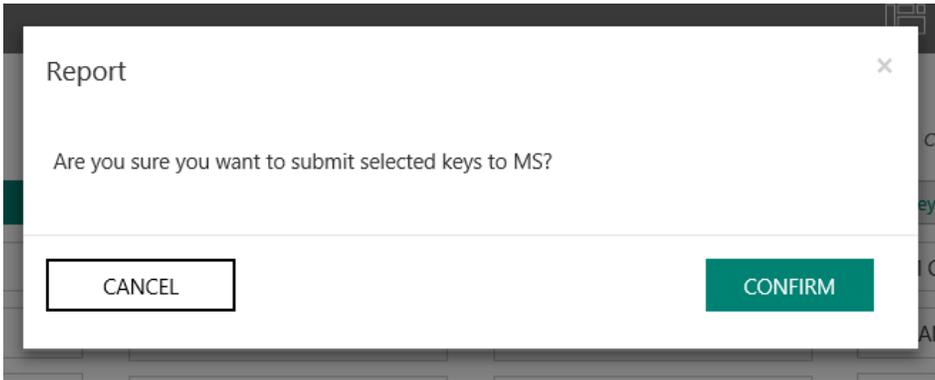
5. Check the box(es) to the select the keys you would like to send in the report.

NOTE: To see more data on a specific key, hover over the key and right click on View Key to pull up additional key details (such as product key ID, 5x5 number, hardware hash, etc.) and key history.

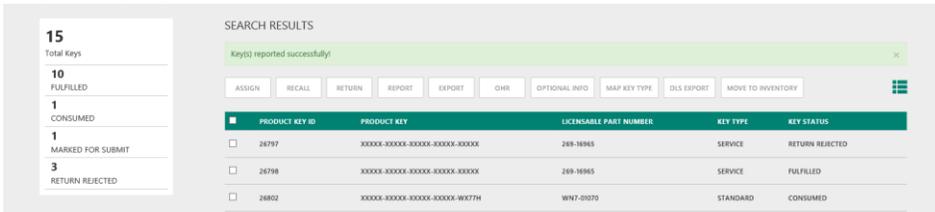
6. Click on the REPORT button above your selection.

MS PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/> 325861322347	XXXXXX-XXXXX-XXXXX-XXXXX-13BK3	KJ7-00001	STANDARD	FULFILLED
<input type="checkbox"/> 325861322348	XXXXXX-XXXXX-XXXXX-XXXXX-3VEDDO	KJ7-00001	STANDARD	CONSUMED
<input checked="" type="checkbox"/> 325861322349	XXXXXX-XXXXX-XXXXX-XXXXX-3VBSQ	KJ7-00001	STANDARD	CONSUMED
<input type="checkbox"/> 325861322350	XXXXXX-XXXXX-XXXXX-XXXXX-WB47D	KJ7-00001	STANDARD	FULFILLED

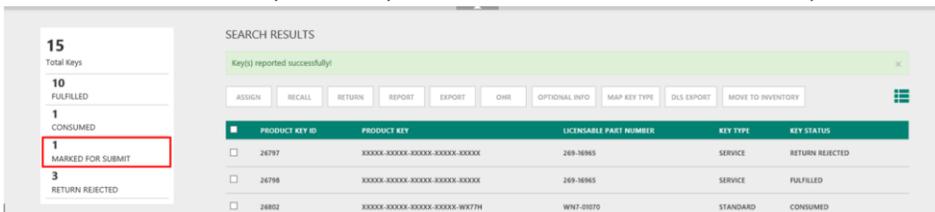
7. A Report confirmation window will pop up to confirm your selection. Click CONFIRM.



8. Once the CBR has been submitted, a "Report sent successfully" message will briefly pop up in the green highlighted banner.



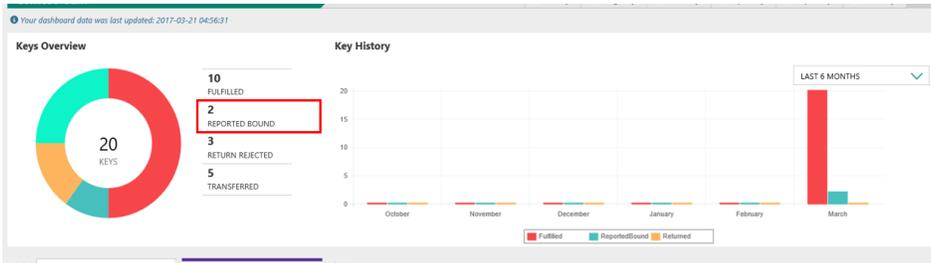
9. The number of Bound Keys in the Keys Overview section will reduce after the report has sent.



10. From the dashboard view, KEY STATUS will be updated from BOUND to MARKED FOR SUBMIT. The number of keys in the MARKED FOR SUBMIT status box on the left will also be updated.

HINT: You may need to search again to see the keys in this status.

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11. KEY STATUS will change from MARKED FOR SUBMIT to REPORTED BOUND once the key is picked and the CBR has been submitted to Microsoft.

15 Total Keys

- 10 FULFILLED
- 2 REPORTED BOUND
- 3 RETURN REJECTED

SEARCH RESULTS

ASSIGN RECALL RETURN REPORT EXPORT OHR OPTIONAL INFO MAP KEY TYPE DLS EXPORT MOVE TO INVENTORY

PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/> 26797	XXXXXXXXXXXXXXXXXXXX	269-16965	SERVICE	RETURN REJECTED
<input type="checkbox"/> 26798	XXXXXXXXXXXXXXXXXXXX	269-16965	SERVICE	FULFILLED
<input type="checkbox"/> 26802	XXXXXXXXXXXXXX-WX77H	WN7-01070	STANDARD	REPORTEDBOUND
<input type="checkbox"/> 26803	XXXXXXXXXXXXXX-H9K07	WN7-01070	STANDARD	REPORTEDBOUND
<input type="checkbox"/> 26804	XXXXXXXXXXXXXX-YH6DV	WN7-01070	STANDARD	FULFILLED

12. KEY STATUS will change a final time from REPORTED BOUND to ACTIVATION ENABLED after acknowledgement by Microsoft (or ACTIVATION DENIED if rejected).

15 Total Keys

- 10 FULFILLED
- 2 ACTIVATION ENABLED
- 3 RETURN REJECTED

SEARCH RESULTS

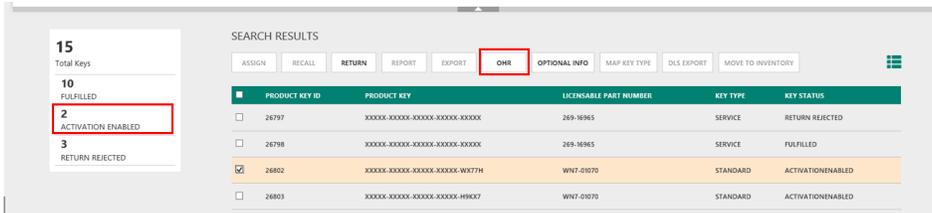
ASSIGN RECALL RETURN REPORT EXPORT OHR OPTIONAL INFO MAP KEY TYPE DLS EXPORT MOVE TO INVENTORY

PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/> 26797	XXXXXXXXXXXXXXXXXXXX	269-16965	SERVICE	RETURN REJECTED
<input type="checkbox"/> 26798	XXXXXXXXXXXXXXXXXXXX	269-16965	SERVICE	FULFILLED
<input type="checkbox"/> 26802	XXXXXXXXXXXXXX-WX77H	WN7-01070	STANDARD	ACTIVATIONENABLED
<input type="checkbox"/> 26803	XXXXXXXXXXXXXX-H9K07	WN7-01070	STANDARD	ACTIVATIONENABLED
<input type="checkbox"/> 26804	XXXXXXXXXXXXXX-YH6DV	WN7-01070	STANDARD	FULFILLED

NOTE: The OHR should be submitted at the same time as the CBR. To submit the OHR follow these steps:

13. Check the box(es) to select the ACTIVATION ENABLED keys and click on the OHR button above your selection.

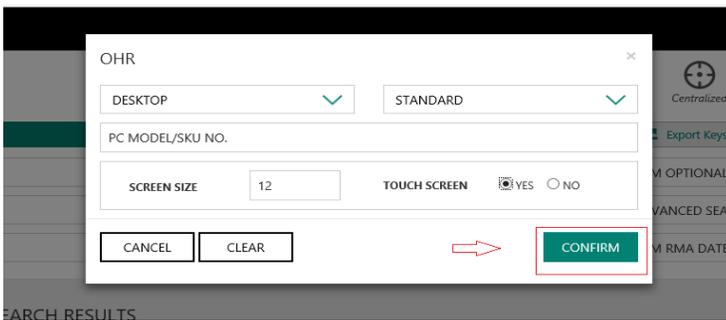
NOTE: Only ACTIVATION ENABLED keys are eligible for OHR submission.



14. An OHR dialog box will open

15. Fill in additional hardware data in OHR dialog box, such as screen size, processor touchscreen, PEV (Promo Code).

15. Click CONFIRM. Details will be sent to Microsoft.

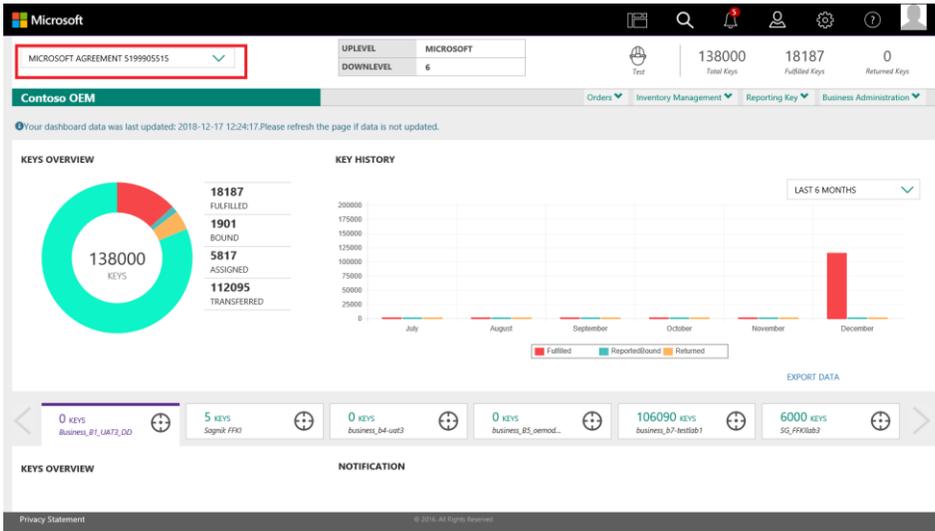


5.1.2 SUBMIT CBR BY QUANTITY

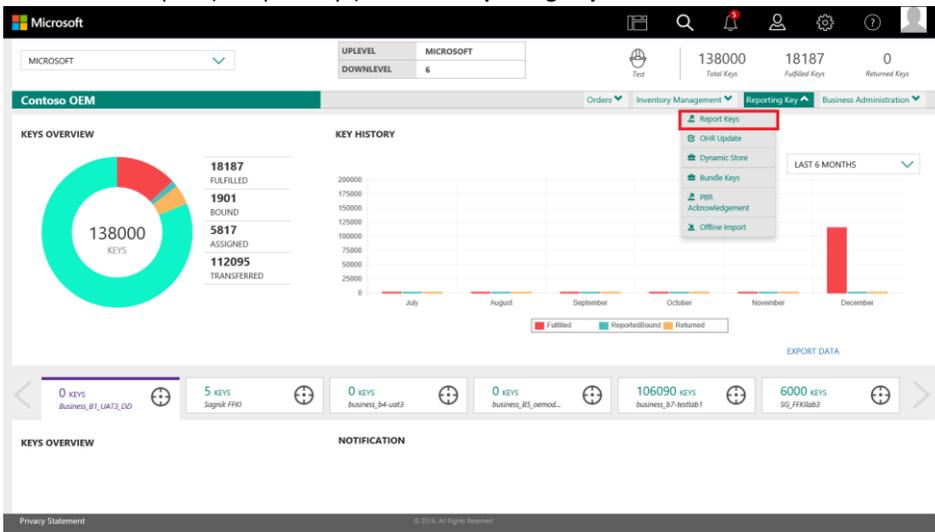
Tip Tool: Submit Computer Build Report (CBR) to report bound keys to Microsoft by quantity.

Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the **Business dropdown** menu.

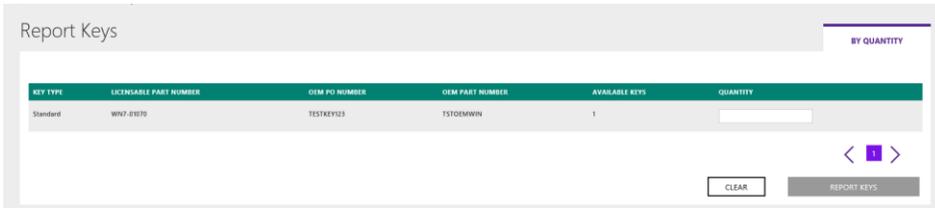


3. Select CBR Report (to report keys) from the Reporting Keys menu.

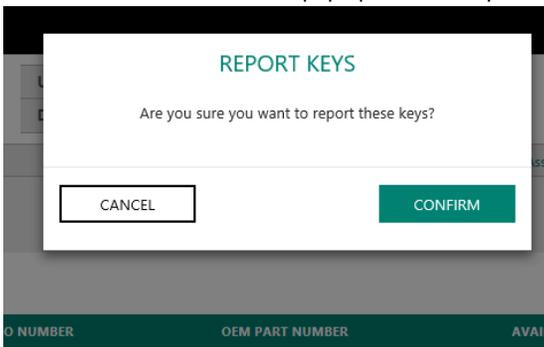


4. Enter the quantity of keys to be reported.

NOTE: Keys must be in BOUND status in order to be reported in the CBR.

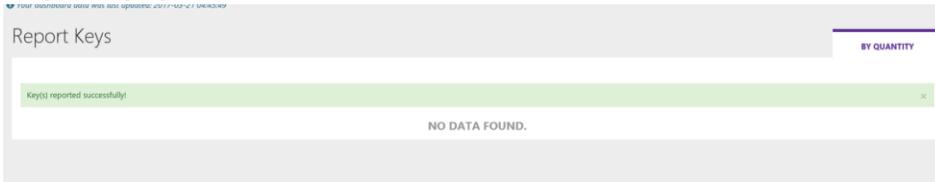


5. A confirmation window will pop up to confirm your selection. Click CONFIRM.



6. The selected bound keys will be reported to Microsoft.

7. Once the report has been sent, a “Key(s) reported successfully” message will briefly pop up in the green highlighted banner.



NOTE: The number of Bound Keys in the Keys Overview section of the dashboard will reduce after the report has sent.

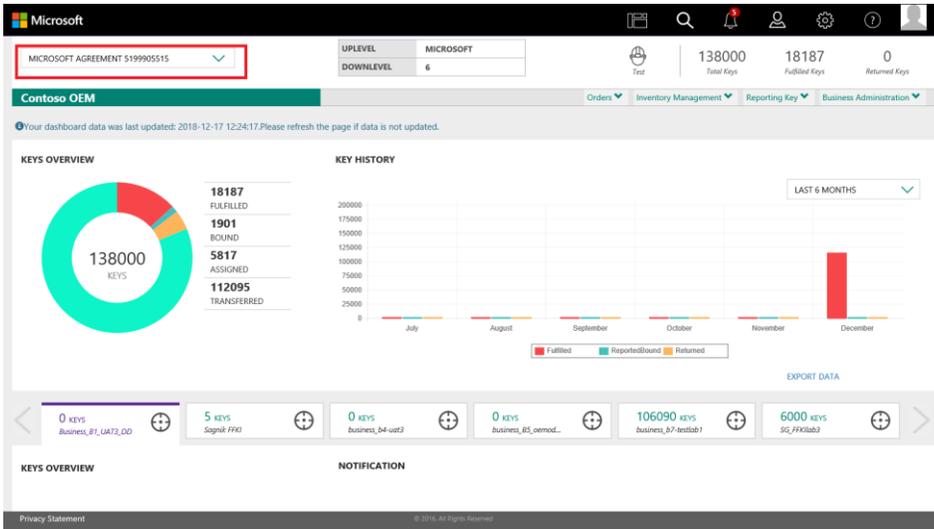
5.1.3 AUTO SUBMIT CBR

Tip Tool: Auto submit CBR (Computer Build Report) functionality allows automatic CBR approval and submission by the uplevel partners, where the process is normally manual.

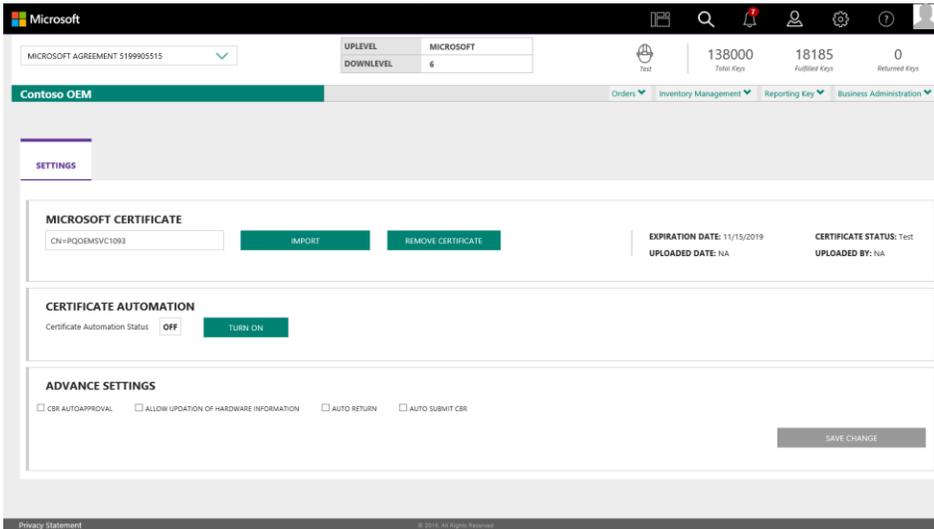
Step-by-step:

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1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.



3. Click on the settings icon in the top navigation bar.



4. Under the SYSTEM menu, check the box to select CBR AUTOAPPROVAL for approvals to be automated.

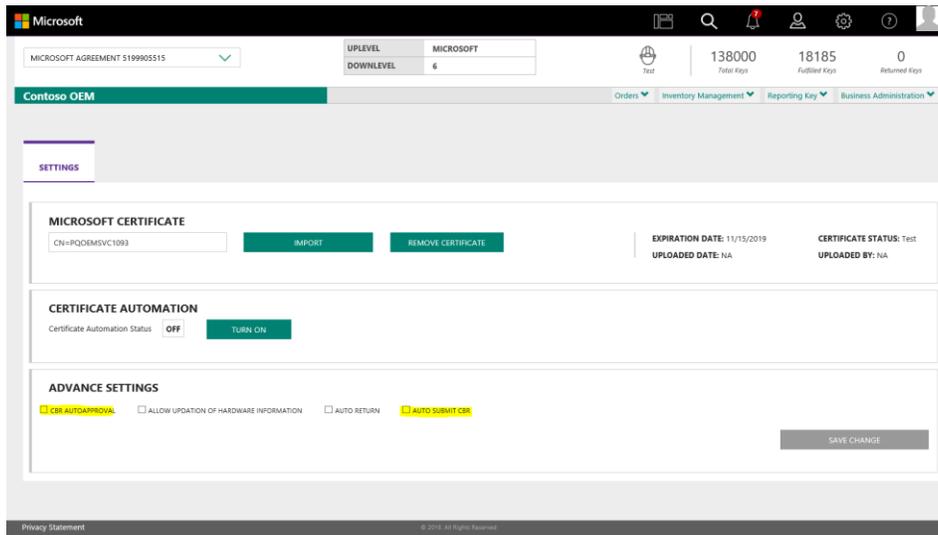
NOTE: User must be admin or have admin permissions.

5. Check the box to select AUTO SUBMIT CBR to turn on automated submission for the CBR.

6. Select Hours and Minutes from the pulldown menu, to set time of day report will be pulled and/or submitted each day.

NOTE:

- Once CBR AUTOAPPROVAL is selected by OEM, key information will go directly go into the report as soon as key status changes to Bound, at the selected time each day.
- Once CBR AUTOSUBMIT is selected by OEM, key information will go directly to Microsoft (skipping OEM) as soon as key status changes to Bound, at the selected time each day.
- Both options must be select for automated approval and submission to occur.
- The OHR reports should be part of the original CBR.



5.2. OHR – OEM HARDWARE REPORT

Description:

The OEM Hardware Report (OHR) follows the Computer Build Report (CBR) and includes additional hardware data required by Microsoft, such as model number, screen size, touch screen. The OHR is required by Microsoft. (Refer to your agreement for details).

An OHR should be submitted at the same time as the CBR. However, it can be updated after the CBR has been submitted in two circumstances; if the OHR Update functionality is turned on under settings. The OHR Update will allow a downlevel partner to update data and the report will automatically submit any time an update is made. (See [OHR Update section](#) for more details). Or a separate OHR update (also known as a Data Update) can be submitted, at a later time, to account for any missing or incorrect data originally submitted in the CBR. (Details can be found [here](#)).

The OEM partner is ultimately responsible for the data and accuracy of the report. Content that is supplied by the downlevel partners should be reviewed by the OEM before submission.

OEM Hardware Report, provides additional optional reporting fields that can be reported as part of the Computer Build Report (CBR). This includes additional hardware details fields such as, OEM Extended Identifier, Country, PEV (Promotional Code), Channel Relationship ID, and Selling Location.

Example: Contoso OEM has submitted their Computer Build Report (CBR), which provided the OEM ID, Hardware Hash, Product Key ID, and Key Status. Next, Contoso adds the OEM Hardware Report (OHR). Contoso selects the keys and the OHR button. From the OHR dialog box they select "Desktop" as the device, enter "10" for the screen size, select "yes" for touchscreen, and add the PEV (promotion code) of "|RE31|". They decide they would like to add additional data under the OEM Optional Information option. They click on the Optional Information button next and the OEM Optional Information report window opens. Here they provide "ABC123" as the OEM Extended Identifier, "China" as the Country for manufacturing, "Japan" for the selling location, and then submits the report.

Tip Tool: OEM Hardware Report (OHR) follows a CBR and includes additional hardware data that is required by Microsoft. The OHR is not optional, but is required by Microsoft.

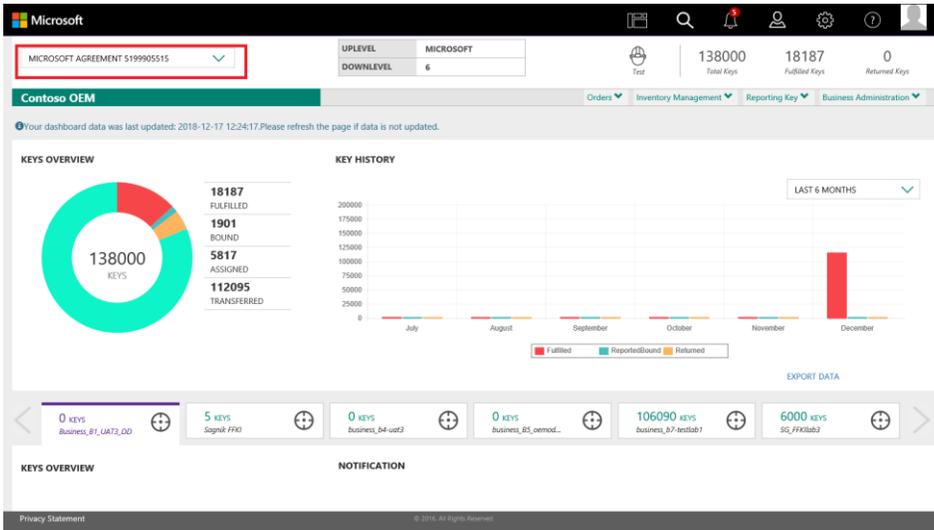
5.2.1 OHR SUBMIT BY SEARCH

Tip Tool: Submit an OEM Hardware Report (OHR) using search functionality.

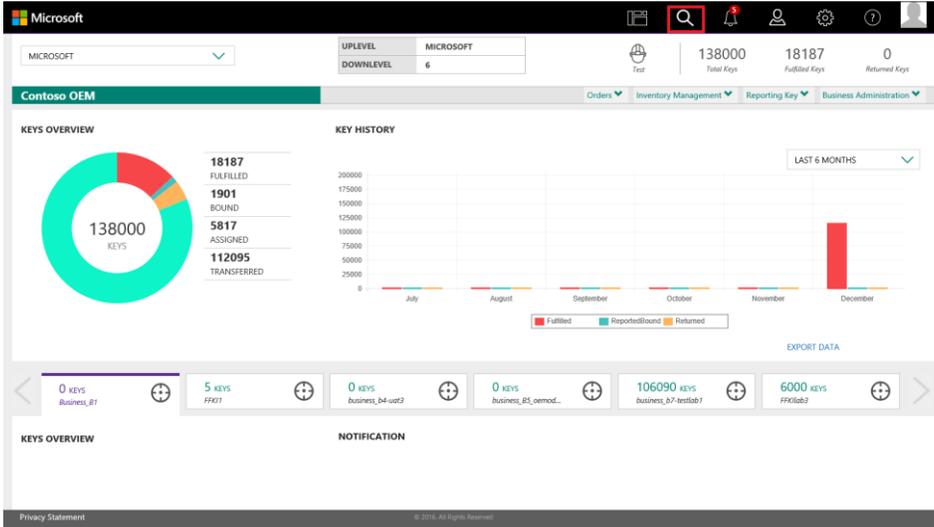
Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the **Business dropdown** menu.

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3. Click on the search icon in the top navigation bar.



4. From the search screen, select ACTIVATION ENABLED status from the KEY STATUS pulldown menu and click on the SEARCH button.

NOTE: Keys must be in ACTIVATION ENABLED status to be sent in OHR. (Refer to section [2.12 SUBMIT CBR](#) for steps to get to this status)

5. Check the box(es) to select the keys you would like to send in the report.

6. Click on the OHR button above your selection.

The screenshot shows a search interface with the following filters and results:

- Filters:**
 - MICROSOFT FILLED DATE: FROM (calendar icon)
 - KEY TYPE: KEY TYPE (dropdown)
 - KEY STATUS: ACTIVATION ENABLED (dropdown)
 - SELECT DLP: CONTOSO OEM (dropdown)
 - OEM PO NUMBER: Eg: BulkKeys_20_PO_No
 - OEM PART NUMBER: Eg: BulkKeys_20_Part_No
 - LICENSEABLE PART NUMBER: Eg: FGC-0000
 - CALL OFF REFERENCE: Eg: 0000089/07877
 - MICROSOFT ORDER NUMBER: Eg: 1018703841
 - MS PRODUCT KEY ID: Eg: 8000009090909
 - OEM OPTIONAL INFO (+)
 - ADVANCED SEARCH (+)
 - OEM RMA DATE (+)
 - RESET button
 - SEARCH button
- Search Results:**
 - Total Keys: 18185
 - ACTIVATION ENABLED: 1
 - Buttons: ASSIGN, RECALL, RETURN, REPORT, EXPORT, OHR (highlighted), OPTIONAL INFO, MAP KEY TYPE, DLP EXPORT, MOVE TO INVENTORY, EXPORT RESULT
 - Table Headers: MS PRODUCT KEY ID, PRODUCT KEY, LICENSEABLE PART NUMBER, KEY TYPE, KEY STATUS
 - Table Row:

<input checked="" type="checkbox"/>	325863132347	XXXXX-XXXXX-XXXXX-XXXXX-1383	K27-00001	STANDARD	ACTIVATION ENABLED
-------------------------------------	--------------	------------------------------	-----------	----------	--------------------

7. An OHR dialog box will open.

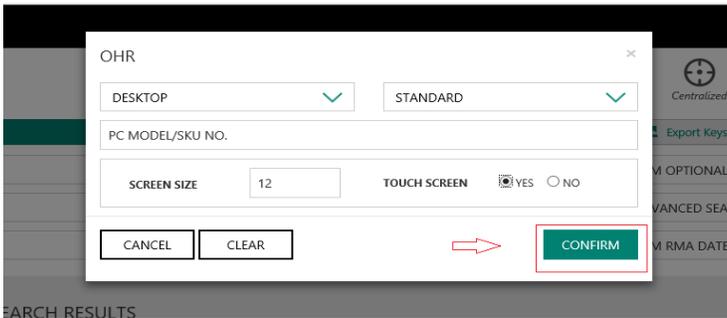
8. Fill in additional hardware data in OHR dialog box, such as screen size, processor touchscreen, PEV (Promo Code).

NOTE: If a Promotion Code (Promo Code) is to be included in the Program Eligibility Value (PEV) field, the following format should be used:

- Up to 60 characters can be entered in the field
- Up to 11 unique 4-digit Promo Codes can be submitted in the field with “|” delimiter
 - Eg. Single Promo Code: |NR12|
 - Multiple Promo Codes: |NR12|AN23|

Only keys that are eligible for the promotion should be submitted with the associated Promo Code(s) in the Program Eligibility Value field. Eligible Promo Codes will be included in the agreement documentation and will have been vetted and signed by the Partner prior to being used in active promotions.

9. Click CONFIRM. Details will be sent to Microsoft.

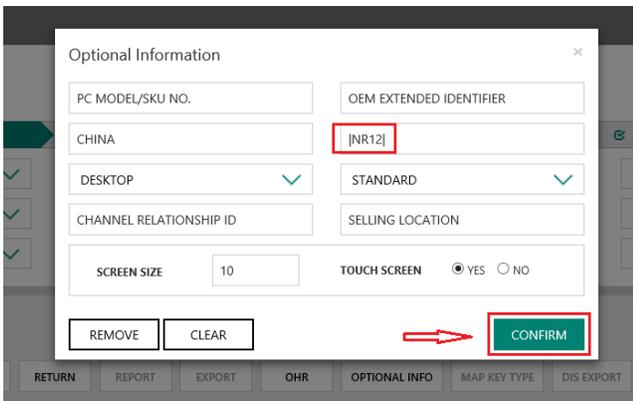


NOTE: After completing the OHR, you may enter optional information as part of the OEM Optional Information report.

6. After entering the OHR information, click on OPTIONAL INFORMATION button above your selected keys.

7. An OPTIONAL INFORMATION popup box will open.

8. Fill in the additional details desired and click CONFIRM.



5.2.2 OHR UPDATE BY BULK

Description:

The OEM Hardware Report (OHR) generally follows the Computer Build Report (CBR) and includes additional hardware data required by Microsoft, such as model number, screen size, touch screen. Please refer to your agreement and Ops Handbook ent for more details on OHR requirements. The OHR Update By Bulk functionality allows the partners to update the OHR information in bulk quantities.

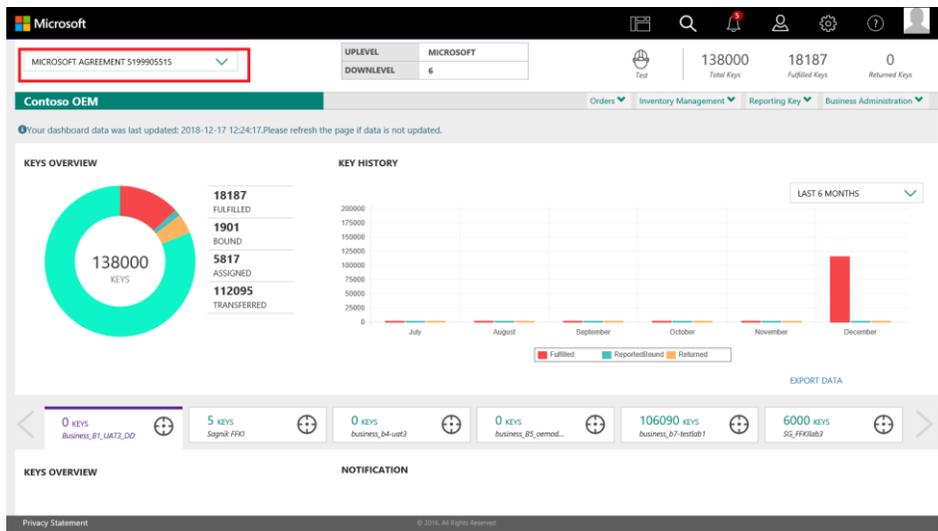
Tip Tool:

Allows OEM/TPI users to update the OHR information in bulk quantity

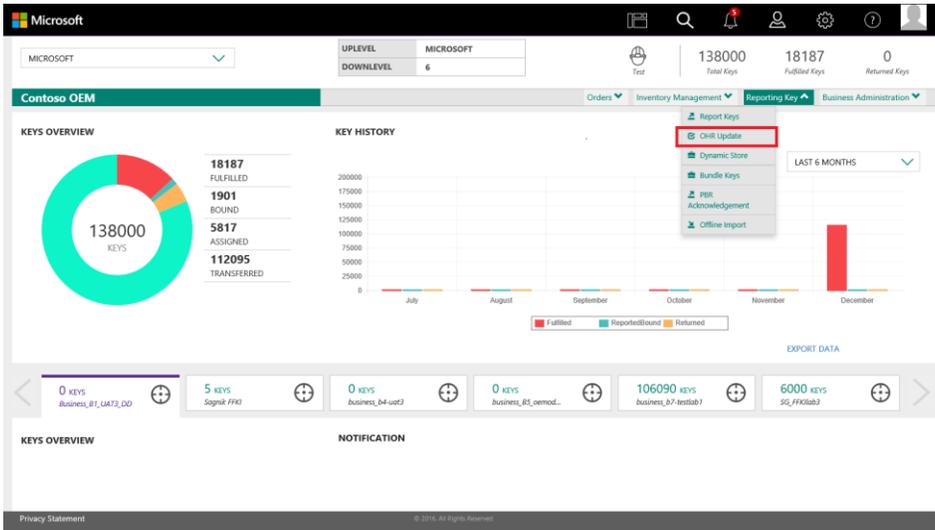
Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.



3. From the Reporting Key menu, select OHR update.



4. From the OHR update page, click on search to get the available key list.

OHR Updates BY QUANTITY

ORDER NUMBER: OEM PO NUMBER: LICENSABLE PART NUMBER: KEY STATUS:

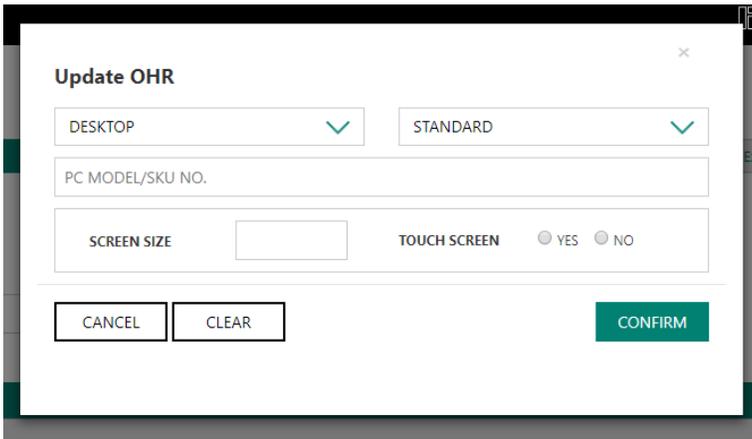
OHR Updates BY QUANTITY

ORDER NUMBER: OEM PO NUMBER: LICENSABLE PART NUMBER: KEY STATUS:

KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	AVAILABLE KEYS
<input type="checkbox"/> Standard	FQC-0800	KV_D907B		2
<input type="checkbox"/> Standard	FQC-0800	TEST KEYS		2
<input type="checkbox"/> Standard	KWR-0004	KV_2		1

5. Select the keys for which you need to perform OHR update, and then click on OHR update button.

6. A popup box will appear where you need to fill the option hardware info (i.e. PC model, screen size).



The screenshot shows a modal window titled "Update OHR" with a close button (X) in the top right corner. The form contains the following elements:

- Two dropdown menus: the first is set to "DESKTOP" and the second is set to "STANDARD".
- A text input field labeled "PC MODEL/SKU NO." which is currently empty.
- A section for "SCREEN SIZE" with an empty input field.
- A "TOUCH SCREEN" section with two radio buttons: "YES" (which is selected) and "NO".
- At the bottom, there are three buttons: "CANCEL", "CLEAR", and "CONFIRM".

7. Enter the OHR details and click on confirm button.

Update OHR

DESKTOP STANDARD

CONTOSO

SCREEN SIZE TOUCH SCREEN YES NO

CANCEL CLEAR CONFIRM

KV_091018

TEST KEYS

KV 2

5.3. OFFLINE IMPORT

Description:

The Offline Import functionality provides the ability to submit a Computer Build Report (CBR) or Product Bind Report (PBR) when offline. This option can be utilized when there is no network connectivity or if the proper bandwidth is not available. A partner can download the file details required and send data in an XML format to their uplevel partner in MDOS. (For more information, see the [CBR \(Computer Build Report\)](#) section of this manual).

The offline process is not recommended. The submission process through MDOS is still the recommended method. The CBR Auto-Submit process is ideally preferred.

Example: Contoso Factory is the FFKI for ABC Design House (the IDH). Contoso Factory does not have reliable network connectivity from their remote location, so they utilize the Offline Import functionality to submit a Computer Build Report (CBR) back to their uplevel partner ABC Design

House. Contoso Factory has previously downloaded the file details that are required, so they are able to create the CBR report offline in an XML format to ABC Design House. ABC Design House then can import the data, add additional report details if desired, and submit the report to Microsoft.

Tip Tool: Submit an offline Computer Build Report (CBR) or Product Bind Report (PBR) to uplevel partners.

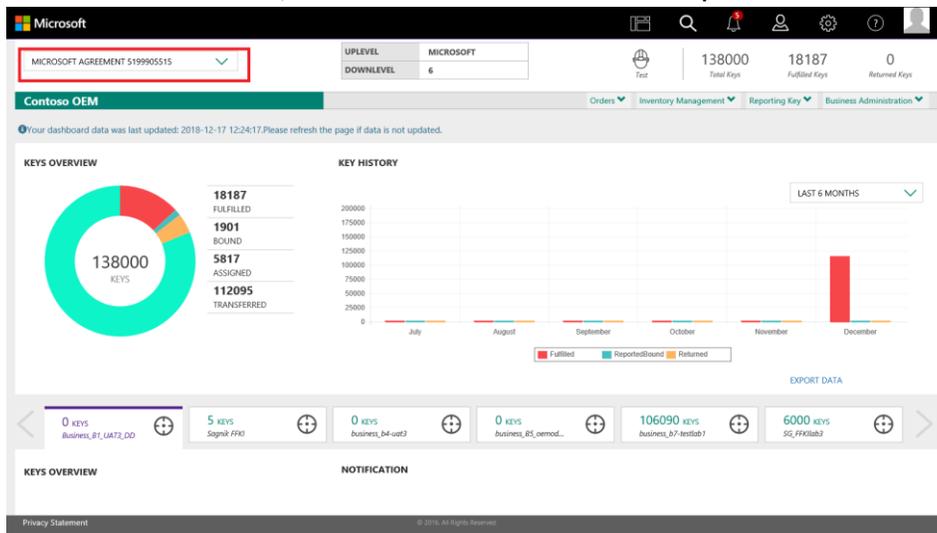
NOTE: File details that are required must be previously downloaded from MDOS by DLP.

5.3.1 CBR IMPORT

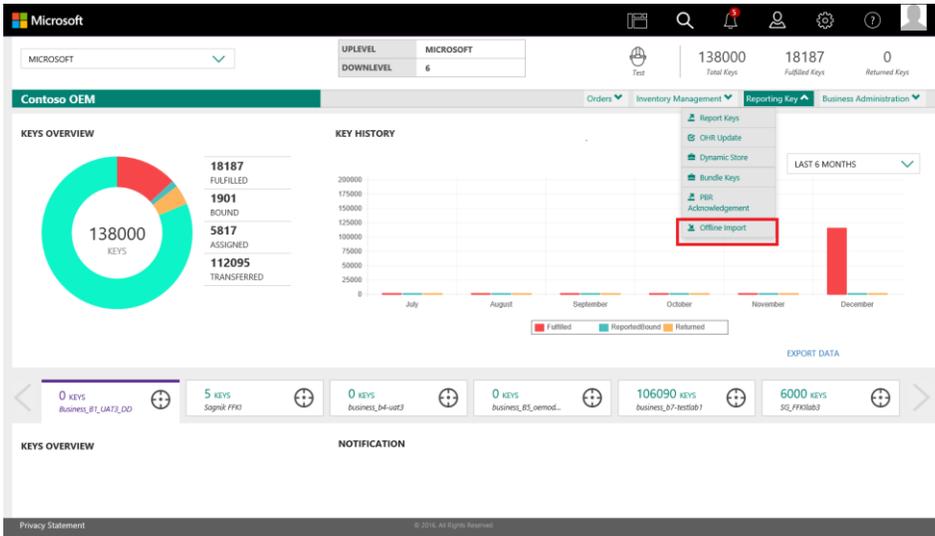
Tip Tool: Submit a Computer Build Report (CBR) to uplevel partners from a file that was previously compiled while offline. File details that are required must be previously downloaded by DLP.

Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the **Business dropdown** menu.



3. From the **Reporting Key** menu, select Offline Import



4. From the Offline Import screen select CBR IMPORT FILE.

NOTE: This option should be used only in exceptional cases when there is no network connectivity.

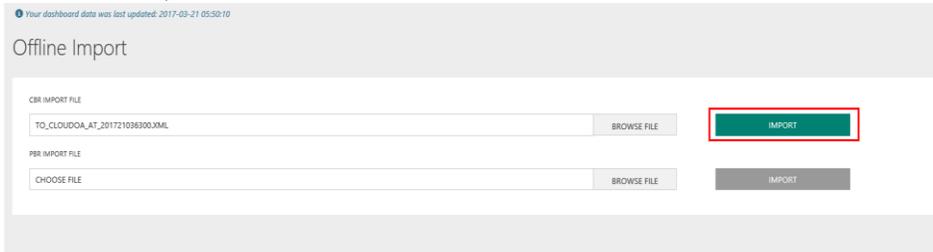
The 'Offline Import' screen shows two sections for file selection. The first section is for 'CBR IMPORT FILE', with the label highlighted in red. It includes a 'CHOOSE FILE' button, a 'BROWSE FILE' button, and an 'IMPORT' button. The second section is for 'PBR IMPORT FILE', also with a 'CHOOSE FILE' button, a 'BROWSE FILE' button, and an 'IMPORT' button.

5. Click BROWSE FILE to locate the CBR Import file received from DIS to import into the MDOS system.

The 'Offline Import' screen shows the 'CBR IMPORT FILE' section with the file path 'TD_CLOUDOA_AT_201721036300.XML' entered in the text field, which is highlighted in red. The 'BROWSE FILE' button is visible next to the text field. The 'IMPORT' button is also visible. The 'PBR IMPORT FILE' section remains empty.

NOTE: The CBR Import file received from DIS has the complete information of the keys to be imported to MDOS system with the respective site, business, and key status.

6. Once selected, click IMPORT.

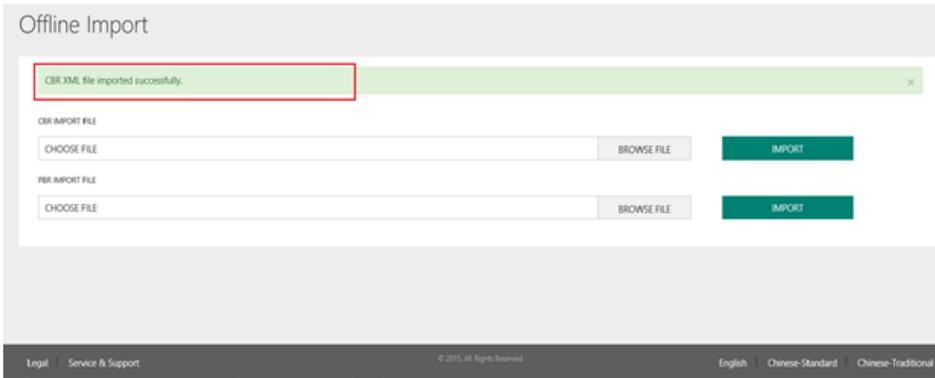


EXAMPLE: CBR Import file

```
<?xml version="1.0" encoding="utf-8"?>
<ExportKeyList xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns: xsi="http://www.w3.org/2001/XMLSchema-instance">
  <CreatedDate>2016-06-12T02:39:07.5493352Z</CreatedDate>
  <Keys>
    <ExportKeyInfo>
      <CloudOAProductKeyId>55162</CloudOAProductKeyId> ← Product Key ID
      <CloudOASiteId>1041</CloudOASiteId>
      <CloudOABusinessId>1012</CloudOABusinessId>
      <CloudOAUserId>0</CloudOAUserId>
      <ProductKeyId>3258628574598</ProductKeyId>
      <ProductKey>
        T3NUMESwdTRVNSstBZ1lTYTRVw8rRm5QqXBGOWxK0F2K1FCb3paVg0RT1EU13
        RA==</ProductKey>
      <ProductKeyState>Bound</ProductKeyState> ← Product key state to be
      <HardwareHash>MAAAAEAAqABAAEAAAACA</HardwareHash> ← changed
      <OEMOptionalInfo>
        <Field>
          <Name>ZPC_MODEL_SKU</Name>
          <Value>ABCDEFGHIJKLM11222333442</Value>
        </Field>
        <Field>
          <Name>ZMANUF_GEO_LOC</Name>
          <Value>CHNIAISOFT</Value>
        </Field>
        <Field>
          <Name>ZPGM_ELIG_VAL</Name>
          <Value> |NR12| </Value>
        </Field>
        <Field>
          <Name>ZOEM_EXT_ID</Name>
          <Value>30000123</Value>
        </Field>
        <Field>
          <Name>ZCHANNEL_REL_ID</Name>
          <Value>ChinaSoft</Value>
        </Field>
      </OEMOptionalInfo>
    </ExportKeyInfo>
  </Keys>
</ExportKeyList>
```

7. Once the import is complete, a “CBR xml file imported successfully” message will briefly pop up in the green highlighted banner.

