

# Third Party Refurbisher (TPR) Onboarding Process

## TPR Onboarding Process

Microsoft Refurbisher product may only be acquired in the MAR Program, which requires a refurbisher to sign an agreement with a Microsoft Authorized Refurbisher partner and onboard as a Third Party Refurbisher.



# Third Party Refurbisher (TPR)

Third Party Refurbisher license terms for Windows Products includes the following.

- ❑ TPR may refurbish Windows devices that meet the following criteria:
  - ✓ Devices must be used and previously had a genuine Windows product installed,
  - ✓ Devices must have been in distribution at least 6 months,
  - ✓ Device hard drive must be data wiped, and
  - ✓ Devices must be appropriately refurbished and tested.
- ❑ Pre-install genuine Windows software on Refurbished devices;
- ❑ TPRs may **not** distribute Microsoft Product standalone – Product may **only** be distributed pre-installed on eligible devices.
- ❑ TPR's must adhere to terms and conditions of the MAR Program as per the agreement with the MAR. Terms of the MAR Program are provided by the MAR with whom you choose to do business. The MAR is responsible for managing TPRs, onboarding, licensing, imaging, operations, etc.
- ❑ TPRs must provide reporting required by Microsoft, through their MAR, and has a continued relationship with Microsoft, which will be a third party beneficiary of the TPR / MAR license terms.
- ❑ A TPR may have agreements with more than one MAR.

# TPR Onboarding Fundamentals

Two main actions needed for TPR to complete onboarding

MAR partners purchase keys and assign to TPR

TPR receive keys from upper level (MAR Partner)

TPR receive keys at the factory

To proceed with manufacturing

## What

do I need to receive keys

- You need to have an account called DOC (Digital Operations Center) under OA centralized IDH access.
- DOC is a cloud platform where you can access anywhere with network and browser.

## How

do I obtain DOC account?

- Your Upper Level (MAR Partner) will submit request to appoint you as their TPR under OA Centralized model .
- Once the request is approved, you will receive activation emails that contain instructions to activate your DOC
- AAD is required as your DOC login email (refer Slide 6 ~ 19)

## Why

do I need DOC account?

- Your DOC will act as a cloud platform to receive keys assigned by your MAR partners, and you to assign to MDOS Smart Client on the factory floor, so that you can configure and inject them

## Where

can I learn how to setup my DOC after I activate it

- Refer to Slide 20 ~ 24 for completing business setup so that you can start to receive keys
- Refer to Slide 25 ~ 27 for creating a FFKI in order to assign key to your factory

## What

do I need to receive keys

- You will need to install MDOS Smart Client (MSC) on the factory floor in order to receive keys assigned from your DOC.

## How

do I obtain MDOS Smart Client installation link?

- You will create an OA FFKI Contact Type in DOC
- After the creation, the FFKI email you populate will receive emails that contains MDOS Smart Client Installation link
- AAD is required as your FFKI email (refer Slide 6 ~ 19 for details)

## Why

do I need to install MSC?

- To receive keys assigned by your DOC. Our MSC acts as a receiver center from your DOC to factory

## Where

can I learn how to install MSC

- Refer to Slide 28 ~ 29

# TPR Onboarding Steps

Stage	Action from MAR	Action for TPR
Account activation	MAR creates OA Centralized contact for TPR	TPR will receives activation link and PIN where activation needs to be completed before you can login using the default link of DOC.  *For TPR that uses Free AAD please refer to Slide 5 for further action needed.
	NA	TPR logs into DOC, accept MAR's business relationship in MDOS
	NA	TPRs create a down level site to connect to factory
Factory Onboarding	NA	TPR down level receive MDOS Smart Client (MSC) emails containing installation package
	NA	TPR prepare a server to install MSC. Complete MSC installation and login to MSC.
Keys Assignment	MAR place order and assign key to TPR's DOC	TPR assign keys from DOC and to MSC The keys that MAR assigned will flow automatically into TPR's DOC.
Factory Floor process	NA	TPR to complete the factory manufacturing phase
GML	NA	TPR to adhere Microsoft Genuine Refurbisher Label
CBR Reporting	NA	Submit CBR from MSC to TPR's DOC
	NA	Submit CBR from TPR's DOC to MAR's DOC
	MAR submit CBR from DOC to Microsoft	NA

# TPR Onboarding Checklist

Stage	Owner	Action for TPR	Completed (Y/N)	Details
Account activation	TPR	TPR receives activation emails DOC containing activation link and PIN. TPR needs to complete the activation process.		TPR needs to share an AAD email for MAR partner to complete the OA centralized request. If you do not have an AAD email, you can create a Free AAD. Please refer to Slide 6 ~ 19.  For TPRs that uses Free AAD email that does not have inbox capability, please contact your MAR partners to reach out to msoemops and obtain the activation link + PIN. After that please request your MAR partner to share to you in order to complete the account activation.
	TPR	TPR logs into DOC, accept MAR's business relationship in MDOS		Please refer to Slide 20 ~ 24 for step-by-step guidance.
	TPR	TPR creates a down level site to connect to factory		Please refer to Slide 25 ~ 27 for step-by-step guidance.
Factory Onboarding	TPR	TPR down level receives MDOS Smart Client (MSC) emails containing installation package		Please refer to Slide 28 for step-by-step guidance.
	TPR	TPR prepares a server to install MSC. Complete MSC installation and login to MSC.		Please refer to Slide 29 for step-by-step guidance.
Keys Assignment	TPR	TPR assigns keys from DOC and to MSC  *The keys that MAR partners assigned from their DOC will flows automatically into TPR's DOC.		Please refer to Slide 30 ~ 31 for step-by-step guidance.
Factory Floor process	TPR	TPR to complete the factory manufacturing phase		Please refer to Slide 32 ~ 37 for step-by-step guidance
GML	TPR	TPR to adhere Microsoft Genuine Refurbisher Label		Please refer to Slide 38 for GMRL Overview
CBR Reporting	TPR	TPR submit CBR from MSC to TPR's DOC		Please refer to Slide 39 ~ 41 for step-by-step guidance.
	TPR	Submit CBR from TPR's DOC to MAR's DOC		Please refer to Slide 42 ~ 52 for step-by-step guidance.

# Azure Active Directory



Users are required to login to OEM applications using an Azure Active Directory (AAD) login.

This is normally your work email address e.g. [kelly@contoso.com](mailto:kelly@contoso.com) If you are not sure then there are a few things you should check before proceeding:

1. Does your company have an AAD Tenant?
  - Your local IT Department will confirm this for you
  - If you do have an AAD Tenant, then you will need to contact the AAD Global Administrator:
    - To find out what your AAD Email Address is
    - To ensure that your AAD email address is included in your companies Azure Active Directory
    - To find out what your AAD Password is
  - If you are not sure who your AAD Global Admin is the steps to find that person are included in the appendix
  - If your company does not have an AAD Tenant then they will need to create one, information on how to do this is available on the Azure Portal <https://azure.microsoft.com/en-us/overview/>
  - Further documentation can be assessed here <https://docs.microsoft.com/en-us/azure/active-directory/>



Note: You can select either Work email AAD or Free AAD as your account's login.

To use your Work email , please check with local IT Department and ensure your email is an AAD.

To create a Free AAD, please refer to slide 7 ~ 17

# AAD Options - Detailed

There are 4 different AAD options which are detailed below

	FREE	OFFICE 365 APPS	PREMIUM P1	PREMIUM P2
<b>Core Identity and Access Management</b>				
Directory Objects	500,000 Object Limit	No Object Limit	No Object Limit	No Object Limit
Single Sign-On (SSO)	up to 10 apps	up to 10 apps	unlimited	unlimited
User provisioning	✓	✓	✓	✓
Federated Authentication (ADFS or 3rd party IDP)	✓	✓	✓	✓
User and group management (add/update/delete)	✓	✓	✓	✓
Device registration	✓	✓	✓	✓
Cloud Authentication (Pass-Through Auth, Password Hash sync, Seamless SSO)	✓	✓	✓	✓
Azure AD Connect sync (extend on-premises directories to Azure AD)	✓	✓	✓	✓
Self-Service Password Change for cloud users	✓	✓	✓	✓
Azure AD Join: desktop SSO & administrator bitlocker recovery	✓	✓	✓	✓
Password Protection (global banned password)	✓	✓	✓	✓
Multi-Factor Authentication	✓	✓	✓	✓
Basic security and usage reports	✓	✓	✓	✓

	FREE	OFFICE 365 APPS	PREMIUM P1	PREMIUM P2
<b>Business to Business Collaboration</b>				
Azure AD features for guest users	✓	✓	✓	✓
<b>Identity &amp; Access Management for Office 365 apps</b>				
Company branding (customization of logon & logout pages, access panel)		✓	✓	✓
Self-service password reset for cloud users		✓	✓	✓
Service Level Agreement (SLA)		✓	✓	✓
Device write-back (device objects two-way synchronization between on-premises directories and Azure)		✓	✓	✓

Visit [this page](#) for more details on Premium AAD editions

# AAD Support

1. Raise a ticket on the Azure Portal  
[https://portal.azure.com/#blade/Microsoft\\_Azure\\_Support/HelpAndSupportBlade/newsupportrequest](https://portal.azure.com/#blade/Microsoft_Azure_Support/HelpAndSupportBlade/newsupportrequest)
2. Telephone Support: <https://support.microsoft.com/en-us/help/4051701/global-customer-service-phone-numbers?ocid=IA-4027136-AdminCU>
3. Live chat: <https://support.microsoft.com/en-us/contactus/?ocid=IA-4027136-CU>
4. The M365 Data Protection team can help admins who need support with password reset. Call (800) 865-9408 (toll-free, US only). If you're outside the United States, see the [Global Support Phone Numbers](#).