8. All the keys in the CBR file will now be updated with the respective information from the XML.

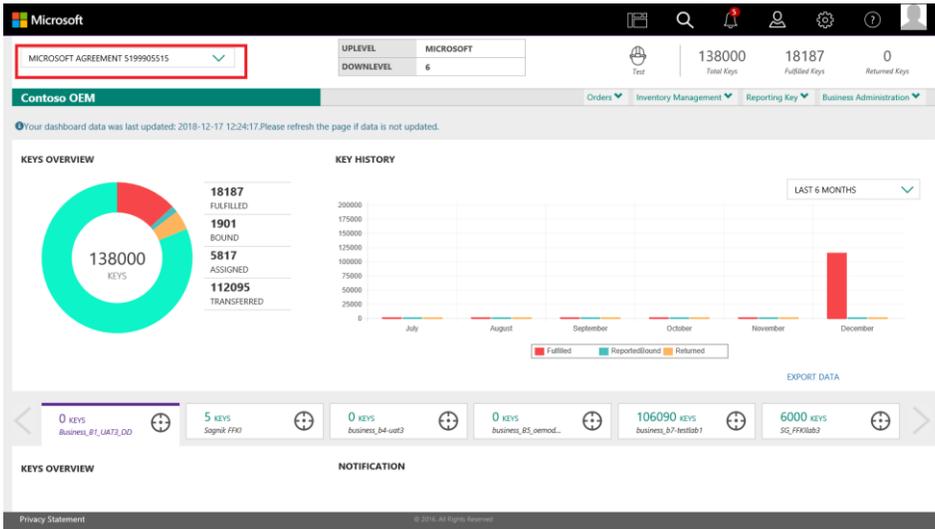


5.3.2 PBR IMPORT

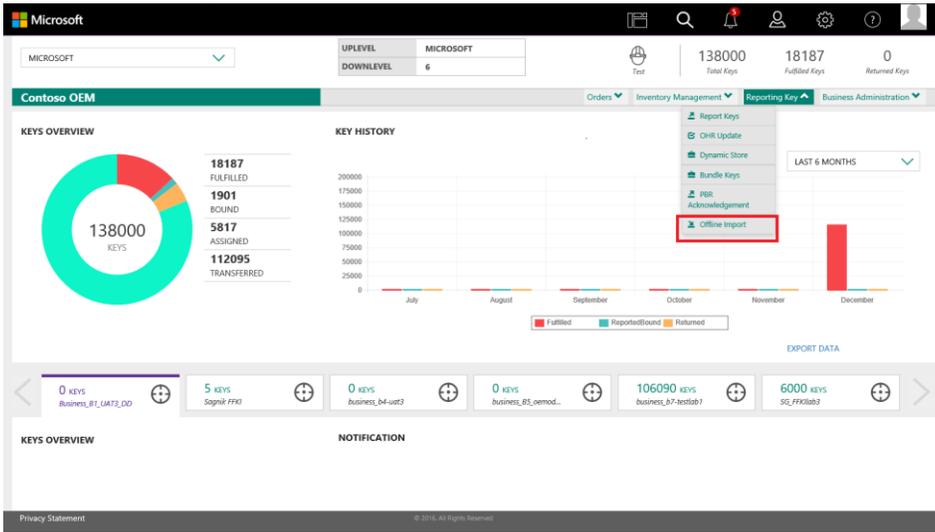
Tip Tool: Submit a Product Bind Report (PBR) to uplevel partners while offline.

Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.



3. From the Reporting Key menu, select Offline Import



4. From the Offline Import screen select PBR IMPORT FILE.

NOTE: This option should be used only in exceptional cases when there is no network connectivity.



5. Click BROWSE FILE to locate the PBR Import file received from the FKI/FFKI via DIS to import into the MDOS system.

6. Once the file is selected, click the IMPORT button.



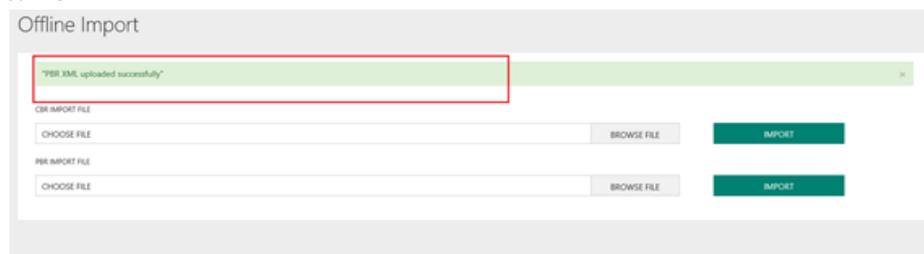
EXAMPLE: PBR Import file

```
<?xml version="1.0" encoding="utf-8"?>
<PbrExportContent xmlns:i="http://www.w3.org/2001/XMLSchema-
instance"
xmlns="http://schemas.ms.it.oem/digitaldistribution/2010/10">
  <CloudOABusinessId>1025</CloudOABusinessId>
  <CloudOASiteId>1023</CloudOASiteId>
  <CloudOAUserId>0</CloudOAUserId>
  <CreatedDateUTC>2016-06-12T02:43:37.818717Z</CreatedDateUTC>
  <Content i:type="ProductBindingReportRequest">
    <CustomerBindingUniqueID>
      a6587b89-01fd-45c1-87c4-9342ccce0a21</CustomerBindingUniqueID>
    <SoldToCustomerID>1 </SoldToCustomerID>
    <ReceivedFromCustomerID>1 </ReceivedFromCustomerID>
    <TotalLineItems>2</TotalLineItems>
    <ProductBindings>
      <ProductBinding>
        <WindowsProductKeyID>2586002113613</WindowsProductKeyID>
        <ServiceProductKeyID>2961047765001</ServiceProductKeyID>
      </ProductBinding>
      <ProductBinding>
        <WindowsProductKeyID>2586002113614</WindowsProductKeyID>
        <ServiceProductKeyID>2961047765002</ServiceProductKeyID>
      </ProductBinding>
    </ProductBindings>
  </Content>
</PbrExportContent>
```

Product key
Service key to be binded

7. Once the import is complete, the key will be bound to the service key(s) defined in the file.

8. A “PBR XML uploaded successfully”, message will briefly pop up in the green highlighted banner.



5.4. PBR ACKNOWLEDGEMENT

Description:

The Product Bind Report (PBR) Acknowledgement (formerly called Offline Export) is the offline reporting of keys that have been bound. The PBR process is required once binding is complete so the report can be submitted to Microsoft for processing and payment. (For more information on how to bind keys, refer to the Bind Keys section).

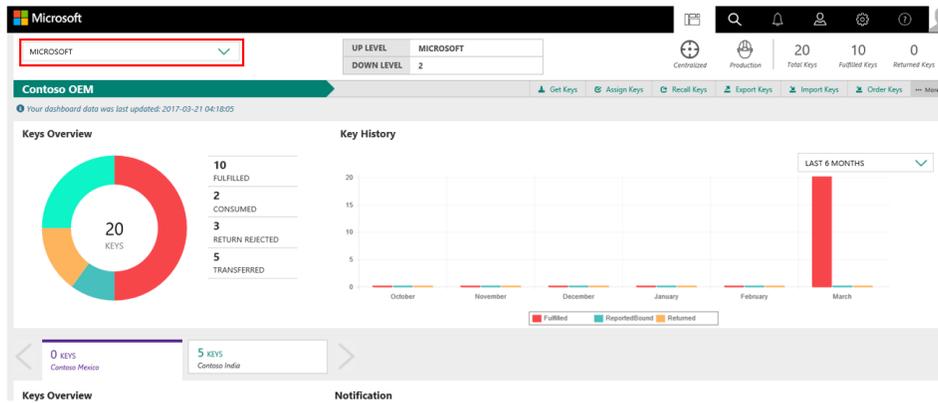
The PBR process is usually seamless as it is created in the background after binding occurs. However, the offline reporting method can be utilized when there is no network connectivity or if the proper bandwidth is not available. The offline process is not recommended. The submission process through MDOS is still the recommended method.

During the PBR process, the downlevel partner will download files and send an offline PBR to the OEM partner. The OEM will then upload the files and send the report to Microsoft via MDOS.

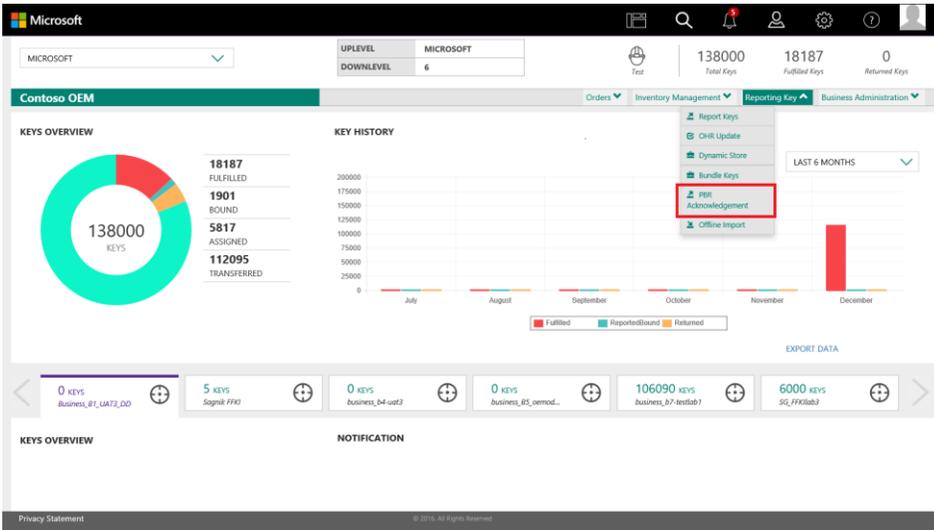
Tip tool: The Product Bind Report (PBR) Acknowledgement is the offline reporting of keys that have been bound.

Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.



3. From the More dropdown menu, select PBR Acknowledgement.



4. Enter search criteria, if desired, and click on the SEARCH button.

5. All PBR submitted keys will be displayed with the respective status of “Not Sent”, “Sent”, or “Acknowledgement Received”.

PBR Acknowledgement Export

PBR REPORT UNIQUE ID: [input field] CREATED DATE (UTC) FROM: [calendar icon] CREATED DATE (UTC) TO: [calendar icon] SEARCH RESET

PBR REPORT UNIQUE ID	MS REPORT UNIQUE ID	MS RECEIVED DATE UTC	CREATED DATE UTC	STATUS	VIEW DETAILS
48E54F8B-72D4-488E-8276-691C9388846	00000000-0000-0000-0000-000000000000		2017-03-21T07:36:13.237	NOT YET SENT	VIEW >

CLEAR EXPORT

6. Select the keys to be exported and click on EXPORT.

7. An EXPORT TO window will pop up. Select the downlevel partner (DLP) from the dropdown menu.

EXPORT TO

CONTOSO OEM ✓

CONTOSO OEM

CONTOSO INDIA

8. Once the export is in process, a “We are processing your request” message will briefly pop up in the green highlighted banner.
2. The PBR export file will be created which will be used by the downlevel (FKI/FFKI) for further processing.
3. Once the file has been downloaded, click on the VIEW link under VIEW DETAILS to see the bound key details.
4. Partners will be able to view the PBR status of the each key, click ‘VIEW’ link as per the below screenshot,

PBR REPORT UNIQUE ID	MS REPORT UNIQUE ID	MS RECEIVED DATE UTC	CREATED DATE UTC	STATUS	VIEW DETAILS
<input type="checkbox"/> 5AF228E5-17A3-47AE-A64B-1794E318948	BC19685-C06E-411D-823D-507664070E2	2018-06-21T07:57:06.54	2018-06-21T07:47:38.243	ACKNOWLEDGEMENT RECEIVED	VIEW >
<input type="checkbox"/> 8296174D-4478-4F58-965E-A39F7802D9F1	9CF9193-6A8F-4896-807E-822620198E	2018-06-21T03:36:55.031	2018-06-21T03:27:46.99	ACKNOWLEDGEMENT RECEIVED	VIEW >
<input type="checkbox"/> EF0782C-6AD2-4D3E-8803-229220488D	DAB80CDE-ABCC-4843-8872-6A4D18309226	2018-06-21T09:33:39.75	2018-06-21T09:18:32.543	ACKNOWLEDGEMENT RECEIVED	VIEW >
<input type="checkbox"/> CXC1A031-8011-4ED4-88D9-63E838329354	51586A3D-3028-41C7-8C25-796D9E3F639	2018-06-21T09:25:32.647	2018-06-21T09:18:31.817	ACKNOWLEDGEMENT RECEIVED	VIEW >
<input type="checkbox"/> 8A97B8D9-F348-4F7D-8152-C76987E4856	00AA4798-9193-488F-8586-A88A58D185E	2018-06-21T07:34:22.037	2018-06-21T07:28:30.86	ACKNOWLEDGEMENT RECEIVED	VIEW >

5

CLEAR EXPORT

5. A popup window will open with PBR acknowledgement details. This window will show the PBR bundle status in the reason description. If the bundle is successful, the status will be ‘Bound’. If the PBR bundling fails, the failure reason will be displayed under ‘Reason Description’

PBR ACKNOWLEDGEMENT DETAILS							
WINDOWS PRODUCT KEY ID	WINDOWS LICENSABLE INAME	WINDOWS LICENSABLE PARTNUMBER	SERVICE PRODUCT KEY ID	SERVICE LICENSABLE INAME	SERVICE LICENSABLE PARTNUMBER	MASKED PRODUCT KEY	REASON DESCRIPTION
89990123163682	WIN HOME 10 OLC OAS HomeAct PTK	KW9-00458	2875303004558	OFFICE PRO 2016 OLC OAS PTK APOLB	289-16965	X82QV	INVALID PRODUCT BINDING

EXPORT TO EXCEL

CLOSE

6. Partners also have the option to export the results to excel file as MDOS only shows the top 5 records in the display screen.

PBR ACKNOWLEDGEMENT DETAILS

EXPORT TO EXCEL

WINDOWS PRODUCTKEY ID	WINDOWS LICENSABLENAME	WINDOWS LICENSABLE PARTNUMBER	SERVICE PRODUCTKEY ID	SERVICE LICENSABLENAME	SERVICE LICENSABLE PARTNUMBER	MASKED PRODUCTKEY	REASON DESCRIPTION
3258505488873	WIN HOME 10 OLC OA3 PTK	KW9-00004	2975301004580	OFFICE PRO 2016 OLC OA3 PTK AFOLB	269-16965	FX8VD	BOUND
3258505488874	WIN HOME 10 OLC OA3 PTK	KW9-00004	2975301004581	OFFICE PRO 2016 OLC OA3 PTK AFOLB	269-16965	Q69QQ	BOUND
3258505488875	WIN HOME 10 OLC OA3 PTK	KW9-00004	2975301004582	OFFICE PRO 2016 OLC OA3 PTK AFOLB	269-16965	PGYK3	BOUND
3258505488876	WIN HOME 10 OLC OA3 PTK	KW9-00004	2975301004583	OFFICE PRO 2016 OLC OA3 PTK AFOLB	269-16965	R9CHD	BOUND
3258505488877	WIN HOME 10 OLC OA3 PTK	KW9-00004	2975301004584	OFFICE PRO 2016 OLC OA3 PTK AFOLB	269-16965	D69QQ	BOUND

CLOSE

PBR ACKNOWLEDGEMENT DETAILS

WINDOWS PRODUCTKEY ID	WINDOWS LICENSABLENAME	WINDOWS LICENSABLE PARTNUMBER	SERVICE PRODUCTKEY ID	SERVICE LICENSABLENAME	SERVICE LICENSABLE PARTNUMBER	MASKED PRODUCTKEY
899901203174015	WIN NEXT CVF UNACTIVATABLE OLC OEM	WN7-01070	2975301002221	OFFICE PRO 2016 OLC OA3 PTK AFOLB	269-16965	DHH7H

CLOSE

5.5 DLP EXPORT

Description:

The DLP export functionality is meant to be used by an OEM who has an offline business with downlevel partners. The OEM can export keys and transfer those keys to their downlevel partners while offline. This functionality then allows a downlevel partner to export/receive keys while also offline.

The difference between a DLP export and a Product Bind Report (PBR) Acknowledgement (formerly called Offline Export), is that with a PBR Acknowledgement, the DLP can export the keys from the cloud at any time.

Additionally, the key status will change to “FFKI Fulfilled” after the DLP export has completed. Whereas the key status will change to “Consumed” when the PBR Acknowledgement offline export is used.

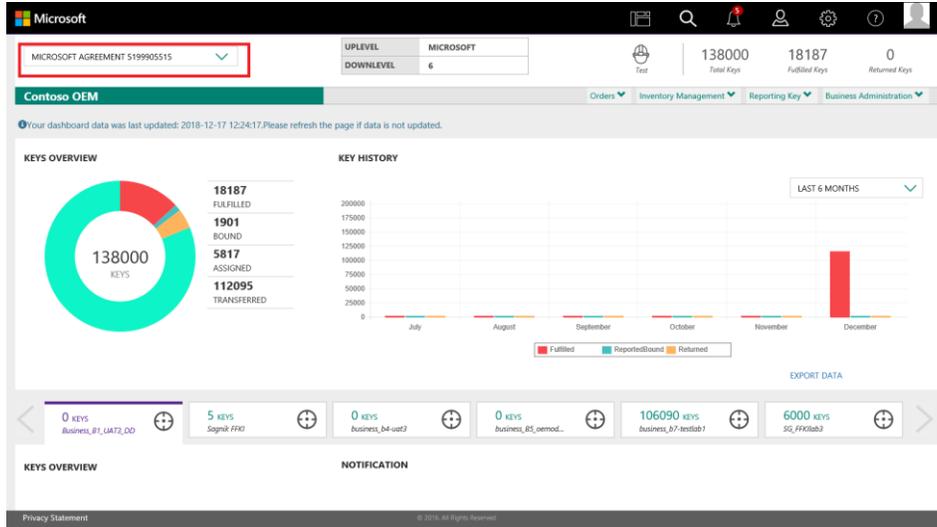
Tip Tool: DLP export functionality allows the OEM to export keys and transfer those keys to their downlevel partners while offline.

5.5.1 DLP EXPORT BY SEARCH

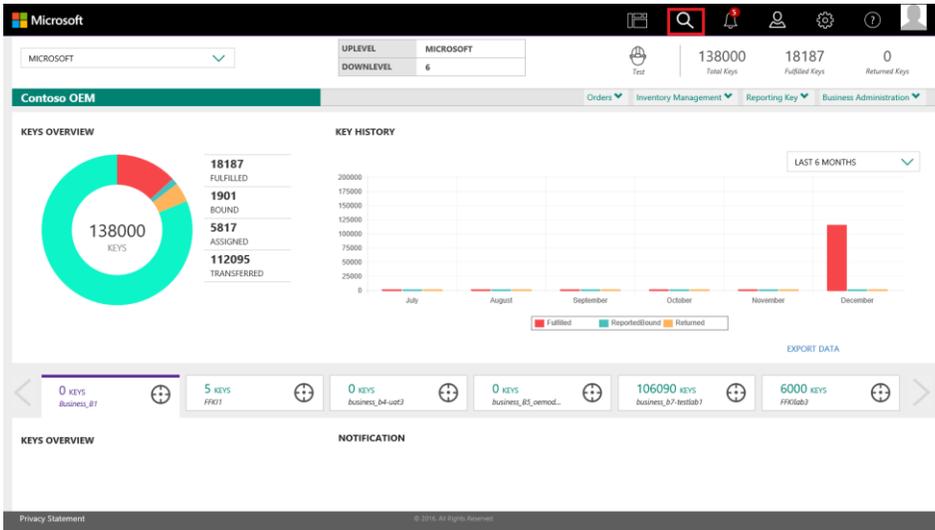
Tip Tool: Use search functionality to export keys and transfer to downlevel partners while offline.

Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.



3. Click on the search icon in the top navigation bar.



4. Enter search criteria, if desired, and click on the SEARCH button.

5. The DLP EXPORT button will be visible in the key operations section.

NOTE: DLP export will be available to keys with key status of assigned, fulfilled, or downloaded.

The screenshot shows the search results page for 25905 total keys. The left sidebar shows a summary of key statuses: 18185 FULFILLED, 2 CONSUMED, 1901 BOUND, and 5817 ASSIGNED. The main area displays a table of search results with the following columns: MS PRODUCT KEY ID, PRODUCT KEY, LICENSABLE PART NUMBER, KEY TYPE, and KEY STATUS. The 'DLP EXPORT' button is highlighted in yellow.

MS PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input checked="" type="checkbox"/> 3258631322347	XXXXX.XXXXX.XXXXX.XXXXX-T38K3	KJ7-00001	STANDARD	FULFILLED
<input type="checkbox"/> 3258631322348	XXXXX.XXXXX.XXXXX.XXXXX-V6DDQ	KJ7-00001	STANDARD	CONSUMED
<input type="checkbox"/> 3258631322349	XXXXX.XXXXX.XXXXX.XXXXX-3VE3Q	KJ7-00001	STANDARD	CONSUMED
<input type="checkbox"/> 3258631322350	XXXXX.XXXXX.XXXXX.XXXXX-W84TD	KJ7-00001	STANDARD	FULFILLED
<input type="checkbox"/> 3258631322351	XXXXX.XXXXX.XXXXX.XXXXX-P17X3	KJ7-00001	STANDARD	FULFILLED
<input type="checkbox"/> 3258631322352	XXXXX.XXXXX.XXXXX.XXXXX-3PQ93	KJ7-00001	STANDARD	FULFILLED
<input type="checkbox"/> 3258631322353	XXXXX.XXXXX.XXXXX.XXXXX-VQ9HVD	KJ7-00001	STANDARD	FULFILLED
<input type="checkbox"/> 3258631322354	XXXXX.XXXXX.XXXXX.XXXXX-VQ9WVD	KJ7-00001	STANDARD	FULFILLED

6. Check the box(es) to select the keys to be exported and click on the DLP EXPORT button.

NOTE: This DLP export functionality is meant to be used by an OEM/IDH who has an offline business with a downlevel partner(s).

25905 Total Keys 18185 FULFILLED 2 CONSUMED 1901 BOUND 5817 ASSIGNED	SEARCH RESULTS					
	ASSIGN RECALL RETURN REPORT EXPORT OHR OPTIONAL INFO MAP KEY TYPE DLP EXPORT MOVE TO INVENTORY EXPORT RESULT					
	MS PRODUCT KEY ID	PRODUCT KEY	LICENSEABLE PART NUMBER	KEY TYPE	KEY STATUS	
	<input checked="" type="checkbox"/>	3258631322347	XXXXX-XXXXX-XXXXX-XXXXX-F38K3	KJ7-00001	STANDARD	FULFILLED
	<input type="checkbox"/>	3258631322348	XXXXX-XXXXX-XXXXX-XXXXX-V6D9Q	KJ7-00001	STANDARD	CONSUMED
	<input type="checkbox"/>	3258631322349	XXXXX-XXXXX-XXXXX-XXXXX-3VE3Q	KJ7-00001	STANDARD	CONSUMED
	<input type="checkbox"/>	3258631322350	XXXXX-XXXXX-XXXXX-XXXXX-W847D	KJ7-00001	STANDARD	FULFILLED
	<input type="checkbox"/>	3258631322351	XXXXX-XXXXX-XXXXX-XXXXX-P17K3	KJ7-00001	STANDARD	FULFILLED
	<input type="checkbox"/>	3258631322352	XXXXX-XXXXX-XXXXX-XXXXX-3P093	KJ7-00001	STANDARD	FULFILLED
	<input type="checkbox"/>	3258631322353	XXXXX-XXXXX-XXXXX-XXXXX-VQWVD	KJ7-00001	STANDARD	FULFILLED
<input type="checkbox"/>	3258631322354	XXXXX-XXXXX-XXXXX-XXXXX-VQWVD	KJ7-00001	STANDARD	FULFILLED	

7. Select the DLP and click CONFIRM.

Dis Export ✕

SELECT DLS: ✓

CANCEL
CONFIRM

8. The DLP export file will be created containing all exported key information. This file will be exported to the DLP selected and available for offline by use.

9. A “We are processing your request, the system will notify you as soon as it is ready to download.” message will briefly pop up in the green highlighted banner. The file will be available for download in download center.

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Contoso OEM | Orders | Inventory Management | Reporting Key | Business Administration

We are processing your download request. The system will notify you when it is ready to download.

MICROSOFT FULFILLED DATE FROM: [calendar icon]

MICROSOFT FULFILLED DATE TO: [calendar icon]

KEY TYPE: [dropdown menu]

KEY STATUS: [dropdown menu]

SELECT DLP: ACER INCORPORATED [dropdown menu]

OEM PO NUMBER: Eg: BulkKeys_20_PO_No

OEM PART NUMBER: Eg: BulkKeys_20_Part_No

LICENSABLE PART NUMBER: Eg: FQC-0000

CALL OFF REFERENCE: Eg: 100009787877

MICROSOFT ORDER NUMBER: Eg: 1018703841

MIS PRODUCT KEY ID: Eg: 8000009090909

OEM OPTIONAL INFO: [plus icon]

ADVANCED SEARCH: [plus icon]

OEM RMA DATE: [plus icon]

RESET [button]

SEARCH [button]

25904 Total Keys

18184 FULFILLED

2 CONSUMED

1901 BOUND

5817

SEARCH RESULTS

ASSIGN | RECALL | RETURN | REPORT | EXPORT | OHR | OPTIONAL INFO | MAP KEY TYPE | DLP EXPORT | MOVE TO INVENTORY | EXPORT RESULT

MS PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/> 325861322348	XXXXX-XXXXX-XXXXX-XXXXX-W5DDQ	KJ7-00001	STANDARD	CONSUMED
<input type="checkbox"/> 325861322349	XXXXX-XXXXX-XXXXX-XXXXX-3W6IQ	KJ7-00001	STANDARD	CONSUMED
<input type="checkbox"/> 325861322350	XXXXX-XXXXX-XXXXX-XXXXX-W847D	KJ7-00001	STANDARD	FULFILLED

Download Center

DOWNLOAD CENTER

FILE NAME	FILE COUNT	EXPORT DATE	LAST DOWNLOAD DATE	ACTION	DOWNLOAD
DLPExport_897_1118_2018_Mar_13_13_38_46.zip	1	03/13/2018 7:08:46	03/14/2018 6:50:44	DLP Export	Download
DPKExport_897_1118_2018_Mar_08_07_20_18.zip	1	03/08/2018 12:50:18	03/08/2018 12:50:35	DPK Export	Download
DPKExport_897_1118_2018_Mar_08_06_07_32.zip	1	03/08/2018 11:37:33	03/08/2018 11:37:51	DPK Export	Download

10. The keys exported in the previous steps will be visible to the DLP in “FFKI Fulfilled” status.

1 Total Keys

1 FFKI FULFILLED

SEARCH RESULTS

ASSIGN | RECALL | RETURN | REPORT | EXPORT | OHR | OPTIONAL INFO | MAP KEY TYPE | DLP EXPORT | MOVE TO INVENTORY | EXPORT RESULT

MS PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/> 2975301617458	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	269-16965	SERVICE	FFKI FULFILLED

The exported file is in the below format:

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```
<?xml version="1.0" encoding="UTF-8"?>
<ExportKeyList xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <CreatedDate>2018-03-13T13:38:46.6611387Z</CreatedDate>
  - <Keys>
    - <ExportKeyInfo>
      <CloudOASiteId>905</CloudOASiteId>
      <CloudOABusinessId>1128</CloudOABusinessId>
      <CloudOAUserId>1083</CloudOAUserId>
      <CloudOAProductKeyId>1040256</CloudOAProductKeyId>
      <ProductKeyId>899901252748332</ProductKeyId>
      <ProductKey>N39F2-CC6QD-Q7MTQ-FYRTJ-KJFHH</ProductKey>
      <ProductKeyState>Fulfilled</ProductKeyState>
      <OEMOptionalInfo/>
      <SoldToCustomerName>Cloud OA OEM 5</SoldToCustomerName>
      <OrderUniqueId>8e4d5cf7-4ae5-4a5d-883c-d2085d6bb8c4</OrderUniqueId>
      <SoldToCustomerId>897</SoldToCustomerId>
      <OEMPONumber>OEMTestPO</OEMPONumber>
      <OEMPartNumber/>
      <MSOrderNumber>1101369883</MSOrderNumber>
      <MSOrderLineNumber>2250</MSOrderLineNumber>
      <LicensablePartNumber>KW9-00458</LicensablePartNumber>
      <OEMPODateUTC>2018-03-11T00:00:00</OEMPODateUTC>
      <ShipToCustomerId>897</ShipToCustomerId>
      <ShipToCustomerName>Cloud OA OEM 5</ShipToCustomerName>
      <LicensableName>WIN HOME 10 OLC OA3 NonAct PTK</LicensableName>
      <FulfillmentResendIndicator>false</FulfillmentResendIndicator>
      <FulfillmentNumber>1901529502</FulfillmentNumber>
      <FulfilledDateUTC>2018-03-11T06:36:45.527</FulfilledDateUTC>
      <FulfillmentCreateDateUTC>2018-03-11T06:36:29</FulfillmentCreateDateUTC>
      <KeyType>1</KeyType>
      <CanBindPbr>true</CanBindPbr>
    </ExportKeyInfo>
  </Keys>
</ExportKeyList>
```

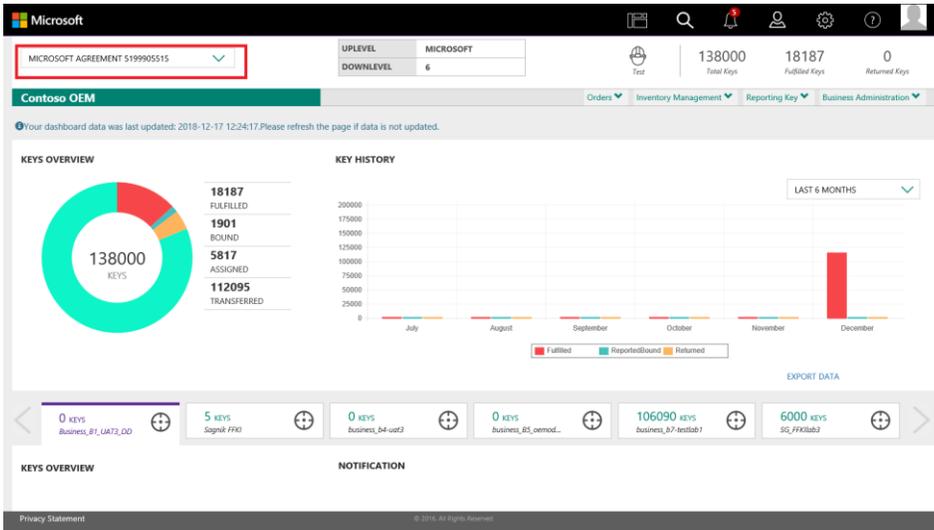
5.5.2 DLP EXPORT BY QUANTITY

Tip Tool: Export keys by quantity and transfer to downlevel partners while offline.

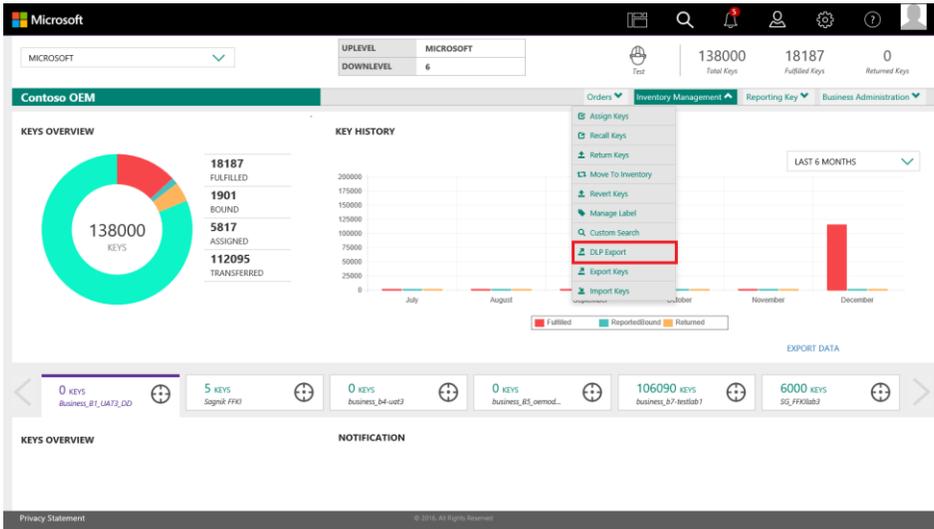
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.

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3. Select DLP Export from the Inventory management menu.



4. Next to the selected keys, enter the quantity desired. Quantity must be less than or equal to the available key quantity.

NOTE: This DLP export functionality is meant to be used by an OEM/IDH who has an offline business with a downlevel partner(s) and click EXPORT KEYS.

DLS Export BY QUANTITY

SELECT DLS: CONTOSO INDIA

KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	AVAILABLE KEYS	QUANTITY
Service	269-16965	TESTKEY1LAN		3	<input type="text"/>
Service	269-16965	TESTKEY123	TESTOEMOFFC	1	<input type="text"/>
Service	7L4-00013	TESTKEY123	TSTOEMC365	3	<input type="text"/>
Standard	WN7-01070	TESTKEY123	TSTOEMWIN	2	<input type="text"/>

< 1 >
CLEAR EXPORT KEYS

5. A confirmation window will pop up to confirm your selection. Click CONFIRM.

EXPORT KEYS

Are you sure you want to export selected keys?

CANCEL
CONFIRM

6. Once the keys are exported, a “We are processing your download request. The system will notify you as soon as it is ready to download” message will briefly pop up in the green highlighted banner. The file will be available for download in download center.

DLP Export BY QUANTITY

SELECT DLP: FFK_SAVKD

KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	AVAILABLE KEYS	QUANTITY
Standard	KW9-00004	TESTING KEY	19001	2	<input type="text" value="0"/>
Standard	KW9-00004	16MAY1	16MAYPBR1	3	<input type="text" value="0"/>
Standard	KW9-00004	4565556	STD	1	<input type="text" value="0"/>

< 1 >
CLEAR EXPORT KEYS

Download Center

FILE NAME	FILE COUNT	EXPORT DATE	LAST DOWNLOAD DATE	ACTION	DOWNLOAD
DLPExport_897_1118_2018_Mar_13_13_38_46.zip	1	03/13/2018 7:08:46	03/14/2018 6:50:44	DLP Export	Download
DPKExport_897_1118_2018_Mar_08_07_20_18.zip	1	03/08/2018 12:50:18	03/08/2018 12:50:35	DPK Export	Download
DPKExport_897_1118_2018_Mar_08_06_07_32.zip	1	03/08/2018 11:37:33	03/08/2018 11:37:51	DPK Export	Download

7. The keys exported in the previous steps will be visible to the DLP in “FFKI Fulfilled” status.

SEARCH RESULTS

MS PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
2975307037468	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	289 1695	SERVICE	FFKI FULFILLED

The exported file is in the below format:

```
<?xml version="1.0" encoding="UTF-8"?>
<ExportKeyList xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <CreatedDate>2018-03-13T13:38:46.6611387Z</CreatedDate>
  <Keys>
    <ExportKeyInfo>
      <CloudOASiteId>905</CloudOASiteId>
      <CloudOABusinessId>1128</CloudOABusinessId>
      <CloudOAUUserId>1083</CloudOAUUserId>
      <CloudOAProductKeyId>1040256</CloudOAProductKeyId>
      <ProductKeyId>899901252748332</ProductKeyId>
      <ProductKey>N39F2-CC6QD-Q7MTQ-FYRTJ-KJFHH</ProductKey>
      <ProductKeyState>Fulfilled</ProductKeyState>
      <OEMOptionalInfo/>
      <SoldToCustomerName>Cloud OA OEM 5</SoldToCustomerName>
      <OrderUniqueId>Be4d5cf7-4ae5-4a5d-883c-d2085d6bb8c4</OrderUniqueId>
      <SoldToCustomerId>897</SoldToCustomerId>
      <OEMPONumber>OEMTestPO</OEMPONumber>
      <OEMPartNumber/>
      <MSOrderNumber>1101369883</MSOrderNumber>
      <MSOrderLineNumber>2250</MSOrderLineNumber>
      <LicensablePartNumber>KW9-00458</LicensablePartNumber>
      <OEMPODateUTC>2018-03-11T00:00:00</OEMPODateUTC>
      <ShipToCustomerId>897</ShipToCustomerId>
      <ShipToCustomerName>Cloud OA OEM 5</ShipToCustomerName>
      <LicensableName>WIN HOME 10 OLC OA3 NonAct PTK</LicensableName>
      <FulfillmentResendIndicator>false</FulfillmentResendIndicator>
      <FulfillmentNumber>1901529502</FulfillmentNumber>
      <FulfilledDateUTC>2018-03-11T06:36:45.527</FulfilledDateUTC>
      <FulfillmentCreateDateUTC>2018-03-11T06:36:29</FulfillmentCreateDateUTC>
      <KeyType>1</KeyType>
      <CanBindPbr>true</CanBindPbr>
    </ExportKeyInfo>
  </Keys>
</ExportKeyList>
```

5.6 REVERT KEYS

Description:

Partners can use the revert keys capability to revert the key status to fulfilled state in this instance. This feature can be leveraged if partners accidentally export keys which are not intended for key injection and want to revert the key back to fulfilled state.

Note: Do not revert Consumed Digital Product Keys that have been:

1. Injected in a device, where that device has shipped to a customer.
2. A CBR report has been created and submitted to Microsoft for a specific DPK. In both of these cases, reverting a key will cause a duplicate key submission situation.

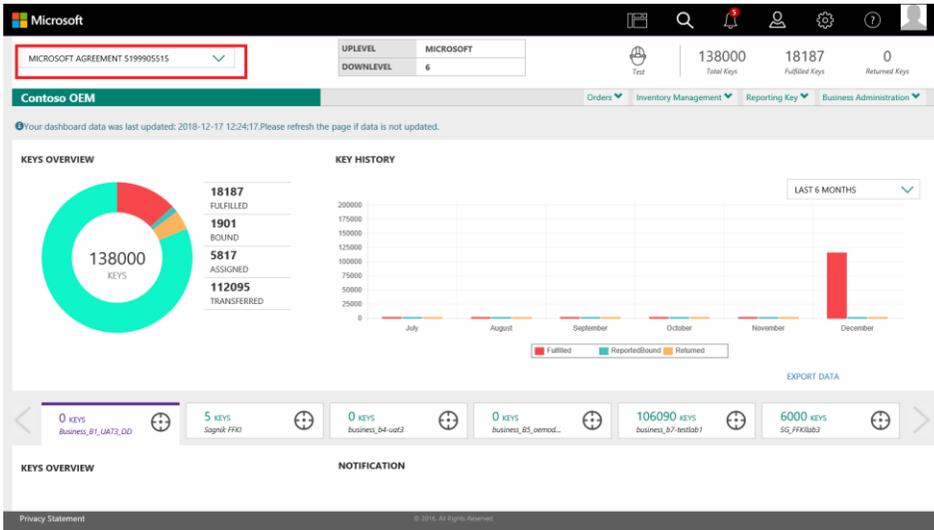
Tip Tool:

Allows OEM/IDH/TPI users to revert the key status from consumed to fulfilled.

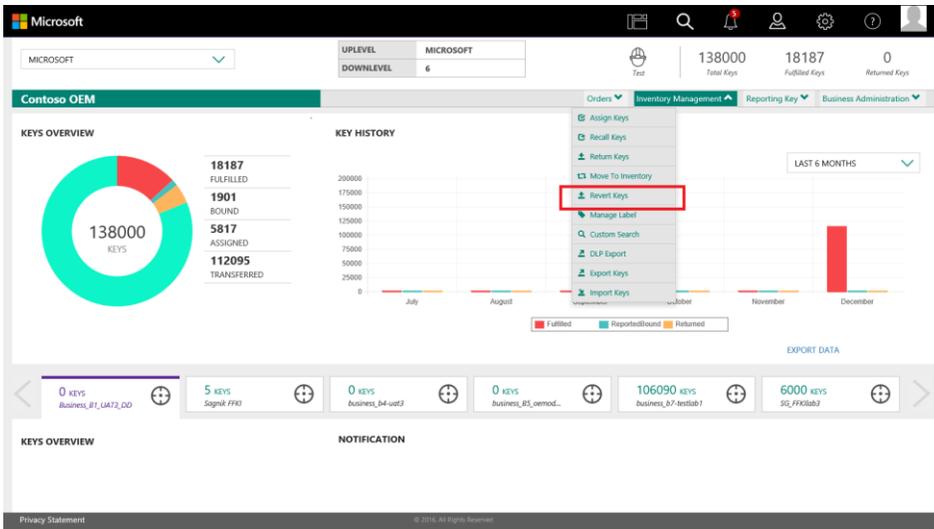
Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.

Microsoft Digital Operations Services User Manual



3. From the Inventory Management menu, select Revert Keys.



4. From the revert key page, select the key that need to be revert and click the Revert button.

Revert Keys

Warning: Please note that this page is used to revert the keys exported by mistake from MDOL Partner has to take full responsibility and make sure that they're not reverting the keys used in any other system.

TRANSACTION ID	SITE NAME	TRANSACTION TYPE	KEY STATUS	QUANTITY	CREATED DATETIME UTC
<input type="checkbox"/> 743baa49-9d5f-4b11-b1e5-ad89e759c038	Contoso OEM9	Export	Consumed	1	2018-10-31 21:38:55
<input type="checkbox"/> 4e8a8ac3-55bb-45ee-9c27-134c1c88ba2	Contoso OEM9	Export	Consumed	1	2018-10-31 21:25:28
<input type="checkbox"/> 781e5c0f-f088-40ac-8a5e-69b32e3ab484	Contoso OEM9	Export	Consumed	1	2018-10-31 21:24:17

Privacy Statement | © 2018. All rights reserved.

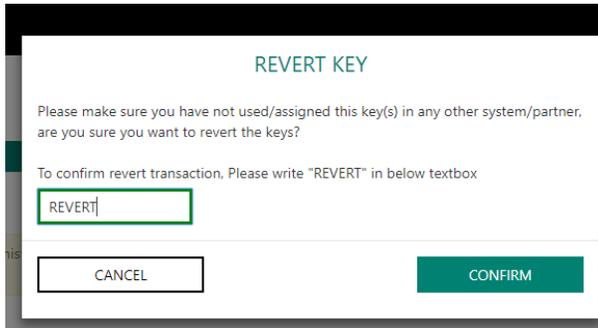
5. A popup box will appear where you need to write revert to confirm the revert transaction.

REVERT KEYS

Please make sure you have not used this key(s) in any other system, are you sure you want to revert the keys?

To confirm revert transaction, Please type "REVERT" in below textbox

6. Click confirm to revert the keys.



SECTION 6. DIGITAL BI INSTRUMENTATION

6.1 BUSINESS INTELLIGENCE

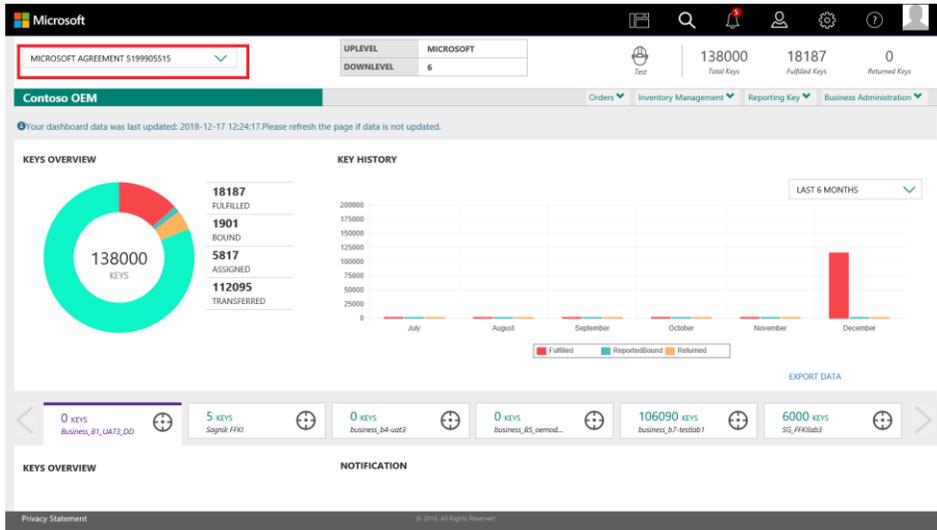
Description:

Business intelligence (BI) can be described as "a set of techniques and tools for the acquisition and transformation of raw data into meaningful and useful information for business analysis purposes".

BI within MDOS is displayed in the dashboard section under Key Overview and Key History. This view provides a quick visual glimpse of your keys counts, grouped by status.

- **Key Overview** – See a breakdown of keys by status (Fulfilled, Activation Enabled, Bound, Returned, etc.) and counts for each in a color-coded donut chart.
- **Key History** – Select a date range in the pulldown menu to see a breakdown of keys by status (Fulfilled, Activation Enabled, Bound, and Returned) and counts for each in a color-coded bar chart view.

This visual display shows you inventory in an easy-to-understand and interactive chart view. Bar charts and donut charts provide a visual breakdown by color, and allow you to click to drill down on a status.



6.1.1 KEY OVERVIEW

Key Overview: The overview section provides a visual synopsis of key counts and status. The Key Overview image displays total key count in the center, provides a breakdown by color in the donut chart, and provides actual counts for each status in the summary section.

Key Overview statuses may include:

Fulfilled	Ordered keys have been downloaded through MDOS to the OEM. (Note: All partner DPKs that are ordered, are automatically downloaded to the MDOS platform).
Assigned	Keys allocated by ULP to their DLP from current inventory. (ULP view)
Transferred	Keys allocated by ULP to their FFKI from current inventory. (ULP view)
FFKI Fulfilled	Keys have been assigned to FFKI (FFKI view)

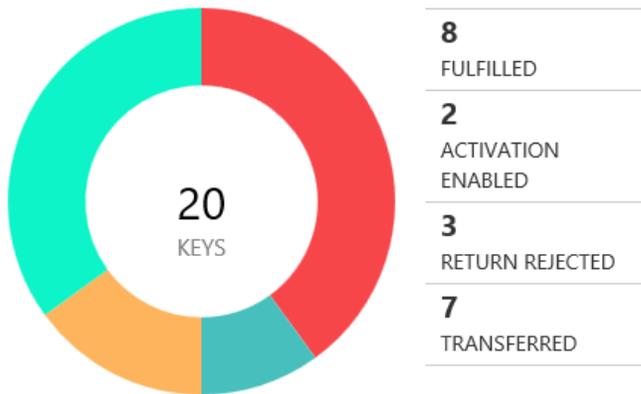
Consumed	Keys have been exported and can be bound/injected by DLP.
Bound	Keys injected to device. Keys need to be reported in CBR so they can be activated. CBR is automatically created in MDOS.
Marked For Submit	Bound keys selected in background process and are ready for CBR submission (CBR has not been submitted to Microsoft yet).
Reported Bound	Bound key submitted to Microsoft and waiting for Microsoft acknowledgment.
Activation Enabled	CBR acknowledgement by Microsoft. Keys ready to be activated for consumption. (final status)
Activation Denied	CBR rejected by Microsoft. Keys status changes to Activation Denied.
Marked For Return	Keys have been returned to Microsoft. (Still awaiting Microsoft acknowledgment and approval and possible account credit).
Reported Return	Keys submitted for return to Microsoft, pending approval.
Returned	Keys have been returned to Microsoft.
Return Rejected	Return has been rejected by Microsoft. Keys status changes to Return Rejected
Product Bound	PBR acknowledgement by Microsoft for service keys.

Interactive donut chart: The donut chart provides a visual breakdown by color, and allows you to click to drill down on a status. Each status is represented in a different color in the donut chart. Click on a section of the chart to display the key count in the section below.

Search: Click on the summary section outside the donut chart to go directly to the search page and see results based on that key status.

Example: Contoso OEM begins looking for a high-level overview of their keys by status. They go to the MDOS dashboard and view the Key Overview image to see their total keys, the donut chart for a quick view by color for each status, and actual counts for each status in the summary section. However, Contoso wants to get a historic view of fulfilled keys in the last six months, so they go to the MDOS dashboard on the right side they will see a historic chart. Contoso inputs six months as the time frame, and selects fulfilled keys. They can see that there are 1000 keys that were fulfilled two months ago and no other transactions had occurred in that time frame. Contoso clicks on the Export to Excel link to retrieve this data so they can run additional internal reports.

Keys Overview



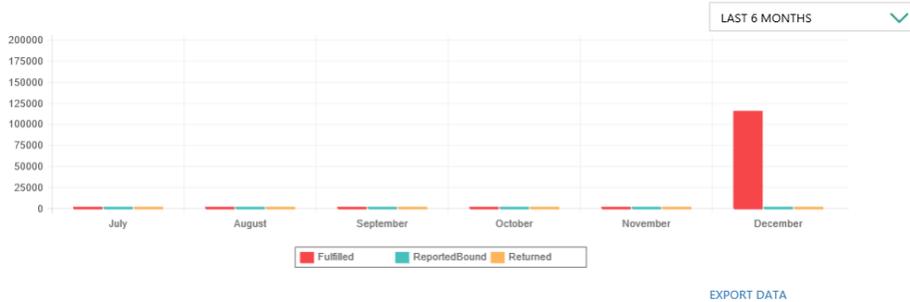
6.1.2 KEY HISTORY

Key History: The history section provides key counts by status in a color-coded bar chart view. This section also allows you to select a date range in the pulldown menu to see a breakdown of keys by status.

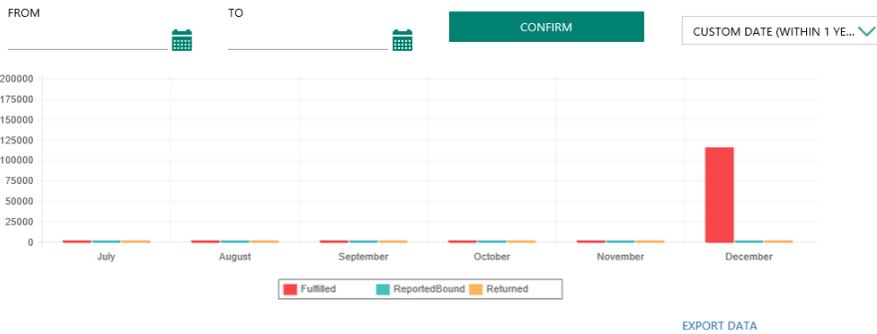
Key History statuses may include:

- Fulfilled
- ReportedBound
- Returned

KEY HISTORY



KEY HISTORY



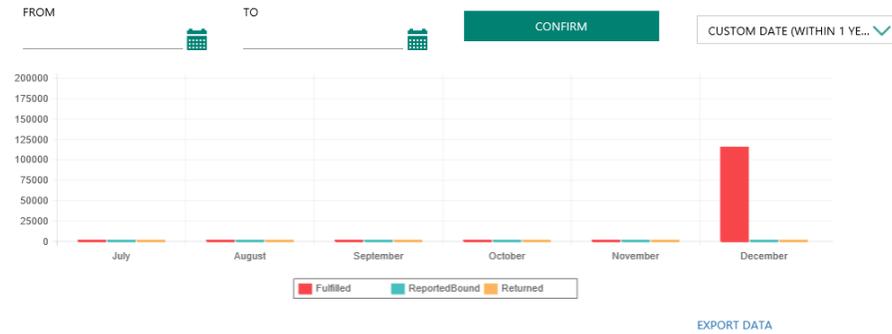
Drilldown functionality:

Timeline reporting: Select a time frame from pull down menu: (1 month, 3 months or 6 months) or select Custom Date, to set a date range within one year.

View Key details: Hover over any bar chart section to see more details, including specific key counts for that status. From there you may click on any bar in the bar chart for more operations. (will be available soon)

Example: Contoso OEM is looking for their fulfilled key history for the past year. They go to the MDOS dashboard, set a date range from 7/17/16 to 3/21/17, and click the COMFIRM button to see the how many fulfilled keys there were each month within the specified date range. Contoso hovers over the red bar for November to see an exact count of how many keys were fulfilled that month.

KEY HISTORY



Downlevel Inventory Status: Below the Key Overview for your business, the inventory status for downlevel partners will be displayed to give a quick view of all keys in the downlevel systems. Click on the downlevel partner tabs to see a detailed view.

SECTION 7. BUSINESS MANAGEMENT

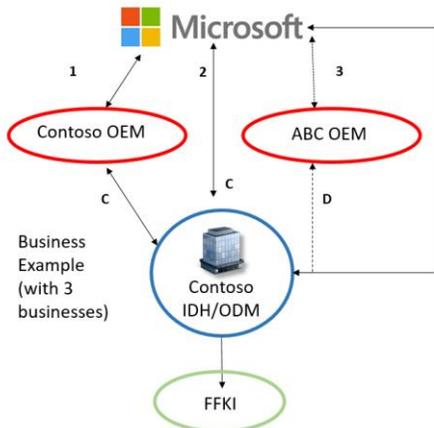
7.1 MANAGE BUSINESS

7.1.1 MANAGE BUSINESS DEFINITIONS

Business: A business in MDOS is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering.

You must select the business/partner you wish to work with from the dropdown menu when you sign into the MDOS dashboard.

Example: Contoso IDH/ODM has a business where they work with different OEMs; Contoso OEM and ABC OEM had both reached out to Contoso IDH/ODM through an MDOS invitation to invite Contoso IDH/ODM to work with them. Contoso IDH/ODM will setup a centralized business model with Contoso OEM and a decentralized model with ABC OEM. Contoso IDH/ODM also has an additional business because they signed an IDH/ODM agreement with Microsoft. So, Contoso IDH/ODM now has three businesses. They are looking to utilize MDOS to help manage all their businesses. MDOS allows Contoso IDH/ODM to easily identify the DPK owners, and better manage multiple businesses.



Upper Level Partner or Uplevel Partner (ULP): Is the entity above the down level entity. Keys will flow from this entity to downstream entities. An uplevel partner can be:

- Microsoft agreement (GPA, IDH/ODM or Embedded)
- OEM, ODM/IDH or TPI in a centralized relationship
- OEM, ODM/IDH or TPI in a decentralized relationship

Down Level Partner or Downlevel Partner (DLP): Is the entity that receives keys from the up-level entity. Downlevel entities can deploy keys to downstream partners, manufacture devices, and/or submit CBR/PHR reports. A downlevel partner can be:

- ODM/IDH or TPI in a centralized relationship
- ODM/IDH or TPI in a decentralized relationship
- Factory Floor (FFKI end entity in business)

Example: Contoso OEM has a direct agreement with Microsoft and has three TPIs that they work with. In this supply chain model Contoso OEM has three downlevel partners; Contoso TPI Mexico, ABC TPI, and Contoso TPI China. Contoso OEM is the uplevel partner for all three TPIs and Contoso OEM’s uplevel partner is Microsoft since they have a direct agreement with Microsoft.

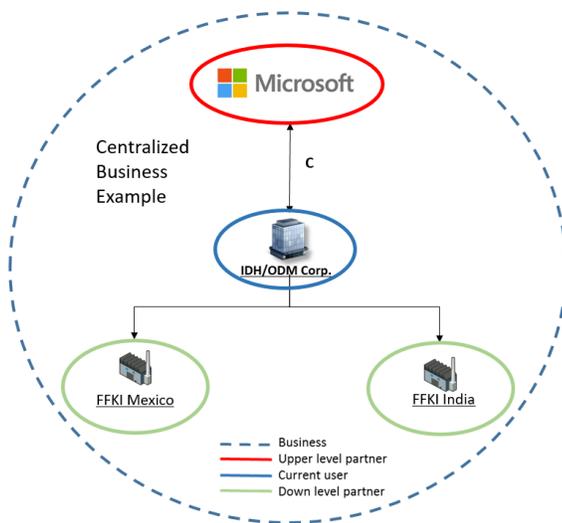
Centralized Business Model

- OEM Corporate conducts all transactions with Microsoft directly
- OEM Corporate places orders, receives DPKs, distributes DPKs to OEM or TPI manufacturing sites
- OEM /TPI manufactures device and returns the Computer Build Report (CBR) and Product Bind Report (PBR)
- OEM Corporate submits CBRs to Microsoft

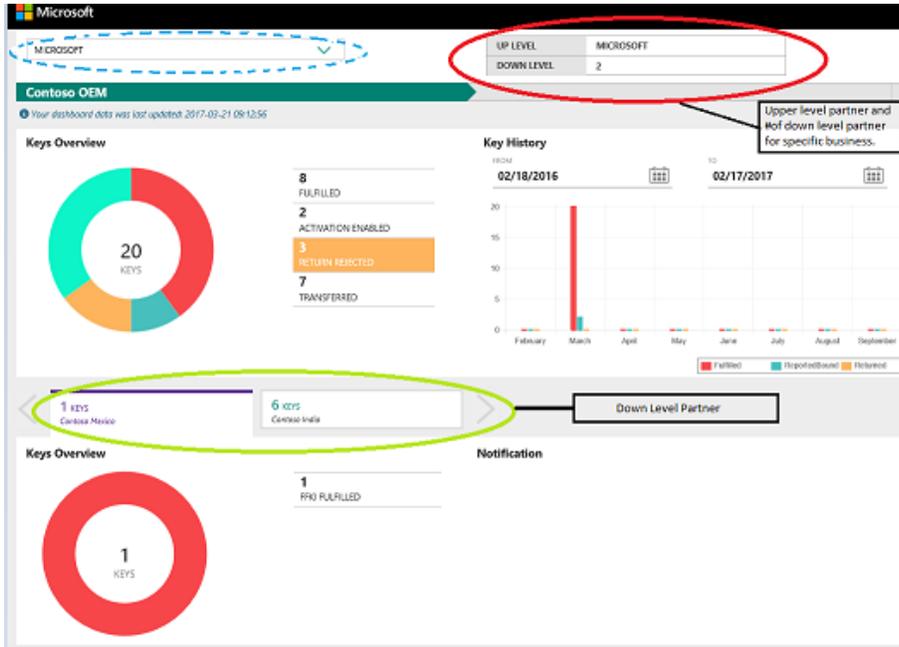
Decentralized Business Model

- OEM Corporate creates relationship with Microsoft, but third parties can conduct transactions on behalf of OEM
- OEM Corporate places blanket orders with Microsoft
- TPI places call-off orders, receives DPKs from Microsoft, manufactures devices
- TPI submits CBR to Microsoft, and a copy to OEM

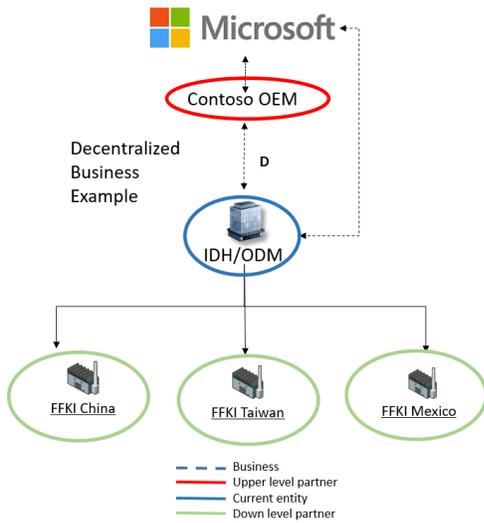
Example of a Centralized Business model:



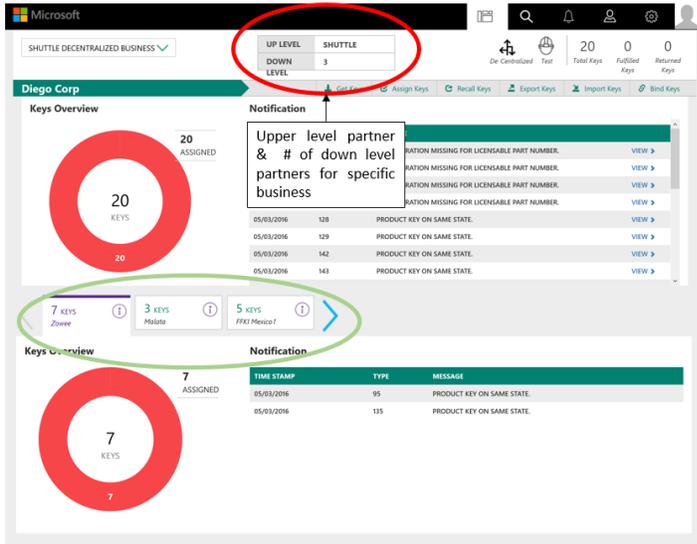
Example of a Centralize Business view in MDOS (from current entity perspective):



Example of a Decentralized Business model:



Example of a Decentralize Business view in MDOS (from current entity perspective):



7.1.2 ADD NEW DOWNLEVEL PARTNER

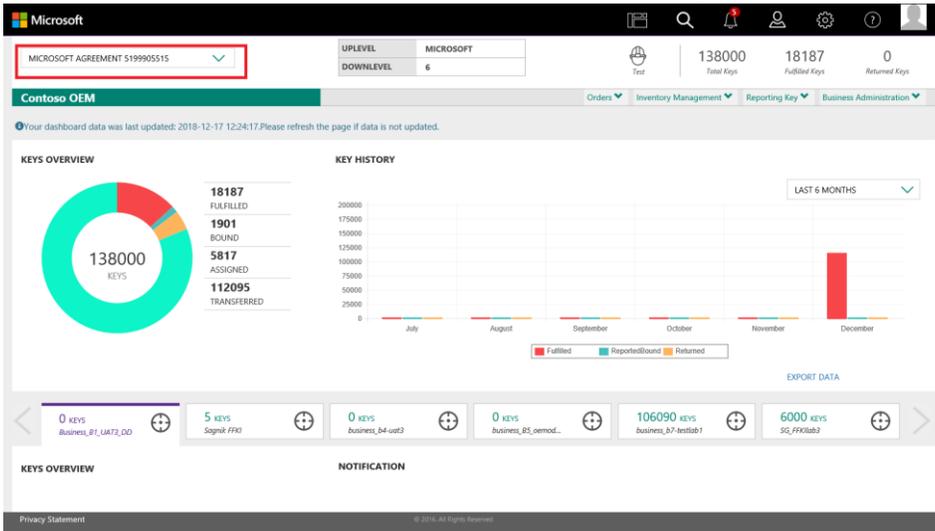
Tip Tool: Once the business is established, a new downlevel partner (or partners) can be added to the account. New partner(s) will then be able to perform key operations.

Example: Contoso OEM wants to add ABC Design House as a new downlevel partner. The Contoso OEM admin logs into MDOS and selects Manage Business from the More pulldown menu to get to the wizard where a new partner can be added. Contoso OEM follows the steps to add ABC Design House. From the Partner Information page, they select the site role as "IDH Default Role" for their partner. Contoso reviews the information on that summary page to confirm all the information is accurate and clicks submit.

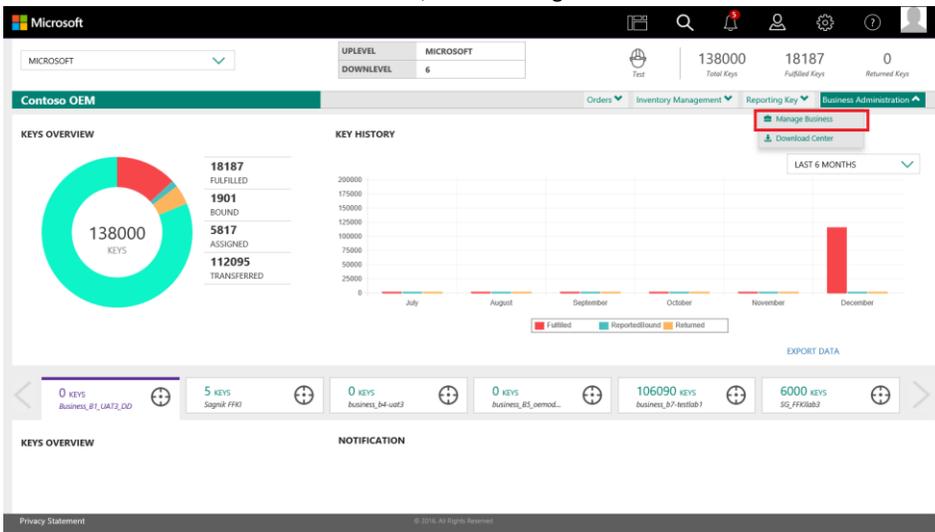
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials with Admin permissions.

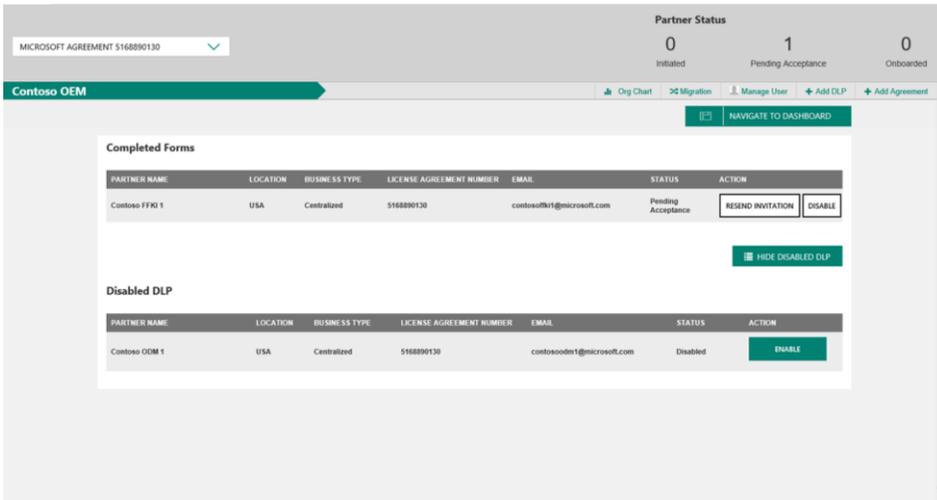
2. From the dashboard view, select the business from the Business dropdown menu.



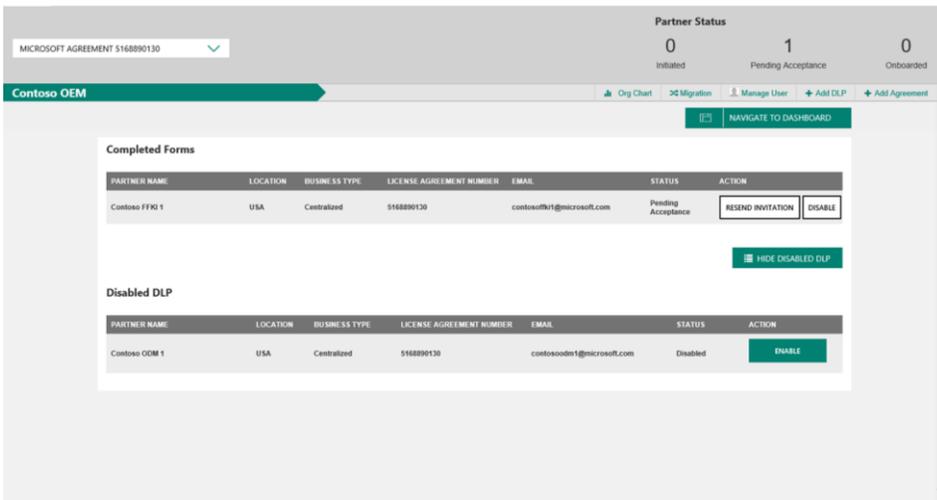
3. From the Business Administration menu, select Manage Business.



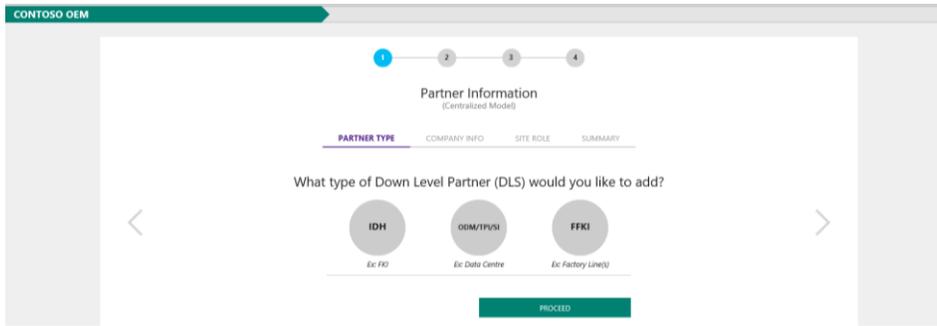
4. The wizard application will open where a new partner can be added.



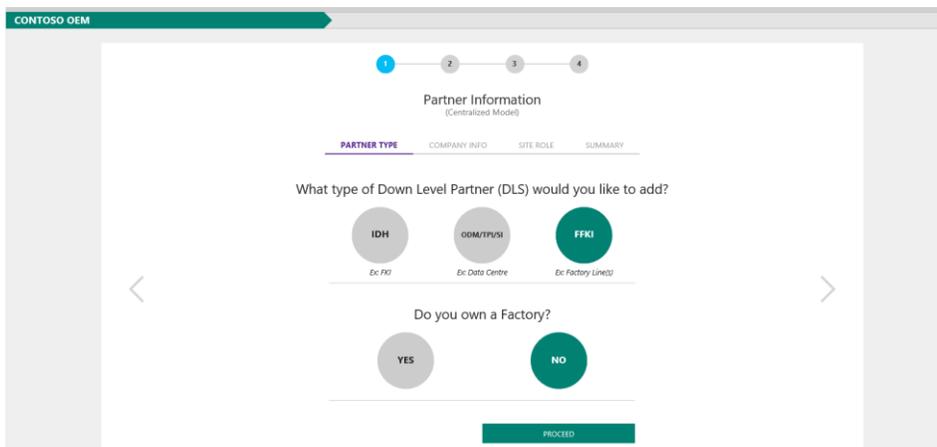
5. Click on the Add New Partner link.



6. Select the downlevel partner type from; IDH, ODM/TPI, or FFKI.



7. If FFKI is selected as a partner type and your business owns that factory, select YES. Otherwise select NO. Then click PROCEED.



8. If YES was selected, the Partner Information form will open. Partner Site Name and Partner Email fields will pre-populate. Fill in the additional fields and click PROCEED.

1 — 2 — 3 — 4

Partner Information

(Centralized Model)

PARTNER TYPE COMPANY INFO SITE ROLE SUMMARY

PARTNER SITE NAME
Cloud OA OEM 1

PARTNER REPRESENTATIVE NAME

PARTNER EMAIL
cloudoalab1@outlook.com

BUSINESS ADDRESS

COUNTRY: UNITED STATES STATE: CITY: POSTAL CODE: PHONE: 0

ADMIN EMAIL

CLEAR SAVE AND EXIT PROCEED

9. If NO was selected, fill in the partner information in the fields and click PROCEED.

NOTE: CLEAR or SAVE AND EXIT to start a new form or save information and come back later to finish.

CLOUD OA OEM 1

1 — 2 — 3 — 4

Partner Information

(Centralized Model)

PARTNER TYPE COMPANY INFO SITE ROLE SUMMARY

PARTNER SITE NAME
Cloud OA FFKI

PARTNER REPRESENTATIVE NAME
FFKI-OEM1

PARTNER EMAIL
cloudoalab23@outlook.com

BUSINESS ADDRESS
Readmond

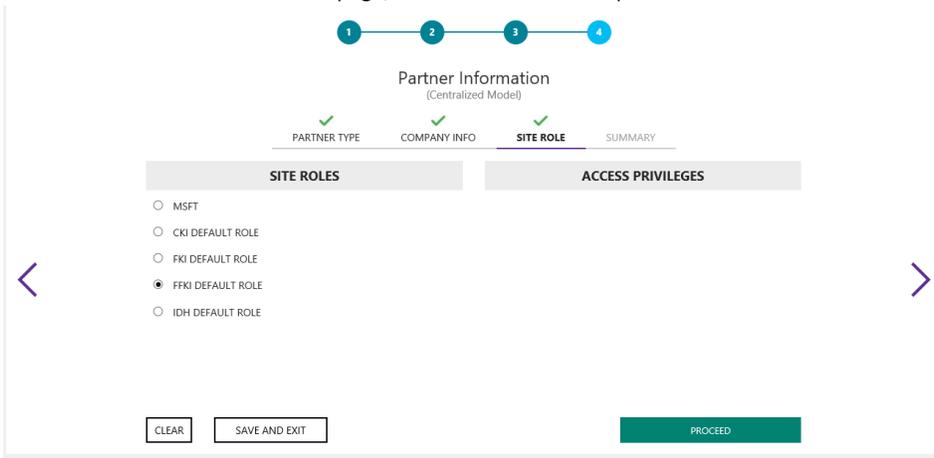
COUNTRY: UNITED STATES STATE: WA CITY: Readmond POSTAL CODE: 456133 PHONE: 71854641

CLEAR SAVE AND EXIT PROCEED

10. If SAVE AND EXIT is selected, the information will be saved. Click on the RESUME button to continue and complete the form.



11. From the Partner Information page, select the site role for partner and click PROCEED.



12. From the SUMMARY page, confirm the partner details.

13. Click PRINT SUMMARY if desired.

14. Click SUBMIT PARTNER INFO when finished.

✓ PARTNER TYPE ✓ COMPANY INFO ✓ SITE ROLE **SUMMARY**

Partner Type

Partner Type : FFKI
Is Own Factory : NO

COMPANY INFO

Partner Site Name CLOUD OA FFKI	Business Address READMOND
Partner Representative Name FFKI-OEM1	City READMOND
Partner Email cloudoalab23@outlook.com	Postal Code 456133
Country UNITED STATES	State WA
	Phone 71854641

SITE ROLE

FFKI DEFAULT ROLE

[PRINT SUMMARY](#) [SUBMIT PARTNER INFO](#)

15. From the confirmation page, click FINISH if done or Add New Partner may be selected again to add another partner.

NOTE: Follow the same procedure for adding partners other than FFKI.

7.1.3 DISABLE/ DELETE DLP

Instruction: This functionality will help to delete or disable the DLP from the list of added IDH/TPI/FFKI/FFKI. Up level partner can disable/delete the DLP only when there is no DLP under them and they don't have any keys assigned to them.

Example: Contoso OEM is no longer doing business with ABC Design House and wants to remove it as a down level partner. From the Partner Information page, they select "Disable" for ABC Design House. After successfully disabling the partner permissions, the status next to the partner name changes to "Disabled". Contoso sees the action button for ABC Design House change to ENABLE, so they may easily re-enable the partner at any time if desired.

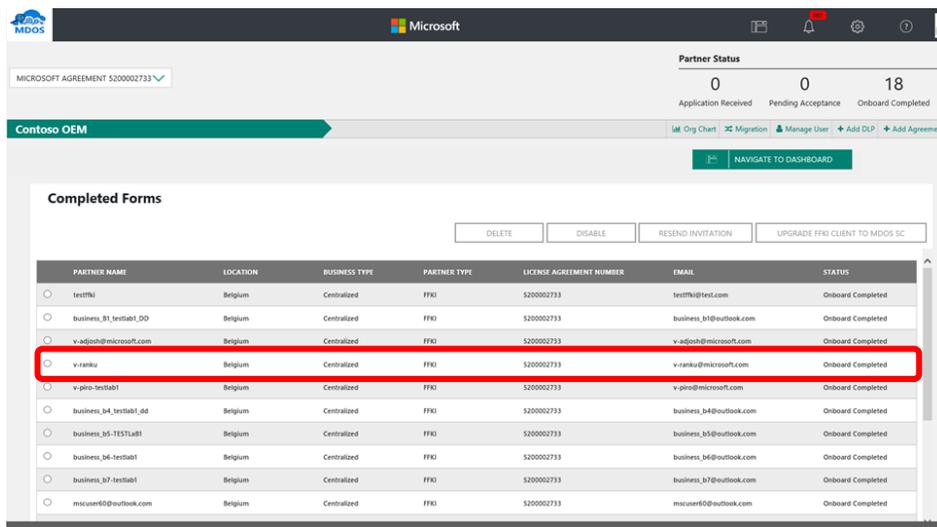
In case partner do not need that DLP in future, they can remove it from list of added DLPs.

To Delete DLP, you need to select partner by clicking on radio button and then click on delete option. A confirmation message box will pop out. After clicking confirm button, selected DLP will be removed from the list.

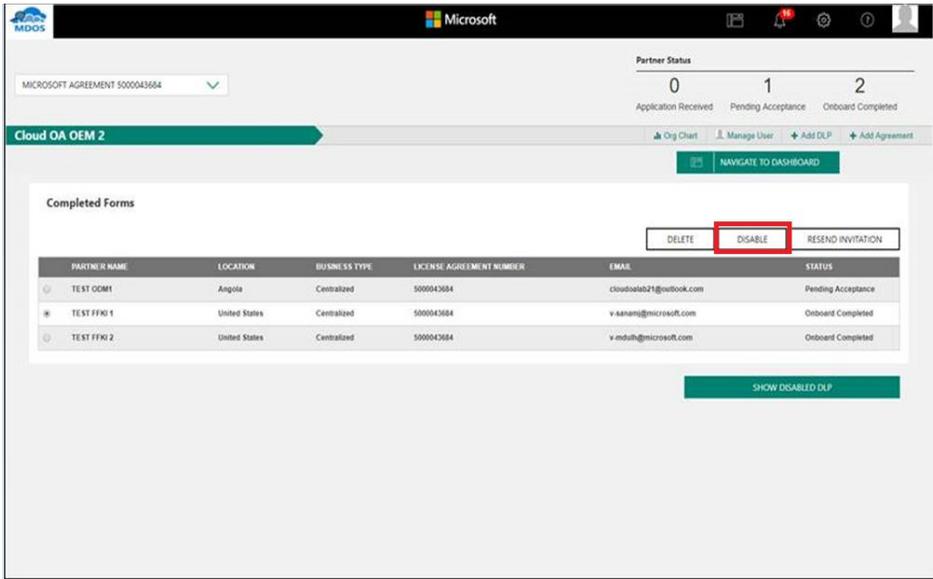
From manage business dashboard, up level partner can delete or disable their down level partner.

DISABLE DLP:

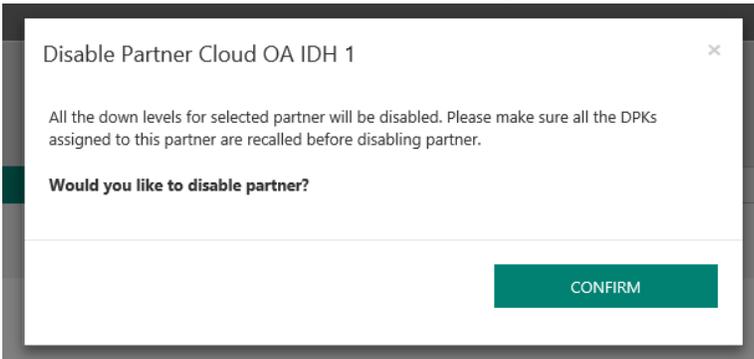
1. From manage business dashboard, select the partner by clicking on radio button that need to be disabled.



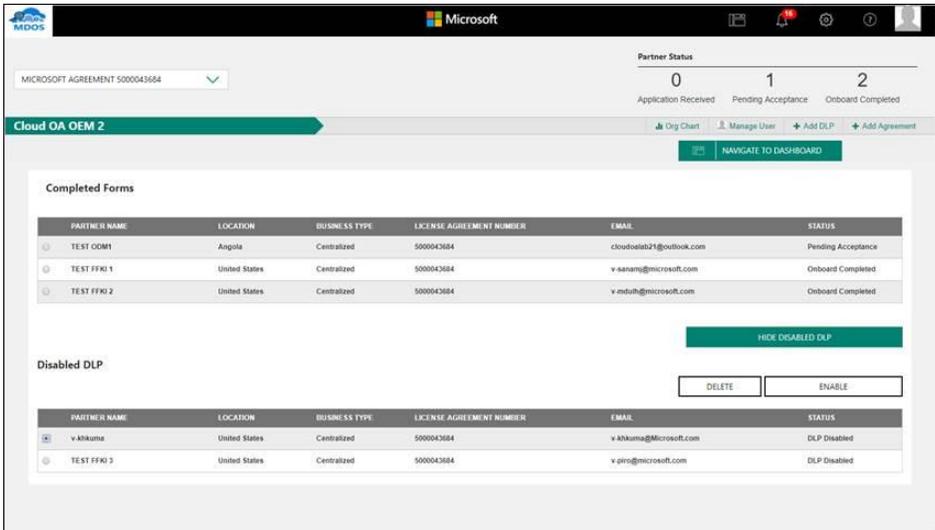
2. Click on disable button.



3. A confirmation window will open to confirm your selection. Click CONFIRM, the request will be processed and the partner will be notified through alert.



4. Once the partner has been disabled successfully, the disabled partner will be moved to 'Disabled DLP' section, the status of the partner will change to "Disabled".



5. To re enable the partner, you need to select the disabled partner from the Disabled DLP list and then click on enable button.

DELETE DLP:

1. From manage business dashboard, select the partner by clicking on radio button that need to be disabled.

Note: Partner will be able to delete the DLP which are in Pending Acceptance, WaitingForLRMAApproval and onboarded status in MDOS.



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The screenshot shows the MIDOS dashboard for 'Microsoft Corporation - OEM Internal'. The 'Partner Status' section displays 0 Application Received, 0 Pending Acceptance, and 19 Onboard Completed. Below this, there are buttons for 'Orig Chart', 'Migration', 'Manage User', 'Add DLP', and 'Add Agreement', along with a 'NAVIGATE TO DASHBOARD' button. The 'Completed Forms' section contains a table with the following data:

PARTNER NAME	LOCATION	BUSINESS TYPE	LICENSE AGREEMENT NUMBER	EMAIL	STATUS
vmtestmdosc_OEM100_DEV01G	Albania	Centralized	5000044460	vmtestmdosc@outlook.com	Onboard Completed
TP1_internal	United States	Decentralized	5000044460	mdostp101@outlook.com	Onboard Completed
proxypatch	Albania	Centralized	5000044460	proxypatch@outlook.com	Onboard Completed
proxystesting2_oem1_dd	Albania	Centralized	5000044460	proxystesting2@outlook.com	Onboard Completed
proxymigrationtesting2_oem1_dd	Albania	Centralized	5000044460	proxymigrationtesting2@outlook.com	Onboard Completed

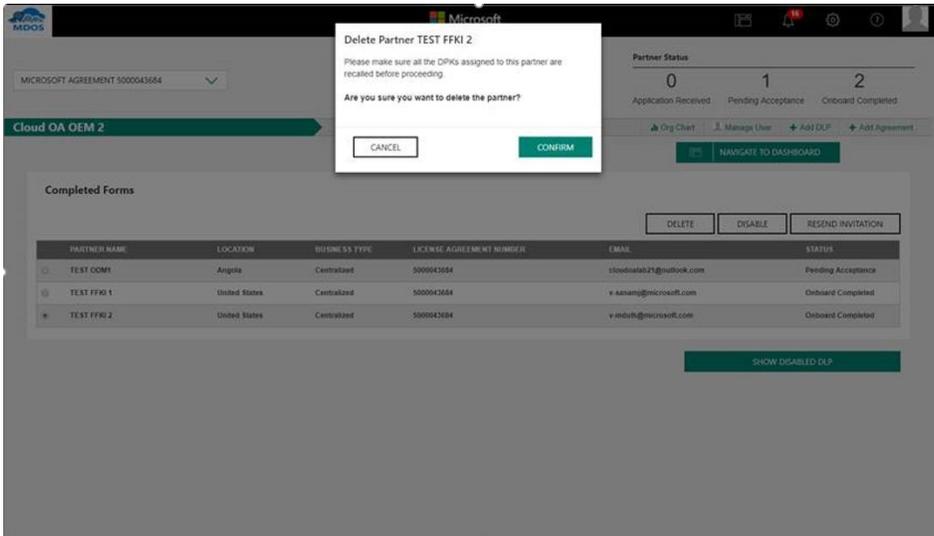
2. Click on Delete button.

The screenshot shows the MIDOS dashboard for 'Cloud OA OEM 2'. The 'Partner Status' section displays 0 Application Received, 1 Pending Acceptance, and 2 Onboard Completed. Below this, there are buttons for 'Orig Chart', 'Manage User', 'Add DLP', and 'Add Agreement', along with a 'NAVIGATE TO DASHBOARD' button. The 'Completed Forms' section contains a table with the following data:

PARTNER NAME	LOCATION	BUSINESS TYPE	LICENSE AGREEMENT NUMBER	EMAIL	STATUS
TEST OEM1	Angola	Centralized	5000043684	ctoudoem21@outlook.com	Pending Acceptance
TEST FFKO 1	United States	Centralized	5000043684	v.sanana@microsoft.com	Onboard Completed
TEST FFKO 2	United States	Centralized	5000043684	v.mduh@microsoft.com	Onboard Completed

The 'DELETE' button in the table's action column is highlighted with a red box. Below the table is a 'SHOW DISABLED DLP' button.

3. A confirmation window will open to confirm your selection. Click CONFIRM, the request to delete the DLP will be processed.



4. Once the request is processed successfully, the partner will be notified with an alert message and the DLP partner will not be visible.

7.1.4 PARTNER TYPE

Display the partner type in Wizard dashboard

The partner will see a new column (Partner Type) added in the manage business dashboard to identify the correct DLP partner type (TPI/ODM/FFKI).

The screenshot displays the MDOS dashboard for a partner named 'Contoso OEM'. At the top, there's a navigation bar with the Microsoft logo and a 'Partner Status' summary showing 0 Application Received, 0 Pending Acceptance, and 18 Onboard Completed. Below this, a 'Completed Forms' section features a table with columns for Partner Name, Location, Business Type, Partner Type, License Agreement Number, Email, and Status. The table lists 10 entries, all with a status of 'Onboard Completed'. Action buttons like 'DELETE', 'DISABLE', 'RESEND INVITATION', and 'UPGRADE FFKI CLIENT TO MDOS SC' are visible above the table.

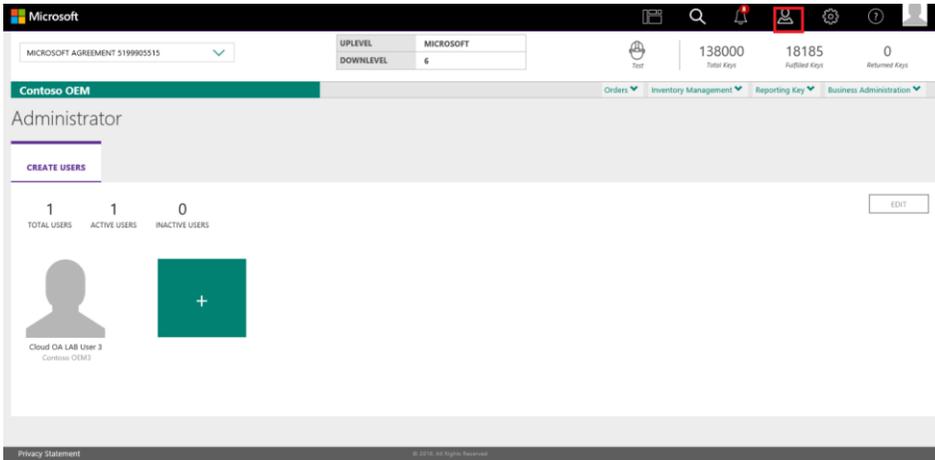
PARTNER NAME	LOCATION	BUSINESS TYPE	PARTNER TYPE	LICENSE AGREEMENT NUMBER	EMAIL	STATUS
testfki	Belgium	Centralized	FFKI	5200002733	testfki@test.com	Onboard Completed
business_b1_testlab1_dd	Belgium	Centralized	FFKI	5200002733	business_b1@outlook.com	Onboard Completed
v-adjosh@microsoft.com	Belgium	Centralized	FFKI	5200002733	v-adjosh@microsoft.com	Onboard Completed
v-ranku	Belgium	Centralized	FFKI	5200002733	v-ranku@microsoft.com	Onboard Completed
v-piro-testlab1	Belgium	Centralized	FFKI	5200002733	v-piro@microsoft.com	Onboard Completed
business_b4_testlab1_dd	Belgium	Centralized	FFKI	5200002733	business_b4@outlook.com	Onboard Completed
business_b5-TESTLaB1	Belgium	Centralized	FFKI	5200002733	business_b5@outlook.com	Onboard Completed
business_b6-testlab1	Belgium	Centralized	FFKI	5200002733	business_b6@outlook.com	Onboard Completed
business_b7-testlab1	Belgium	Centralized	FFKI	5200002733	business_b7@outlook.com	Onboard Completed
mrcuser0@outlook.com	Belgium	Centralized	FFKI	5200002733	mrcuser0@outlook.com	Onboard Completed

7.2 USER MANAGEMENT

Description:

An authorized user will have permissions to access MDOS and perform key actions. Access and permissions must be set by the company administrator.

The Admin section provides a view of all your user accounts and lets you manage users connected to your account from this dashboard. From the Admin page, under CREATE USERS, you can add, remove, or edit current users. You can also edit user permissions from this section.



Tip Tool: Add, remove, or edit current users connected to your account.

Example: Contoso IDH hired a new purchase manager, and wants to add him as new user in MDOS. The Admin signs into MDOS and clicks on the Admin on icon in the top navigation bar to see existing users. From there, the admin clicks on the plus (+) button to add the new user, enters the user’s email address, and sets the roles/permissions to “User” with ordering permissions. The user receives an email with instructions to onboard to MDOS. Contoso IDH Admin later realizes this user needs additional permissions, so the admin returns to the Admin view, selects the user, then the Edit button. From there, the admin selects the “Admin” role from the Role List pulldown menu and saves changes.

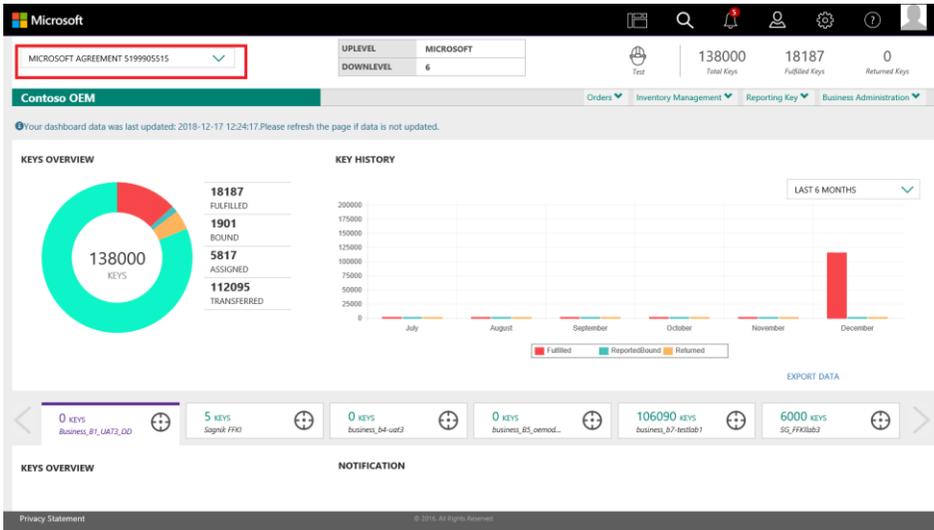
7.2.1 ADD USER

Tip Tool: Add a new user and set permissions for users connected to your business account.

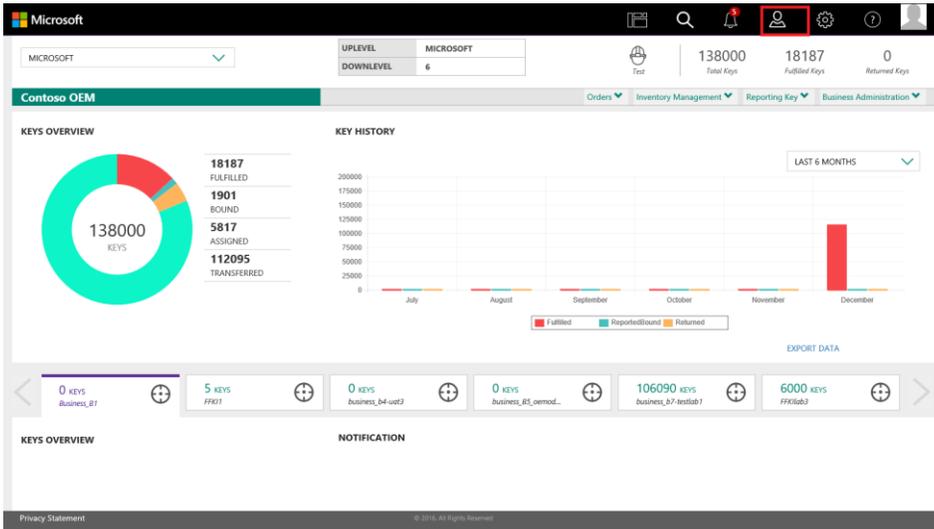
Step-by-Step:

1. Login to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.

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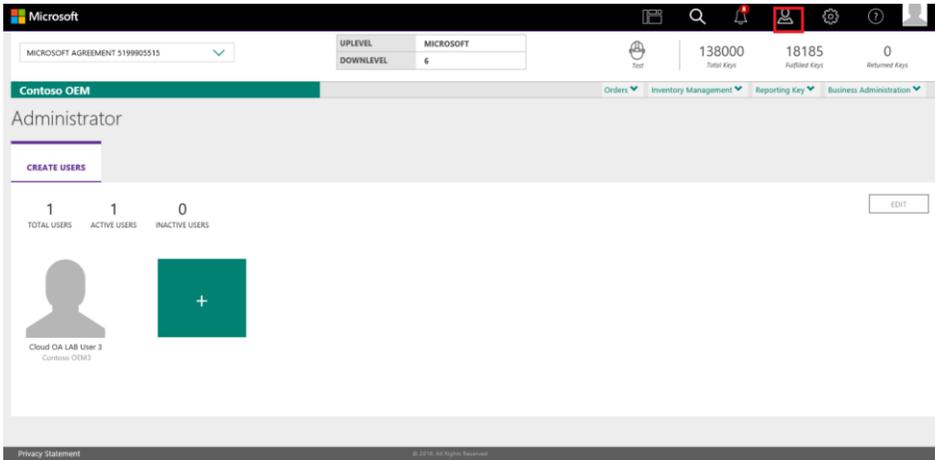


3. Click on the Admin icon in the top navigation bar.

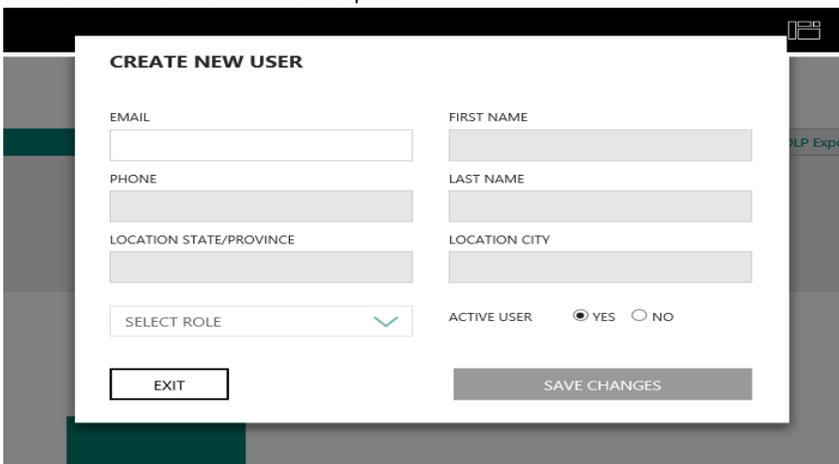


4. From the Admin page, click on the plus (+) button to add a new user.

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5. A Create New User window will open.



6. Enter user email address.

7. If a valid email ID is entered that matches with the DOC information, user information is auto-generated from DOC. A message banner will also display “We have found information from DOC”.

The screenshot shows a 'CREATE NEW USER' form with a light blue header. Below the header, a message states 'We have found information from DPCI!'. The form contains several input fields: 'EMAIL' with the value 'cloudoalab19@outlook.com', 'FIRST NAME' with 'Cloud OA LAB', 'LAST NAME' with 'User 19', and 'ACTIVE USER' with radio buttons for 'YES' and 'NO', where 'NO' is selected. There is also a 'SELECT ROLE' dropdown menu and an 'EXIT' button.

8. Select the Role from the SELECT ROLE pulldown menu and click the radio button YES for Active User.

This screenshot shows the same 'CREATE NEW USER' form, but with the 'SELECT ROLE' dropdown menu open. The menu lists several roles: 'Super Admin', 'View Admin', 'OEM Admin', 'OEM User Role 1', 'OEM User Role 2', and 'OEM User Role 3'. The 'ACTIVE USER' radio buttons are still visible, with 'NO' selected.

9. After selecting the Role, the permission list will display.

10. Confirm information is correct and click the SAVE CHANGES button.

The screenshot shows the 'CREATE NEW USER' form. At the top, it says 'We have found information from DPC'. Below this, there are input fields for EMAIL (cloudoalab19@outlook.com), FIRST NAME (Cloud OA LAB), PHONE, LAST NAME (User 19), LOCATION STATE/PROVINCE, and LOCATION CITY. There are also dropdown menus for SUPER ADMIN and radio buttons for ACTIVE USER (YES/NO). At the bottom, there are three tabs: DPK Permissions, User Permissions, and Site Permissions. The DPK Permissions tab is active, showing a list of permissions: DPK View, DPK Return, DPK Assign, DPK Recall, DPK ViewDecrypt, DPK Export, DPK Import, DPK EditInfo, DPK Report, and NEW Password. The User Permissions tab shows USER Get, USER Manage, USER Add, and USER Edit. The Site Permissions tab shows Site View, Site Get, and Site Manage. At the bottom of the form, there are 'EXIT' and 'SAVE CHANGES' buttons.

11. Once the keys are assigned, a “User info is saved successfully” message will briefly pop up in the green highlighted banner.

This screenshot is identical to the previous one, but it includes a green banner at the top that says 'User info saved successfully!'. The 'EXIT' button is now highlighted in grey, indicating it is the next step to be taken.

12. Click on the Exit button to close the window.

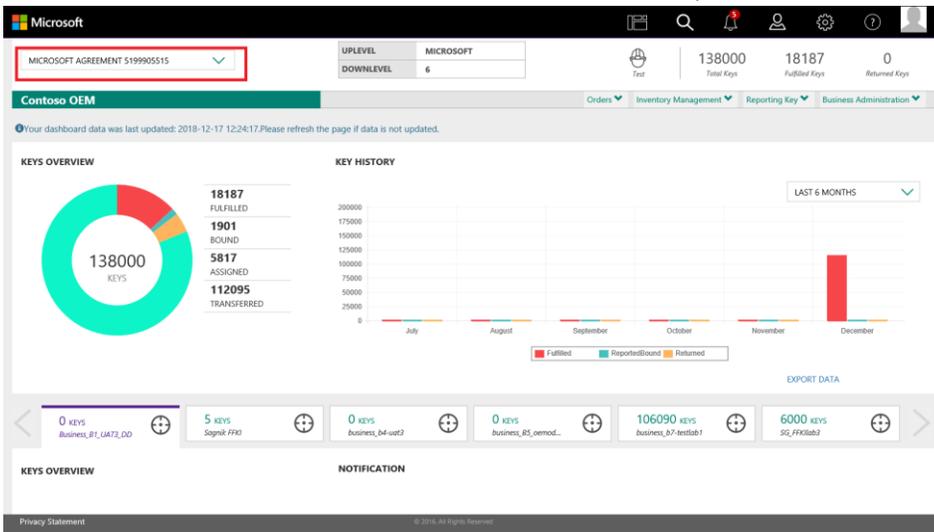
13. The User will automatically be added to the User list.

7.2.2 EDIT USER

Tip Tool: Edit current user information or permissions for users connected to your business account.

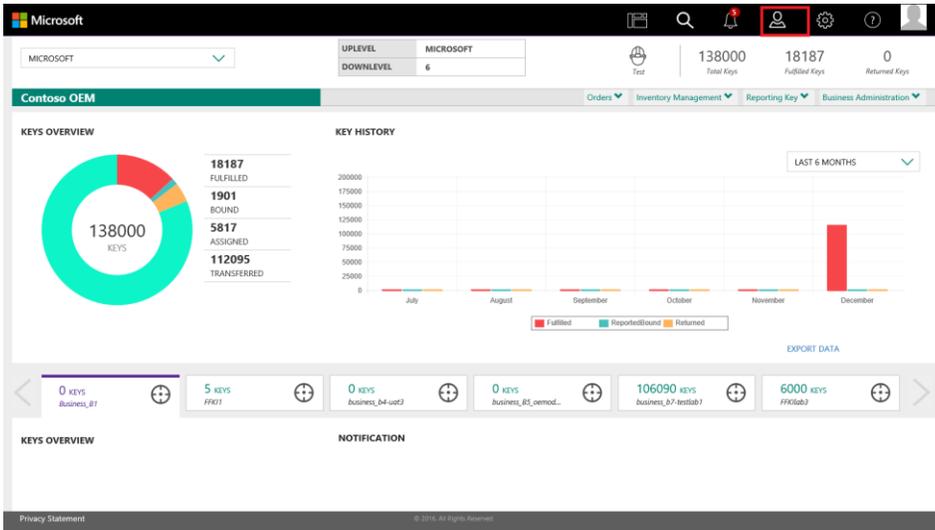
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.

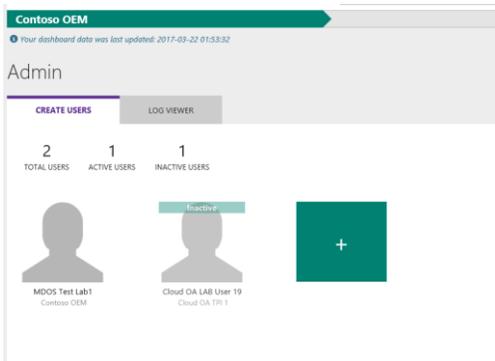


3. Click on the Admin icon in the top navigation bar.

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4. The User Management screen will display all current users, account name and status information (active or inactive).



5. Click on the user icon to select a user to edit.

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6. After selecting a user, the EDIT button will become active. Click on the EDIT button to continue.

7. The EDIT USER ROLE window will open, containing all current user information.

The 'EDIT USER ROLE' form contains the following fields and sections:

- EMAIL:** cloudoalab19@outlook.com
- FIRST NAME:** Cloud OA LAB
- PHONE:** (empty)
- LAST NAME:** User 19
- LOCATION STATE/PROVINCE:** (empty)
- LOCATION CITY:** (empty)
- SUPER ADMIN:** (dropdown menu)
- ACTIVE USER:** YES (radio button), NO (selected radio button)
- Permissions:**
 - DPK Permissions:** DPK View, DPK Return, DPK Assign, DPK Recall, DPK ViewDecrypt, DPK Export, DPK Import, DPK Editinfo, DPK Report, DPK Download
 - User Permissions:** USER Get, USER Manage, USER Add, USER Edit
 - Site Permissions:** Site View, Site Get, Site Manage
- Buttons:** EXIT, SAVE CHANGES

8. To edit the role of user, select the role from Role List pulldown menu and click SAVE CHANGES.

The screenshot shows the 'EDIT USER ROLE' form. The 'SUPER ADMIN' dropdown menu is open, showing a list of roles: Super Admin, View Admin, OEM Admin, OEM User Role 1, OEM User Role 2, and OEM User Role 3. The 'Super Admin' option is selected, indicated by a green checkmark. The form includes fields for EMAIL (cloudoalab19@outlook.com), FIRST NAME (Cloud OA LAB), PHONE, LAST NAME (User 19), LOCATION STATE/PROVINCE, and LOCATION CITY. There is also an 'ACTIVE USER' section with radio buttons for YES and NO (selected). At the bottom, there are 'EXIT' and 'SAVE CHANGES' buttons.

9. Once the user role is updated, a “User info updated successfully” message will briefly pop up in the green highlighted banner.

The screenshot shows the 'EDIT USER ROLE' form after the update. A green banner at the top displays the message 'User info updated successfully!'. The form fields and dropdown menu are the same as in the previous screenshot. The 'SUPER ADMIN' dropdown is now closed. The 'ACTIVE USER' section remains the same. At the bottom, there are 'EXIT' and 'SAVE CHANGES' buttons.

7.2.3 ROLES

LIST OF FUNCTIONALITIES:

SI. No	Functionalities	Permissions/Actions
1	Key Operations	View Keys
		Return Keys
		Assign Keys
		Recall Keys
		View Decrypt Keys
		Export Keys
		Import Keys
		Edit Info
		Report Keys
		Download Keys
		Return To MS
		Get Keys
		Bind Keys
		Order Keys
2	User Management	Add User
		Edit User
		View User
		Manage User
3	Site Management	View Site
		Get Site
		Manage Site
4	DLP	Report
		Edit
5	ULP	View
		Manage
6	Onboarding	Create Business
		Activate Site
		View
		Manage
		Create Site

Site Roles:

1. OEM Persona

Available User Roles

1. OEM Admin
2. OEM Inventory Manager

- 3. OEM Business Manager
- 4. OEM View User

User Role	Functionality	Permissions
1.OEM Admin	All	All
2. OEM Inventory Manager	Key Operations	View Keys
		Return Keys
		Assign Keys
		Recall Keys
		View Decrypt Keys
		Export Keys
		Import Keys
		Edit Info
		Report Keys
		Download Keys
		Return To MS
		Get Keys
		Bind Keys
		Order Keys
3.OEM Business Manager	Onboarding	Create Business
		Activate Site
		View
		Manage
		Create Site
	Site Management,	View Site
		Get Site
		Manage Site
	DLP	Report
	ULP	Edit
		View
Manage		
4.OEM View User	Key Operations	View Keys
		Return Keys
		Assign Keys
		Recall Keys
		View Decrypt Keys
		Export Keys
		Import Keys
		Edit Info
		Report Keys
		Download Keys
Return To MS		
Get Keys		

		Bind Keys
		Order Keys
	Site Management	Create Site
		View Site
		Get Site
		Manage Site
	Onboarding	Create Business
		Activate Site
		View
		Manage

2. TPI Centralized Persona:

Available User Role

1. TPI Admin
2. TPI Inventory Manager
3. TPI Business Manager
4. TPI View User

User Role	Functionality	Permissions
1.TPI Admin	All	All(Except actions marked with * in first tab)
2.TPI Inventory Manager	Key Operations	View Keys**
		Return Keys***
		Assign Keys
		Recall Keys
		Export Keys***
		Import Keys***
		Edit Info
		Report Keys***
		Download Keys***
		Get Keys***
Bind Keys***		
3.TPI Business Manager	Onboarding	Activate Site
		View**
		Manage
		Create Site
		View Site**
		Get Site
4.TPI View User	Key Operations	View Keys**

	Site Management	View Site**
	Onboarding	View**

3. TPI De-Centralized Persona:

Available User Role

1. TPI Decentralize Admin
2. TPI Decentralize Inventory Manager
3. TPI Decentralize Business Manager
4. TPI Decentralize View User

User Role	Functionality	Permissions	
1. Default Admin	All	All(Except actions marked with * in first tab)	
TPI Admin	All	All(Except actions marked with * in first tab)	
TPI Inventory Manager	Key Operations	View Keys**	
		Return Keys***	
		Assign Keys	
		Recall Keys	
		Export Keys***	
		Import Keys***	
		Edit Info	
		Report Keys***	
		Download Keys***	
		Get Keys***	
TPI Business Manager	Onboarding	Bind Keys***	
		Activate Site	
		View**	
		Manage	
		Create Site	
		Site Management	View Site**
		Get Site	
TPI View User	Key Operations	View Keys**	

	Site Management	View Site**
	Onboarding	View**

4. IDH Persona:

Available User Role

1. IDH Admin
2. IDH Inventory Manager
3. IDH Business Manager
4. IDH View User

User Role	Functionality	Permissions	
IDH Admin	All	All(Except actions marked with * in first tab)	
IDH Inventory Manager	Key Operations	View Keys**	
		Return Keys***	
		Assign Keys	
		Recall Keys	
		Export Keys***	
		Import Keys***	
		Edit Info	
		Report Keys***	
		Download Keys***	
		Get Keys***	
Bind Keys***			
IDH Business Manager	Onboarding	Activate Site	
		View**	
		Manage	
		Create Site	
		Site Management,	View Site**
			Get Site
IDH View User	Key Operations	View Keys**	
	Site Management	View Site**	
	Onboarding	View**	

5. Subsidiary Persona:

Available User Role

1. Subsidiary Admin
2. Subsidiary Inventory Manager
3. Subsidiary Business Manager
4. Subsidiary View User

User Role	Functionality	Permissions
Subsidiary Admin	All	All(Except actions marked with * in first tab)
Subsidiary Inventory Manager	Key Operations	View Keys**
		Return Keys***
		Assign Keys
		Recall Keys
		Export Keys***
		Import Keys***
		Edit Info
		Report Keys***
		Download Keys***
		Get Keys***
		Bind Keys***
Subsidiary Business Manager	Onboarding	
		Activate Site
		View**
		Manage
		Create Site
	Site Management,	View Site**
		Get Site
Subsidiary View User	Key Operations	View Keys**
	Site Management	View Site**
	Onboarding	View**

6. FFKI Persona:

Available User Role

- FFKI Admin
- FFKI Inventory Manager
- FFKI Business Manager
- FFKI View User

User Role	Role Id	Functionality	Permissions
FFKI Admin	17	Key Operations	View Keys**
			Return Keys***
			Export Keys***
			Import Keys***
			Report Keys***
			Download Keys***
			Get Keys***
			Bind Keys***

		Site Management,	View Site**
		Onboarding	View**
FFKI Inventory Manager	18	Key Operations	View Keys**
			Return Keys***
			Export Keys***
			Import Keys***
			Report Keys***
			Download Keys***
			Get Keys***
			Bind Keys***
FFKI Business Manager	19	Onboarding	View**
		Site Management,	View Site**
FFKI View User	20	Key Operations	View Keys**
		Site Management,	View Site**
		Onboarding	View**

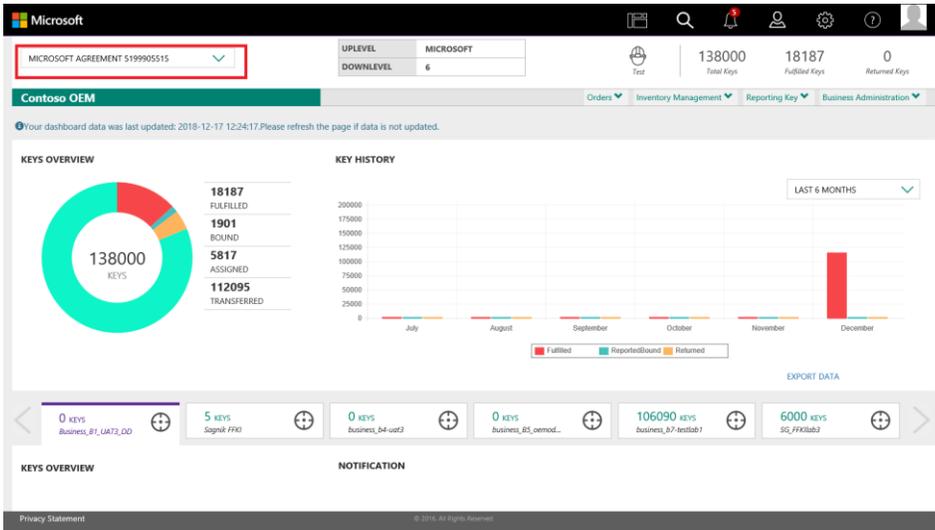
7.2.4 DISABLE / INACTIVATE USER

Tip Tool: Disable or inactivate permissions for a current user connected to your business account.

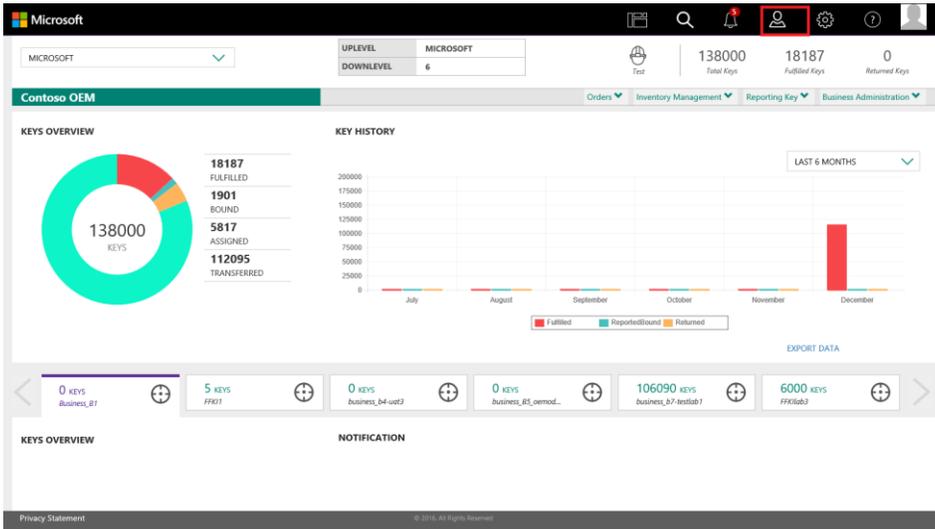
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.

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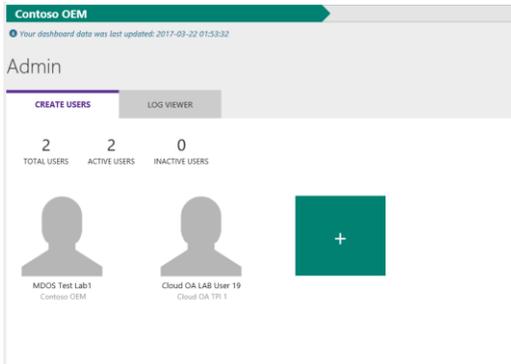


3. Click on the Admin icon in the top navigation bar.

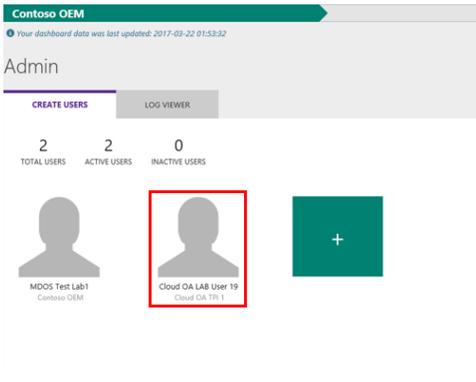


4. The User Management screen will display all current users, account name, and status information (active or inactive).

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5. Click on the user icon to select a user to edit.



6. After selecting a user, the EDIT button will become active. Click on the EDIT button to continue.

7. The EDIT USER ROLE window will open, containing all current user information.

EDIT USER ROLE

EMAIL: FIRST NAME:

PHONE: LAST NAME:

LOCATION STATE/PROVINCE: LOCATION CITY:

SUPER ADMIN: ACTIVE USER: YES NO

DPK Permissions	User Permissions	Site Permissions
DPK View	USER Get	Site View
DPK Return	USER Manage	Site Get
DPK Assign	USER Add	Site Manage
DPK Recall	USER Edit	
DPK ViewDecrypt		
DPK Export		
DPK Import		
DPK EditInfo		
DPK Report		
DPK Download		

EXIT

8. To make the user Inactive, select the radio button for NO next to Active User and click SAVE CHANGES.

EDIT USER ROLE

EMAIL: FIRST NAME:

PHONE: LAST NAME:

LOCATION STATE/PROVINCE: LOCATION CITY:

SUPER ADMIN: ACTIVE USER: YES NO

DPK Permissions	User Permissions	Site Permissions
DPK View	USER Get	Site View
DPK Return	USER Manage	Site Get
DPK Assign	USER Add	Site Manage
DPK Recall	USER Edit	
DPK ViewDecrypt		
DPK Export		
DPK Import		
DPK EditInfo		
DPK Report		
DPK Download		

EXIT

9. Once the user role is updated, a “User info updated successfully” message will briefly pop up in the green highlighted banner.

The screenshot shows the 'EDIT USER ROLE' interface. At the top, a green banner displays the message 'User info updated successfully!'. Below this, the form contains several input fields: 'EMAIL' (cloudoalab19@outlook.com), 'FIRST NAME' (Cloud OA LAB), 'PHONE', 'LAST NAME' (User 19), 'LOCATION STATE/PROVINCE', and 'LOCATION CITY'. There is a dropdown menu for 'SUPER ADMIN' and a radio button for 'ACTIVE USER' (set to YES). At the bottom, there are three permission categories: 'DPK Permissions', 'User Permissions', and 'Site Permissions', each with a list of actions. At the very bottom, there are 'EXIT' and 'SAVE CHANGES' buttons.

7.3 BUSINESS MANAGEMENT BY PERSONA

Description:

The rules and roles within MDOS will vary by persona. Personas within MDOS include OEM, ODM/IDH, TPI, and MDOS FFKI. ODM/IDH may work without an agreement with Microsoft or with a direct agreement with Microsoft.

Business Acronyms and Definitions:

Acronym	Term	Description