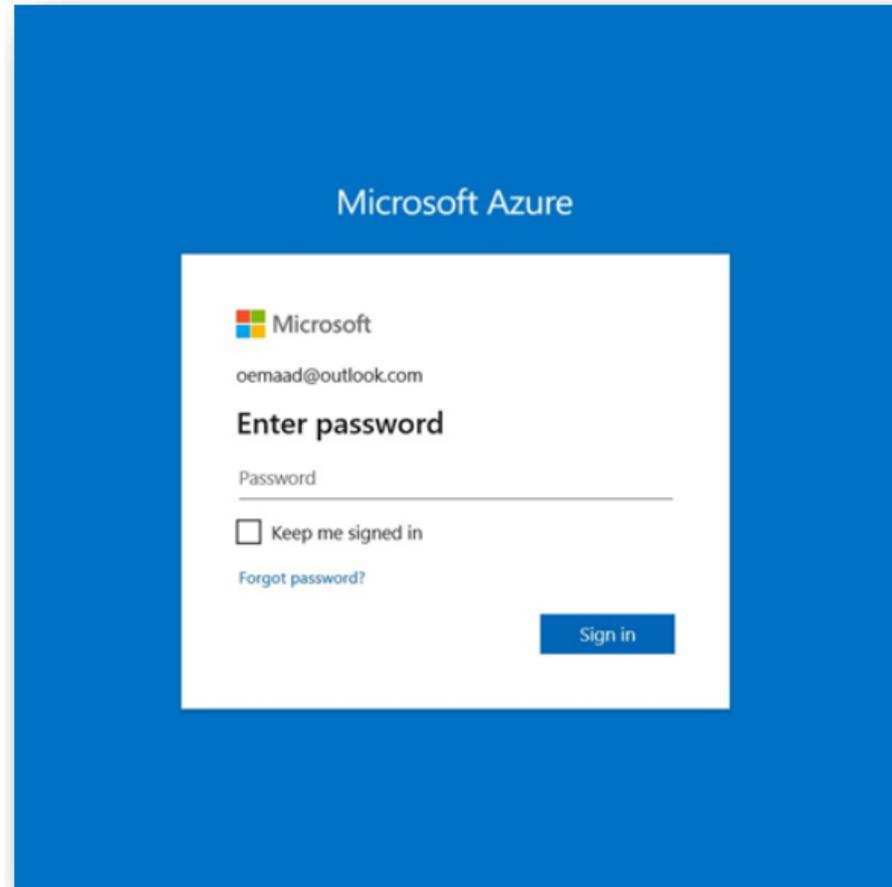


# How to Create a Free AAD

# Create the Tenant – Step 1

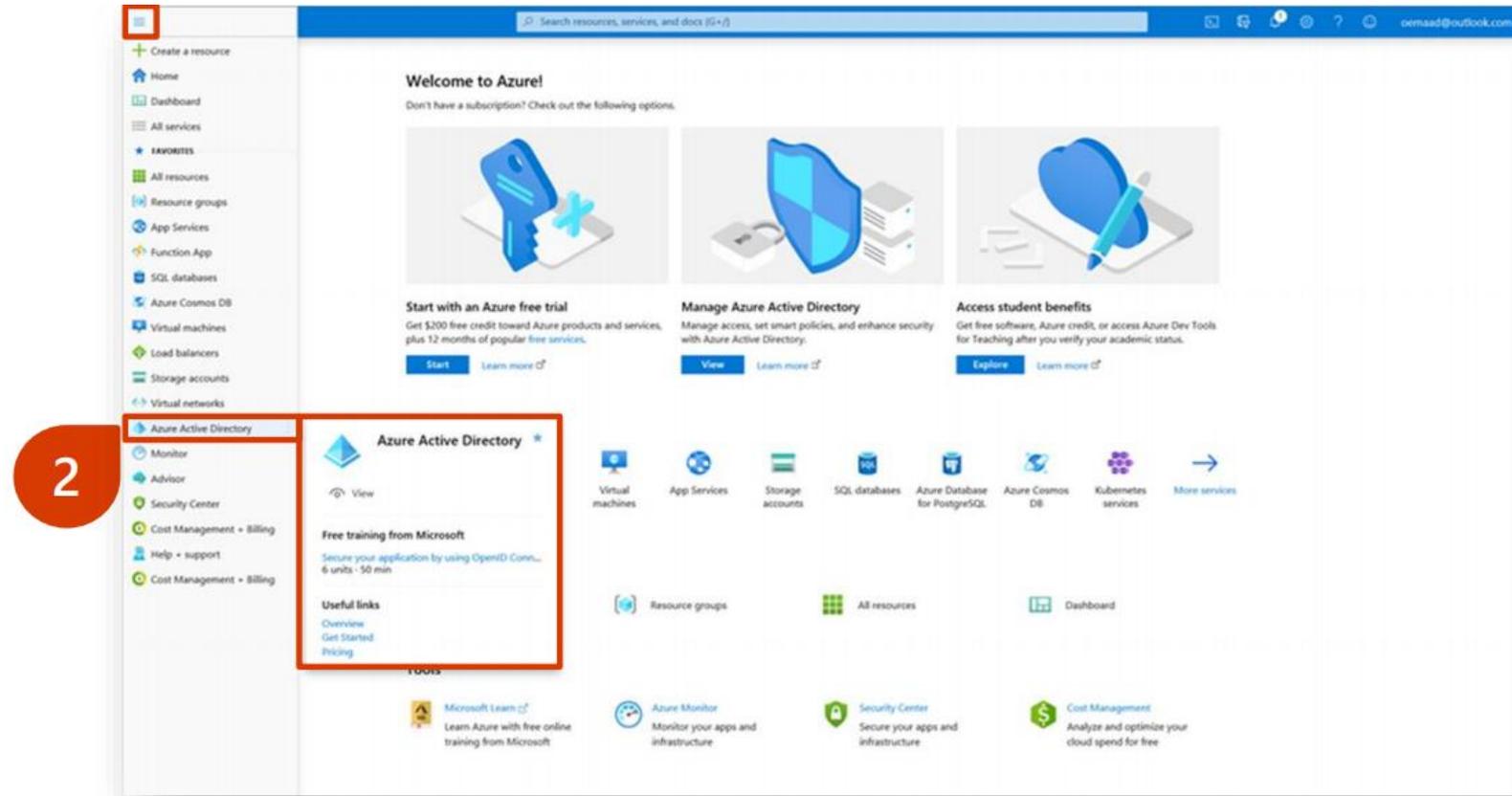
To create a Free AAD email, there are two steps involved: Create a Tenant and Create a User

1. Sign into the Azure [portal](#)



# Create a Tenant – Step 1

2. Select [Azure Active Directory](#) on the home page



# Create a Tenant – Step 1

## 3. Select Create a tenant

The screenshot shows the Azure Active Directory management console. The page title is "Default Directory | Overview" under "Azure Active Directory". A navigation menu on the left lists various management options. At the top right, there are action buttons: "Switch tenant", "Delete tenant", "Create a tenant", "What's new", and "Got feedback?". The "Create a tenant" button is highlighted with a red box, and a red circle with the number "3" is overlaid on it. Below the navigation bar, there is a search bar labeled "Search your tenant".

Home > **Default Directory** | Overview  
Azure Active Directory

Switch tenant Delete tenant **Create a tenant** What's new Got feedback?

Azure Active Directory can help you enable remote work for your employees and partners. [Learn more](#)

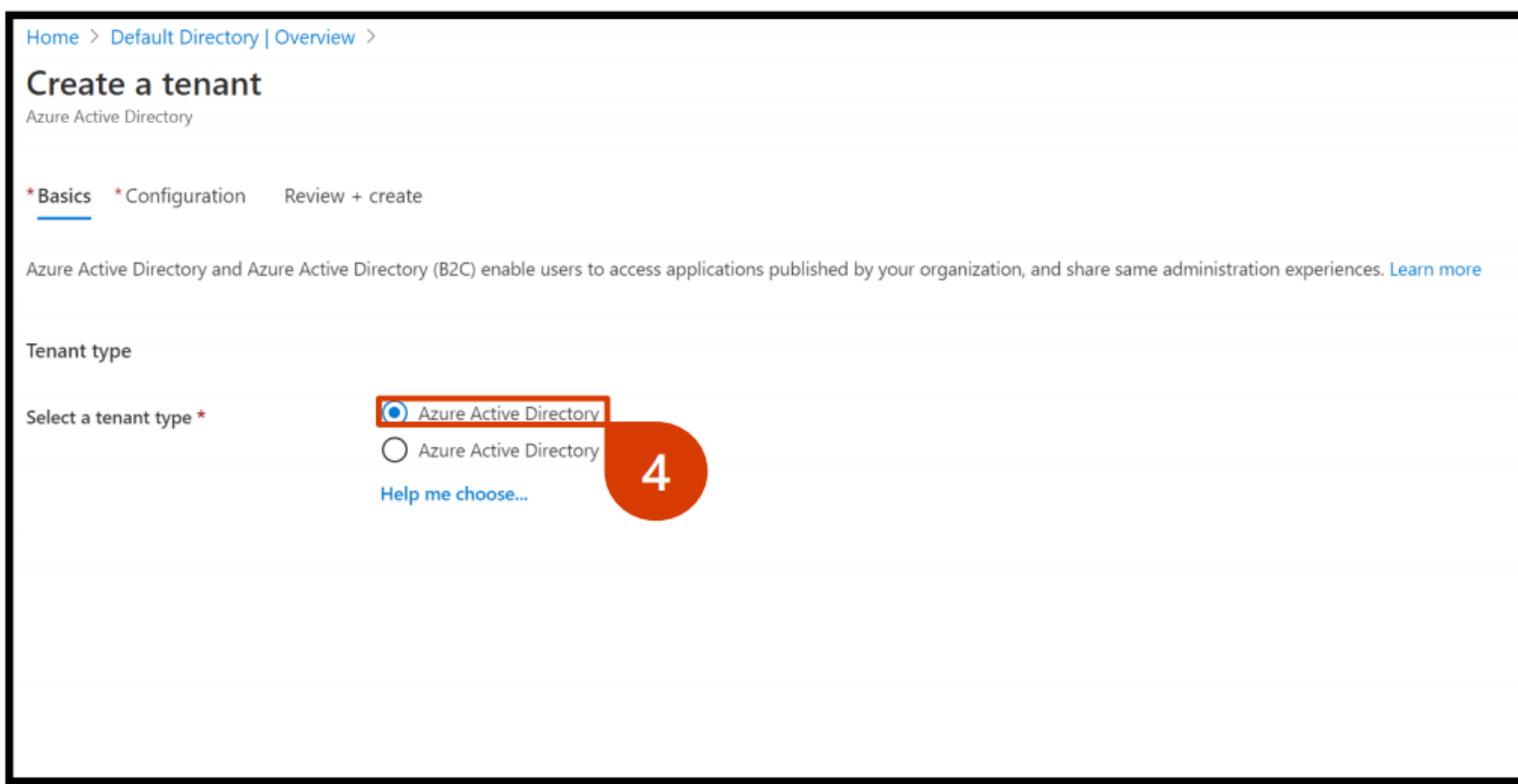
**Default Directory**

Search your tenant

Navigation menu items:  
Overview  
Getting started  
Diagnose and solve problems  
Manage  
Users  
Groups  
External Identities  
Roles and administrators  
Administrative units (Preview)  
Enterprise applications  
Devices  
App registrations  
Identity Governance  
Application proxy  
Licenses