FFKI	Factory Floor Key Inventory	The number of keys needed on the manufacturing line is determined by OEM Corp. The number is based on the line forecast and current inventories on the Factory Floor Key Inventory system on the factory floor. The keys are protected and transmitted from the Corp Key Inventory system to the Factory Key Inventory system via HTTPS or may be manually transferred (e.g. via USB).
ODM/IDH	Original Design Manufacturer/ Independent Design House	An original design manufacturer (ODM) or independent design house (IDH) is hired by an OEM. They are a company that designs and manufactures devices (tablet, PC, etc.) based on requirements specified by the OEM, (such as

		screen size, processor, memory, performance, etc.). The devices manufactured by the ODM/IDH are rebranded by the OEM. ODM/IDH companies allow the firm that owns or licenses the brand to produce products without having to engage in the design or running of a factory.
OEM	Original Equipment Manufacturer	Original equipment manufacturer (OEM) is a term used when one company makes a part or subsystem that is used in another company's product.
TPI	Third-Party Installer	A manufacturer that is licensed through a TPI agreement to preinstall the Windows operating system onto a computer on behalf of an OEM. TPIs are authorized to use the OA 3.0 Tool. The OEM sends the DPKs to the Factories (usually a Third-Party Installer (TPI) factory).

The sections below provide more information to help you better understand your path as it pertains to your persona within MDOS.

7.3.1 OEM SPECIFIC PERSONA

Description:

Original Equipment Manufacturer (OEM) is a term used when one company makes a part or subsystem that is used in another company's product.

The rules and roles within MDOS will vary for each persona. The OEM business model has a direct agreement with Microsoft (Master License Agreement). The OEM will set the specs (specifications) for the device that is being manufactured and will carry the branding for the device. The OEM can build any size device and can license any of the Windows licensable software, including Windows Pro.

Subsidiary: A subsidiary, subsidiary company, or daughter company is a company that is owned or controlled by another company, which is called the parent company, parent, or holding company. The subsidiary can be a company, corporation, or limited liability company. A company can have multiple subsidiaries.

Example: An example of a subsidiary within MDOS could be an OEM who has offices in different countries; OEM USA, OEM Asia; or a company who has different facilities for different functions; Contoso Design House, Contoso Factory, etc.

Agreements

The Uplevel Partner for an OEM, could be Microsoft or another OEM depending on the agreement.

Agreements include:

- GPA (Master License Agreement) with Microsoft
- GPA Embedded with Microsoft

Agreement contents:

GPA (Master License Agreement)

- Own brand
- Over 10" screen
- Windows Pro SKUs

GPA Embedded

- Internet of things (IOT)
- Examples include: ATMs, Cars, Point of Sale devices, etc.

Agreements types:

- Windows Royalty
- Windows Embedded
- Windows Server
- Etc.

Activate Business: The first time a company is onboarded, this will activate the business. (See the [Onboarding section](#) for more info).

Add New Agreement: If a new business is added, a new agreement must be established with the new partner.

Example: Contoso OEM has a direct licensing agreement with Microsoft, so they have a GPA agreement signed for their PC part of the business. Contoso OEM also wants to start selling embedded devices. Hence, Contoso must sign a new GPA Embedded agreement with Microsoft, and then setup it in MDOS by clicking the Add Agreement button in MDOS.

Agreements include:

- GPA (Master License Agreement) with Microsoft
- GPA Embedded with Microsoft

Email Communications:

Subject Line	Purpose of email	Who receives	OEM
--------------	------------------	--------------	-----

Welcome to Microsoft Digital Operations Services Platform	Partner onboard request has been received and is being processed. Onboard form successfully submitted and next steps. If you are a new user, MDOS has requested the creation of your DOC account. Once your OA 3.0 form is approved, additional emails will be sent with next steps.	User/Partner who submitted request	Y
Welcome to Microsoft Digital Operations Services Platform	(Approved) Onboard request has been approved by LRM (Licensing & Revenue Management). Partner needs to click link and accept business relationship in MDOS to complete business set up.	User/Partner who submitted request	Y
MDOS Onboarding request has been rejected	(Rejected) Onboard request has been rejected LRM (Licensing & Revenue Management)	User/Partner who submitted request	Y
File exported successfully	Keys exported and file location to access provided	User/Partner who exported file	Y
Import Key Status	Keys import contained errors	User/Partner who imported file	Y
Request Accepted by Partner	OEM's DLP has accepted business request	OEM/ULP	Y
Welcome to Microsoft Digital Operations Platform Services	(Has DOC profile) DLP email invitation from OEM/ULP via MDOS. Partner needs to log in to complete profile set up in DOC	DLP	Y
Enrollment in DOC	(No DOC profile) Partner has been invited to MDOS and needs to set up profile in DOC.	DLP	Y

7.3.2 ODM/IDH SPECIFIC PERSONA

Description:

ODM/IDH: An original design manufacturer (ODM) or independent design house (IDH) is hired by an OEM. They are a company that designs and manufactures devices (tablet, PC, etc.) based on requirements specified by the OEM, (such as screen size, processor, memory, performance, etc.). The devices manufactured by the ODM/IDH are rebranded by the OEM. ODM/IDH companies allow the firm that owns or licenses the brand to produce products without having to engage in the design or running of a factory.

DLP per business explanation: The rules and roles within MDOS will vary for each persona. The ODM/IDH business model might have a direct ODM/IDH agreement with Microsoft or they may have multiple agreements with Microsoft. The ODM/IDH may also have agreements with various partners. The ODM/IDH will need to set up each downlevel partner separately, as its own business. Therefore, the TPI needs to utilize the flexible, multitenant platform within MDOS as it pertains to each role.

Agreements include:

- ODM/IDH Agreement with Microsoft
- GPA (Master License Agreement) with Microsoft
- GPA Embedded with Microsoft

Agreement contents:

ODM/IDH Agreement

- Under 10" screen
- Free SKU's

GPA (Master License Agreement)

- Own brand
- Over 10" screen
- Windows Pro SKUs

GPA Embedded

- Internet of things (IOT)
- Examples include: ATMs, Cars, Point of Sale devices, etc.

If the ODM or IDH has a direct agreement with Microsoft and no Upper Level Partner, the role is similar to an OEM. (Please refer to the [OEM specific persona](#) section for more details).

If the ODM or IDH has a direct agreement with Microsoft and an Upper Level Partner, the role is similar to an OEM when working with Microsoft and similar to a TPI when working with the uplevel partner. (Please refer to the [OEM specific persona](#) or [TPI specific persona](#) section depending on your specific agreement (centralized or decentralized) for more details).

If the ODM or IDH do not have a direct agreement with Microsoft, but have an uplevel partner, they are similar to a Third-Party Installer (TPI). (Please refer to the [TPI specific persona](#) section depending on your specific agreement (centralized or decentralized) for more details).

MDOS supports all roles within its flexible, multitenant platform, making it easy to add new partners and scale your business according to your needs. It gives partners the ability to order, deploy, manage, bind, return, and recall Digital Product Keys as needed.

MDOS multitenant support: The term "multitenant" refers to an architecture in which a single partner MDOS account instance can serve multiple tenants. A tenant in MDOS is a group of ULP partners and/or direct agreements with Microsoft. A tenant in MDOS could have a centralized or decentralized model with your business. MDOS multitenant support is based in the cloud and provides a unique view as it pertains to each user, their business, and agreements.

Example: Contoso ODM/IDH is a manufacturer that is licensed through a ODM/IDH agreement to preinstall the Windows operating system onto a computer on behalf of ABC OEM. Final factory production for ABC OEM and Contoso ODM/IDH devices is done at Mexico FFKI. Contoso TPI also has an agreement with Contoso OEM. Final factory production for Contoso

OEM and Contoso ODM/IDH devices is done at Mexico FFKI as well. Although in both businesses the final factory production is done at Mexico FFKI, Contoso ODM/IDH will need to set up each business separately.

Email Communications:

Subject Line	Purpose of email	Who receives	IDH/ODM
Welcome to Microsoft Digital Operations Services Platform	Partner onboard request has been received and is being processed. Onboard form successfully submitted and next steps. If you are a new user, MDOS has requested the creation of your DOC account. Once your OA 3.0 form is approved, additional emails will be sent with next steps.	User/Partner who submitted request	Y
Welcome to Microsoft Digital Operations Services Platform	(Approved) Onboard request has been approved by LRM (Licensing & Revenue Management). Partner needs to click link and accept business relationship in MDOS to complete business set up.	User/Partner who submitted request	Y
MDOS Onboarding request has been rejected	(Rejected) Onboard request has been rejected LRM (Licensing & Revenue Management)	User/Partner who submitted request	Y
File exported successfully.	Keys exported and file location to access provided	User/Partner who exported file	Y
Import Key Status	Keys import contained errors	User/Partner who imported file	Y
Request Accepted by Partner	OEM's DLP has accepted business request	OEM/ULP	Y
Welcome to Microsoft Digital Operations Platform Services	(Has DOC profile) DLP email invitation from OEM/ULP via MDOS. Partner needs to log in to complete profile set up in DOC	DLP	Y
Enrollment in DOC	(No DOC profile) Partner has been invited to MDOS and needs to set up profile in DOC.	DLP	Y

7.3.3 TPI SPECIFIC PERSONA

Description:

Third-Party Installer (TPI) is a manufacturer that is licensed through a TPI agreement to preinstall the Windows operating system onto a computer on behalf of an OEM. TPIs are authorized to use the OA 3.0 Tool. The OEM sends the DPKs to the Factories (usually a Third-Party Installer (TPI) factory) and the TPI will provide large scale production.

DLP per business explanation: The rules and roles within MDOS will vary by persona. With the TPI business model there is no direct agreement with Microsoft. The TPI will work directly with the OEM, ODM, or IDH. The TPI may have agreements with various partners. They may also work with a single partner with both centralized and decentralized models. The TPI will need to set up each downlevel partner separately, as its own business. Therefore, the TPI needs to utilize the flexible, multitenant platform within MDOS as it pertains to each role.

The TPI may accept or reject requests from uplevel partners as relationship requests are received. (See the [Onboarding](#) section for more information).

MDOS multitenant support: The term "multitenant" refers to an architecture in which a single partner MDOS account instance can serve multiple tenants. A tenant in MDOS is a group of ULP partners and/or direct agreements with Microsoft. A tenant in MDOS could have a centralized or decentralized model with your business. MDOS multitenant support is based in the cloud and provides a unique view as it pertains to each user, their business, and agreements.

Example: Contoso TPI is a manufacturer that is contracted to preinstall the Windows operating system onto a computer on behalf of ABC OEM. Final factory production for ABC OEM and Contoso TPI devices is done at Mexico FFKI. Contoso TPI also has an agreement with Contoso OEM. Final factory production for Contoso OEM and Contoso TPI devices is done at Mexico FFKI as well. Although in both businesses the final factory production is done at Mexico FFKI, Contoso TPI will need to set up each business separately.

Email Communications:

Subject Line	Purpose of email	who receives	TPI
Welcome to Microsoft Digital Operations Services Platform	Partner onboard request has been received and is being processed. Onboard form successfully submitted and next steps. If you are a new user, MDOS has requested the creation of your DOC account. Once your OA 3.0 form is approved, additional emails will be sent with next steps.	User/Partner who submitted request	Y
Welcome to Microsoft Digital Operations Services Platform	(Approved) Onboard request has been approved by LRM (Licensing & Revenue Management). Partner needs to click link and accept business relationship in MDOS to complete business set up.	User/Partner who submitted request	Y
File exported successfully.	Keys exported and file location to access provided	User/Partner who exported file	Y
Import Key Status	Keys import contained errors	User/Partner who imported file	Y
Request Accepted by Partner	OEM's DLP has accepted business request	OEM/ULP	Y

Welcome to Microsoft Digital Operations Platform Services	(Has DOC profile) DLP email invitation from OEM/ULP via MDOS. Partner needs to log in to complete profile set up in DOC	DLP	Y
Enrollment in DOC	(No DOC profile) Partner has been invited to MDOS and needs to set up profile in DOC.	DLP	Y

7.3.3 FFKI SPECIFIC PERSONA (WITHIN MDOS)

Description:

Factory Floor Key Inventory (FFKI) refers to the inventory on the factory floor where they manufacture devices on a large scale. The number of keys needed on the manufacturing line is determined by the OEM. The number is based on the line forecast and current inventories on the Factory Floor Key Inventory system on the factory floor. The keys are protected and transmitted from MDOS to the Factory Key Inventory system via HTTPS or may be manually transferred (e.g. via USB).

A FFKI could support one or more businesses: They may support an online business where they connect to cloud for key downloads. Or they may support an offline model, where offline export and offline reporting functionality is utilized.

The rules and roles within MDOS will vary by persona. The MDOS FFKI business model does not have a direct agreement with Microsoft, but they do connect to MDOS directly via API or support via an offline model. The FFKI also directly connects to the OA 3.0 tool.

Example: FFKI Mexico works in a centralized business model with Contoso OEM to manufacture their devices on a large scale. FFKI Mexico does not have a direct agreement with Microsoft. Contoso OEM provides the specs for the devices and forecasts that they will need to build 500 units, so will need 500 keys. Contoso OEM protects and transmits the key information from MDOS to the Factory Key Inventory system via USB, since FFKI Mexico’s factory floor does not have a secure internet connection to access MDOS. Once the devices are built and the keys have been injected, FFKI Mexico provides the CBR back to Contoso OEM via USB. Contoso OEM and FFKI Mexico are working to get secure internet connection to the factory floor so they can begin working with keys and reporting in real time.

Business setup specific for FFKI

7. FFKI Partner receives invitation from ULP via email.
8. FFKI Partner will receive an email with step-by-step guide.
9. FFKI Partner will receive an email with credentials.
10. FFKI Partner downloads software.
11. FFKI Partner will get set up.

12. FFKI Partner will test.

(**Note:** See [Onboarding section](#) for technical details on the FFKI set up).

Definitions:

Business: A Business is a secure hierarchical grouping of registered entities that allows those entities to interact and transact to complete the OEM Activation 3.0 features and functions within the MDOS Service offering.

Uplevel Partner (ULP): An Uplevel Partner (ULP) is the entity above the downlevel entity. Keys will flow from this entity to downstream entities. An upper level (uplevel) partner can be:

- Microsoft agreement (GPA, IDH/ODM or Embedded)
- OEM, ODM/IDH or TPI in a centralized relationship
- OEM, ODM/IDH or TPI in a decentralized relationship

Example: Contoso OEM has a business where they work with downlevel partner ABC TPI. Contoso OEM is the uplevel partner for ABC TPI and Contoso OEM’s uplevel partner is Microsoft.

Business Nickname: The name that will be displayed in the Business dropdown can be modified to a friendly nickname to help you quickly identify your partner accounts. This can be done when setting up a new partner after the invitation email has been accepted.

Example: Examples of nicknames for an OEM that has offices in different countries might be; OEM USA, OEM Asia. The OEM may decide to name their DLPs by an easy to identify name such as Factory ABC, Contoso Design House, Contoso Factory, etc.

Offline vs. online mode:

Accessing MDOS through a secure and reliable connection is always highly recommended. A factory may utilize some of the offline capabilities only when a connection is not available. Offline connections can be used for exporting keys, CBR and PBR imports, PBR acknowledgement, and DLP exports.

Example: Contoso TPI’s factory floor needs to work with keys offline since they do not have a secure connection to access to MDOS. The factory needs to manufacture 5000 devices, and needs the appropriate number of keys. Contoso TPI exports the select keys from MDOS and is notified when the download is complete via the Download Center. All keys are encrypted and located on a zip file. Contoso TPI shares the file with their downlevel factory for production via their own secure FTP site (or USB stick). After the devices are manufactured, the factory provides an offline CBR back to Contoso TPI, so it can be reviewed and shared with Microsoft.

Email Communications:

Subject Line	Purpose of email	who receives	FFKI
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Welcome to Microsoft Digital Operations Services Platform	Partner onboard request has been received and is being processed. Onboard form successfully submitted and next steps. If you are a new user, MDOS has requested the creation of your DOC account. Once your OA 3.0 form is approved, additional emails will be sent with next steps.	User/Partner who submitted request	Y
Welcome to Microsoft Digital Operations Services – FFKI Partner Set Up	Credentials for FFKI partner to begin using MDOS.	FFKI partner	Y