# Create a Tenant – Step 1

4. Next to [Select a tenant type](#), select the radio button for [Azure Active Directory](#). (No subscription is required for this option)



Home > Default Directory | Overview >

## Create a tenant

Azure Active Directory

\*Basics \*Configuration Review + create

Azure Active Directory and Azure Active Directory (B2C) enable users to access applications published by your organization, and share same administration experiences. [Learn more](#)

Tenant type

Select a tenant type \*

Azure Active Directory

Azure Active Directory

[Help me choose...](#)

4

# Create a Tenant – Step 1

5. Enter your Organization name, Initial Domain name, and country of incorporation.
6. Select **Next: Review + Create >**. The initial domain will be set up as `domainname.onmicrosoft.com`

The screenshot shows the 'Create a tenant' wizard in the Azure Active Directory portal, specifically the 'Configuration' tab. The 'Directory details' section is active, showing the following fields:

- Organization name:** OEM AAD Test (with a green checkmark)
- Initial domain name:** oemaadtestone (with a green checkmark). The resulting domain is shown as `oemaadtestone.onmicrosoft.com`.
- Country/Region:** United States (with a dropdown arrow)

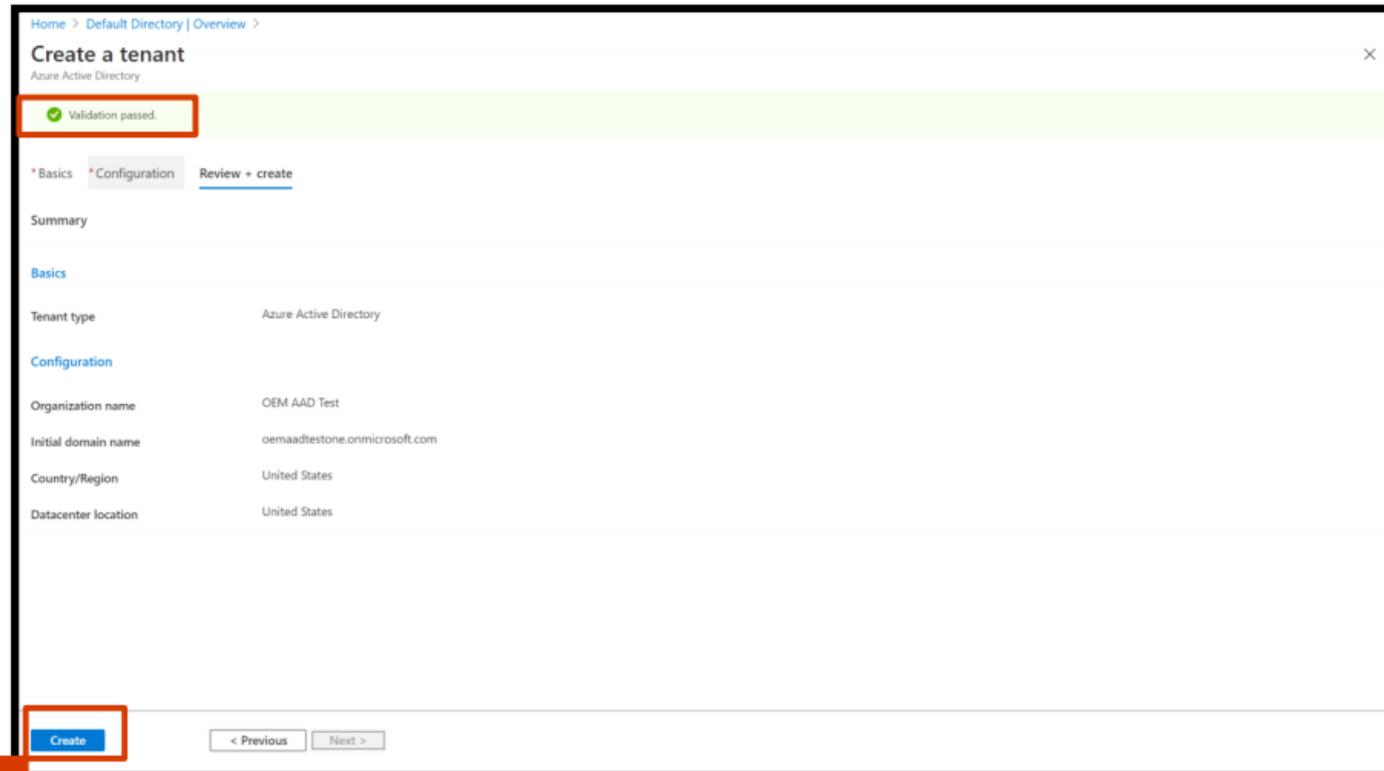
Below these fields, there is a green checkmark and the text: 'Datacenter location - United States'. A note below that states: 'Datacenter location is based on the country/region selected above.'

At the bottom of the form, there are three navigation buttons: 'Review + create' (blue), '< Previous' (grey), and 'Next: Review + create >' (grey). The 'Next: Review + create >' button is highlighted with a red box, and a red circle with the number '6' is overlaid on it.

6

# Create a Tenant – Step 1

7. A message stating **Validation passed** message will be displayed. Select **Create**.



Home > Default Directory | Overview >

## Create a tenant

Azure Active Directory

Validation passed.

\* Basics \* Configuration **Review + create**

Summary

**Basics**

Tenant type Azure Active Directory

**Configuration**

Organization name OEM AAD Test

Initial domain name oemaadtestone.onmicrosoft.com

Country/Region United States

Datacenter location United States

**Create** < Previous Next >

7

# Create a Tenant – Step 1

8. Wait for 5~10 minutes and your tenant is created.
9. Click on the link to go to the homepage where you can add users

[Home](#) > [osdrdv](#) >

## Create a tenant

Azure Active Directory

✔ Tenant creation was successful. [Click here to navigate to your new tenant:](#)

### Configuration



Organization name

Initial domain name

.onmicrosoft.com

Country/Region

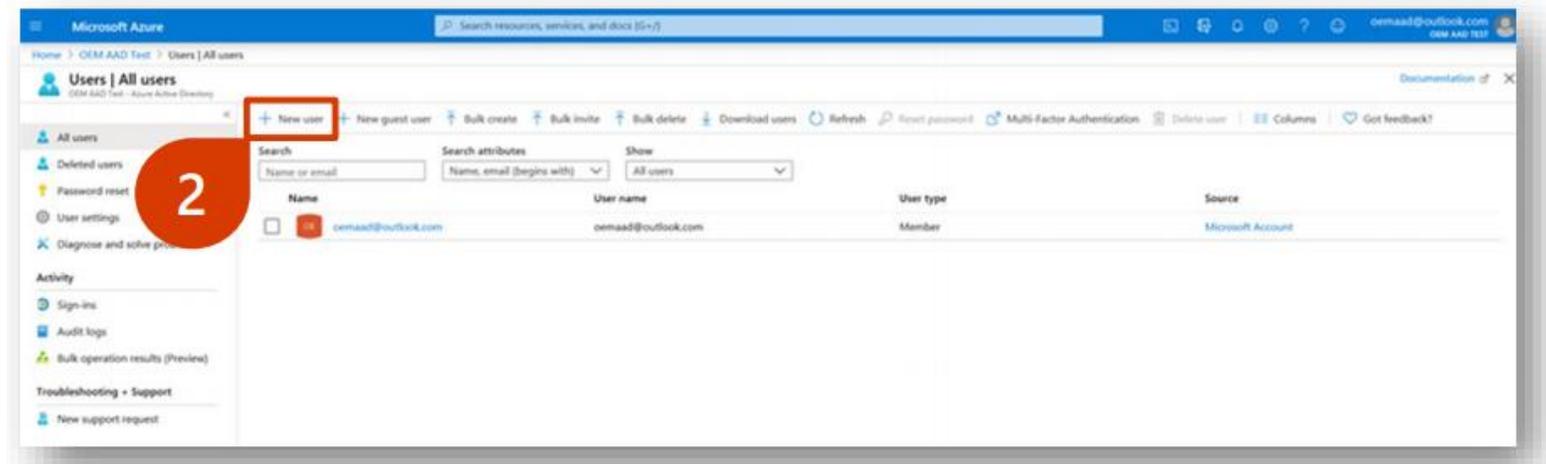
United States

Datacenter location

United States

# Create a User – Step 2

1. On the [Azure Active Directory](#) page, select [All Users](#) to view all the users in the directory
2. Select [+ New User](#) to create a new user account.



# Create a User – Step 2

3. Select the **Create User** option.
4. Fill in the details for the new user.

The screenshot shows the 'New user' page in the Microsoft Azure portal. At the top, there are two radio button options: 'Create user' (selected and highlighted with a red box) and 'Invite user'. Below these options is a red circle with the number '3'. The 'Create user' section contains the following fields:

- Identity:**
  - User name: Example: chris @ oemaadtest.onmicrosoft.com
  - Name: Example: 'Chris Green'
  - First name: [Empty field]
  - Last name: [Empty field]
- Groups and roles:**
  - Groups: 0 groups selected
  - Roles: User
- Settings:**
  - Block sign in: Yes [Selected] No
  - Usage location: [Empty field]

A 'Create' button is visible at the bottom left of the form.

Note: You can choose either to enter your own password, or Auto-generate.



If you select Auto-generate password, please remember the password as it is required for your first-time login. And you will be prompted to update a new set of password upon first time login.

# Create a User – Step 2

5. Select **Create**.

Note: For Free versions of AAD, the user account will be set up as [username@domain.onmicrosoft.com](mailto:username@domain.onmicrosoft.com)

Now, the user can provide this login to their MAR partner for TPR set up.

As the Free AAD subscription does not provide an inbox to the user the TPR should also provide an alternative company email to their MAR to ensure critical onboarding activation links and ongoing information is received.

The screenshot shows the Microsoft Azure portal interface for creating a new user. The page title is "New user" and the breadcrumb is "Home > OEM AAD Test > Users | All users > New user". There are two main options: "Create user" (selected) and "Invite user". The "Create user" option includes a description: "Create a new user in your organization. This user will have a user name like alice@oemaadtest.onmicrosoft.com. I want to create users in bulk". The "Invite user" option includes a description: "Invite a new guest user to collaborate with your organization. The user will be emailed an invitation they can accept in order to begin collaborating. I want to invite guest users in bulk". Below these options is a "Help me decide" link. The "Identity" section contains the following fields: "User name" (filled with "tester"), "Name" (filled with "tester aad"), "First name" (empty), and "Last name" (empty). The "Password" section has two radio buttons: "Auto-generate password" (selected) and "Let me create the password" (unselected). Below the radio buttons is an "Initial password" field filled with "\*\*\*\*\*" and a "Show Password" checkbox (unchecked). The "Groups and roles" section has a "Groups" field with "0 groups selected". At the bottom left, a red box highlights the "Create" button.