Welcome to Microsoft Digital Operations Services – FFKI Partner Set Up	Same FFKI has been added to different OEM.	FFKI partner	Y
Welcome to Microsoft Digital Operations Services – FFKI Partner Set Up	Partner needs to reset their credentials.	FFKI Partner	Y

SECTION 8. ADVANCED FUNCTIONALITY

Description

Advanced Functionality provides additional MDOS functions, outside the most common actions, that can be utilized.

Advanced Functionality includes; setting up automated OEM Hardware Reporting (OHR); mapping key types; grouping keys and managing labels; utilizing the Download Center; utilizing search and advanced search capabilities; moving key inventory; and accessing the online user manual.

8.1 ALLOW OHR UPDATES

Description

An OEM Hardware Report (OHR) can be submitted at the same time as the CBR, or any time after the CBR is submitted when the “Allow OHR Updates” functionality is turned on under settings.

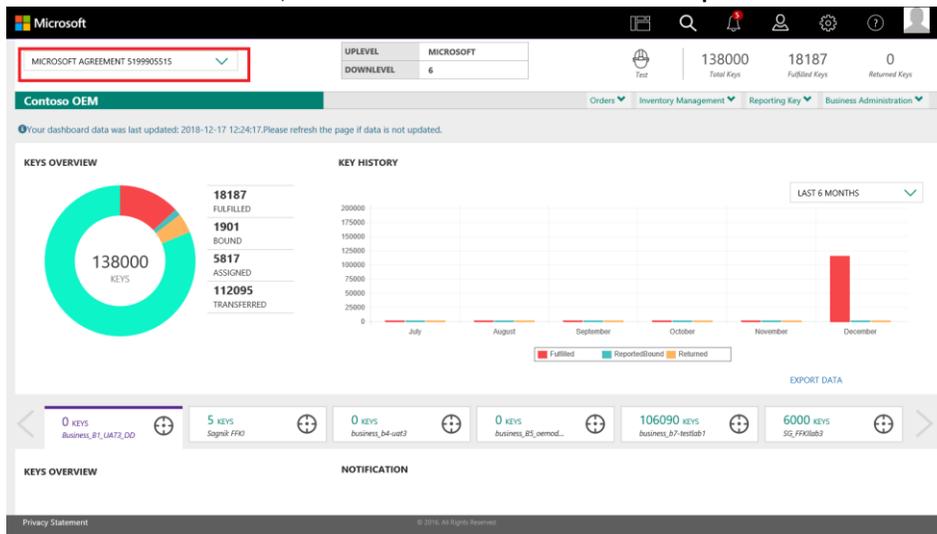
The OHR Update functionality is similar to the CBR AutoApproval and AutoSubmit in that it allows a downlevel partner to update OHR data, and the report will automatically submit any time an update is made.

Tip Tool: Automatically submit OEM Hardware Reports (OHR) automatically when updates are made.

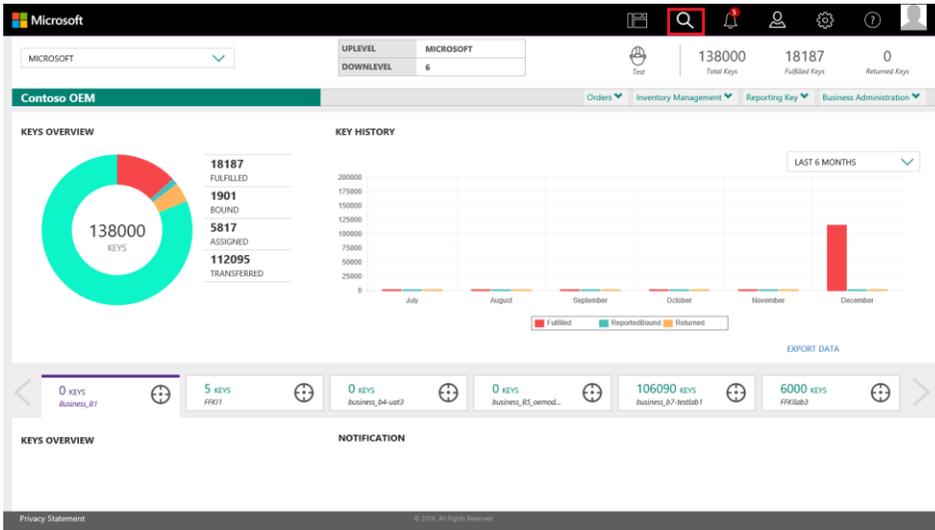
Step-by-step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

2. From the dashboard view, select the business from the **Business dropdown** menu.



3. Click on the search icon in the top navigation bar.



NOTE: Keys must be in ACTIVATION ENABLED status to be sent in OHR. (Refer to section [2.12 SUBMIT CBR](#) for steps to get to this status)

4. To view keys in ACTIVATION ENABLED status. Click on the Search icon from the top navigation bar.

5. From the search screen, select ACTIVATION ENABLED status from the KEY STATUS pulldown menu and click on the SEARCH button.

6. To allow automatic OHR Updates, click on the settings icon (gear icon) in the top navigation bar.

7. Check the box next to ALLOW UPDATES OF HARDWARD INFORMATION to turn on OHR automatic updates.

8. Click on SAVE CHANGES.

SETTINGS

MICROSOFT CERTIFICATE

CN=PODEMVC1093 **IMPORT** **REMOVE CERTIFICATE**

EXPIRATION DATE: 11/15/2019 CERTIFICATE STATUS: Test
UPLOADED DATE: NA UPLOADED BY: NA

CERTIFICATE AUTOMATION

Certificate Automation Status **OFF** **TURN ON**

ADVANCE SETTINGS

CSR AUTOAPPROVAL ALLOW UPDATION OF HARDWARE INFORMATION AUTO RETURN AUTO SUBMIT CSR

SAVE CHANGE

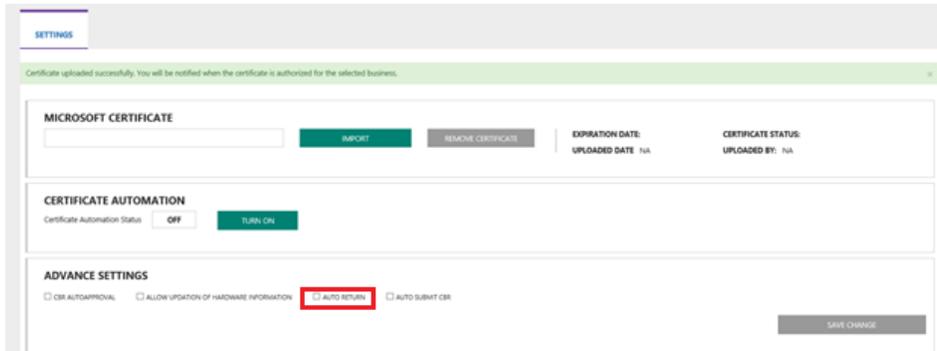
8.2 AUTO RETURN

Description:

This functionality helps the OEM to return the keys directly to Microsoft from their DLP (like TPI, FKI etc.). If the OEM has checked the auto return box, then the keys returned by DLP to OEM will directly return to MS and the state of those keys will change to “Marked For Return” for OEM. If the OEM has not turned on the flag and if the key is returned by DLP, then OEM has to manually return the keys to Microsoft.

Tooltip:

This functionality helps the OEM to return the keys directly to Microsoft from their DLP (like TPI, FKI etc.). If the OEM has checked the auto return box, then the keys returned by DLP to OEM will directly return to MS and the state of those keys will change to “Marked For Return” for OEM.



8.3 MAP KEY TYPE

Description:

Map Key Type allows users to map the keys that do not have a specified type with a designation, such as Standard, Services etc. A Key Type is required to perform any operations on keys.

By default, the system automatically maps keys with keys whose licensable part number matches the downloaded keys licensable part number. In the rare circumstance where a Key Type was not determined by the system, the key would display as NO KEY TYPE and the Map Key Type functionality would allow the key to be mapped by the user.

Key Types include:

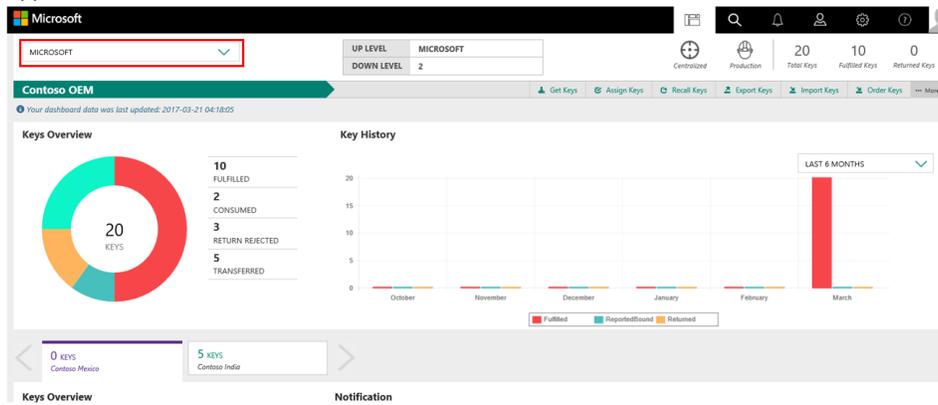
KEY TYPE	EXAMPLE
Standard	Windows 10 OS
Service	Office, XBOX, Add-ons
MBR	Mother Board Replacement
MAT	Multiple Activation Test key (also referred to as Test Key or TKY)

NOTE: This functionality is no longer required after Jan 2017 release as keys are now automatically mapped. In rare circumstances, this functionality may be needed.

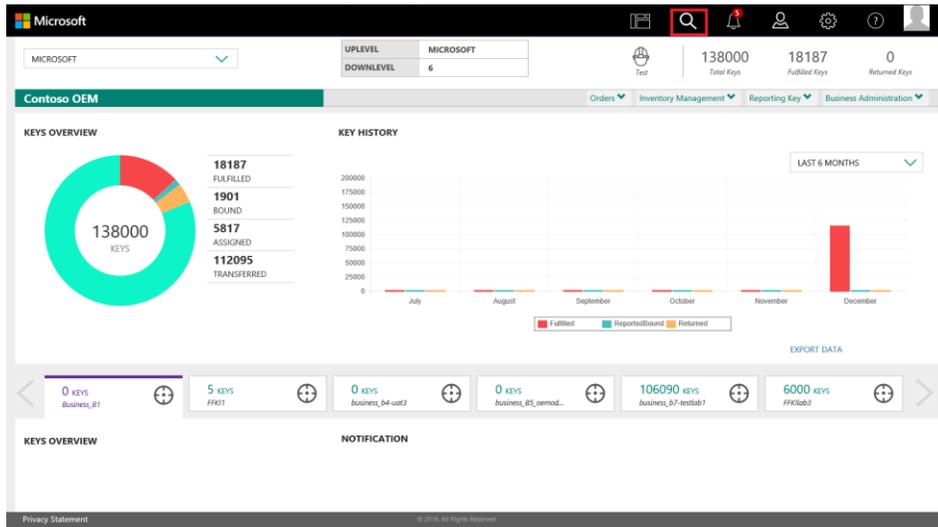
Tip Tool: Map Key Type functionality allows users to map key types to as standard, service, motherboard, etc.

Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.



3. Click on the search icon in the top navigation bar.



4. Under the KEY TYPE pulldown menu, select NO KEY TYPE and click on the SEARCH button.

Your dashboard data was last updated: 2017-03-21 10:56:13

18
Total Keys

14
FULFILLED

2
ACTIVATION ENABLED

2
RETURN REJECTED

SEARCH RESULTS

ASSIGN RECALL RETURN REPORT EXPORT OHR OPTIONAL INFO **MAP KEY TYPE** DLS EXPORT MOVE TO INVENTORY

PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/>	26797 XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	269-16965	SERVICE	RETURN REJECTED
<input type="checkbox"/>	26798 XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	269-16965	SERVICE	FULFILLED
<input type="checkbox"/>	26802 XXXXX-XXXXX-XXXXX-XXXXX-WX77H	WN7-01070	STANDARD	ACTIVATIONENABLED
<input type="checkbox"/>	26803 XXXXX-XXXXX-XXXXX-XXXXX-H9K07	WN7-01070	STANDARD	ACTIVATIONENABLED
<input type="checkbox"/>	26806 XXXXX-XXXXX-XXXXX-XXXXX-DH47H	WN7-01070	NOKEYTYPE	FULFILLED

5 < 1 2 3 4 >

5. Check the box(es) to select the keys to be mapped.

18
Total Keys

14
FULFILLED

2
ACTIVATION ENABLED

2
RETURN REJECTED

SEARCH RESULTS

ASSIGN RECALL RETURN REPORT EXPORT OHR OPTIONAL INFO **MAP KEY TYPE** DLS EXPORT MOVE TO INVENTORY

PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/>	26797 XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	269-16965	SERVICE	RETURN REJECTED
<input type="checkbox"/>	26798 XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	269-16965	SERVICE	FULFILLED
<input type="checkbox"/>	26802 XXXXX-XXXXX-XXXXX-XXXXX-WX77H	WN7-01070	STANDARD	ACTIVATIONENABLED
<input type="checkbox"/>	26803 XXXXX-XXXXX-XXXXX-XXXXX-H9K07	WN7-01070	STANDARD	ACTIVATIONENABLED
<input checked="" type="checkbox"/>	26806 XXXXX-XXXXX-XXXXX-XXXXX-DH47H	WN7-01070	NOKEYTYPE	FULFILLED

5 < 1 2 3 4 >

6. Click on the MAP KEY TYPE button above your selection.

18
Total Keys

14
FULFILLED

2
ACTIVATION ENABLED

2
RETURN REJECTED

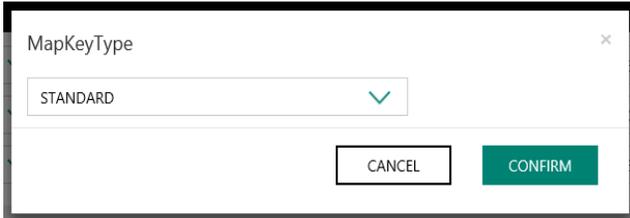
SEARCH RESULTS

ASSIGN RECALL RETURN REPORT EXPORT OHR OPTIONAL INFO **MAP KEY TYPE** DLS EXPORT MOVE TO INVENTORY

PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/>	26797 XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	269-16965	SERVICE	RETURN REJECTED
<input type="checkbox"/>	26798 XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	269-16965	SERVICE	FULFILLED
<input type="checkbox"/>	26802 XXXXX-XXXXX-XXXXX-XXXXX-WX77H	WN7-01070	STANDARD	ACTIVATIONENABLED
<input type="checkbox"/>	26803 XXXXX-XXXXX-XXXXX-XXXXX-H9K07	WN7-01070	STANDARD	ACTIVATIONENABLED
<input checked="" type="checkbox"/>	26806 XXXXX-XXXXX-XXXXX-XXXXX-DH47H	WN7-01070	NOKEYTYPE	FULFILLED

5 < 1 2 3 4 >

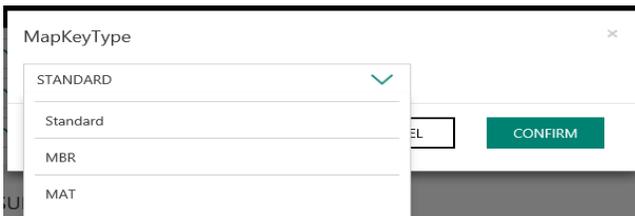
7. A confirmation window will pop up to confirm your selection. Click CONFIRM.



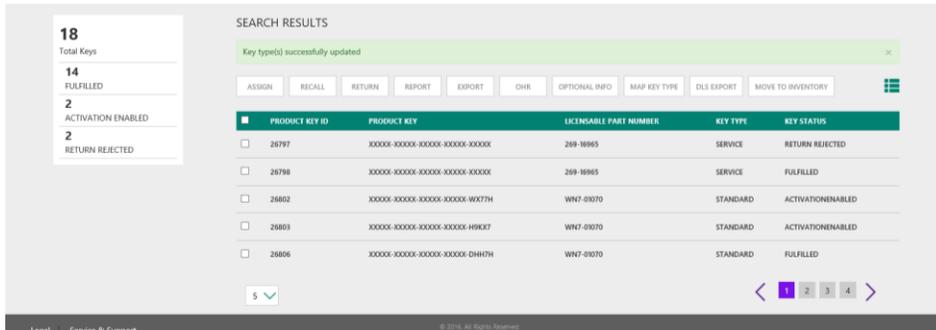
8. Select the key type from the dropdown and click on confirm.

NOTE: Key Types include the following:

KEY TYPE	EXAMPLE
Standard	Windows 10 OS
Service	Office, XBOX, Add-ons
MBR	Mother Board Replacement
MAT	Multiple Activation Test key (also referred to as Test Key or TKY)



9. Once the selected keys are mapped, a "Key types successfully updated" message will briefly pop up in the green highlighted banner.



8.4 MANAGE LABEL

Description:

Manage Label provides functionality to allow a selection of keys to be grouped together and identified under one, common name. The functionality of grouping is similar to putting keys in a folder or zip file, or adding a label to all the keys in one group, so they can quickly be identified and selected as a set. Keys can then be accessed as a collection to perform different tasks.

Names are determined by the user and can be any name and any length. Some examples of label names might be “ABC Group”, “Holiday Promo 2017”, “Special OEM Combo with Office 365”, etc.

Once a label is created and a set of keys has been grouped and associated with that label, they can then be accessed by quantity, keys, or by status. Keys can also be unlabeled at any time.

Example: Contoso TPI decides they want to group all the keys that have for their holiday promotion. They create a label called “Holiday Promo 2017” and assign all the keys by date range from September to October to this label. Contoso can later go back and search for these keys by label (using the ADVANCED SEARCH functionality) and export all the keys under the label to send to their factory for production.

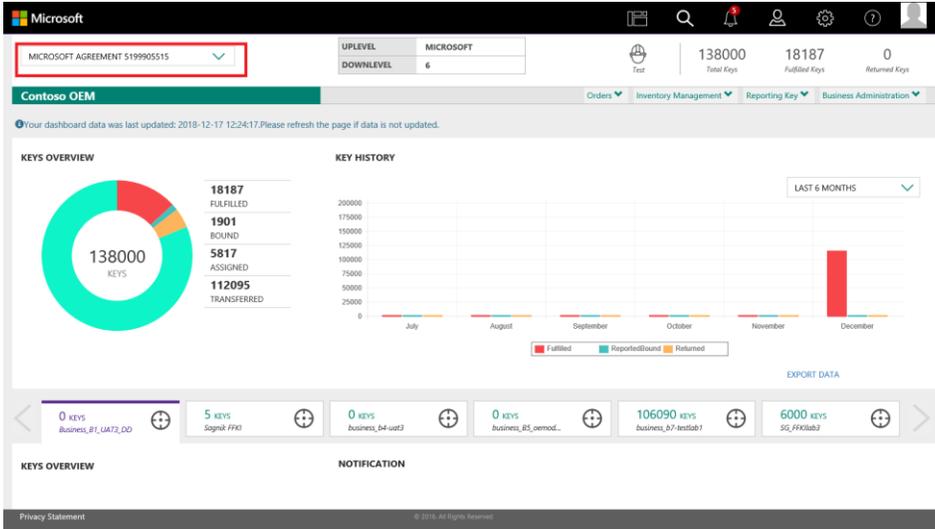
Tip Tool: Group a selection of keys together so they can be identified by a common name.

8.4.1 MANAGE LABEL BY QUANTITY

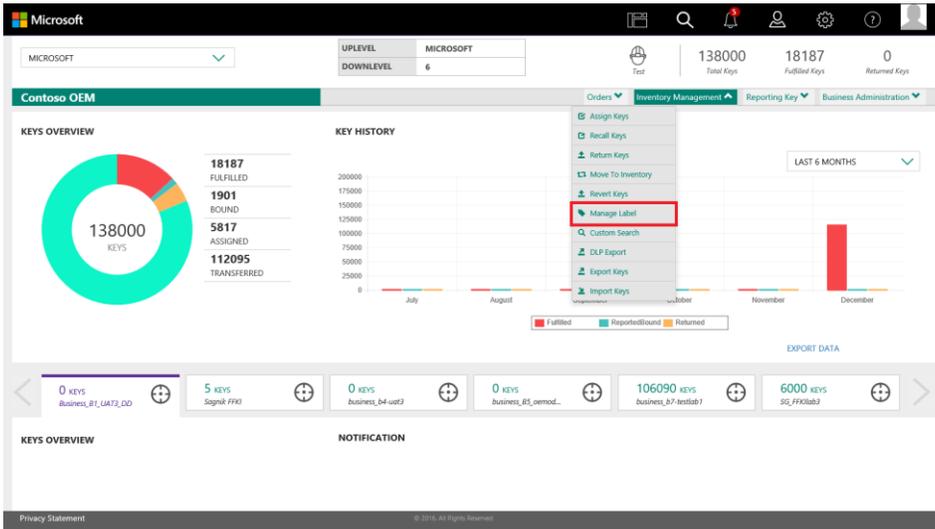
Tip Tool: Group a selection of keys together so they can be identified by one name and assign keys to label by quantity.

Step-by-Step:

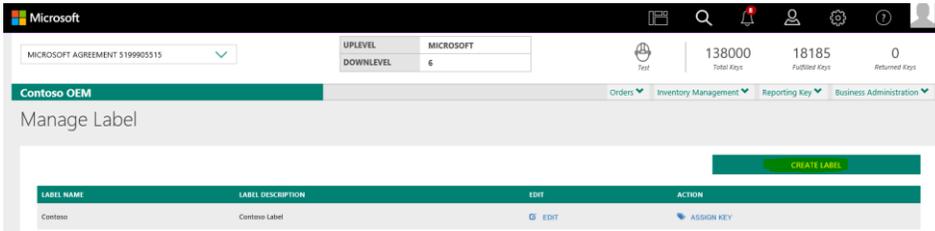
1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.



3. From the Inventory Management menu, select Manage Label.



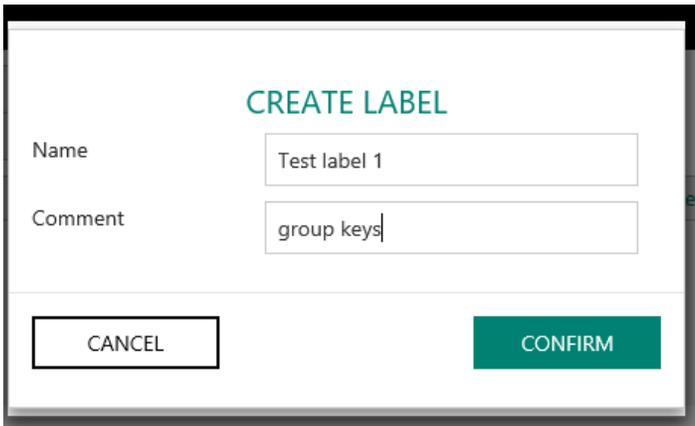
4. Under the Manage Label page, a list of any current labels will display. To create a new label, click on the CREATE LABEL button.



5. A CREATE LABEL window will pop up.

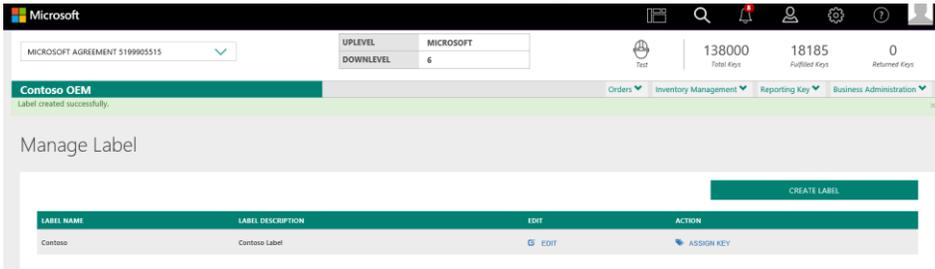
6. Add the new label name in the box next to NAME and any additional information in the box next to COMMENT.

7. Click CONFIRM.

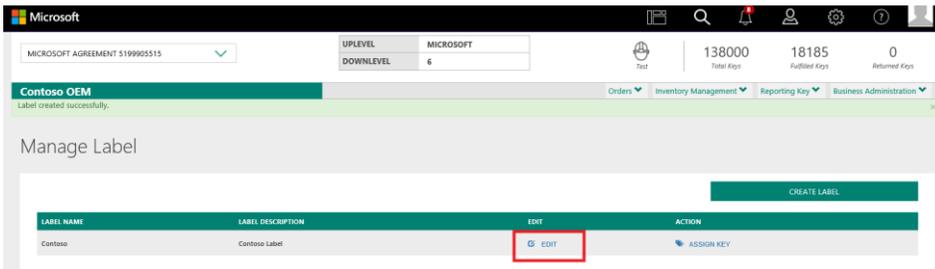


8. Once the keys are assigned, a “Label created successfully” message will briefly pop up in the green highlighted banner. “

9. The new label will now display in the list on the Manage Label page.

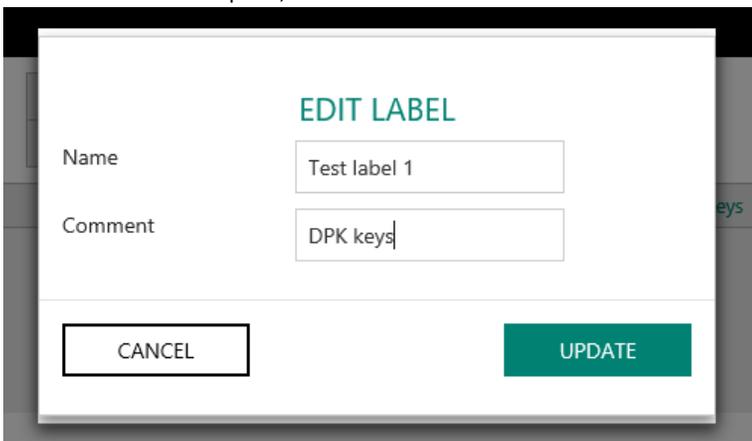


10. If edits are needed or desired, click on the EDIT link next to the Label Name under the EDIT column.



11. A window will pop up allowing edits to the Name and Comment fields.

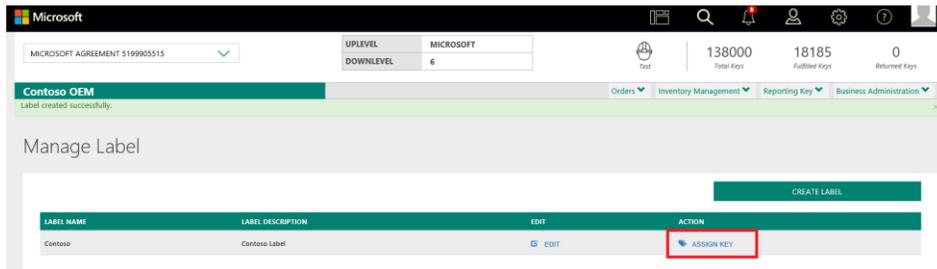
12. Once edits are complete, click UPDATE.



13. Once the keys are assigned, a “Label updated successfully” message will briefly pop up in the green highlighted banner.

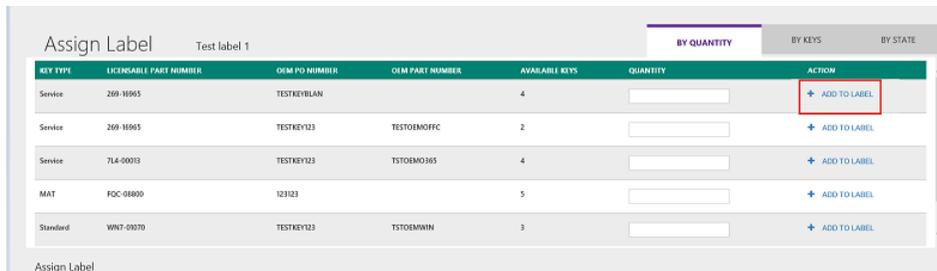
14. The revised label will now display in the list on the Manage Label page.

15. To assign keys to this label by quantity, click on the ASSIGN KEY link under ACTION for the label that was created.



16. Click on the BY QUANTITY Tab.

17. Under the QUANTITY column, enter the quantity of keys to be assigned to the label and click on the ADD TO LABEL link.



18. The selected keys and the assigned quantity, will display below your selection.

19. Confirm the information and click on the ASSIGN LABEL button.

KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	AVAILABLE KEYS	QUANTITY	ACTION
Service	269-16965	TESTKEYBLAN		4	<input type="text"/>	+ ADD TO LABEL
Service	269-16965	TESTKEY123	TESTOEMOFFC	2	<input type="text"/>	+ ADD TO LABEL
Service	714-00013	TESTKEY123	TSTOEMO365	4	<input type="text"/>	+ ADD TO LABEL
MAT	FQC-08800	123123		5	<input type="text"/>	+ ADD TO LABEL
Standard	WN7-01070	TESTKEY123	TSTOEMWIN	2	<input type="text"/>	+ ADD TO LABEL

Assign Label

KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	CATEGORY	QUANTITY	ACTION
Standard	WN7-01070	TESTKEY123	By Quantity	1	✕ REMOVE LABEL

20. A confirmation window will pop up to confirm your selection. Click CONFIRM.

ASSIGN LABEL TO KEYS

Are you sure you want to assign these keys?

CANCEL

CONFIRM

21. Once the keys are assigned to the label, a “Key(s) assigned to label successfully” message will briefly pop up in the green highlighted banner.

Contoso OEM Get Keys Assign Keys Recall Keys Export Keys Import Keys Order Keys More

Your dashboard data was last updated: 2017-03-21 11:01:16

Assign Label Test label 1

BY QUANTITY BY KEYS BY STATE

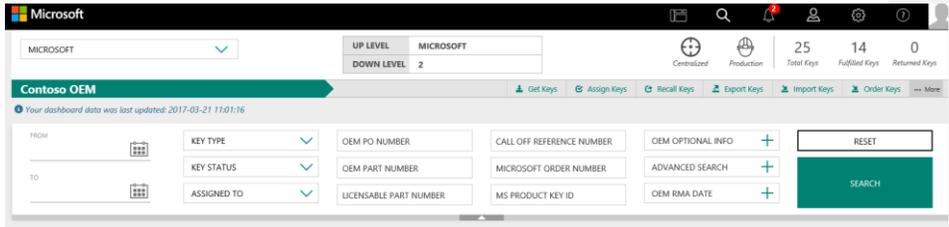
Keys assigned to label successfully.

KEY TYPE	LICENSABLE PART NUMBER	OEM PO NUMBER	OEM PART NUMBER	AVAILABLE KEYS	QUANTITY	ACTION
Service	269-16965	TESTKEYBLAN		4	<input type="text"/>	+ ADD TO LABEL
Service	269-16965	TESTKEY123	TESTOEMOFFC	2	<input type="text"/>	+ ADD TO LABEL
Service	714-00013	TESTKEY123	TSTOEMO365	4	<input type="text"/>	+ ADD TO LABEL
MAT	FQC-08800	123123		5	<input type="text"/>	+ ADD TO LABEL

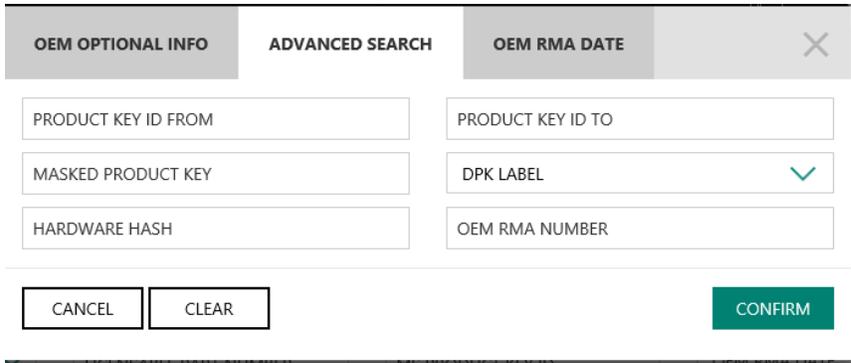
Assign Label

NOTE: To search for keys by label:

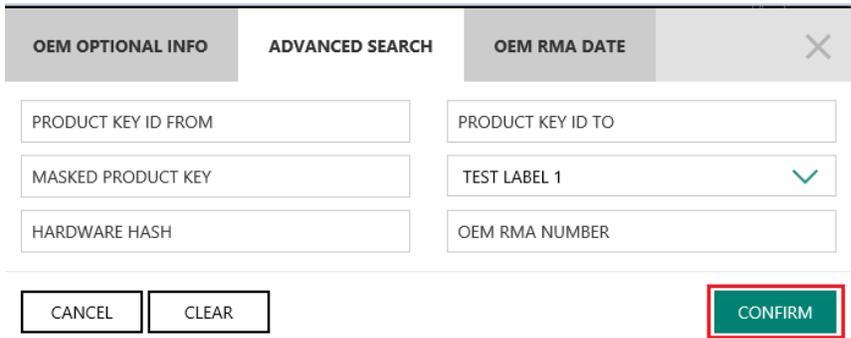
1. Go to Search section and click on the ADVANCED SEARCH field.



2. Select Label name from DPK LABEL pulldown menu.



3. Click CONFIRM to view all keys under that label.

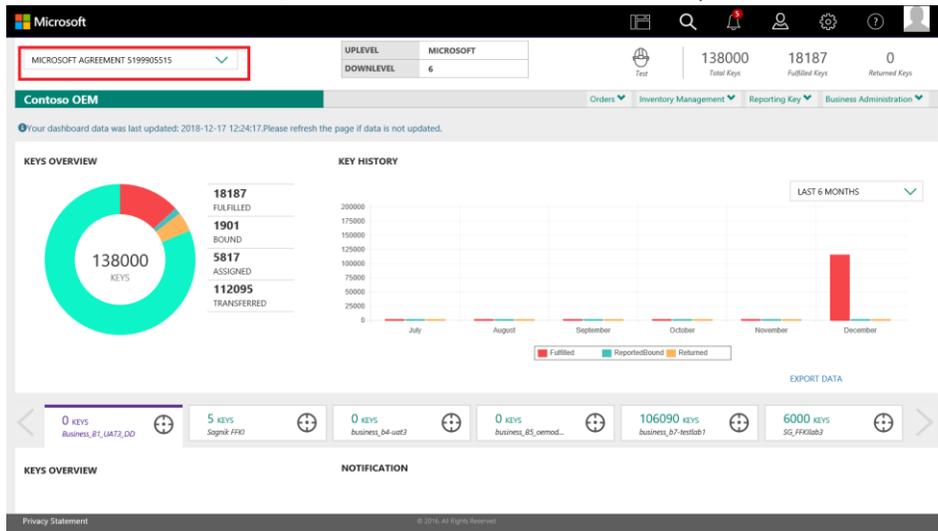


8.4.2 MANAGE LABEL BY KEYS

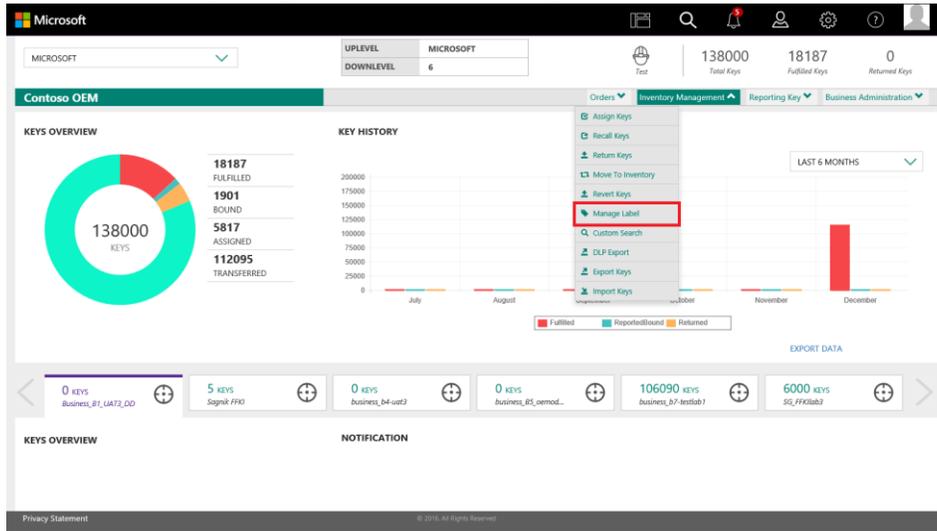
Tip Tool: Group a selection of keys together so they can be identified by one name and assign keys to label by specific keys.

Step-by-Step:

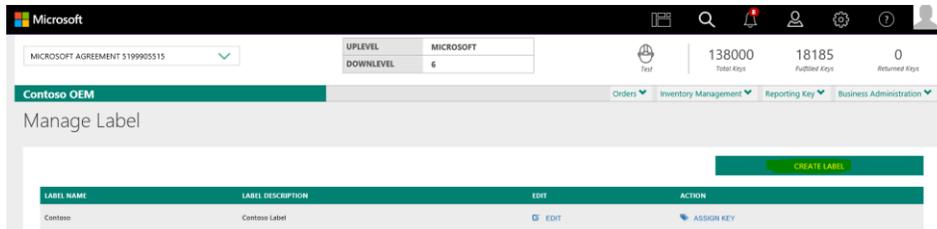
1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.



3. From the Inventory management menu, select Manage Label.



4. Under the Manage Label page, a list of any current labels will display. To create a new label, click on the CREATE LABEL button.



5. A CREATE LABEL window will pop up.

6. Add the new label name in the box next to NAME and any additional information in the box next to COMMENT.

7. Click CONFIRM.

CREATE LABEL

Name

Comment

8. Once the keys are assigned, a “Label created successfully” message will briefly pop up in the green highlighted banner.

9. The new label will now display in the list on the Manage Label page.

Manage Label

Label Created Successfully!

LABEL NAME	LABEL DESCRIPTION	EDIT	ACTION
Test label 1	group keys	EDIT	ASSIGN KEY

< 1 >

10. If edits are needed or desired, click on the EDIT link next to the Label Name under the EDIT column.

Manage Label

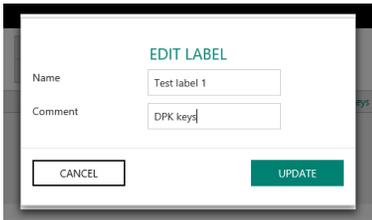
Label Created Successfully!

LABEL NAME	LABEL DESCRIPTION	EDIT	ACTION
Test label 1	group keys	EDIT	ASSIGN KEY

< 1 >

11. A window will pop up allowing edits to the Name and Comment fields.

12. Once edits are complete, click UPDATE.



EDIT LABEL

Name

Comment

13. Once the keys are assigned, a “Label updated successfully” message will briefly pop up in the green highlighted banner.

14. The revised label will now display in the list on the Manage Label page.

15. To assign keys to this label by specific key, click on ASSIGN KEY under ACTION for the label that was created.



Your dashboard data was last updated: 2017-03-21 11:01:16

Manage Label

Label Created Successfully!

LABEL NAME	LABEL DESCRIPTION	EDIT	ACTION
Test label 1	group keys	<input type="button" value="EDIT"/>	<input type="button" value="ASSIGN KEY"/>

< 1 >

16. Click on the BY KEYS tab.

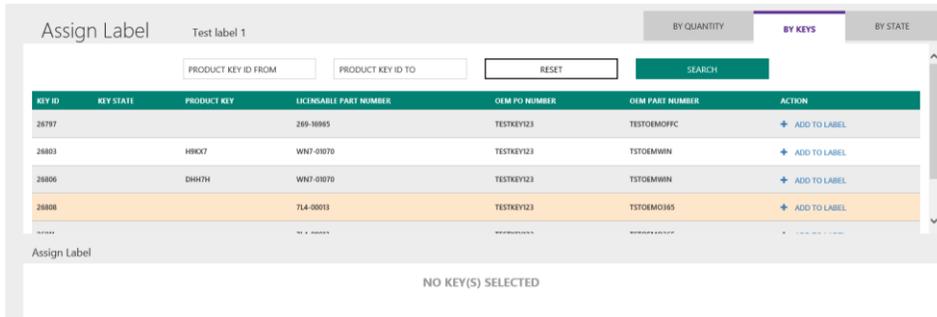
17. Under the ASSIGN LABEL page, PRODUCT KEY ID FROM and PRODUCT KEY ID TO fields will display.

18. Enter search criteria, if desired, then click the SEARCH button to view all keys eligible for assigning to labels.



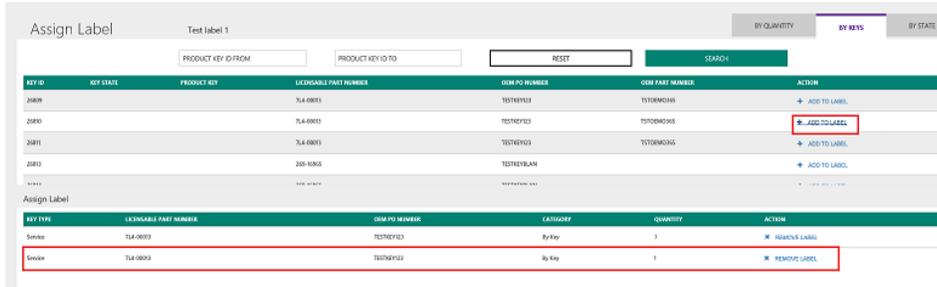
Assign Label Test label 1

19. Results will display all the keys based on the search criteria or will default to show all keys if no parameters are selected.

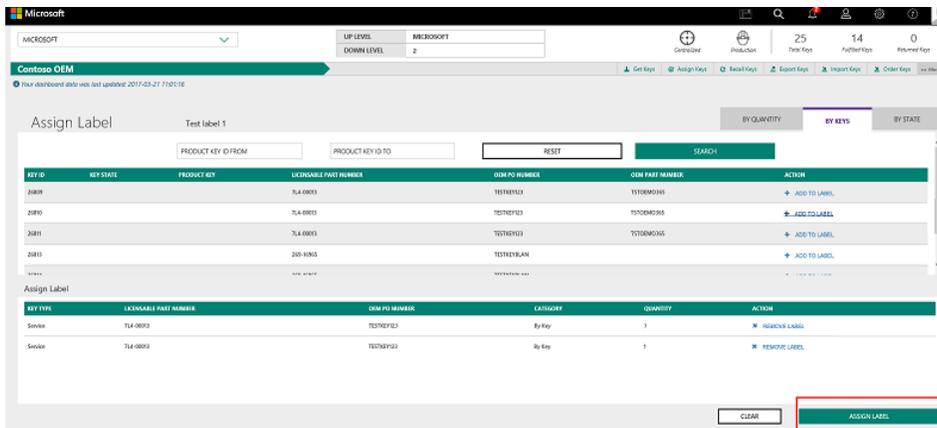


20. Click the ADD TO LABEL link to add specified keys to a label.

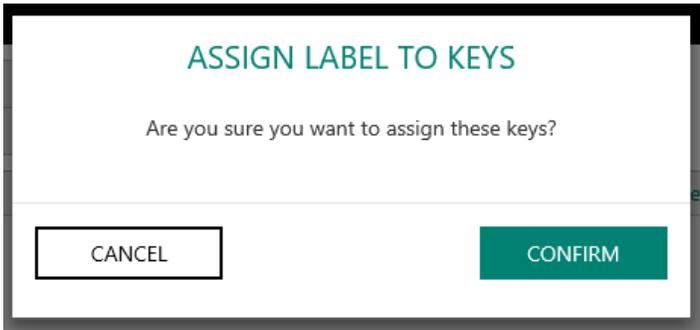
21. The selected keys and the assigned quantity, will display below your selection.



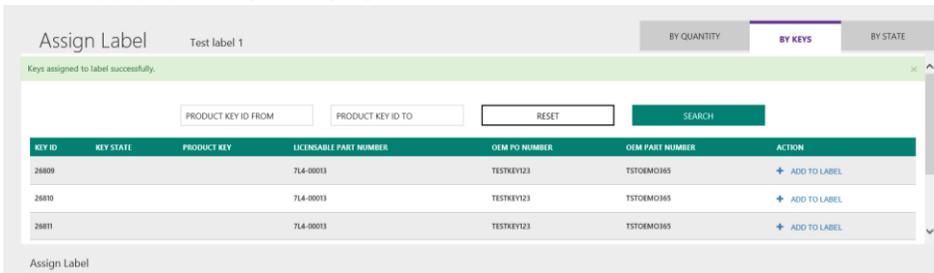
22. Confirm the information and click on the ASSIGN LABEL button.



23. A confirmation window will pop up to confirm your selection. Click CONFIRM.

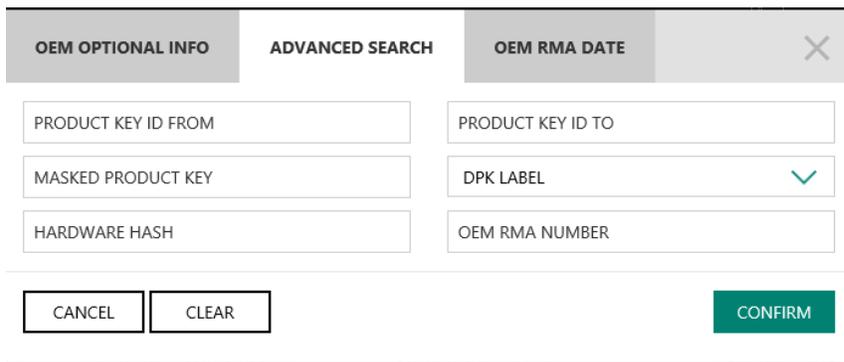


24. Once the keys are assigned to the label, a “Key(s) assigned to label successfully” message will briefly pop up in the green highlighted banner.



NOTE: To search for keys by label:

2. Go to Search section and click on the ADVANCED SEARCH field.
3. Select Label name from DPK LABEL pulldown menu.



3. Click CONFIRM to view all keys under that label.

OEM OPTIONAL INFO	ADVANCED SEARCH	OEM RMA DATE	✕
<input type="text" value="PRODUCT KEY ID FROM"/>	<input type="text" value="PRODUCT KEY ID TO"/>		
<input type="text" value="MASKED PRODUCT KEY"/>	<input style="color: green; font-weight: bold; text-decoration: none; cursor: pointer;" type="text" value="TEST LABEL 1"/>		
<input type="text" value="HARDWARE HASH"/>	<input type="text" value="OEM RMA NUMBER"/>		
<input type="button" value="CANCEL"/>	<input type="button" value="CLEAR"/>	<input style="border: 2px solid red;" type="button" value="CONFIRM"/>	

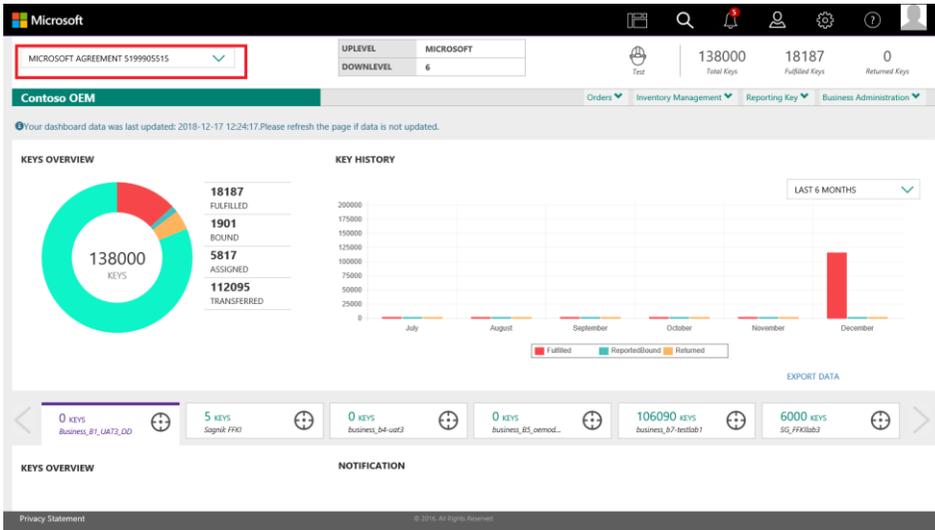
8.4.3 MANAGE LABEL BY STATUS

Tip Tool: Group a selection of keys together so they can be identified by one name and assign keys to label by status.

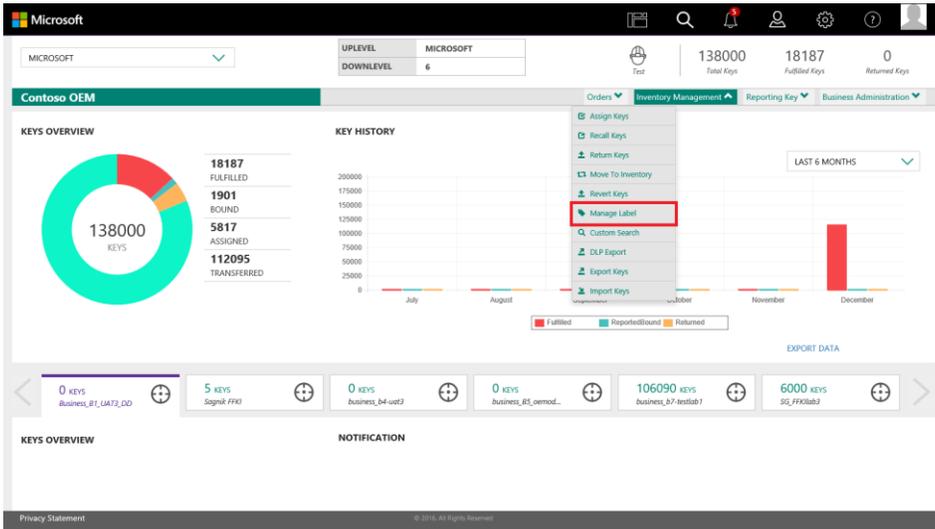
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.

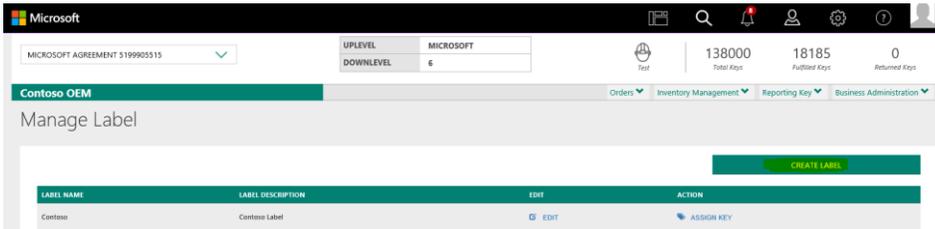
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3. From the Inventory management menu, select Manage Label.



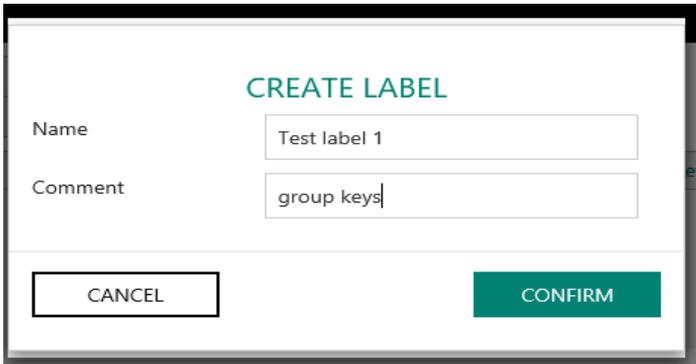
4. Under the Manage Label page, a list of any current labels will display. To create a new label, click on the CREATE LABEL button.



5. A CREATE LABEL window will pop up.

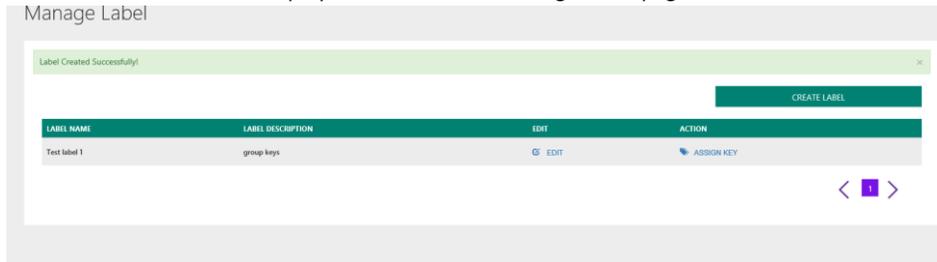
6. Add the new label name in the box next to NAME and any additional information in the box next to COMMENT.

7. Click CONFIRM.

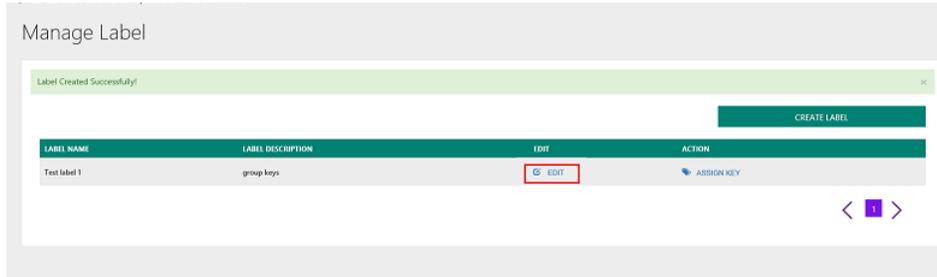


8. Once the keys are assigned, a “Label created successfully” message will briefly pop up in the green highlighted banner. “

9. The new label will now display in the list on the Manage Label page.

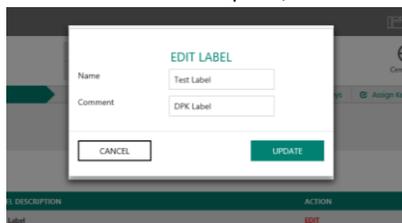


10. If edits are needed or desired, click on the EDIT link next to the Label Name under the EDIT column.



11. A window will pop up allowing edits to the Name and Comment fields.

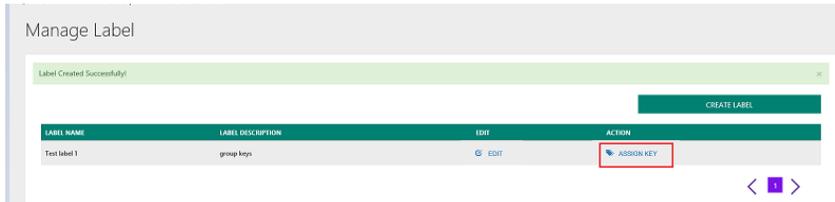
12. Once edits are complete, click UPDATE.



13. Once the keys are assigned, a "Label updated successfully" message will briefly pop up in the green highlighted banner.

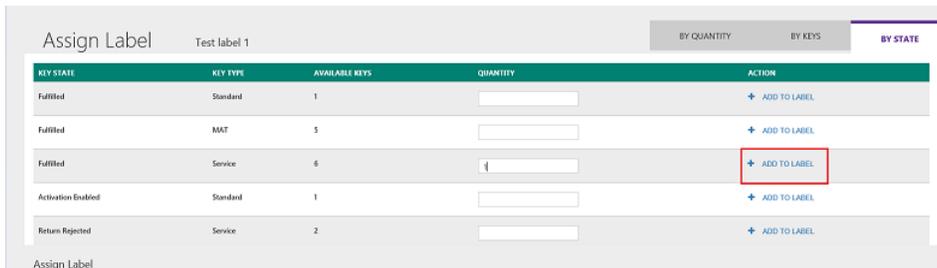
14. The revised label will now display in the list on the Manage Label page.

15. To assign keys to this label by status, click on ASSIGN KEY under ACTION for the label that was created.



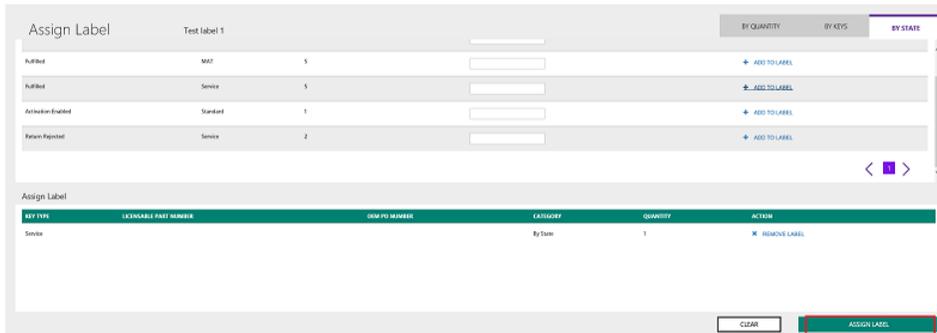
16. Click on the BY STATUS Tab.

17. Under the QUANTITY column, enter the quantity of keys to be assigned to the label and click on the ADD TO LABEL link.

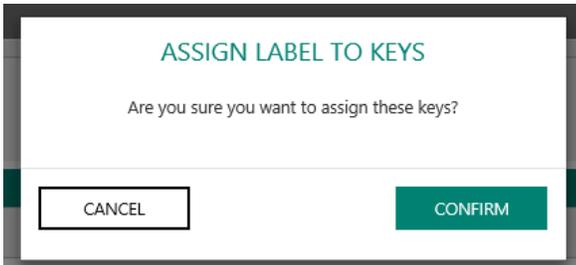


18. The selected keys and the assigned quantity, will display below your selection.

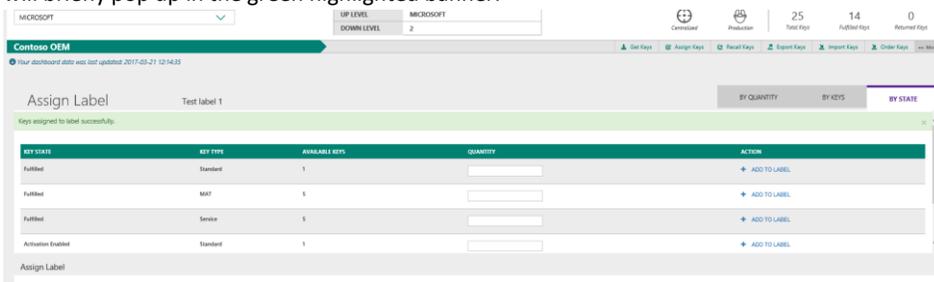
19. Confirm the information and click on the ASSIGN LABEL button.



20. A confirmation window will pop up to confirm your selection. Click CONFIRM.

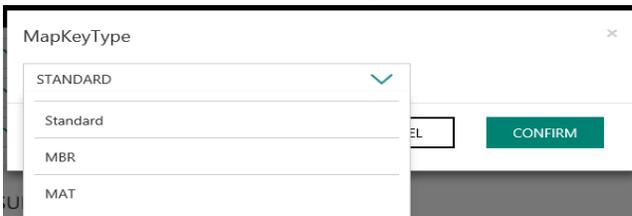


21. Once the keys are assigned to the label, a “Key(s) assigned to label successfully” message will briefly pop up in the green highlighted banner.



NOTE: To search for keys by label:

1. Go to Search section and click on the ADVANCED SEARCH field.
2. Select Label name from DPK LABEL pulldown menu.



3. Click CONFIRM to view all keys under that label.

OEM OPTIONAL INFO	ADVANCED SEARCH	OEM RMA DATE	✕
<input type="text" value="PRODUCT KEY ID FROM"/>	<input type="text" value="PRODUCT KEY ID TO"/>		
<input type="text" value="MASKED PRODUCT KEY"/>	<input style="color: green; text-decoration: none; font-weight: normal; font-size: 0.9em; font-family: sans-serif; border: none; border-bottom: 1px solid #ccc; padding: 2px 5px;" type="text" value="TEST LABEL 1"/>		
<input type="text" value="HARDWARE HASH"/>	<input type="text" value="OEM RMA NUMBER"/>		
<input type="button" value="CANCEL"/>	<input type="button" value="CLEAR"/>	<input style="border: 2px solid red;" type="button" value="CONFIRM"/>	

8.5 DOWNLOAD CENTER

Description:

The Download Center is a location within MDOS that is a retention area for all your downloadable files. From this location, you may access and export the files. The files you might access in the Download Center include: Exported keys, DLP Exports (See [DLP Export](#) section for more information), and PBR Acknowledgment.

The file information you'll see in the Download Center includes: File Name, File Count, Export Dates, Last Download Date, and Action (PBR Acknowledgment, DIS Export, Exported Keys).

Since the Download Center retains all files that are available for download it can be accessed at any time. Files can be exported into a zip file and saved to a secure location you choose.

Another option for accessing downloaded files is under the Alert icon pulldown menu. These notifications show up just after a file is downloaded. However, newer notifications will push previous notifications down the list so some may go out of view. These files will always be available in the Download Center should you need to go back at another time.

Downloads that can be accessed from the Download Center include:

- PBR Acknowledgment
- DLP Export - FFKI Fulfilled Status (FFKI only)
- Exported Keys: Consumed Status

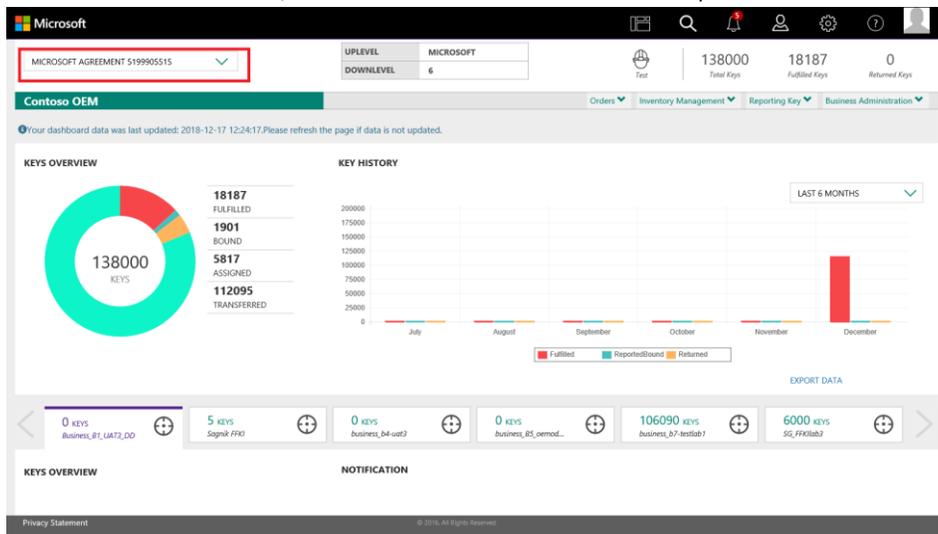
Example: Contoso TPI's factory floor needs to work with keys offline since they do not have a secure connection to access to MDOS on the factory floor. The factory floor needs to manufacture 5000 devices and needs the appropriate number of keys. Contoso TPI exports the select keys from MDOS and is notified when the download is complete via an alert. From the alert, Contoso TPI follows the link to the Download Center to access the zip file and shares the

file with their downlevel factory for production via their own secure method. Contoso can also go back to the Download Center to access at a later date if needed.

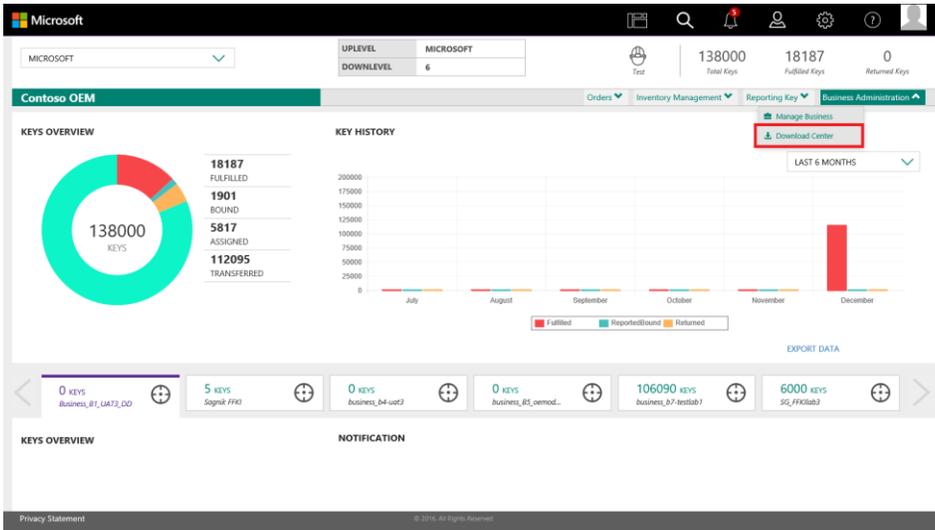
Tip Tool: View, access and export your downloadable files at any time from the Download Center.

Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.



3. From the Business Administration menu, click on Download Center.



4. In this view, all downloadable files will be displayed and will allow export of the files.

NOTE: Files available for access in the Download Center may include: Exported keys, DLP Exports, and PBR Acknowledgment.

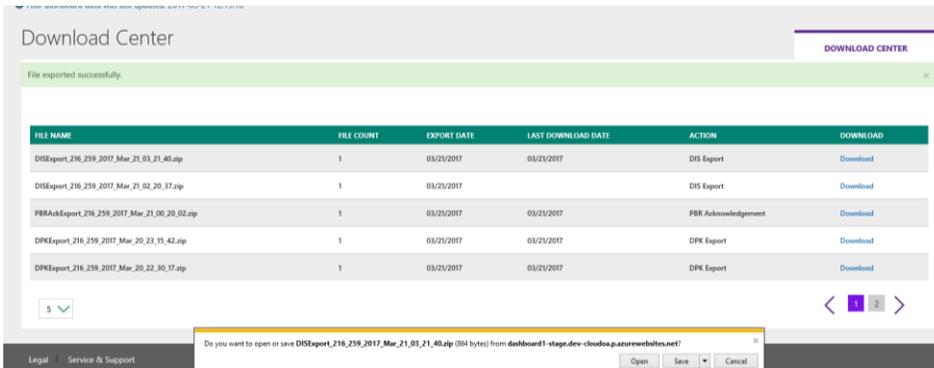
5. To export a file, click on the Download link next to the file name.

Download Center

FILE NAME	FILE COUNT	EXPORT DATE	LAST DOWNLOAD DATE	ACTION	DOWNLOAD
DISExport_216_259_2017_Mar_21_03_21_40.zip	1	03/21/2017		DIS Export	Download
DISExport_216_259_2017_Mar_21_02_20_37.zip	1	03/21/2017		DIS Export	Download
PBRAckExport_216_259_2017_Mar_21_00_39_02.zip	1	03/21/2017	03/21/2017	PBR Acknowledgment	Download
DPKExport_216_259_2017_Mar_20_23_15_42.zip	1	03/21/2017	03/21/2017	DPK Export	Download
DPKExport_216_259_2017_Mar_20_22_30_37.zip	1	03/21/2017	03/21/2017	DPK Export	Download

5

6. Once the files are exported, a “Files exported successfully” message will briefly pop up in the green highlighted banner.



7. Files may be saved to a secure location that you choose.

8.6 SEARCH KEYS

Description:

The Search Key allows users to search for keys based on search parameters and perform key operations such as ASSIGN, RECALL, REPORT, RETURN, etc. from the search screen.

Search fields include the following fields and options:

- KEY TYPE –
 - Standard – (i.e. Windows OS)
 - Service – (i.e. Office products, XBOX, other add-ons)
 - MBR – Motherboard Replacement
 - MAT – Multiple Activation Test
- KEY STATUS – Includes: Activation Denied, Activation Enabled, Activation Enabled Pending Update, Assigned, Bound, Consumed, FFKI Fulfilled, Fulfilled, Marked for Return, Marked for Submit, Notified Bound, Reported Bound, Reported Returned, Returned.
- ASSIGNED TO – OEM or downlevel partner name.
- OEM PO NUMBER – The Purchase Order (PO) number assigned when order is placed
- OEM PART NUMBER – The number assigned by the OEM for a part.
- LICENSABLE PART NUMBER – Unique ID assigned by Microsoft.
- CALL OFF REFERENCE NUMBER – The number assigned in MDOS once the Call Off order has been placed.
- MICROSOFT ORDER NUMBER – Order number received from Microsoft after order is placed.
- MICROSOFT PRODUCT KEY ID – Shortened number associated with the long Product Key ID.

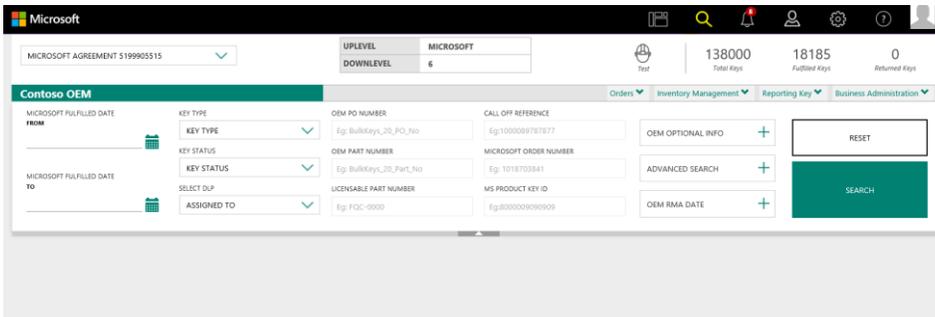
- Long Product Key ID is the 25-character product key, formatted as XXXXX-XXXXX-XXXXX-XXXXXXXXXX, which Microsoft provides to activate a single copy of Windows on a computer)

Opens a new window with additional fields:

- OEM OPTIONAL INFO – If info is provided, you may search by PC MODEL/SKU, OEM EXTENDER IDENTIFIER, MANUFACTURER GEO-LOCATION, PROGRAM ELIGIBILITY VALUES (PEV), etc.
- ADVANCED SEARCH - If info is provided, you may search by PRODUCT KEY ID FROM, PRODUCT KEY ID TO, MASKED PRODUCT KEY, DPK LABEL, HARDWARE HASK, OEM RMA NUMBER.
- OEM RMA DATE – FROM date, TO date.
- 5x5 Key Number – If you choose to search by 5x5 key number, only the key that matches this exact search will be returned.

Example: Contoso TPI wants to search for keys that are grouped by label "Holiday 2017". They use the ADVANCED SEARCH functionality within search. From the pop-up window, Contoso selects "Holiday 2017" from the DPK LABEL pulldown menu and click CONFIRM to view all keys under that label.

1. Click on the search icon to view search fields, then click on the ADVANCED SEARCH field.



2. From the ADVANCED SEARCH pop-up window, select the label name from the DPK LABEL pulldown menu.

OEM OPTIONAL INFO	ADVANCED SEARCH	OEM RMA DATE	✕
PRODUCT KEY ID FROM		PRODUCT KEY ID TO	
MASKED PRODUCT KEY		DPK LABEL ✓	
HARDWARE HASH		OEM RMA NUMBER	
CANCEL	CLEAR	CONFIRM	

3. Click CONFIRM to view all keys under that label.

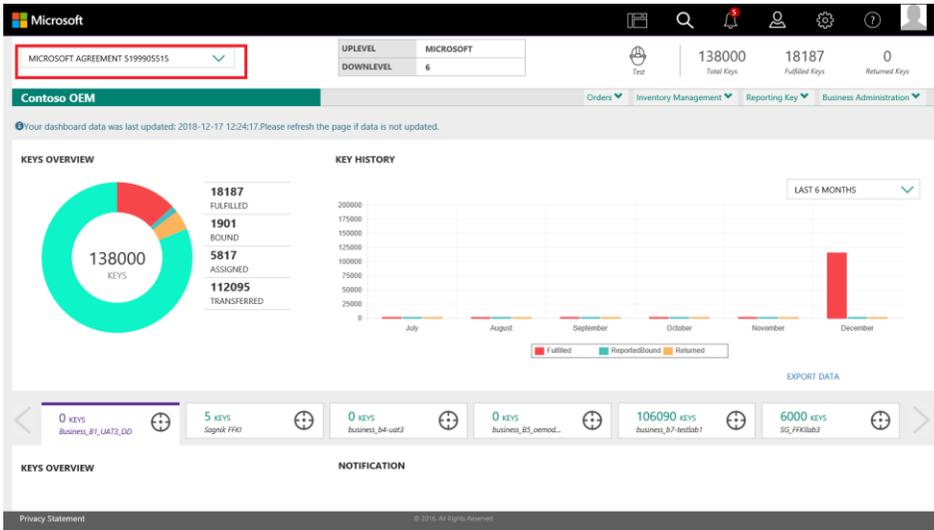
OEM OPTIONAL INFO	ADVANCED SEARCH	OEM RMA DATE	✕
PRODUCT KEY ID FROM		PRODUCT KEY ID TO	
MASKED PRODUCT KEY		TEST LABEL 1 ✓	
HARDWARE HASH		OEM RMA NUMBER	
CANCEL	CLEAR	CONFIRM	

Tip Tool: Use Search functionality to find keys based on search parameters and perform key operations such as ASSIGN, RECALL, REPORT, RETURN, etc. from the search screen.

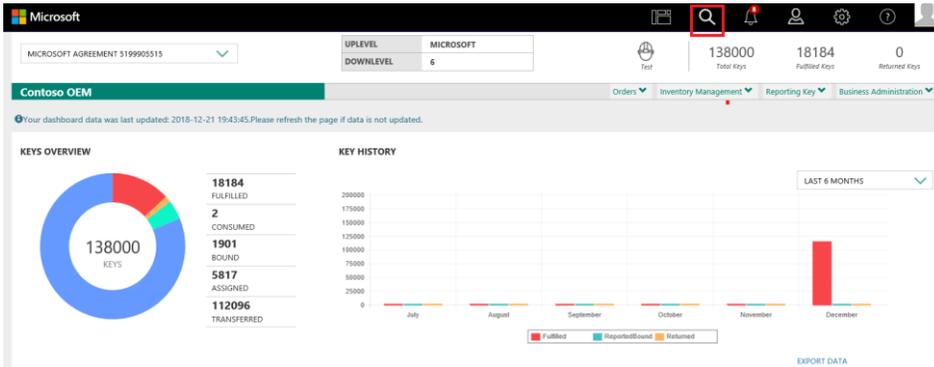
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.

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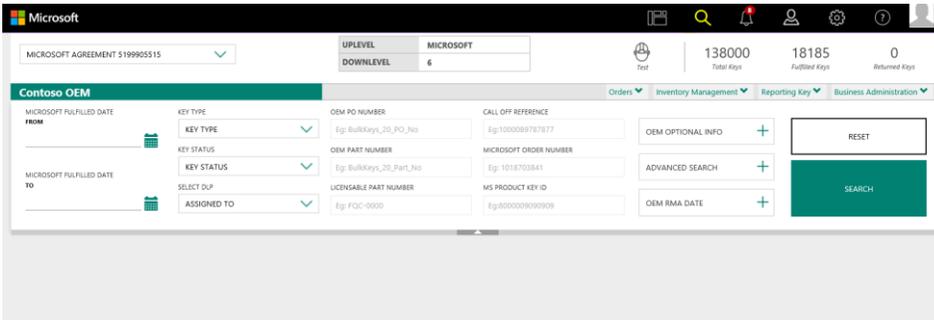


3. Click on the search icon in the top navigation bar.

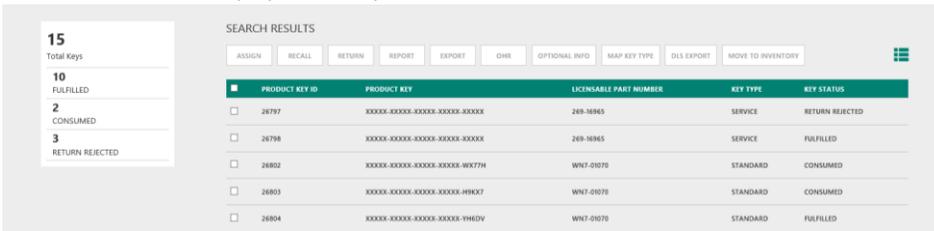


4. Enter search criteria, such as Key Status, Key Type, Assigned to, MS Fulfilled date, OEM RMA Date, etc., and click on the SEARCH button.

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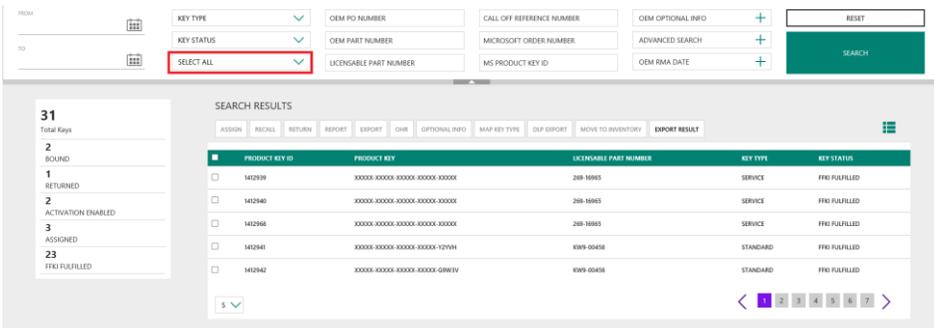


5. Search results will display all the keys based on the search criteria.



6. MDOS has introduced a 'SELECT ALL' option in the assigned to dropdown, if the partner selects this option, they will get to view all the keys that were available with them as well as with their DLP's irrespective of to whom the keys were assigned to.

NOTE: In search partner OEM/TPI/Subsidiary partner can choose the "Select All" option in Assigned To box to search the DPKs are associated with themselves and their DLPs.

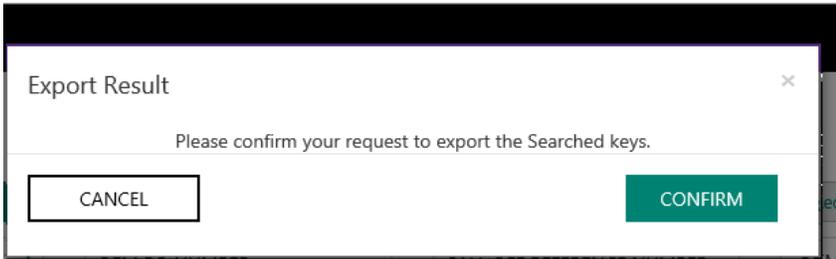


7. Partners can also export the search results to excel file using the 'Export Result' option, click on Export Result button:

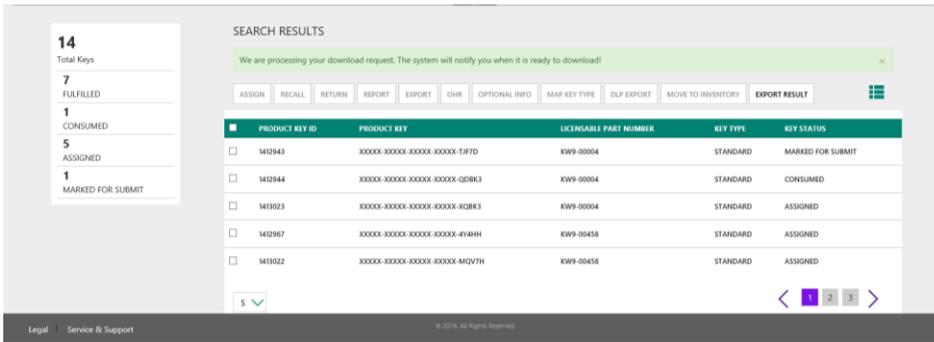
The screenshot shows the 'SEARCH RESULTS' page. On the left is a filter sidebar with the following counts: 33 Total Keys, 5 FULFILLED, 2 BOUND, 1 RETURNED, 2 ACTIVATION ENABLED, 7 ASSIGNED, 8 FFKI FULFILLED, 4 RETURN REJECTED, and 4. The main area contains a table with columns: MS PRODUCT KEY ID, PRODUCT KEY, LICENSABLE PART NUMBER, KEY TYPE, and KEY STATUS. The table lists 10 rows of data. At the top right of the table area are buttons: ASSIGN, RECALL, RETURN, REPORT, EXPORT, OHR, OPTIONAL INFO, MAP KEY TYPE, DLP EXPORT, MOVE TO INVENTORY, and EXPORT RESULT. A 'Privacy Statement' link is at the bottom left, and '© 2016. All Rights Reserved' is at the bottom center.

This screenshot shows the same 'SEARCH RESULTS' page but with a pagination dropdown menu open over the 10th row. The dropdown menu shows options for 25, 50, and 25 (likely a typo for 100 or similar). The table continues with rows 11 through 20. The 'Microsoft' logo is visible in the top left corner of the interface. A 'Privacy Statement' link is at the bottom left, and '© 2016. All Rights Reserved' is at the bottom center.

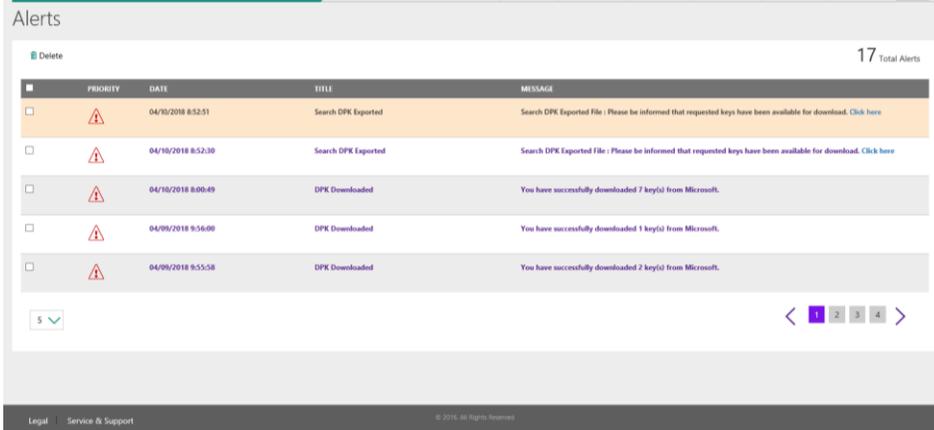
8. Dialog box will pop up to confirm export result. Click on confirm:



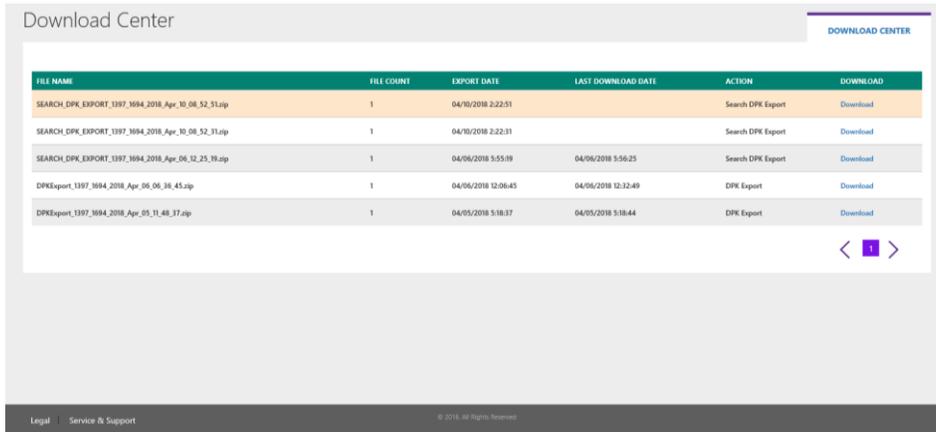
- Once confirmed, you will see a message that MDOS processing the export request which will be available once it is ready for download.



- Once the file is available to download, the partners will receive a notification message in alert section.



11. The exported search file will be available to download in download center.



8.7 CUSTOM SEARCH

Description:

The MDOS enable OEM partners to manage and consume the product keys. The purpose of this functionality is to enhanced search criteria to find out any combination of keys.

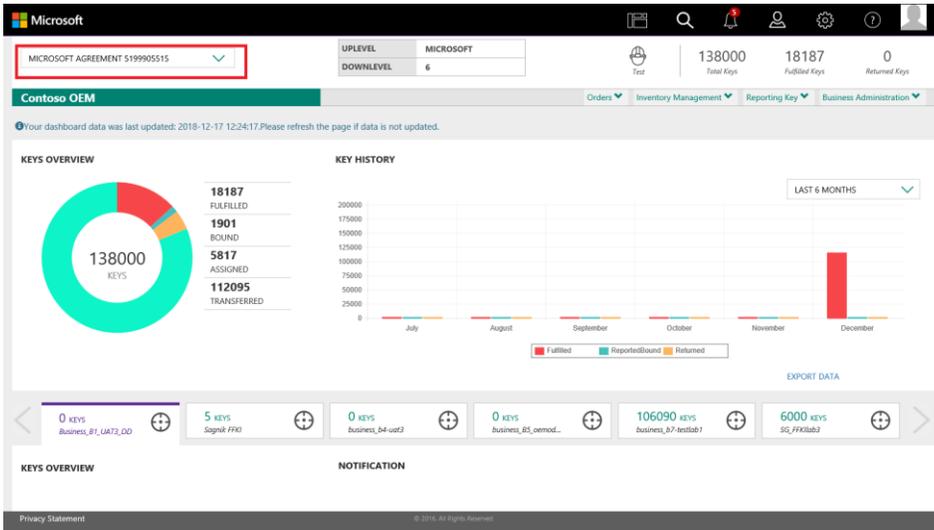
The scope of this functionality to build an efficient view to build custom query to search keys by any combination without any restrictions and perform key operations such as ASSIGN, RECALL, REPORT, RETURN, etc. from the search screen.

In this functionality partner can create their query, can save, rename their query and can delete that query as well.

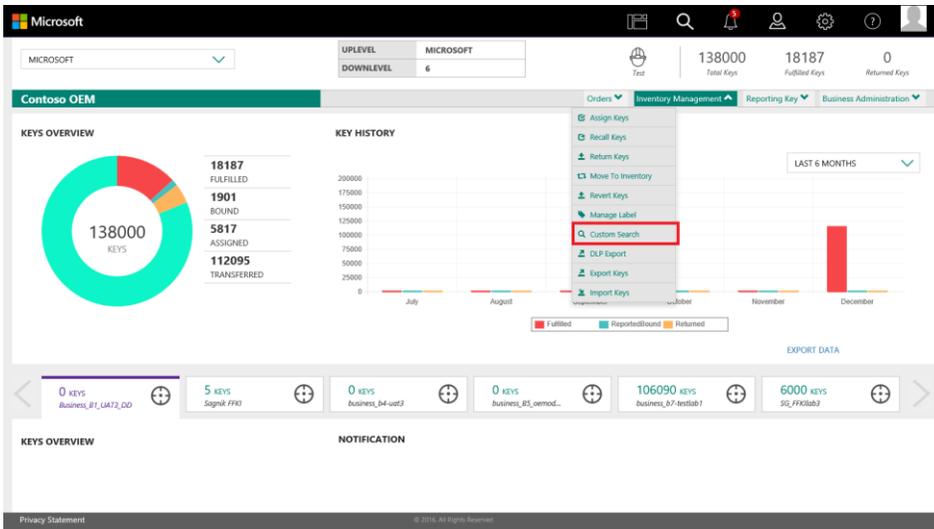
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.

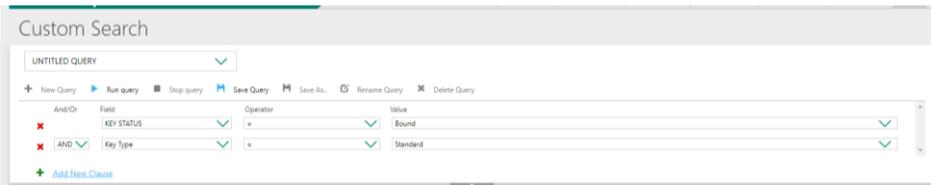
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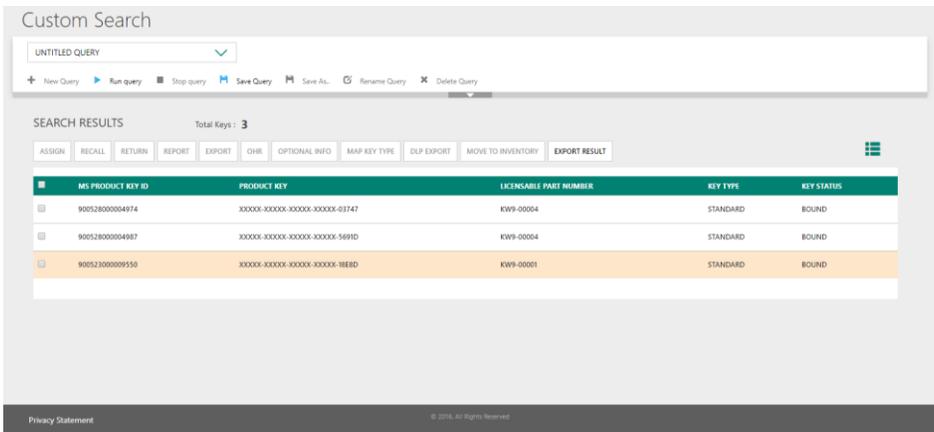
3. From the Inventory Management menu, select Custom Search.



4. In Custom Search page, user will get the screen in which they can set the field, operator and value according to their requirement and can click on Clause the Add New to add new search parameters. By Default there is already one parameter user can see when click land on the custom page screen and user can create their own search criteria by clicking on “Add New Clause” button.

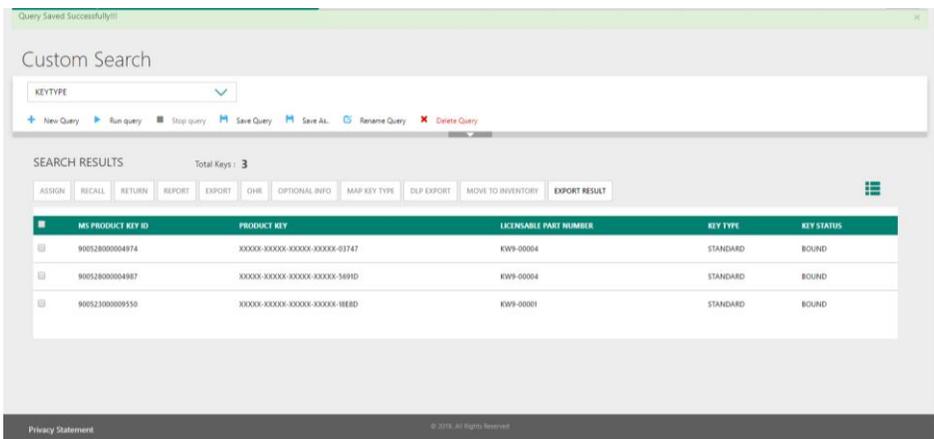


5. Once the query is set, user can click on the Run Query button. Search results will display all the keys based on the query that user run.

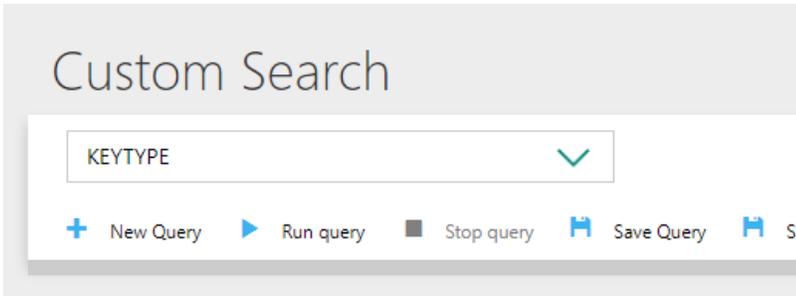


6. Based on the search user can perform the operations such as ASSIGN, RECALL, REPORT, RETURN, etc. from the custom search page.

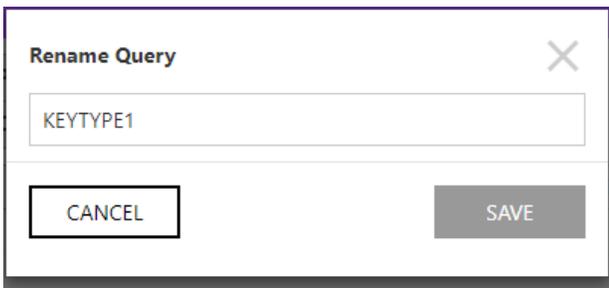
7. User can also save the query that is set in the custom search page by clicking Save Query button. Once the query saved user will get the successful message “Query Saved Successfully!!!” on same page.

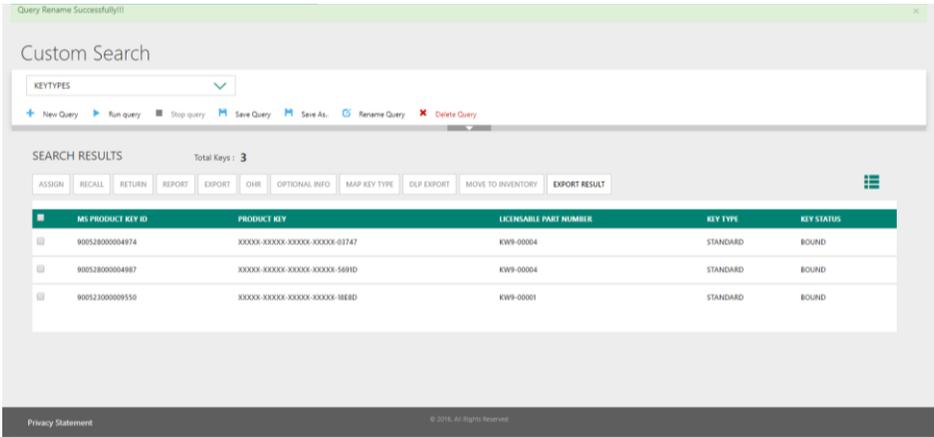


9. Once the query get saved, user can see that query in drop down along with other queries saved by user in query drop down box.

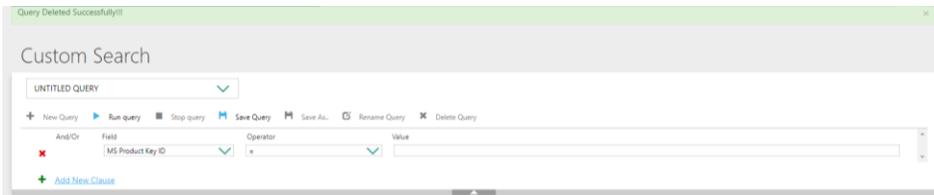
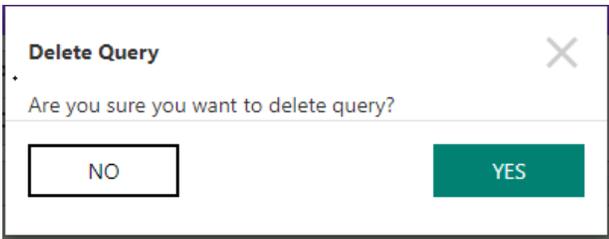


8. User can also rename the same query, by clicking Rename Query Button. Once query name updated then user will get the successful message “Query Rename Successfully!!!” on same page.





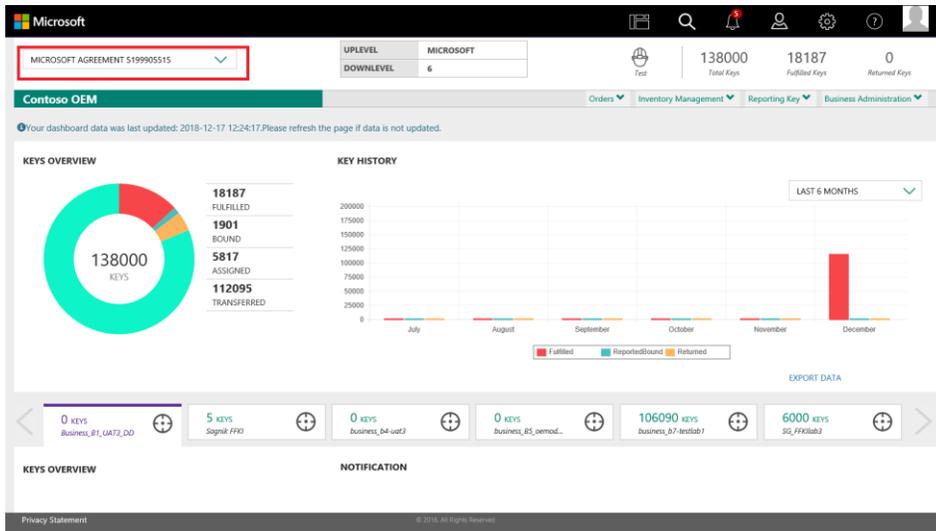
9. User can also delete the same query by clicking Delete Query Button and get confirmation popup with "Yes/No" options. Once user click on "Yes" after successful delete query user will get default criteria loaded on custom search page.



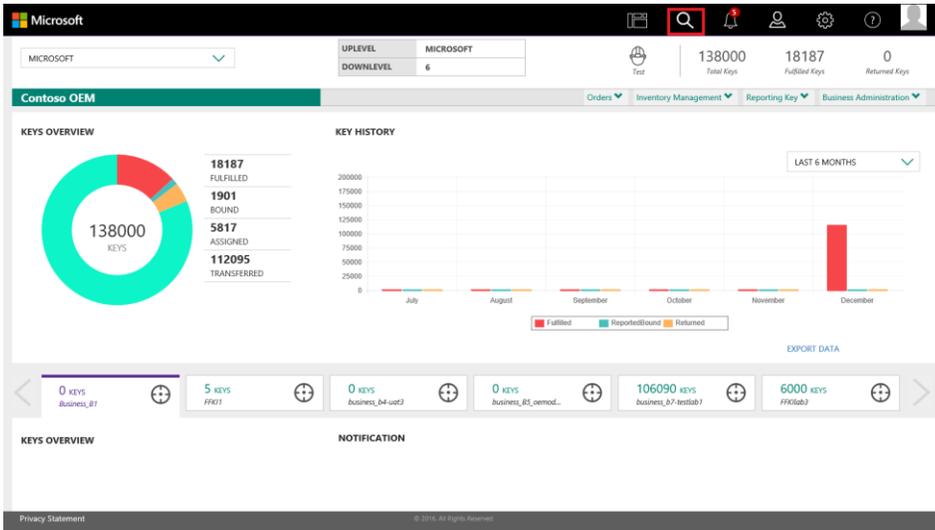
8.7 VIEW KEYS

Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.



3. Click on the search icon in the top navigation bar.

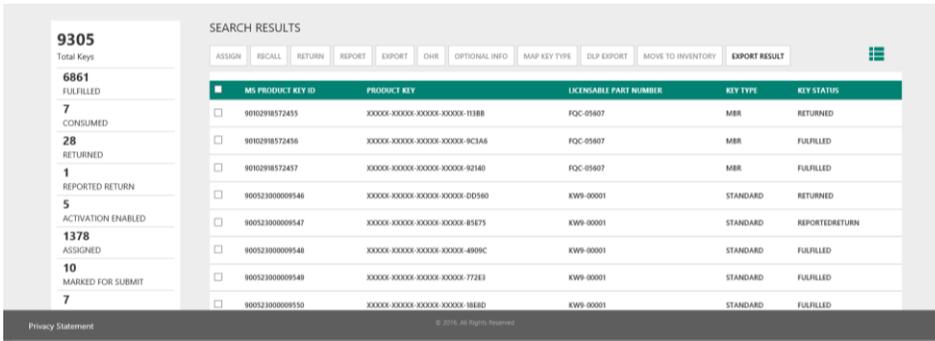


4. Enter search criteria, such as Key Status, Key Type, Assigned to, MS Fulfilled date, OEM RMA Date, etc., and click on the SEARCH button.

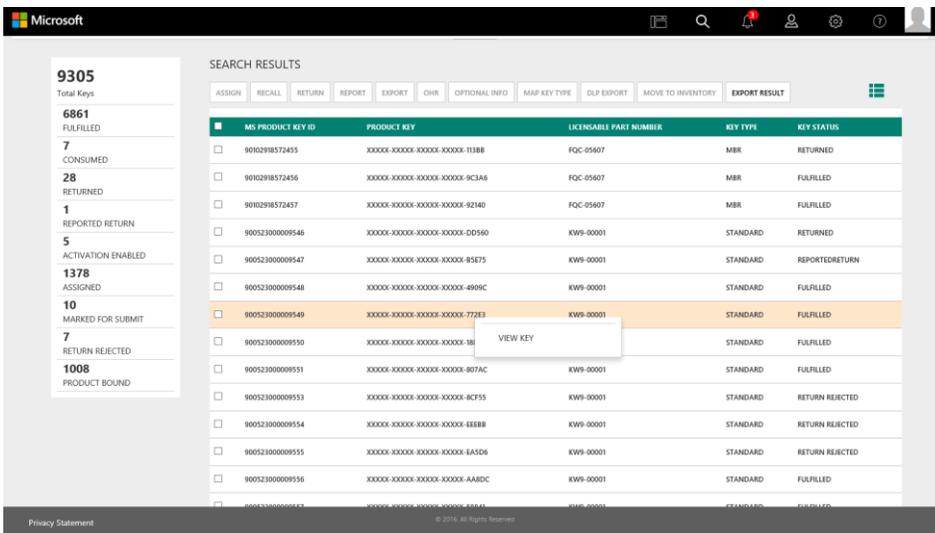
The screenshot shows the search interface in the Microsoft Digital Operations Services dashboard. The user is logged in as 'MICROSOFT' with a 'DOWNLEVEL' of 6. The dashboard shows a total of 138,000 keys, with 18,184 fulfilled keys and 0 returned keys. The search interface includes several input fields for search criteria: 'MICROSOFT AGREEMENT 3199905515', 'KEY TYPE', 'KEY STATUS', 'SELECT DUP', 'ASSIGNED TO', 'OEM PO NUMBER', 'CALL OFF REFERENCE', 'OEM PART NUMBER', 'MICROSOFT ORDER NUMBER', 'LICENSABLE PART NUMBER', 'MS PRODUCT KEY ID', 'OEM RMA DATE', 'OEM OPTIONAL INFO', 'ADVANCED SEARCH', and 'OEM RMA DATE'. There are also 'RESET' and 'SEARCH' buttons.

5. Search results will display all the keys based on the search criteria.

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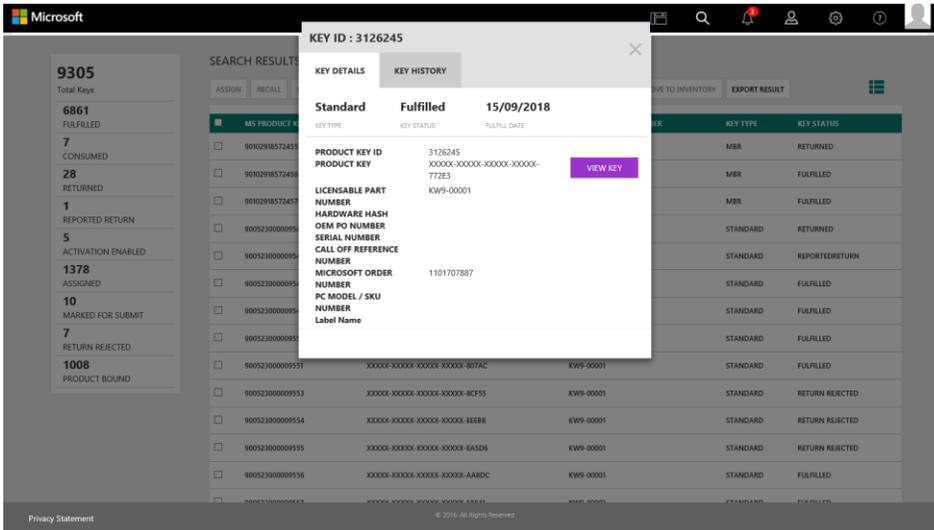


6. To view the keys details and key history, user can right click on that particular key and click on view key button.

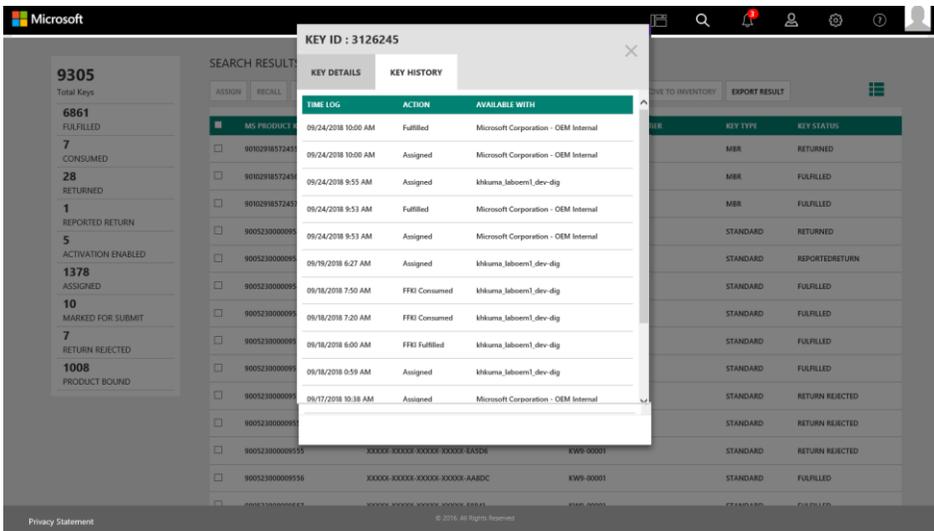


7. After clicking View key button, key details screen will popup and user can see key details of that particular DPK.

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8. On clicking key history tab, user can see the history of that key with status and available with.



8 DIGITAL ATTACH

Description:

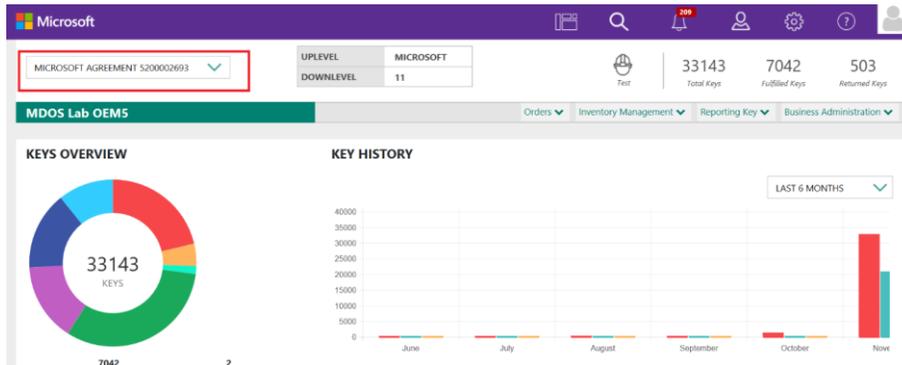
Digital Attach (DA) is a flexible, cloud-based service that entitle select Microsoft Store Products to OEM devices. The ability for Device Partners to bundle devices and content, such as media, games, subscriptions and digital currency without the need for tokens, custom images, or long lead times, will decrease time to market and increase device flexibility. Digital Attach can be leveraged for Windows, Games & Apps, Game Pass, and eligible 3rd party offerings.

Tip tool

Allows the partners to add the store products to the label and inventory

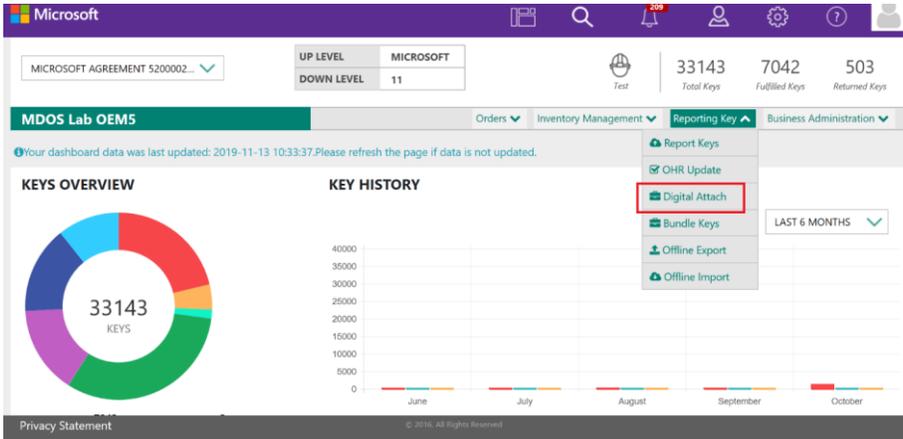
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.

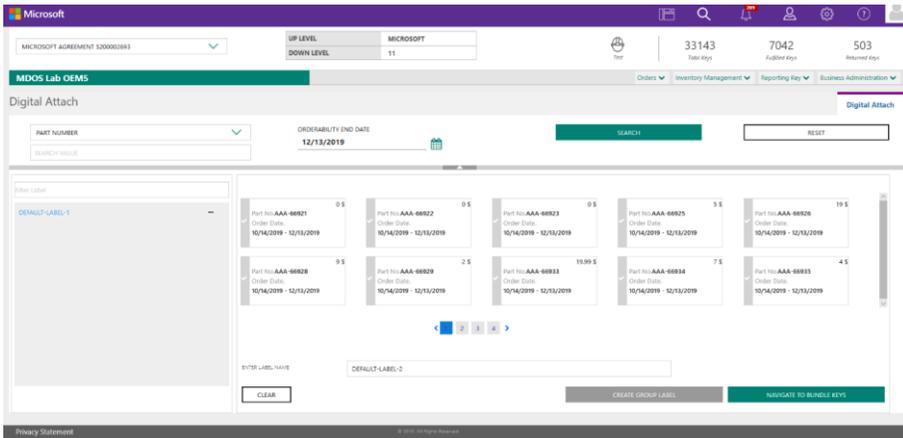


3. From the Reporting Key menu, select Digital Attach.

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4. Digital Attach page will display all the store products available for the partner.



5. Select the store products for which you want to create group label.

Part No. AAA-66921 Order Date: 10/14/2019 - 12/13/2019	Part No. AAA-66922 Order Date: 10/14/2019 - 12/13/2019	Part No. AAA-66923 Order Date: 10/14/2019 - 12/13/2019	Part No. AAA-66925 Order Date: 10/14/2019 - 12/13/2019	Part No. AAA-66926 Order Date: 10/14/2019 - 12/13/2019
Part No. AAA-66928 Order Date: 10/14/2019 - 12/13/2019	Part No. AAA-66929 Order Date: 10/14/2019 - 12/13/2019	Part No. AAA-66933 Order Date: 10/14/2019 - 12/13/2019	Part No. AAA-66934 Order Date: 10/14/2019 - 12/13/2019	Part No. AAA-66935 Order Date: 10/14/2019 - 12/13/2019

ENTER LABEL NAME: DEFAULT-LABEL-2

CLEAR CREATE GROUP LABEL NAVIGATE TO BUNDLE KEYS

6. Enter the label name and click of “Create group label and add to inventory”. The selected store product(s) will be added to the label and to the inventory.

By default, Default label name will be displayed.

ENTER LABEL NAME: INVENTORY_STOREPRODUCTS

CLEAR CREATE GROUP LABEL NAVIGATE TO BUNDLE KEYS

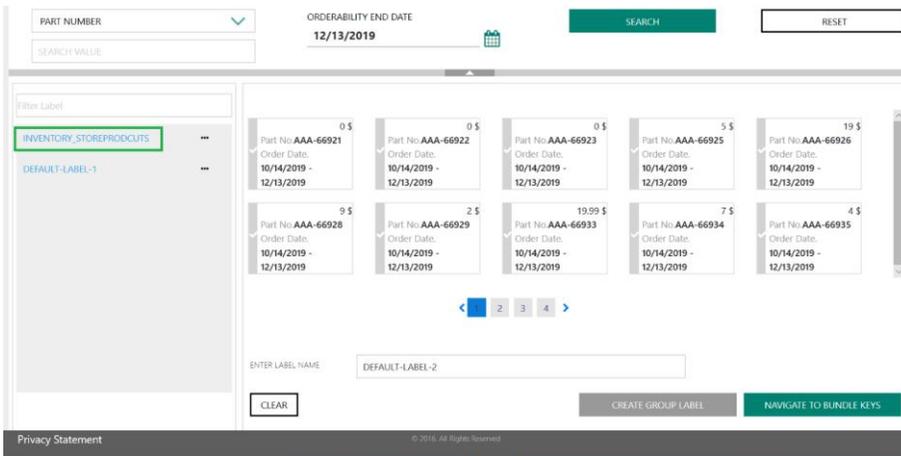
7. Once the label is created, a successful message will display in green banner.

MDOS Lab OEMS Orders Inventory Management Reporting Key Business Administration

Label with Store Product(s) is successfully saved to Inventory.

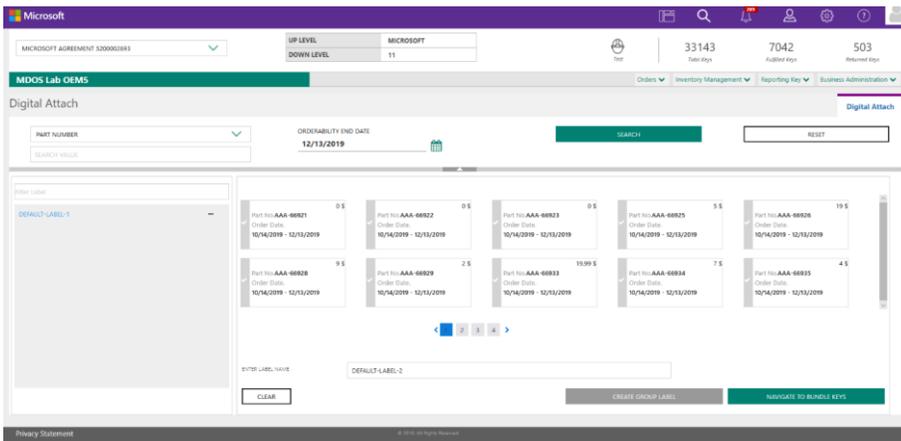
Digital Attach Digital Attach

Microsoft Digital Operations Services User Manual



8.8.1 SYNC STORE PRODUCTS

As soon as we land on the 'Digital attach' page, it fetches the latest store the products available in DOC portal for the selected business and shows it in the screen.

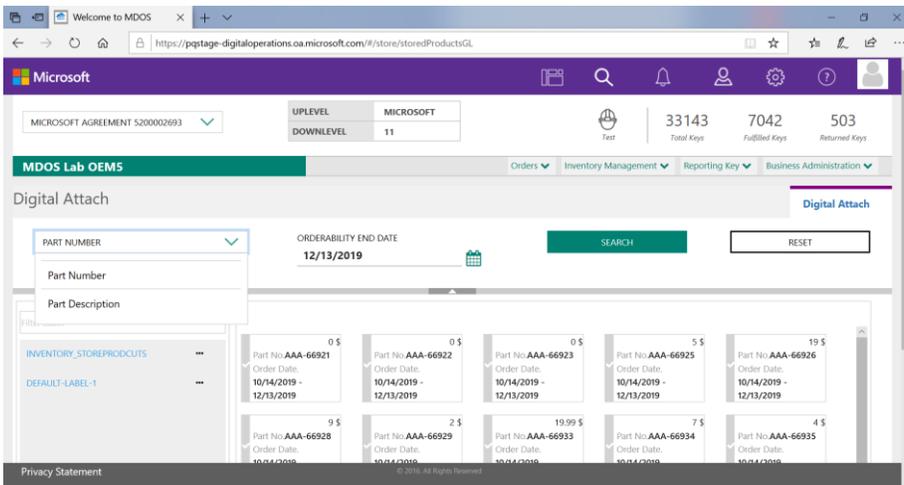


8.8.2 SEARCH STORE PRODUCTS

Partner can search the store products using multiple search parameters:

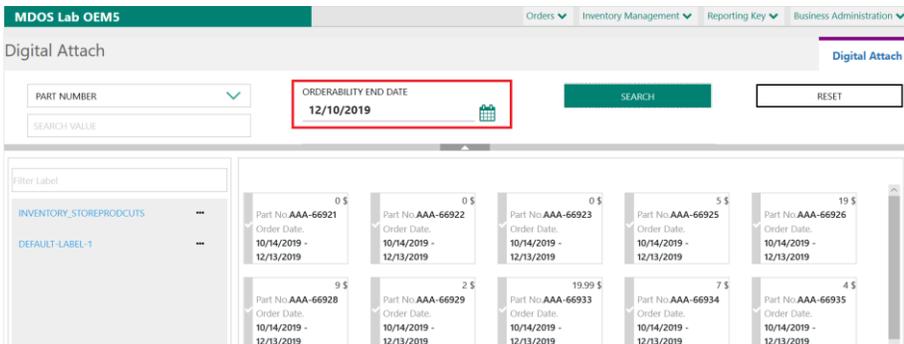
- Order ability end date
- Part number
- Part description

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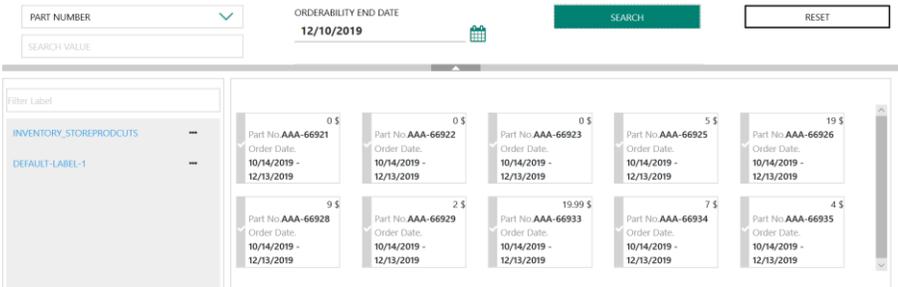


Step-by-Step:

1. Enter the search parameter (for example- orderability end date) and click search button.

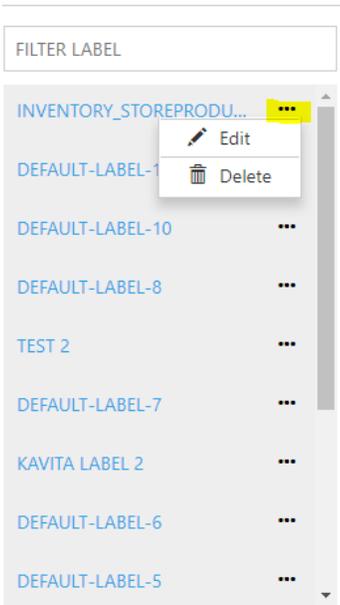


2. You will see the store products only for the selected orderability end date.



8.8.3 DELETE/EDIT LABEL:

Partner can delete or edit the labels from the list of group labels.



Select the label which you want to delete or rename.

- a. To edit click on edit button.
- b. Enter the new label name and click on save button.

EDIT LABEL NAME

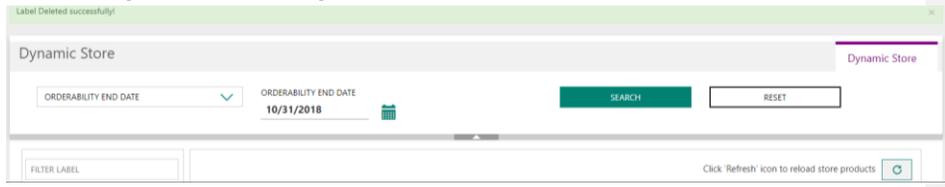
Enter label name :

- c. To delete label, click on delete button.
- d. A popup confirmation box will appear, click on delete button to confirm delete option.

DELETE LABEL NAME

Are you sure you want to delete label **INVENTORY_STOREPRODUCTS** ?

- e. A message will be shown in green for successful deletion of the selected label.