5



# TPR Onboarding Technical overview

## Accepting a Business Model

MDOS on DOC Business Administration

# Accepting a Business Model

- Log into DOC at [www.microsoftoem.com](http://www.microsoftoem.com)
- Select Administration > MDOS Business Administration > Accept Business Model

The screenshot displays the Microsoft Digital Operations Center (DOC) interface. The top navigation bar includes the Microsoft logo and the text 'Digital Operations Center'. Below this, a secondary navigation bar lists various menu items: Home, Organization, Agreements, Products, Orders, Invoices, Returns, COA Management, Device Management, Reports, Administration, and Inventory Management. The 'Administration' menu item is highlighted with a red box. A dropdown menu is open under 'Administration', listing several options: Account Management, System Management, Reports, Email Administration, User Account Management, MDOS Business Administration, and MDOS Business Administration (Legacy). The 'MDOS Business Administration' option is highlighted with a red box. A secondary dropdown menu is open under 'MDOS Business Administration', listing: Setup Business, Accept Business Model, Associate Down Level Partner, and Search Down Level Partner. The 'Accept Business Model' option is highlighted with a red box. The main content area features a large heading 'Welcome to Microsoft OEM Digital Operations Center' and a sub-heading 'From this Home Page you can access the specific Microsoft OEM Operations applications you use for your job function.'



Note: This action is to accept invitation from upper level, which is your MAR partner in order to complete the connection between both parties. Once this action is completed, you can start to receive keys assigned by your upper level (MAR partner)

# Accepting a Business Model

- Available pending relations will be displayed
- Select the relationship card and click Confirm Relationship to proceed.

Select Relationship ⓘ

ⓘ You can only select single option for relationship from the available list.

1 Results Found

Business Name OEM Name	Business Number 0000XXXXXX	<input checked="" type="checkbox"/>
Partner Type TPI		

6 ▾ Showing 1-1 of 1 Items

Discard **Confirm Relationship**

# Accepting a Business Model

- Upon the first-time login, the Subcontractor/ Down level Partner can provide a 'friendly name' for the business model and select confirm.

Friendly Business Name

Friendly Business Name \*

Example : Microsoft OEM - DLP

Discard Confirm

- A success message will confirm the process has been completed.

Microsoft | Digital Operations Center

Home Organization Agreements Products Pricing Orders Invoices Returns COA Management Device Management Reports Revenue Allocation Administration

✔

**Congratulations !!!**

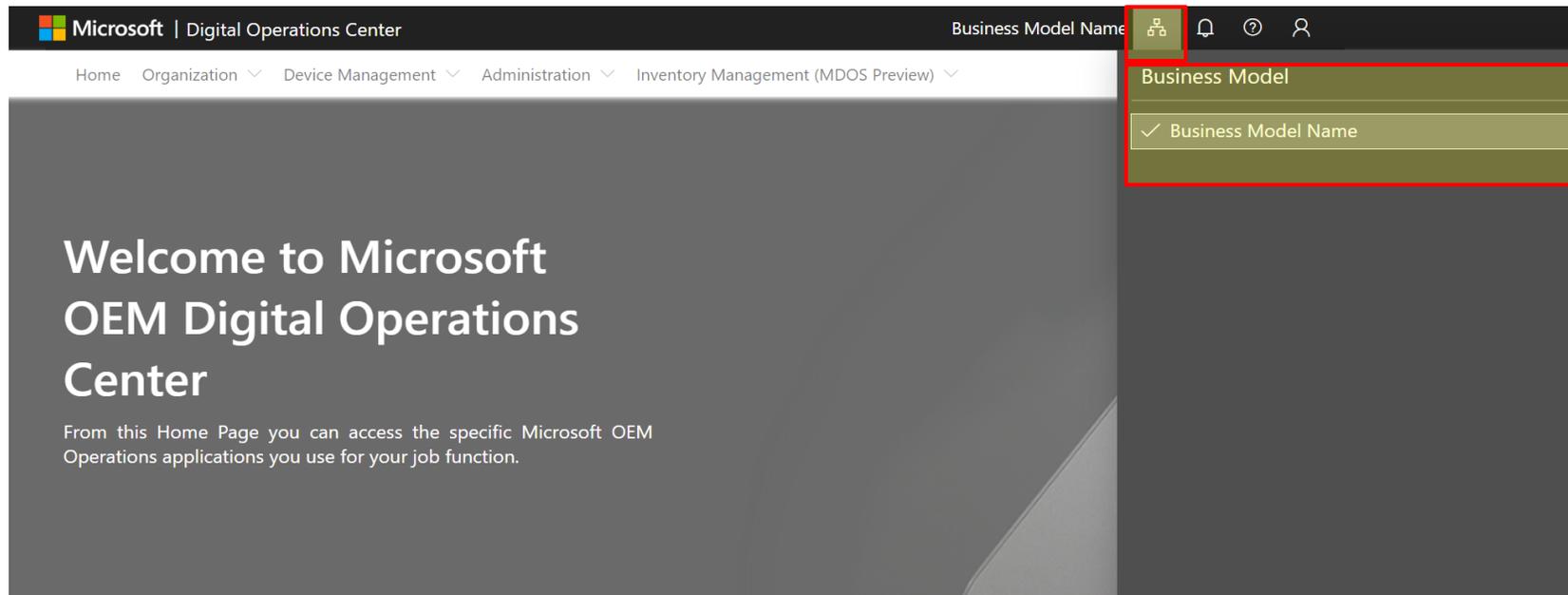
Your business model has been setup !

Select more relations Add new DLP Add an authorized user

Home

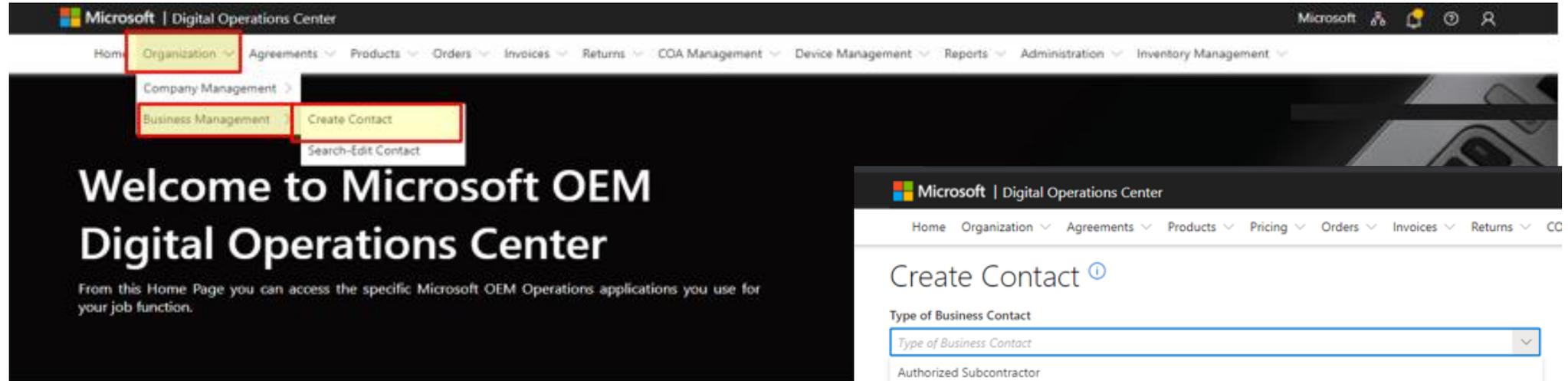
# Accepting a Business Model

- This new Business Model will be visible from under the Business Model icon 

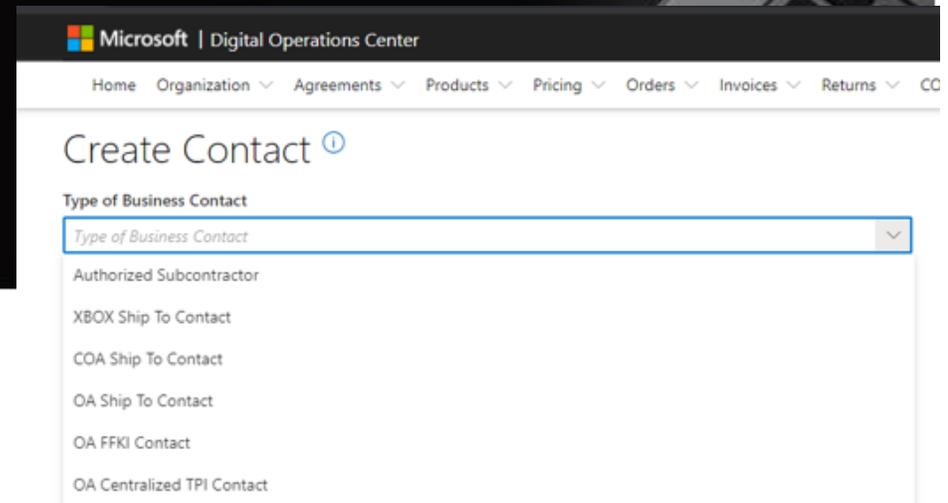


# Create an FFKI Contact

- Log into DOC at [www.microsoftoem.com](http://www.microsoftoem.com)
- Select Organization > Business Management > Create Contact



- Select OA FFKI Contact from the menu



# Create an FFKI Contact

Populate the mandatory field\* details for the FFKI contact and select Submit

Microsoft | Digital Operations Center

Home Organization Agreements Products Pricing Orders Invoices Returns COA Management Device Management Reports Revenue Allocation Administration ...

## Create Contact ⓘ

Type of Business Contact  
FFKI Contact

First Name \*  
John

FFKI Name \*  
FFKI - Test

Business Model  
----

Last Name \*  
Smith

Admin Email \*  
John.Smith@ffki.com

Discard Submit

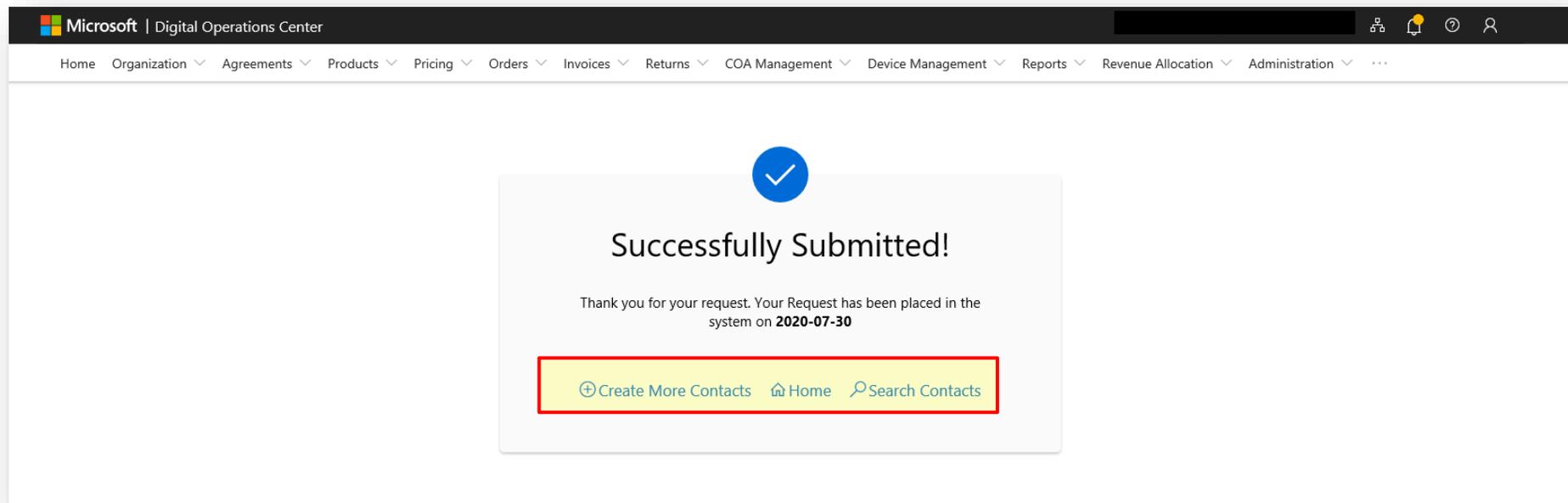


Note: An AAD email is required under Admin Email.

# Create an FFKI Contact

A pop-up message will confirm that the FFKI was submitted successfully displaying shortcut links to:

⊕[Create More Contacts](#), navigate to 🏠 [Home](#) page or 🔍 [Search Contacts](#)



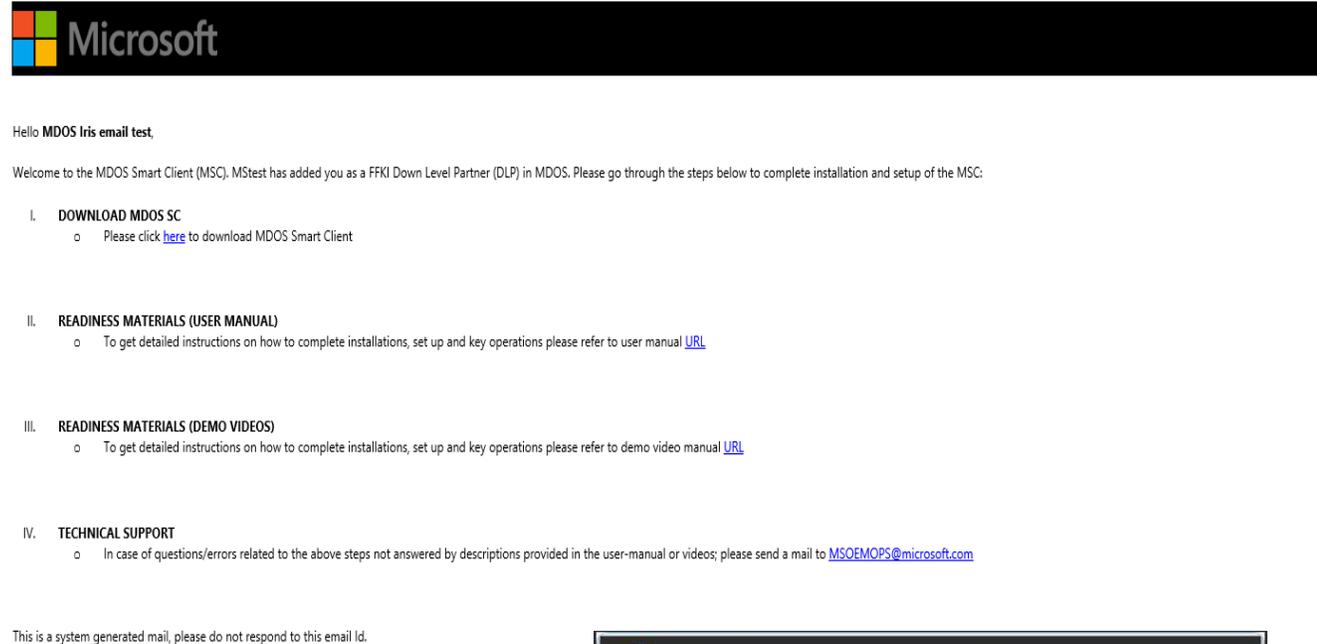
# Install MDOS SC

- Invitation email with the link to install MDOS SC.
- Download MDOS.exe setup package -> Run as administrator' -> complete installation
- Email ID and password of the FFKI added in DOC as LOGIN details
- Email address must be AAD enabled.

**Note:** You can obtain our MSC user manual through the below :



1. Download MSC User Manual from the emails that was sent to you ( example screenshot on top right at point II).
2. By clicking the  icon in DOC, it will open the Help & Support Menu, where you will find the MSC User Manual.
3. [Here](#)



# MDOS Smart Client System requirements

## Hardware

The following are the minimum hardware system requirements for MDOS SC,

- • 64-bit infrastructure processor
- • 8GB RAM minimum
- • 250GB Hard Disk minimum
- • Screen Resolution: 1024\*768 minimum

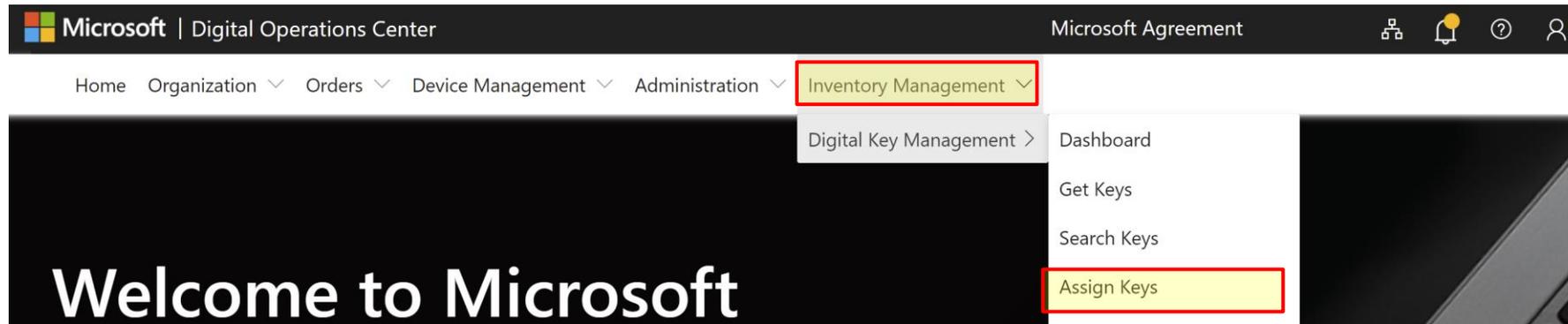
## Software

MDOS SC will be supported in any of the below application servers,

- • Windows 10 Home editions (64-bit)
- • Windows 10 Pro editions (64-bit)
- • Windows Server 2012 Enterprise Edition (64-bit)
- • Windows Server 2012 R2 Enterprise Edition (64-bit)
- • Windows Server 2016 Enterprise Edition

# Assigning keys to MSC

- Log into DOC at [www.microsoftoem.com](http://www.microsoftoem.com)
- Select Inventory Management > Digital Key Management > Assign keys



# Assigning keys to MSC

- Select your DLP, fill in the quantity for the keys that you wish to assign, and click [Assign Keys](#)