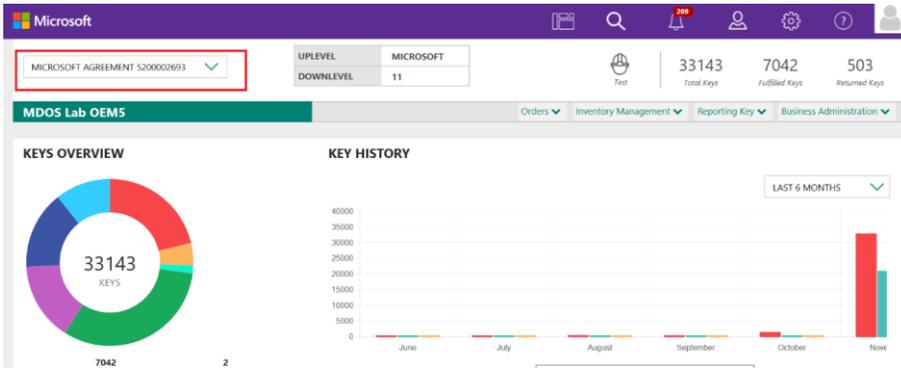


8.8.4 DELETE THE STORE PRODUCTS ADDED UNDER LABEL

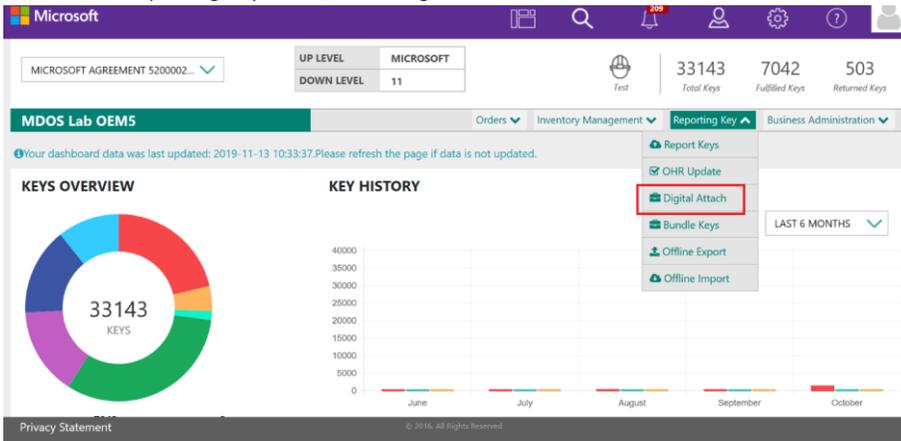
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.

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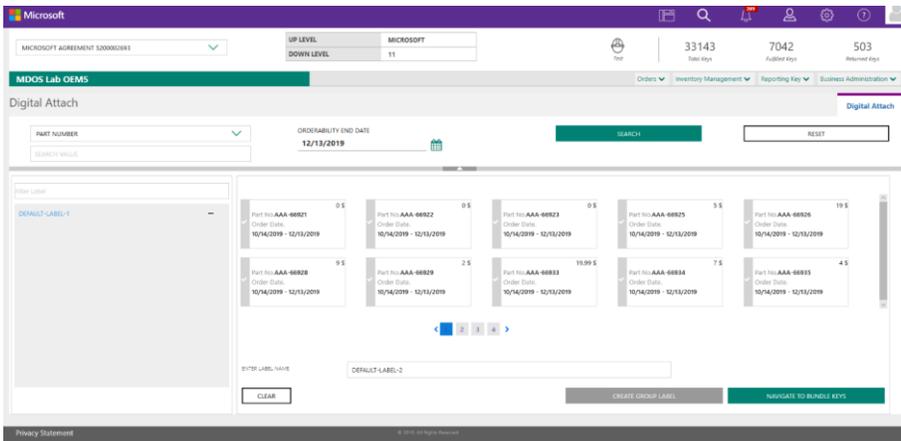


3. From the Reporting Key menu, select Digital Attach.

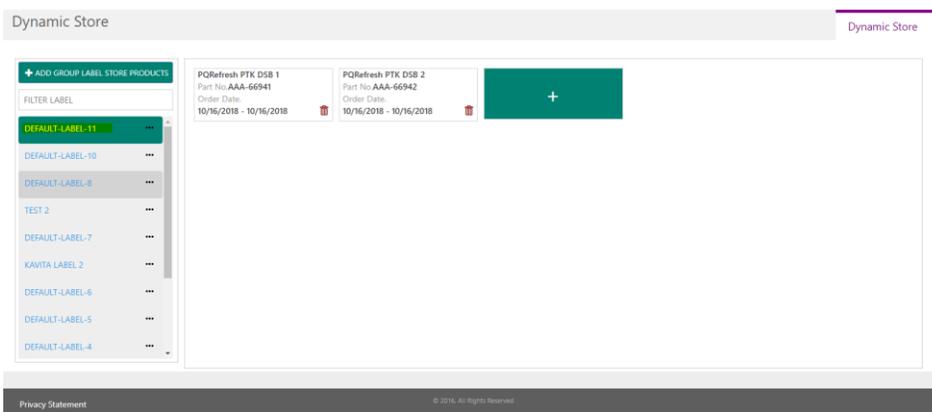


4. Digital Attach page will display all the store products available for the partner.

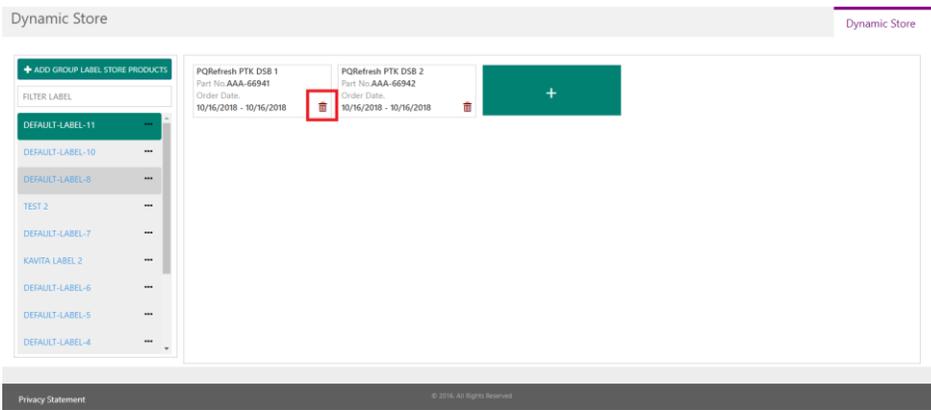
Microsoft Digital Operations Services User Manual



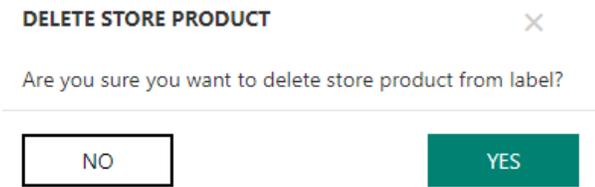
5. Select the label out of the list of labels from which you want to delete store products.



6. Click on delete icon into the store product you want to delete.



7. A confirmation window will pop up to confirm delete. Click yes.

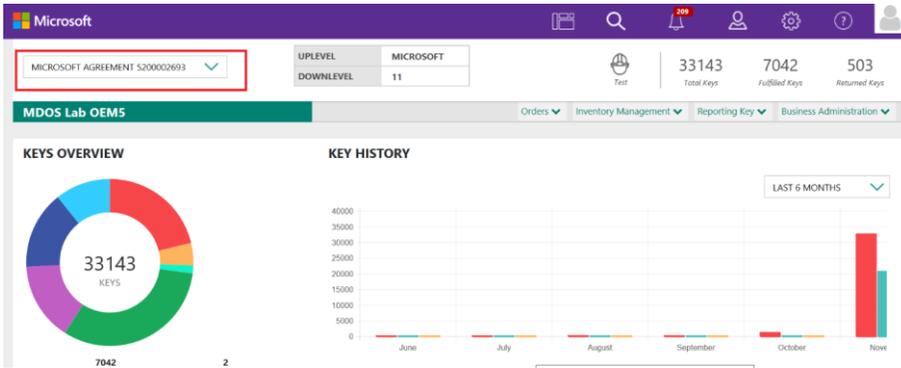


8.8.5 ADD THE STORE PRODUCTS TO ALREADY AVAILABLE LABEL

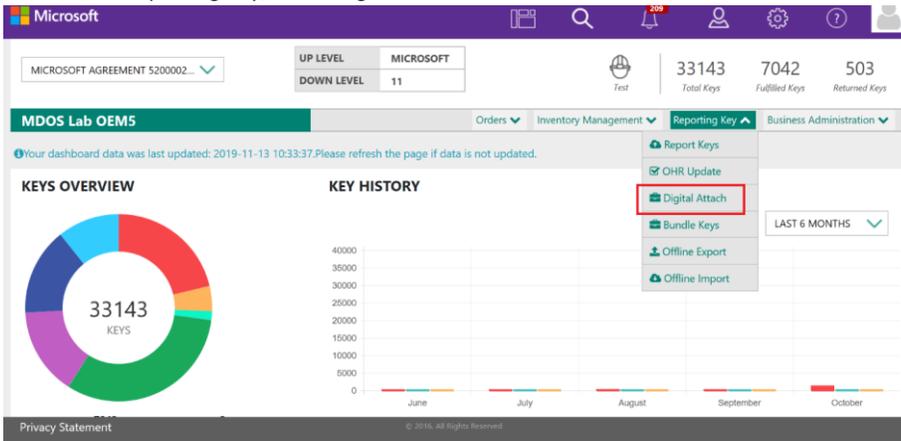
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.

Microsoft Digital Operations Services User Manual

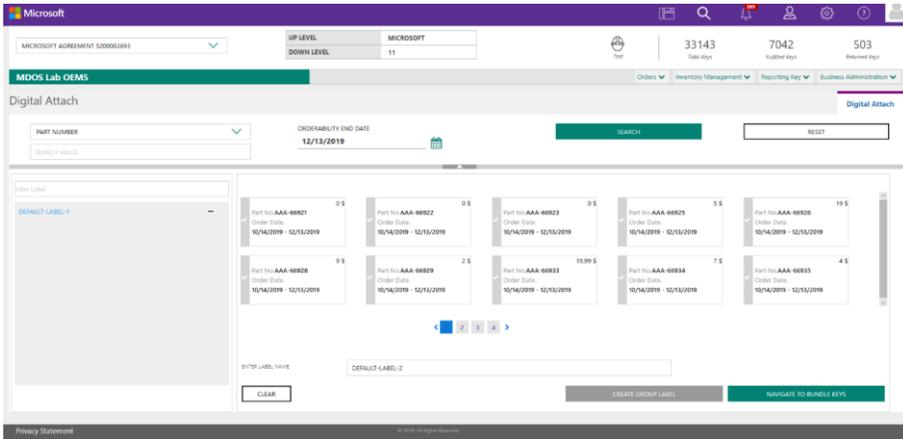


3. From the Reporting Key, select Digital Attach.

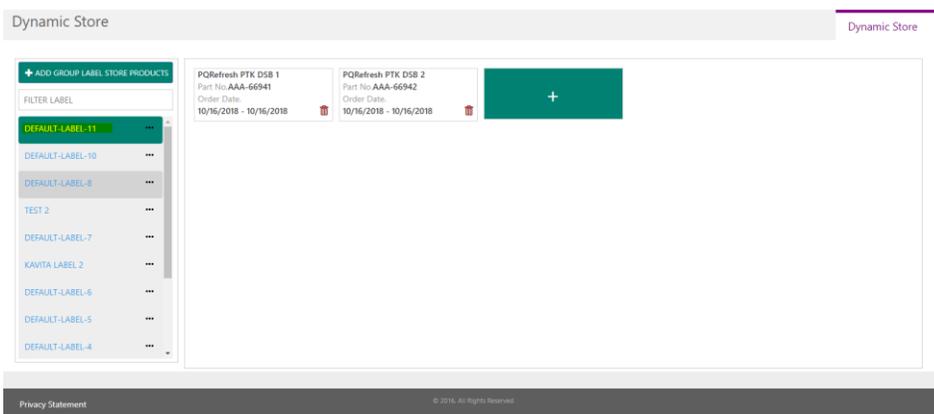


4. Digital Attach page will display all the store products available for the partner.

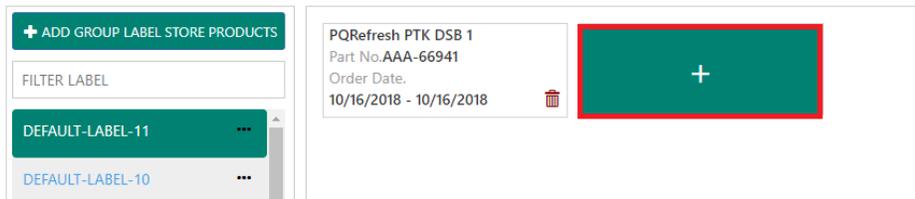
Microsoft Digital Operations Services User Manual



5. Select the label out of the list of labels in which you want to add products.

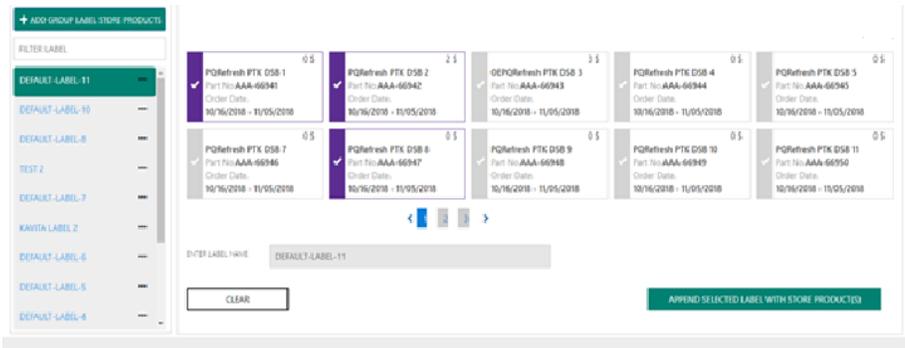


6. Click on Add button.

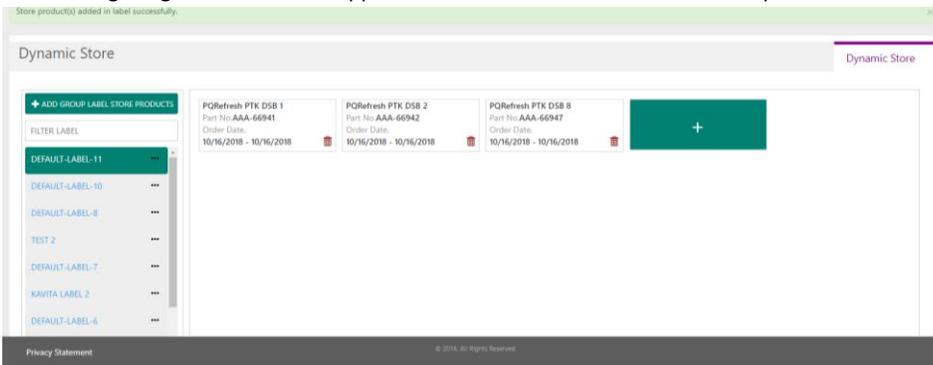


7. Select the new products you want to add and click on Append selected label with store product(s)

Note: Already added store products will be disabled for selection and checked by default.



8. A message in green banner will appear on successful addition of new store products.

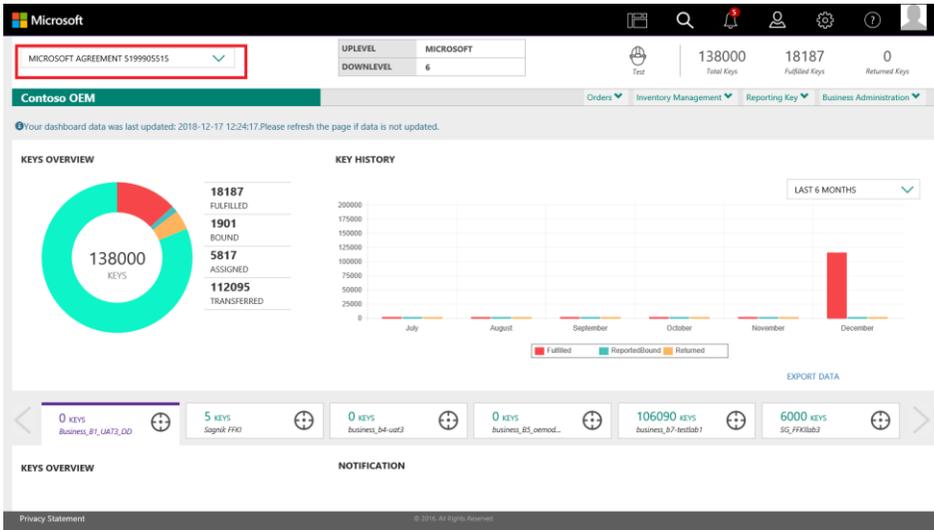


8.8.6 BUNDLE BY QUANTITY

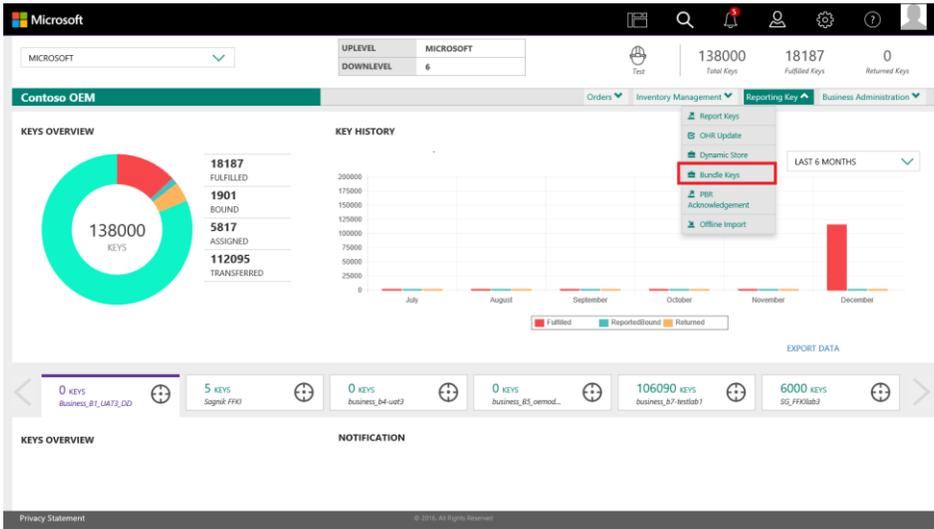
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.

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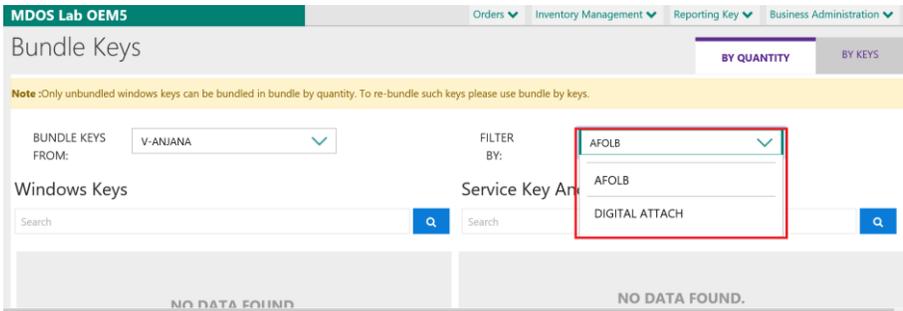


3. From the Reporting Key menu, select Bundle Keys.

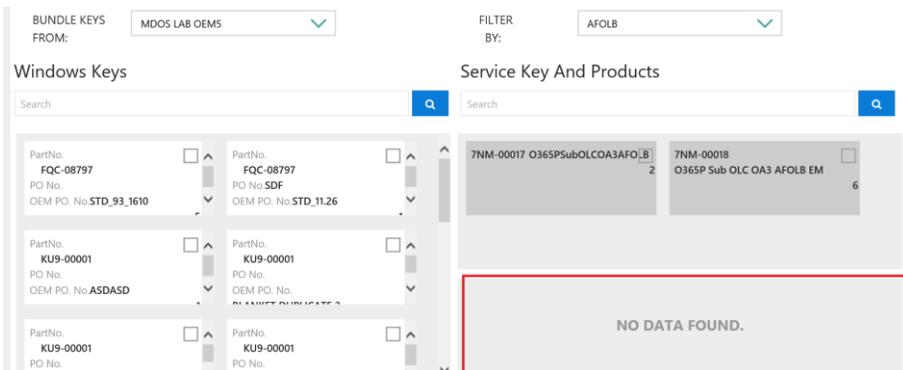


4. Under the Bundle Keys page, a list of windows keys, service keys and products will be displayed. Partner can use search box to search the window keys, office keys and store product.

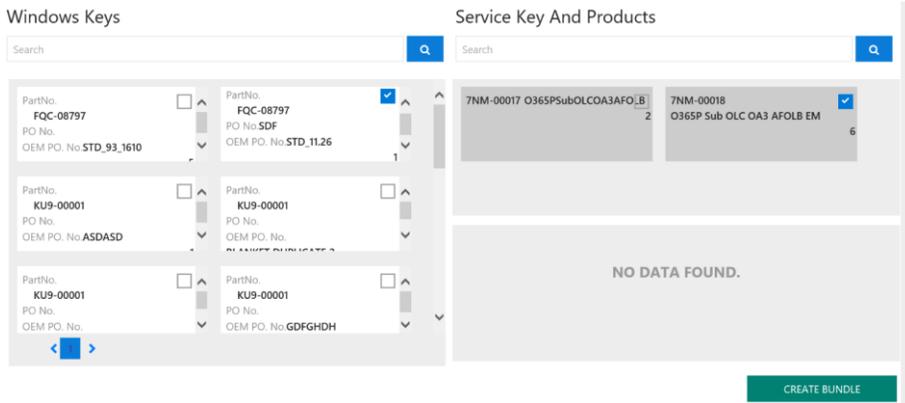
5. User will be able to see a dropdown selection list on Bundle Key Page. This selection list will have 2 options, namely : a) AFOLB and b) DIGITAL ATTACH . By default, AFOLB will remain selected.



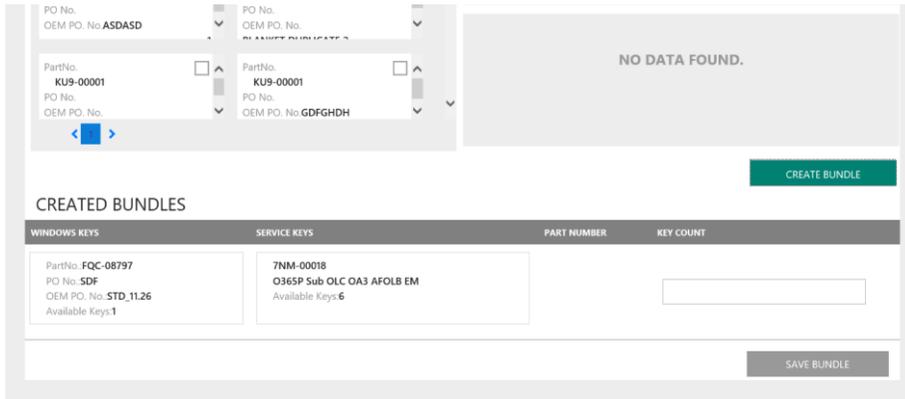
6. In AFOLB Filter, in Window Keys section, window keys of all eligible key states will be displayed for bundling. However, no Store Products will be displayed for bundling. User can only bundle window keys with service keys.



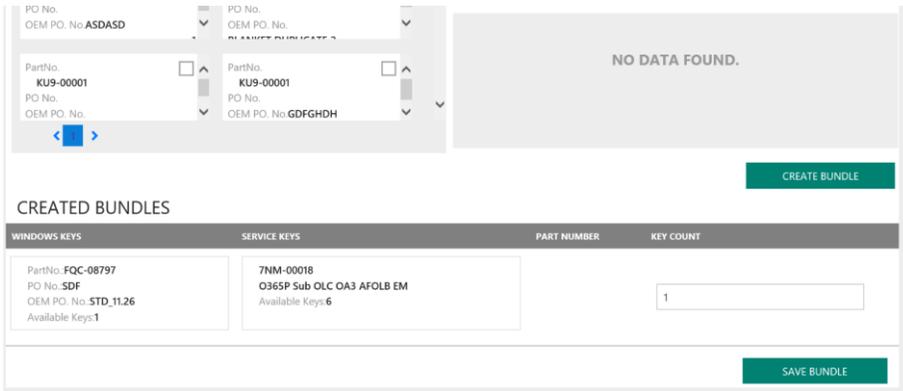
7. Check the checkboxes in order to select the Windows keys and service keys. After selecting the required keys click on the Create Bundle button.



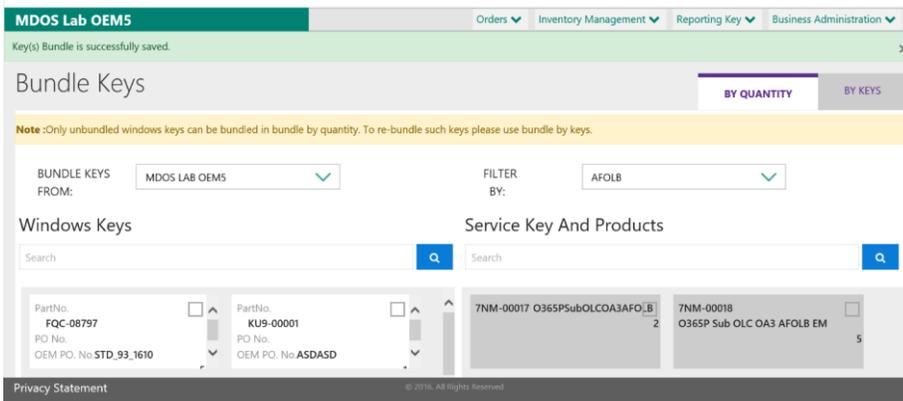
8. After clicking the Create Bundle, a section Created Bundles will appear at the bottom of the page as shown below. In this section you can mention the Key count and click on the Save Bundle button to save the Bundle keys.



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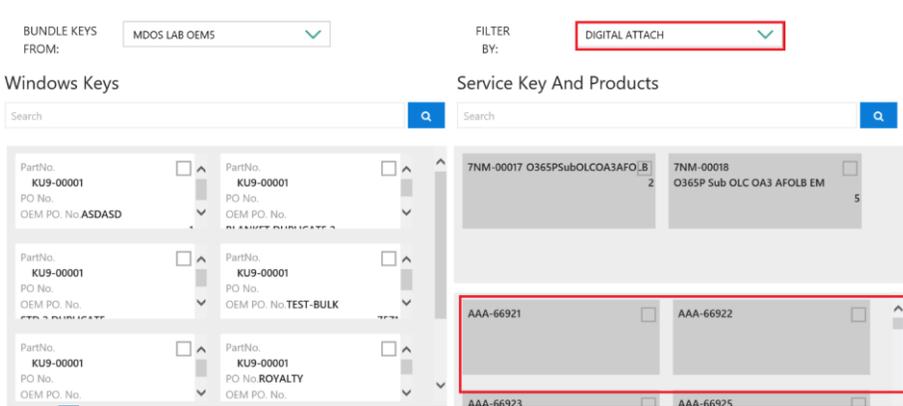


9. Once the keys are bundled, a “Key(s) Bundle is successfully saved” message will briefly pop up in the green highlighted banner.

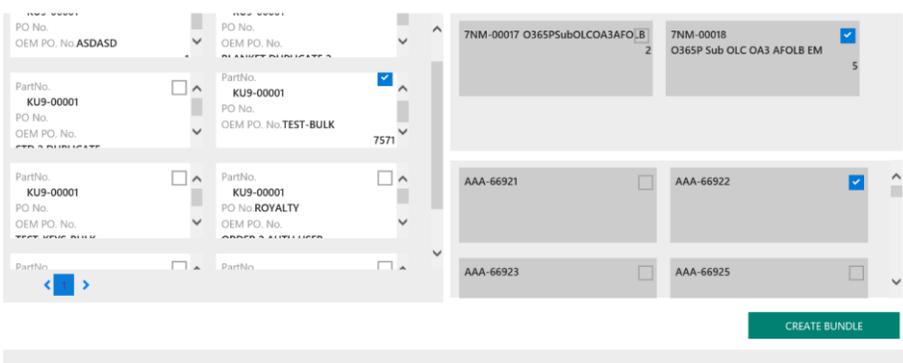


10. In DIGITAL ATTACH filter, in Windows Keys section, only ACTIVATION ENABLED keys will get displayed for bundling. User can attach Windows key with Service key and store products.

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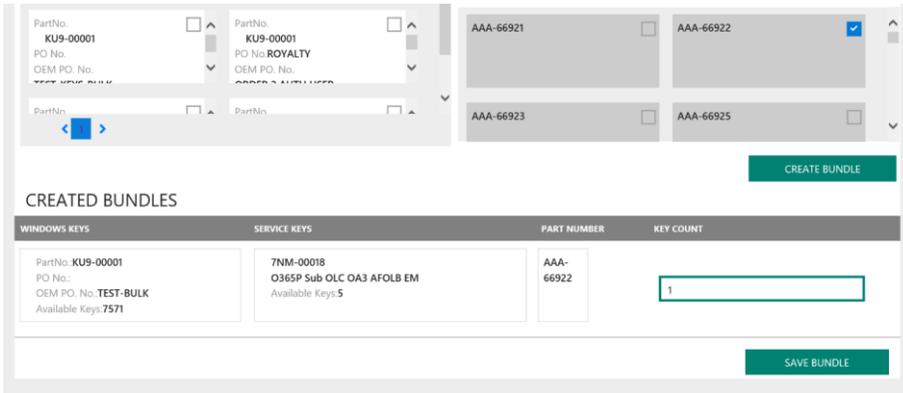


11. Check the checkboxes in order to select the Windows keys, service keys and Store products. After selecting the required keys click on the Create Bundle button.

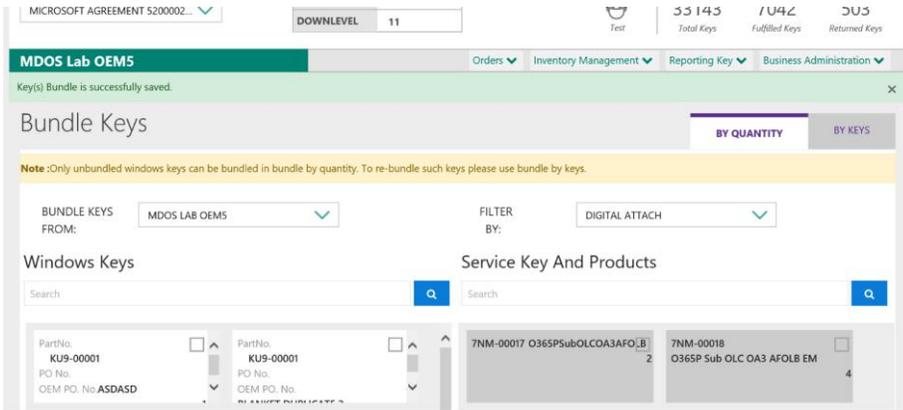


12. After clicking the Create Bundle, a section Created Bundles will appear at the bottom of the page as shown below. In this section you can mention the Key count and click on the Save Bundle button to save the Bundle keys.

Microsoft Digital Operations Services User Manual



13. Once the keys are bundled, a “Key(s) Bundle is successfully saved” message will briefly pop up in the green highlighted banner.



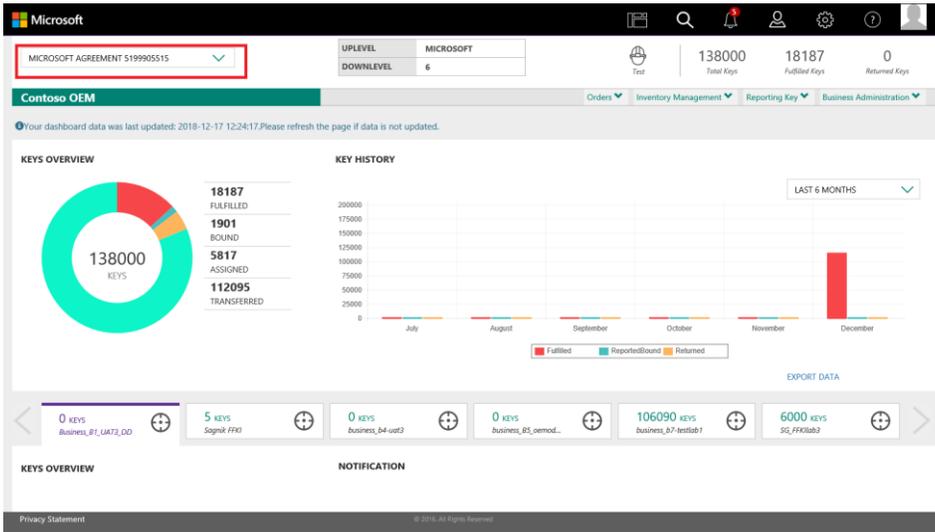
14. Partner can bundle any number of keys in MDOS, if the key count is more than 5000 keys, then MDOS will process the bundle in batches from the backend and submit it to Microsoft in batches.

8.8.7 BUNDLE BY KEYS

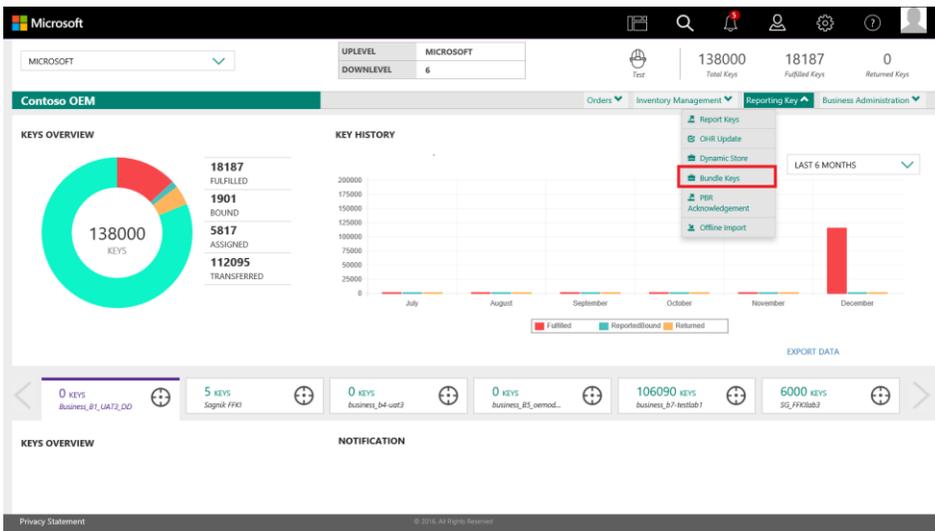
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.

2. From the dashboard view, select the business from the Business dropdown menu in the upper left corner.

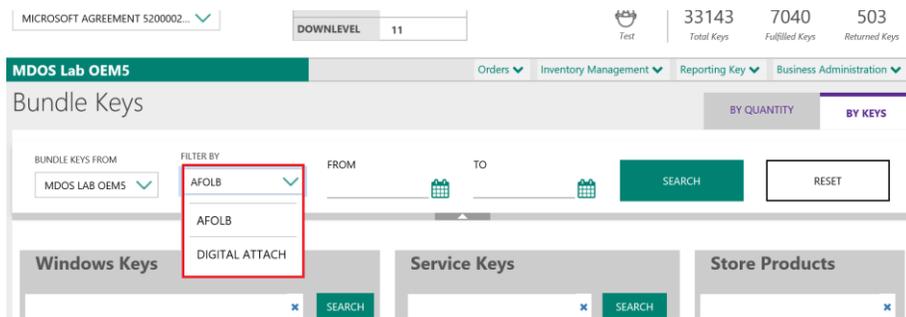


3. From the Reporting Key menu, select Bundle Keys.

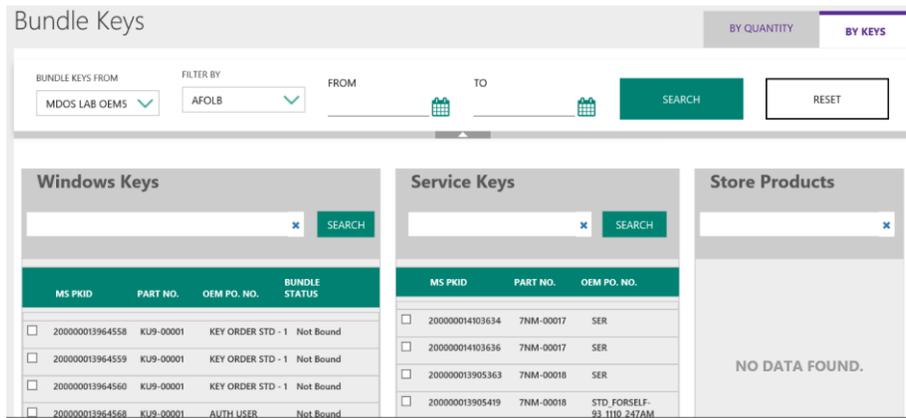


4. Under the Bundle Keys page, on clicking By Keys Tab, a list of windows keys, service keys and store products will be displayed under By Keys Tab.

5. User will be able to see a dropdown selection list on Bundle By Key Page. This selection list will have 2 options, namely : a) AFOLB and b) DIGITAL ATTACH . By default, AFOLB will remain selected.

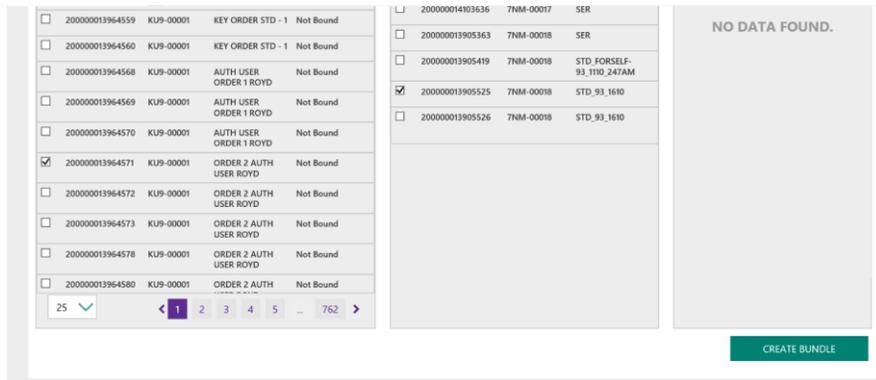


6. In AFOLB Filter, in Window Keys section, window keys of all eligible key states will be displayed for bundling. However, no Store Products will be displayed for bundling. User can only bundle window keys with service keys.

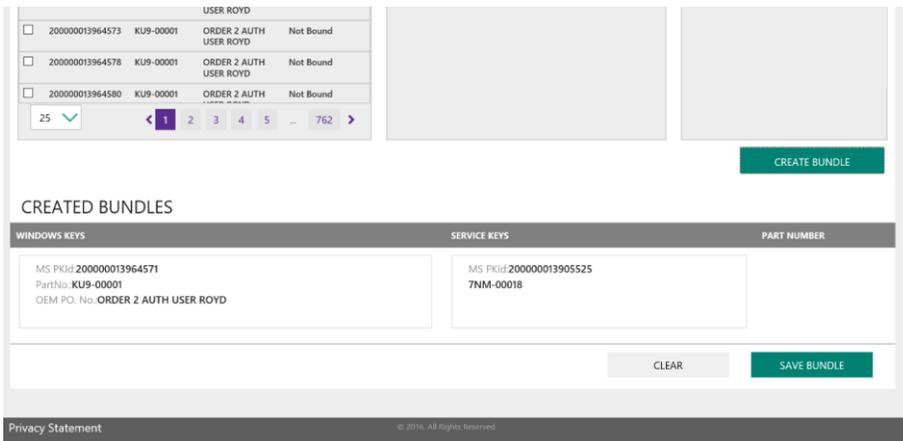


7. Check the checkboxes in order to select the Windows keys and Service keys.

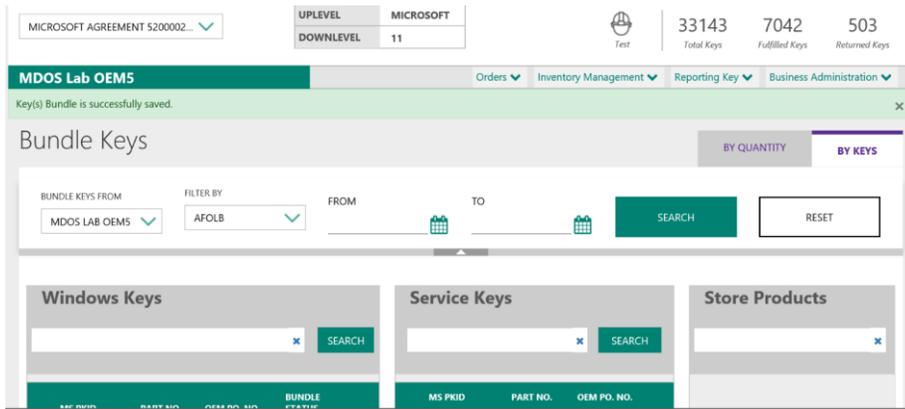
After selecting the required keys click on the Create Bundle button.



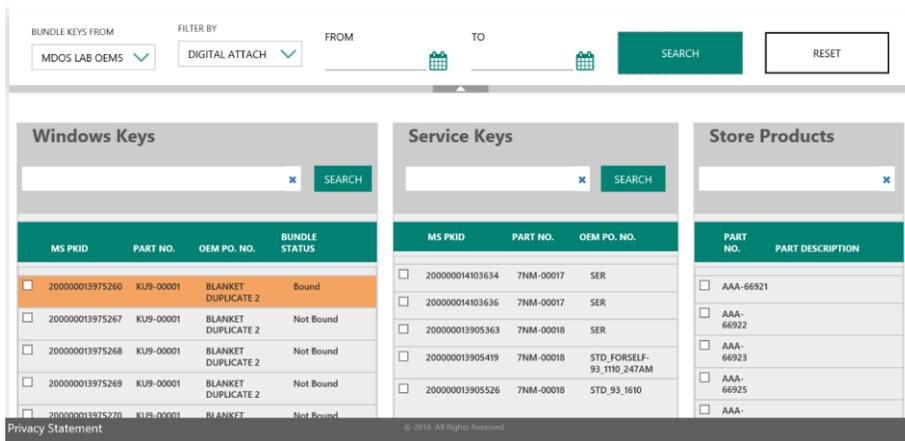
8. After clicking the Create Bundle, a section Created Bundles will appear at the bottom of the page as shown below. In this section click on the Save Bundle button to save the Bundle keys.



9. Once the keys are bundled, a “Key(s) Bundle is successfully saved” message will briefly pop up in the green highlighted banner.

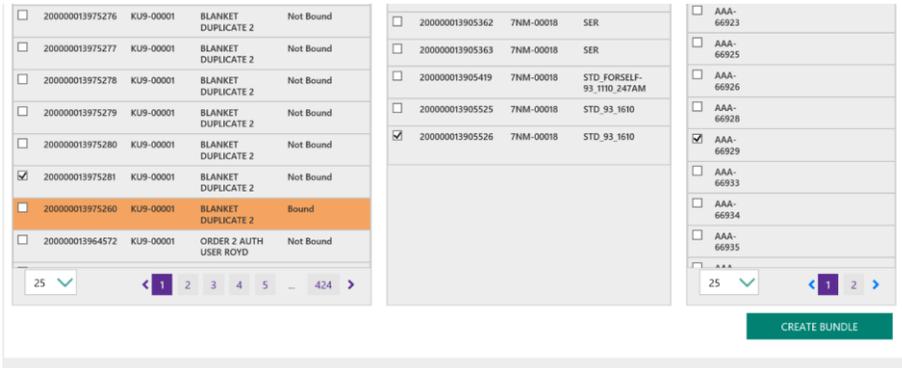


10. In DIGITAL ATTACH filter, in Windows Keys section, only ACTIVATION ENABLED keys will get displayed for bundling. User can attach Windows key with Service key and store products.

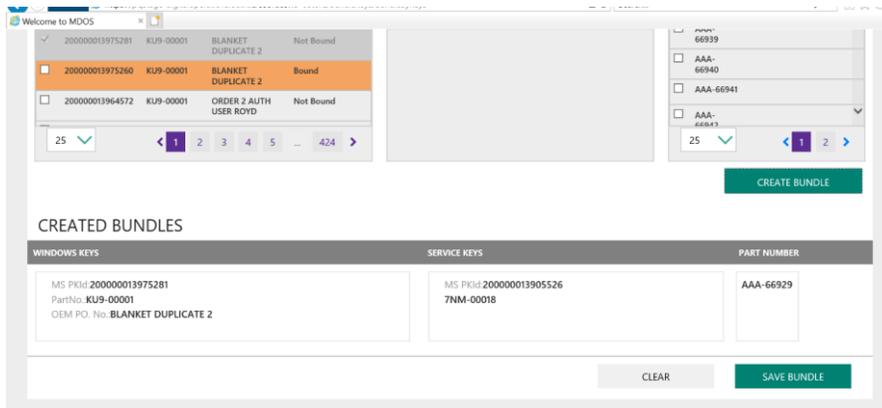


11. Check the checkboxes in order to select the Windows keys, service keys and Store products. After selecting the required keys click on the Create Bundle button.

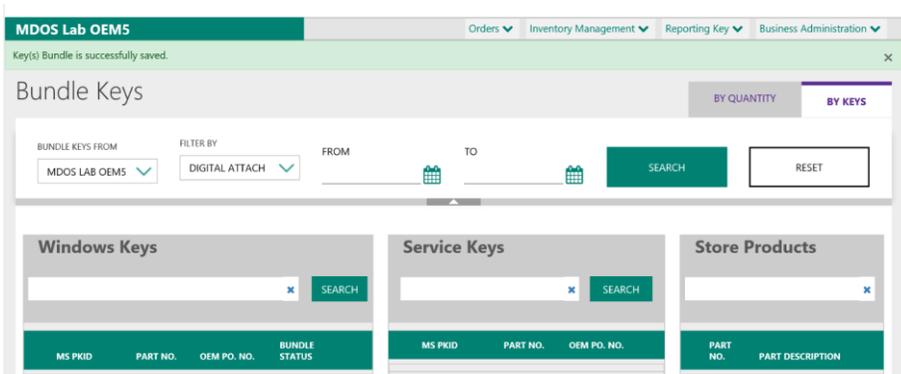
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12. After clicking the Create Bundle, a section Created Bundles will appear at the bottom of the page as shown below. In this section click on the Save Bundle button to save the Bundle keys.



13. Once the keys are bundled, a "Key(s) Bundle is successfully saved" message will briefly pop up in the green highlighted banner.



14. Keys that are already bundled will be displayed in Orange color for the partners to differentiate between bundled and unbundled keys.

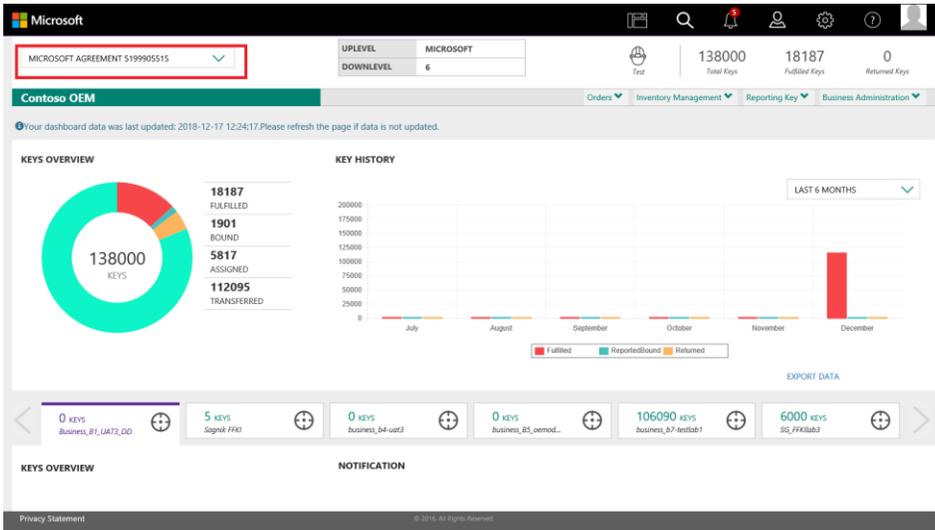
8.8.8 PRODUCT BOUND STATUS

Tip Tool: Once the windows keys bundled with service keys (office keys), on successful bundle, the status of the service keys will change to Product Bound.

Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.

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3. Click on the search icon in the top navigation bar.

4. Partner can select the Product Bound state from key status box.

The screenshot shows the search interface in the Microsoft Digital Operations Services dashboard. The top navigation bar is identical to the previous screenshot. Below it, the search filters are expanded. On the left, there are two date pickers for 'MICROSOFT FULFILLED DATE FROM' and 'TO'. In the center, a 'KEY STATUS' dropdown menu is open, showing options: 'Marked For Return', 'Marked For Submit', 'Notified Bound', 'Product Bound' (highlighted in yellow), and 'Reported Bound'. To the right of the dropdown, there are several input fields: 'OEM PO NUMBER' (Eg: BulkKeys_20_PO_No), 'CALL OFF REFERENCE' (Eg: 1000089787877), 'OEM PART NUMBER' (Eg: BulkKeys_20_Part_No), 'MICROSOFT ORDER NUMBER' (Eg: 1018703841), 'LICENSABLE PART NUMBER' (Eg: PQC-0000), and 'MS PRODUCT KEY ID' (Eg: 8000009030909). There are also buttons for 'OEM OPTIONAL INFO', 'ADVANCED SEARCH', and 'OEM RMA DATE'. A 'RESET' button is located to the right of the search filters, and a 'SEARCH' button is at the bottom right.

5. Partner can also verify if the service keys are product bound in the search results using column 'Key Status' which will display product bound state if they are bundled in MDOS.

SEARCH RESULTS

MS PRODUCT KEY ID	PRODUCT KEY	LICENSABLE PART NUMBER	KEY TYPE	KEY STATUS
<input type="checkbox"/> 297301004226	XXXXX-XXXXX-XXXXX-XXXXX	269-16965	SERVICE	PRODUCT BOUND
<input type="checkbox"/> 2961048219571	XXXXX-XXXXX-XXXXX-XXXXX	714-00013	SERVICE	PRODUCT BOUND

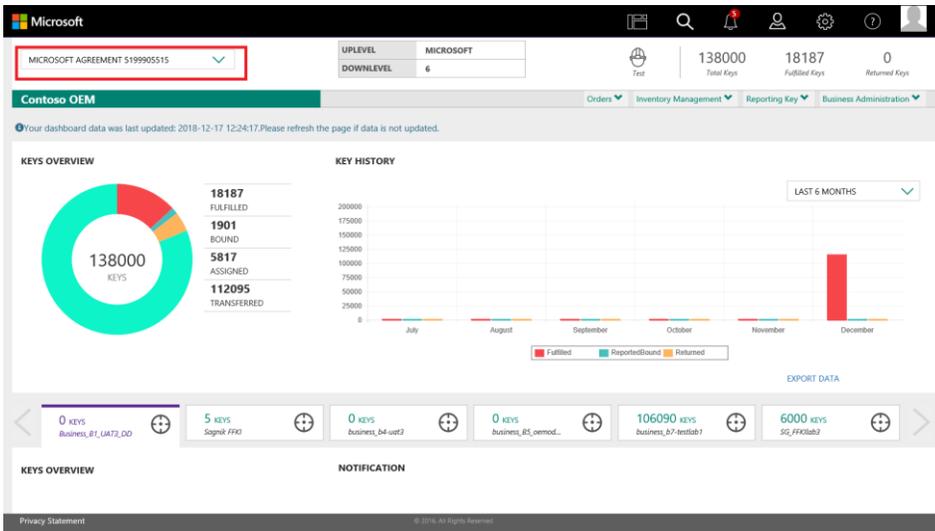
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8.8.9 VIEW BIND KEY(S) STATUS ON THE SEARCH SCREEN

Tip Tool: Once windows keys are successfully bundled with service keys (office keys), partners can check the Bind Status in Search.

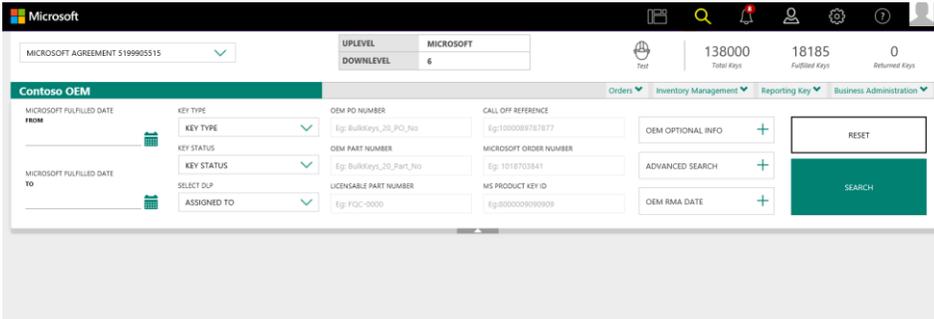
Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.



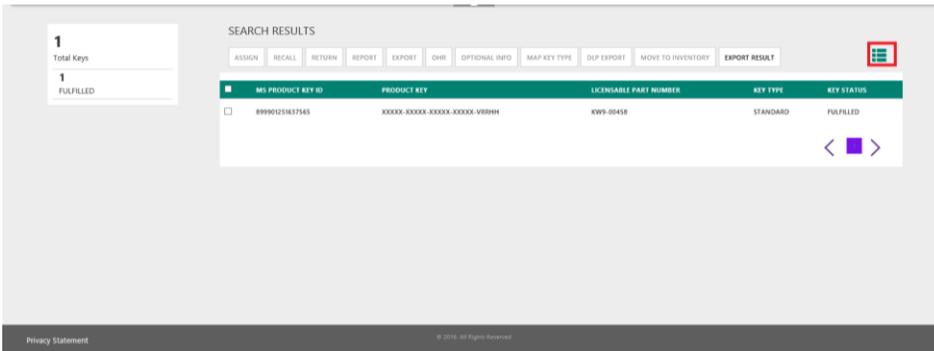
3. Click on the search icon in the top navigation bar.

4. Enter search criteria, such as Key Status, Key Type, Assigned To, MS Fulfilled Date, OEM RMA Date, etc., and click on the SEARCH button.

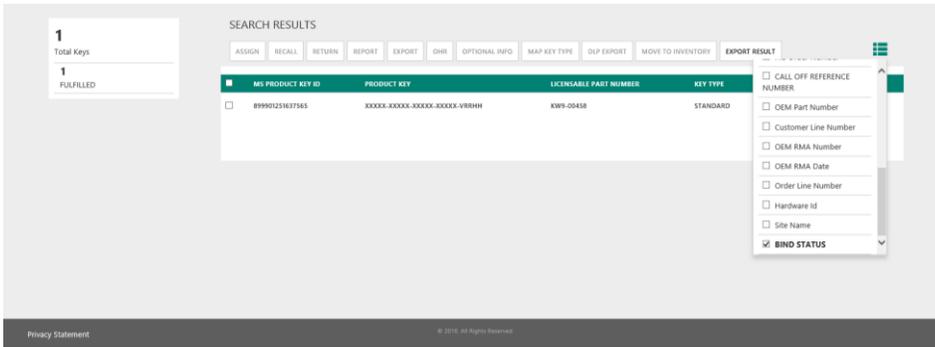


5. Search results will display all the keys based on the search criteria.

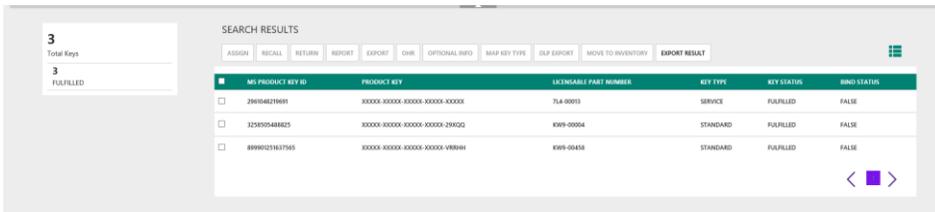
6. Click on the more option button as highlighted in red box in the below screenshot.



7. Select the Bind Status option from the side bar.



8. Once partner selects the Bind Status, partner will be able to see the Bind Status against that key.



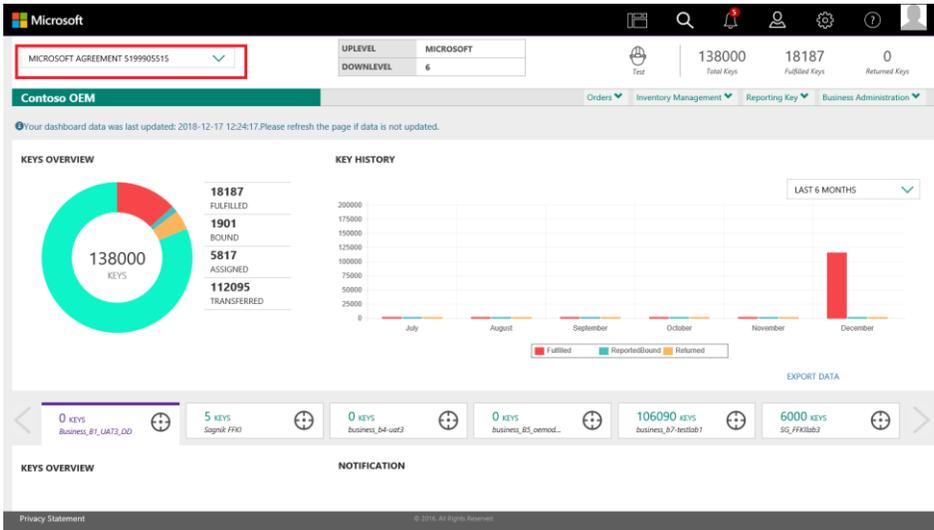
8.8.10 RETURN STORE PRODUCTS

Tip Tool: Once the windows keys bundle with store products, partner can return the store products alone without returning windows keys.

Step-by-Step:

1. Log in to <https://digitaloperations.oa.microsoft.com> using valid Microsoft account credentials.
2. From the dashboard view, select the business from the Business dropdown menu.

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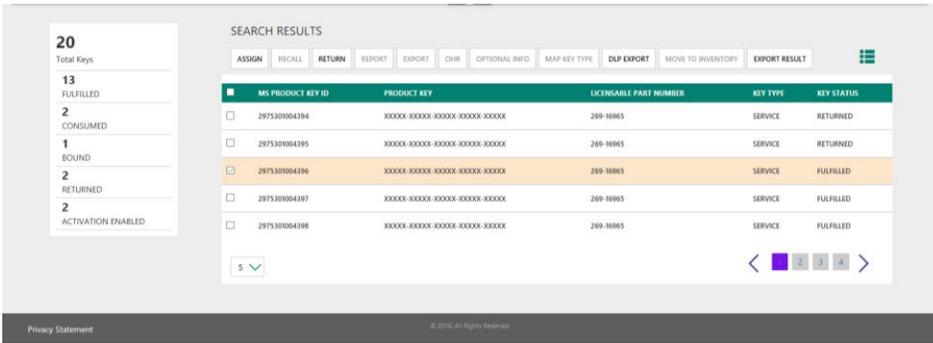


3. Click on the search icon in the top navigation bar.

4. Enter OEM search criteria, such as OEM PO Number, Agreement Number etc., and click on the SEARCH button.

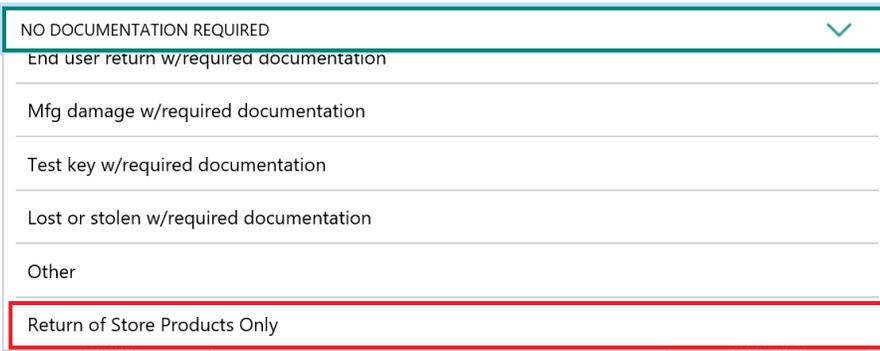
The screenshot shows the search interface in the Microsoft Digital Operations Services dashboard. The top navigation bar is the same as in the previous screenshot. Below it, the search criteria are entered into several fields: 'MICROSOFT AGREEMENT 5199905515' in a dropdown, 'UPLEVEL: MICROSOFT' and 'DOWNLEVEL: 6' in a table, and '138000 Total Keys', '18185 Fulfilled Keys', and '0 Returned Keys' in summary statistics. The main content area is titled 'Contoso OEM' and includes a navigation bar with 'Orders', 'Inventory Management', 'Reporting Key', and 'Business Administration'. The search interface is divided into several sections: 'MICROSOFT FULFILLED DATE FROM' and 'TO', 'KEY TYPE' and 'KEY STATUS' dropdowns, 'SELECT DUP' dropdown, 'ASSIGNED TO' dropdown, 'OEM PO NUMBER' and 'CALL OFF REFERENCE' text boxes, 'OEM PART NUMBER' and 'MICROSOFT ORDER NUMBER' text boxes, 'LICENSEABLE PART NUMBER' and 'MS PRODUCT KEY ID' text boxes, 'OEM OPTIONAL INFO', 'ADVANCED SEARCH', and 'OEM RMA DATE' buttons. A 'RESET' button and a 'SEARCH' button are also present.

5. After that select the key which is bundle with store products, so that you can return the store products which is bundle with that window key and then click on return button.



6. After clicking on the return button partner will see the below mentioned pop box. In the Pop-up box, they will see a Return Reason dropdown. They need to select “Return of Store Products Only” reason, if they want to return only store products bundle with that windows keys.

REASON



Return

Please confirm your request to return the selected keys.

REASON

RETURN OF STORE PRODUCTS ONLY

Include keys or attachments that will not receive credits ** YES NO(Default)

Note
**If "No" is selected, keys or attachment returns that will not receive credit will not be processed for return with the exception of "Lost/Stolen" or "Other" returns.
"Lost/Stolen" and "Other" returns will be returned regardless of selection. Please ensure the return request is submitted correctly.

CANCEL CONFIRM

7. After that partner will get the confirmation message.

8.9 UPGRADE FFKI TO SC

MANAGE BUSINESS

1. Selected ULP (OEM/TPI) can view the 'Upgrade FFKI Client to MDOS SC' button to upgrade FFKI client to the latest MDOS SC from manage business page. Partner need to select the FFKI from the list of added FFKIs under OEM/ULP.
2. Once the ULP clicks upgrade FFKI client to MDOS SC, an email will be sent to FFKI partner and Cc to ULP with the link to download MDOS SC.

Note: List of OEM/TPI partners to upgrade to MDOS SC can be decided by MDOS business team

The screenshot shows the MDOS dashboard interface. At the top, there's a navigation bar with the Microsoft logo and user profile. Below it, a 'Partner Status' summary shows 0 Application Received, 1 Pending Acceptance, and 6 Onboard Completed. A 'Cloud OA OEM 2' section contains navigation links like 'Org Chart', 'Migration', 'Manage User', 'Add DLP', and 'Add Agreement'. The main content area is titled 'Completed Forms' and features a table with columns: PARTNER NAME, LOCATION, BUSINESS TYPE, LICENSE AGREEMENT NUMBER, EMAIL, and STATUS. Above the table are action buttons: DELETE, DISABLE, RESEND INVITATION, and UPGRADE FFKI CLIENT TO MDOS SC (highlighted with a red box). Below the table is a 'Submitted OA 3.0 Forms' section with a similar table structure.

PARTNER NAME	LOCATION	BUSINESS TYPE	LICENSE AGREEMENT NUMBER	EMAIL	STATUS
khkuma_lab3_dev-dlg	Angola	Centralized	5000043797	v.khkuma@microsoft.com	Onboard Completed
v.piro_dev-dlg	Angola	Centralized	5000043797	v.piro@microsoft.com	Onboard Completed
lthtest@test.com	Andorra	Centralized	5000043797	lthtest@test.com	Pending Acceptance
sav-lab3	Angola	Centralized	5000043797	v.savko@microsoft.com	Onboard Completed
cloudoalab15	Angola	Centralized	5000043797	cloudoalab15@outlook.com	Onboard Completed
ran_rfk_lab3_dgl	Angola	Centralized	5000043797	v.ranku@microsoft.com	Onboard Completed
v.abde_Cloudoalab3	Angola	Centralized	5000043797	v.abde@microsoft.com	Onboard Completed

PARTNER NAME	LOCATION	BUSINESS TYPE	LICENSE AGREEMENT NUMBER	EMAIL	STATUS
subtest@test.com	Andorra	Subsidiary	5000043797	subtest@test.com	Pending Formal Approval

8.11 MAINTENANCE NOTIFICATION

Description:

MDOS will notify the partners about the system maintenance notifications through pop up screens. Partner will be notified with message and the maintenance date and time. Partner will see 'Remind me later' checkbox by default checked, if partner clicks on OK button, then after 5 days the popup will show again.

If partner clicks on OK button with remind me later checkbox unchecked, then the notification pop-up will not be shown again.

Once the maintenance period is completed, the notification popup will not appear again.

MDOS SYSTEM MAINTENANCE INFORMATION



System Maintenance scheduled on: 09/30/2018 02:03:00 PM PST

Please be informed that MDOS platform will be down for planned release maintenance date. During this period MDOS portal will not be available for any transactions. We appreciate your patience.

Remind me later

OK

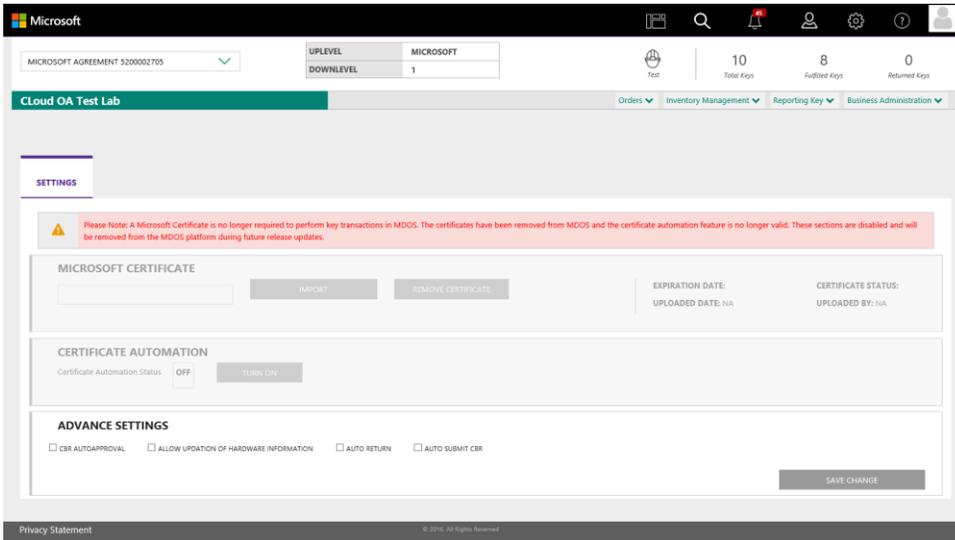
8.12 SETTING PAGE

Description:

Microsoft Certificate no longer required to perform key transactions in MDOS.

The certificate upload section has been disabled and will be removed from MDOS in future release.

MDOS will notify the same to the partners on setting page.



SECTION 9. DATA ARCHIVAL

Description

The initial phase for the MDOS data archival is planned to take place on February 14, 2020 to 6:00 PM PT on February 15, 2020. This aligns with the previously notified system downtime.

9.1 DATA ARCHIVAL DETAILS

The initial phase for the MDOS data archival will be aligned with the SAP downtime scheduled for February 2020. The downtime will last from 6:00 PM PT on February 14 to 6:00 PM PT on February 15, 2020.

Subsequent data archival sessions will happen each quarter.

We expect the first data archival process to last six to eight hours, but subsequent sessions are likely to take about two to three hours.

Please note that you won't receive any notification about the archival in the MDOS system as the data in the system is no longer active. The process of archival will have no impact on conducting any business transactions.

The following types of data will be archived:

- Key is in activation-enabled state for more than 500 days
- Key is in activation-denied state for more than 500 days
- Key is in return state for more than 500 days
- Office key is in product-bound state for more than 500 days
- Alerts that were received in MDOS more than 500 days (configurable value) before the date of archival
- Product key: All data related to the product key, including
 - MSFT ProductKeyId
 - 5*5 Product key
 - Optional info
 - OHR data
 - CBR information
 - PBR information
 - Key history
 - Hardwarehash, which will be archived in following scenarios:
 - Key is in activation enabled state for more than 90 days
 - Key is in activation denied state for more than 90 days
 - Key is in returned state for more than 90 days

Note: All the archived data except alerts and 5*5 product keys can be retrieved from MDOS. Partners can request your archived data retrieval by raising a ticket with MSOEMOPS who will then contact the MDOS Support team. The MDOS Support team will be able to retrieve data from the MDOS archival database and securely provide it to you. For Hardwarehash data, the retrieval process will take around five to six days.

Commented [EH1]: @Devdatta Gode (MINDTREE LIMITED) is this just for the above mentioned key states?

Commented [DL2R1]: Yes