Microsoft | Digital Operations Center

Home Orders Returns Reports

## Assign Keys

Assign Key Criteria

Select DLP \*  
roletesting2

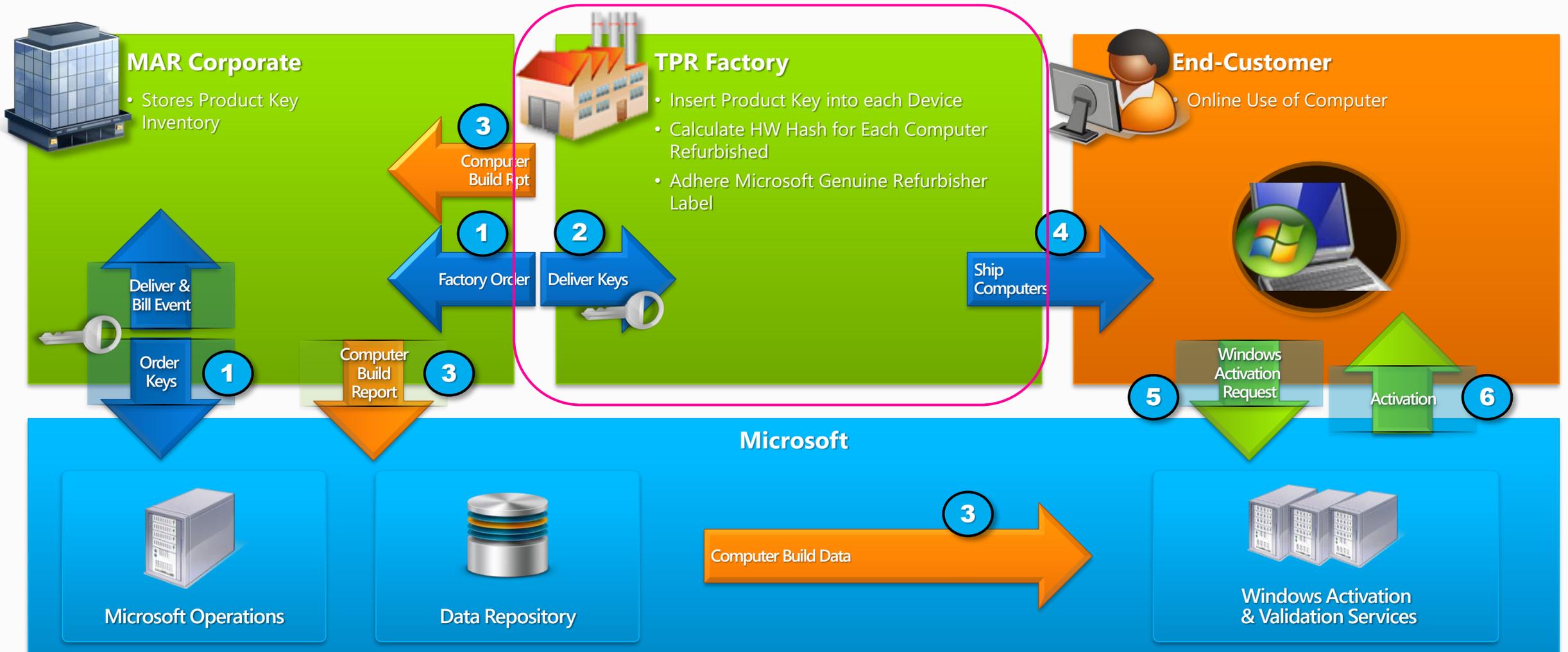
List Items

Key Type	Licensable Part Number	OEM PO Number	OEM Part Number	Available Keys	Quantity
Standard	42C-00151	39F31BA693184523A10...	CUST-42C-00151	4373	100
Standard	42C-00151	42AA0E5E2B864B93B37...	CUST-42C-00151	4880	20
Standard	42C-00151	51211CE2BD9B4BD68D...	CUST-42C-00151	2	0
Standard	42C-00151	783A157811724AF784B...	CUST-42C-00151	1	0
Standard	42C-00151	8D71948A40D84DE6A8...	CUST-42C-00151	1	0
Standard	42C-00151	951C21B5C930422C996...	CUST-42C-00151	1	0
Standard	42C-00151	A05AA52E7A224E4E9C9...	CUST-42C-00151	1	0
Standard	42C-00151	A64CB28D45D4B4794...	CUST-42C-00151	1	0
Standard	42C-00151	AD34D7ADAC5F43AD8...	CUST-42C-00151	1	0
Standard	42C-00151	BB25C552AF4D45A4A8...	CUST-42C-00151	1	0

Showing 1-10 of 100 Items

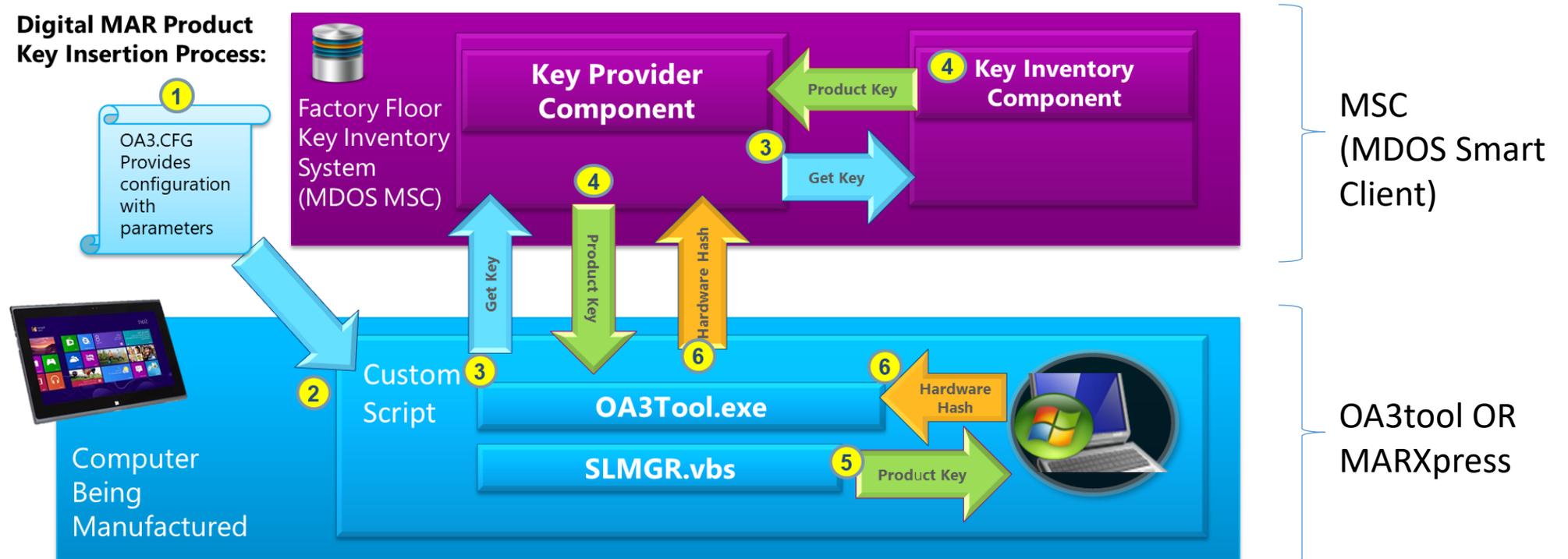
Clear All Assign Keys

# Digital MAR: Illustrative Model



# Digital MAR Factory Floor Mfg. Process

The overall concept to insert DPK (Digital product key) into Refurbish Device at the manufactory:



## Create Config file

**1.** MAR Partner creates custom script and configuration file with location, parameters and action for OA3 tool. This is saved to a USB drive for use on the factory floor.

## Assemble Key

**2.** On the factory floor, the USB drive is inserted into the device being refurbished. The operator runs the custom script which in turn calls OA3Tool.exe with location of key provider and parameters specifying the action

**3.** OA 3.0 Tool calls Key Provider component with information to get the next key

**4.** A product key is pulled from inventory and written to \*.xml file

## Write key

**5.** Custom script reads the product key from \*.bin file and inserts it into the device using the slmgr /ipk command.

## Report Key

**6.** The custom script next calls the OA3Tool.exe to calculate the Hardware Hash of the device. After this, the custom script updates the hardware hash output file to insert the new product key ID and saves the file to the USB drive for reporting back to Microsoft.

# Before Starting

## What you need to know:

There are 4 solutions available for partner to choose. Partner needs to decide which solution should be applied to the manufactory:

- Server base OA3tool + /slmgr (online mode)
- File base OA3tool + /slmgr (offline mode)
- Server base MARXpress (online mode)
- File base MARXpress (Offline mode)

## What you need to be ready:

Please ensure following requirements are ready before executing.

1. Device & System
  1. MDOS SC (MDOS Smart Client)
  2. Target Device (Refurbish device)
2. APP
  1. Server base MARXpress (Contact your MAR partner to get the download link for MARXpress tool), or
  2. OA3tool
3. Other requirements
  1. Read *"MAR Digital License Manufacturing Reference Guide"* and *"OA3 Manufactory Step-by-Step guide for MAR process"*
  2. MSC and Target test device must be running on same network (ensure both MSC and target device can ping to each other)
  3. Make sure there are DPKs (Digital Product keys) available in MSC, and the DPKs are in "fulfilled" key state.
  4. Port 9011 is not blocked by router.
  5. USB drive

# Manufacturing Tools

## OA3 Tool – Available in Windows 10 ADK

- Command-line tool that supports assembling, reporting, and returning a non-unique identifier for the activation of computers on the factory floor
- Relies on configuration file (described in general as OA3.cfg) to find the factory floor key inventory (MDOS/MSK)
- Runs in Audit Mode without impacting the end user activation experience during OOBE
- Windows ADK download link [here](#)

## MAR Xpress (Sample Tool)

- Powershell script to automate the digital key insertion process and CBR report generation.
- Sample script available from Microsoft for use.
- MAR Xpress is as-is tools and are offered without warrantee either express or implied.
- Please download MARXpress Sample Tool [here](#)

For more information on how to use MARXpress and OA3tool to complete writing DPK into device, please refer to “MAR Digital License Manufacturing Reference Guide” and “OA3 Manufactory Step-by-Step guide for MAR process”



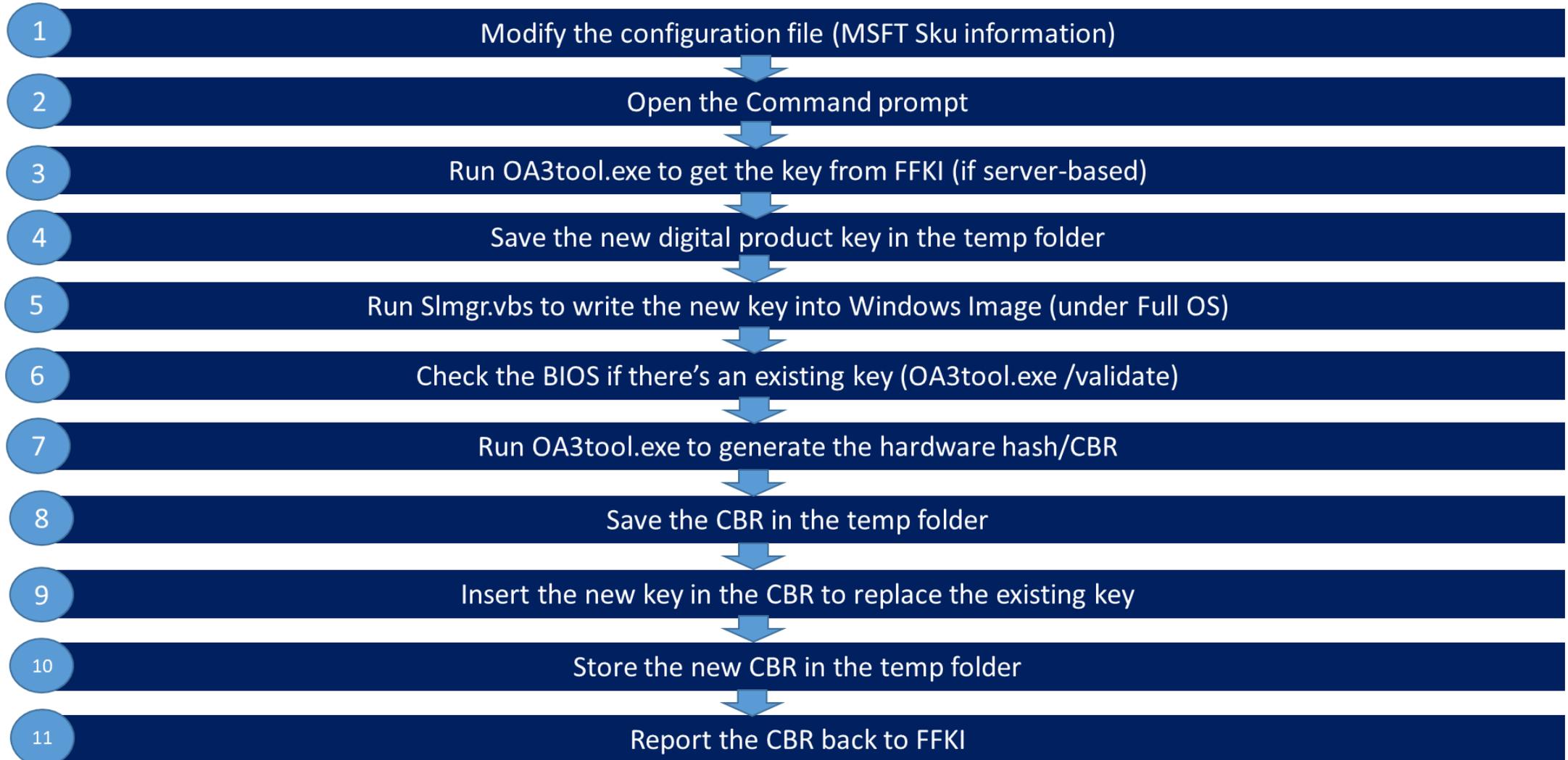
MAR Digital License Manufacturing Reference Guide v1.0.pdf



OA3 Manufactory Step-by-Step guide for MAR process

# Manual Processes (OA3tool) – From Key insertion to CBR

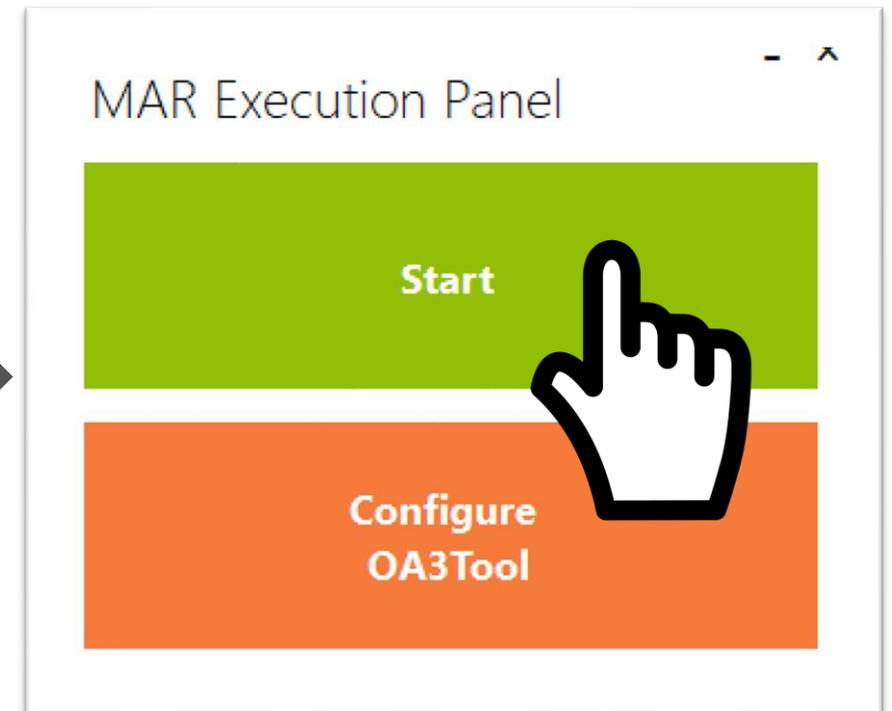
Example of using **OA3tool + /slmgr command (Server base solution)** to complete DPK insertion process at the production line (including report CBR back to MSC):



# MARXpress Process – From Key insertion to CBR

- 1 Modify the configuration file (MSFT Sku information)
- 2 Open the Command prompt
- 3 Run OA3tool.exe to get the key from FFKI
- 4 Save the new digital product key in the temp folder
- 5 Run SImgr.vbs to write the new key into Windows Image
- 6 Check the BIOS if there's an existing key
- 7 Run OA3tool.exe to generate the hardware hash/CBR
- 8 Save the CBR in the temp folder
- 9 Insert the new key in the CBR to replace the existing key
- 10 Store the new CBR in the temp folder
- 11 Report the CBR back to FFKI

Example of using **MARXpress tool (Server base solution)** to complete DPK insertion process at the production line (including report CBR back to MSC):



MARXpress Sample Script can be a reference for you to develop your own solution to integration from #3 to #10 into a single click.

Please download MARXpress Sample Tool [here](#)

# New Genuine Microsoft Refurbisher Label (GMRL) in MAR FY21

GMRL is a holographic label with latest security features . This is assurance for end-users that Device is preinstalled with a genuine Microsoft operating system license, sourced from a quality driven and legitimate supplier.

## GMRL details:

- Holographic label with latest security features
- Dimensions 22x22mm
- Trackable - UV printed unique serial #
- Order Code R20-30001
- Orders from Authorized Replicators
- Only MARs can order GMRL
- MARs can sub-distribute GMRL to TPRs with DPKs capability
- GMRL must be applied to Devices with DPKs ONLY. This is not applicable for COA Devices



## GMRL benefits:

- Differentiation from PCs with non genuine Windows
- Elevate MAR PCs status vs others
- Assurance for end-users that PC is preinstalled with a genuine operating system license, sourced from a quality driven and legitimate supplier
- Helps build a strong MAR program brand

# How to submit a CBR from MSC to DOC

- Log into Smart Client using FFKI partner account credentials.
- Click on the button CBR by Quantity / Key as shown in below screen

The screenshot displays the Microsoft Digital Operations Services Smart Client interface. The top navigation bar includes 'Online', 'CBR', 'PBR', 'Revert', 'Return To ULP', 'Information', and 'OA 3.0 Tool'. The 'CBR' menu is expanded, showing 'By Keys' and 'By Quantity' options, with 'By Quantity' highlighted in a red box. Below the navigation bar, the 'Keys Count' section shows a total of 6000 keys, with 5971 fulfilled, 0 returned, and 17 activation enabled. The 'KEYS OVERVIEW' section features a donut chart showing 6000 keys, with 17 activation enabled (green), 12 notified bound (yellow), and 5971 fulfilled (orange). The 'Last 5 Transaction(s) Summary' section shows a progress bar for each transaction, with stages: Initiated, Submitted, Inprogress, ACK Received, and Completed. The 'NOTIFICATION' section includes four notification cards: 'Fulfilled Key' (99+ keys stuck in fulfilled status), 'Consumed Key' (0 keys stuck in consumed status), 'Bound Key' (11 CBR submitted without OHR information), and 'Exception' (0 daily number of MDOs services failed connection(s) for today). The footer shows '© 2018 All Rights Reserved' and 'Internet Connection'.



This menu allows the user to report bound keys to DOC by quantity. Keys must be in **Bound** status in order to be reported in the CBR.

# How to submit a CBR by quantity

- Enter the quantity of keys to be Reported.
- Once the FFKI partner clicks on the Submit button, a confirmation window will pop up to confirm your Key Request. Click CONFIRM.
- Once the CBR has been submitted, a “Key Submitted Successfully” message will briefly pop up in the green highlighted banner.

The screenshot displays a software interface for submitting CBR keys by quantity. At the top, there is a search bar containing 'FFKI\_FFKI\_Test\_Aamir\_Microsoft Agreement 5000043726'. To the right, a 'Keys Count' summary shows: Total (79500), Fulfilled (79335), Returned (0), and Activation Enabled (0). The environment is set to 'PROD'.

The main section is titled 'CBR BY QUANTITY' and contains a table with the following data:

Key Type	Licensable Part Number	OEM Part Number	OEM PO Number	Available Keys	Quantity
Standard	KJ7-00001		W10-46622-50000	146	1
Standard	KJ7-00001			5	0
Service	KJ7-00001			4	0

A confirmation dialog box is overlaid on the table, titled 'Confirm CBR Keys'. It asks 'Are you sure you want to continue?' and has 'CANCEL' and 'CONFIRM' buttons. The 'Submit' button is also highlighted in the interface.

# How to submit a CBR by Key

- Select the keys you want to submit the CBR to MS for. Click Submit to report.
- Once the FFKI partner clicks on the Submit button, a confirmation window will pop up to confirm your Key Request. Click CONFIRM.
- Once the CBR has been submitted, a “Key Submitted Successfully” message will briefly pop up in the green highlighted banner.

The screenshot displays the 'CBR BY KEY' interface. At the top, there are search filters for Key Type, PBR Binding Status, and Store Products Binding Status, along with input fields for Call Off Reference Number, OEM Part Number, Product Key ID From, MDOS Product Key ID, OEM PO NUMBER, Licensable Part Number, Product Key ID To, and MS Order Number. A 'Search' button is located on the right. Below the filters is a table with columns: Key Id, Product Key, Status, Licensable Part Number, and MS Product Key ID. The first row (Key Id: 2033211) is highlighted in green, and its checkbox is checked. A confirmation dialog box is overlaid on the table, asking 'Are you sure you want to continue?' with 'CANCEL' and 'CONFIRM' buttons. The 'CONFIRM' button is highlighted in green. At the bottom right of the table, there is a 'Submit' button, also highlighted in green.

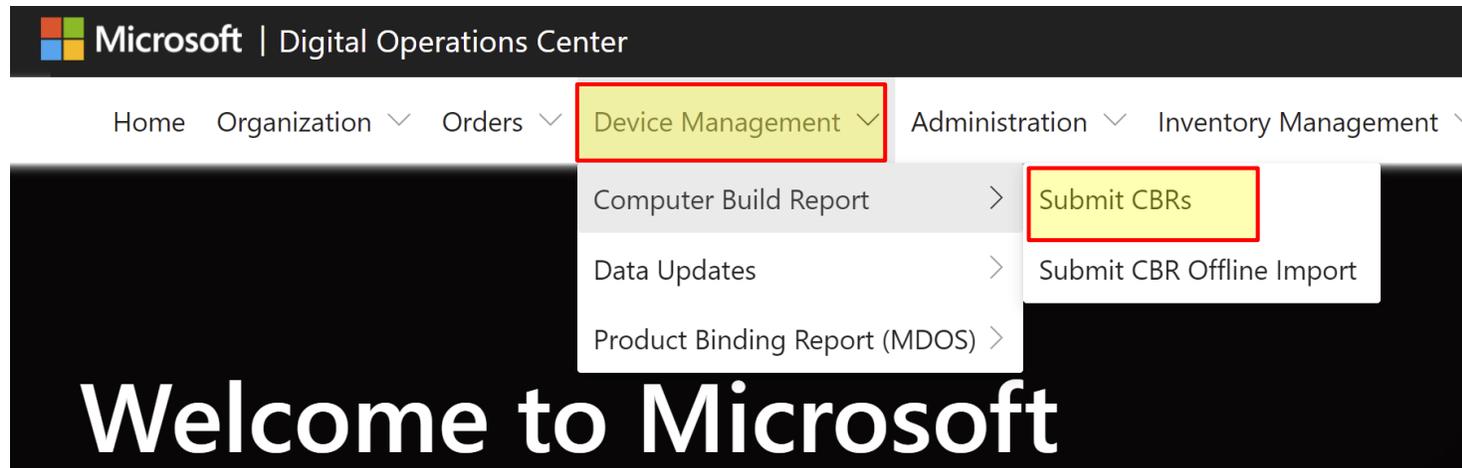
Key Id	Product Key	Status	Licensable Part Number	MS Product Key ID
<input checked="" type="checkbox"/> 2033211	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Bound	KJ7-00001	3258631581587
<input type="checkbox"/> 2033212	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Bound	KJ7-00001	3258631581588
<input type="checkbox"/> 2033213	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Bound	KJ7-00001	3258631581588
<input type="checkbox"/> 2033214	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Bound	KJ7-00001	3258631581589
<input type="checkbox"/> 2033215	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Bound	KJ7-00001	3258631581589
<input type="checkbox"/> 2033216	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Bound	KJ7-00001	3258631581590
<input type="checkbox"/> 2033219	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Bound	KJ7-00001	3258631581591
<input type="checkbox"/> 2033220	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Bound	KJ7-00001	3258631581592
<input type="checkbox"/> 2033221	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Bound	KJ7-00001	3258631581592
<input type="checkbox"/> 2033222	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Bound	KJ7-00001	3258631581593



You can automate the CBR submission too. Please refer to MSC User Manual > System Setting for more details.

# How to submit a CBR from TPR's DOC to MAR's DOC

- Sign into DOC at [www.microsoftoem.com](http://www.microsoftoem.com)
- Go to [Device Management](#)-> [Computer Build Report](#) -> [Submit CBRs](#)



This menu allows the user to report bound keys to Microsoft by quantity. Keys must be in **Bound** status in order to be reported in the CBR. Once validated, the keys will be activated for use by an end user.

# How to submit a CBR by quantity



**New:** Quick support is available by hovering over the "i" icon. Callouts provide high-level data points to support you through each activity.

Microsoft | Digital Operations Center

Home Organization Agreements Products Pricing Orders Invoices Returns COA Management Device Management Reports

## Submit CBR

Available Keys

Key Type	Licensable Part Number	OEM PO Number	OEM Part Number	Available Keys	Quantity
Standard	KU9-00001	3_11_STDLLEN		1	<input type="text" value="0"/>
Standard	KU9-00001	STDOEMLEN_2020	LEN_123	2	<input type="text" value="0"/>

10 Showing 1-10 of 10 Items

[Clear All](#) [Submit](#)

# How to submit a CBR by quantity

- Enter the **quantity** of keys to report, then select **Submit**.

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Home Organization Agreements Products Pricing Orders Invoices Returns COA Management Device Management Reports Revenue Allocation Administration

## Submit CBR ⓘ

Available Keys

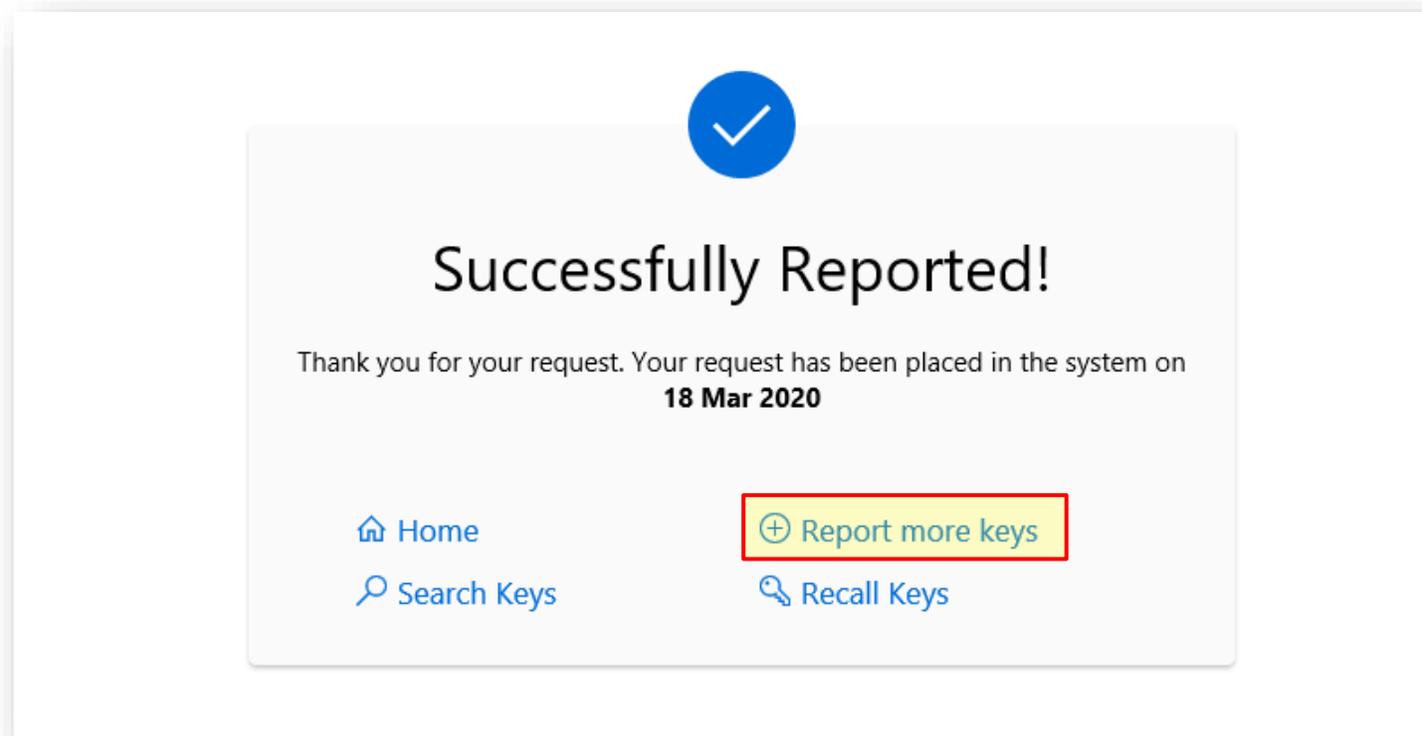
Key Type	Licensable Part Number	OEM PO Number	OEM Part Number	Available Keys	Quantity
Standard	KU9-00001	3_11_STDLEN		1	<input type="text" value="0"/>
Standard	KU9-00001	STDOEMLEN_2020	LEN_123	2	<input type="text" value="0"/>

10 Showing 1-10 of 10 Items

[Clear All](#) [Submit](#)

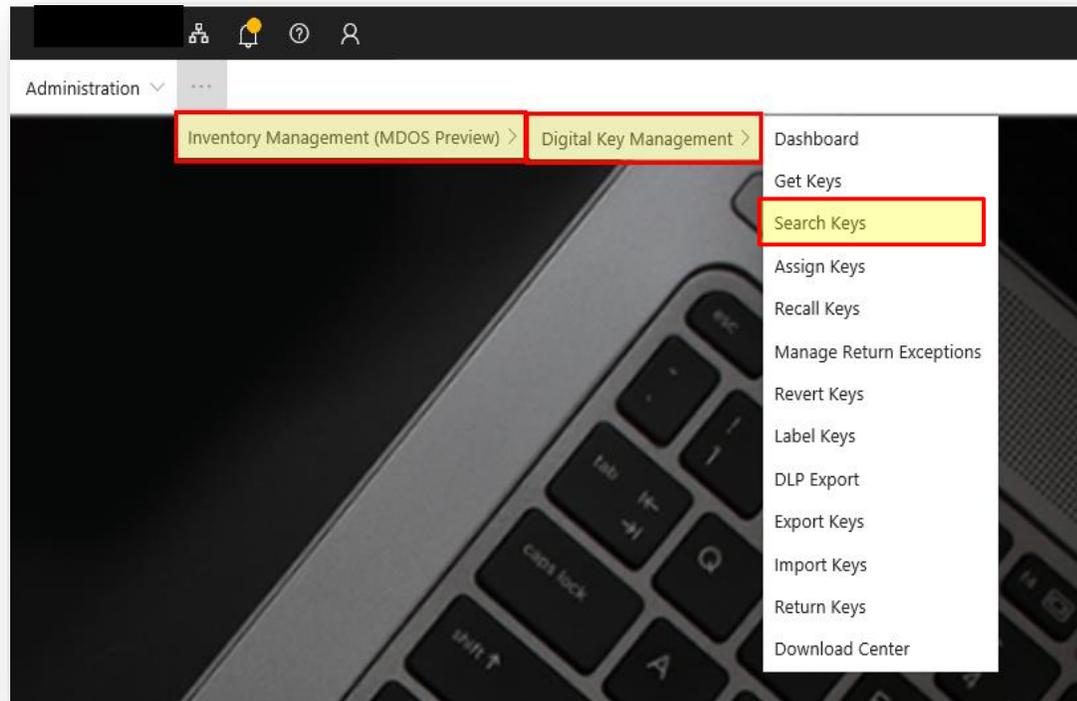
# How to submit a CBR by quantity

- A success message will confirm that the keys have been reported successfully..
- The key status will change from [Bound](#) to [Reported Bound](#).
- To submit more CBRs, select [Report more keys](#).



# How to submit a CBR using the **Search Keys** menu

- Sign into DOC at [www.microsoftoem.com](http://www.microsoftoem.com).
- Go to **Inventory Key Management (MDOS Preview)** -> **Digital Key Management** -> **Search Keys**.



This menu allows the user to report bound keys to Microsoft by quantity. Keys must be in **Bound** status in order to be reported in the CBR. Once validated, the keys will be activated for use.

# How to submit a CBR using the Search Keys menu

- Select **Bound** from the **Key Status** drop-down menu.
- Select **Search Keys**.

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Home Orders Returns Reports Inventory Management (Preview)

## Search Keys

Search Filter

Key Details

Select DLP: Dell LTD

Key Type: Select Key Type

Key Status: Bound

Licensable Part Number: Licensable Part Number

OEM Part Number: OEM Part Number

Microsoft Product Key ID: Microsoft Product Key ID

Additional Search Criteria

Orders Returns OHR Data Updates Other Details

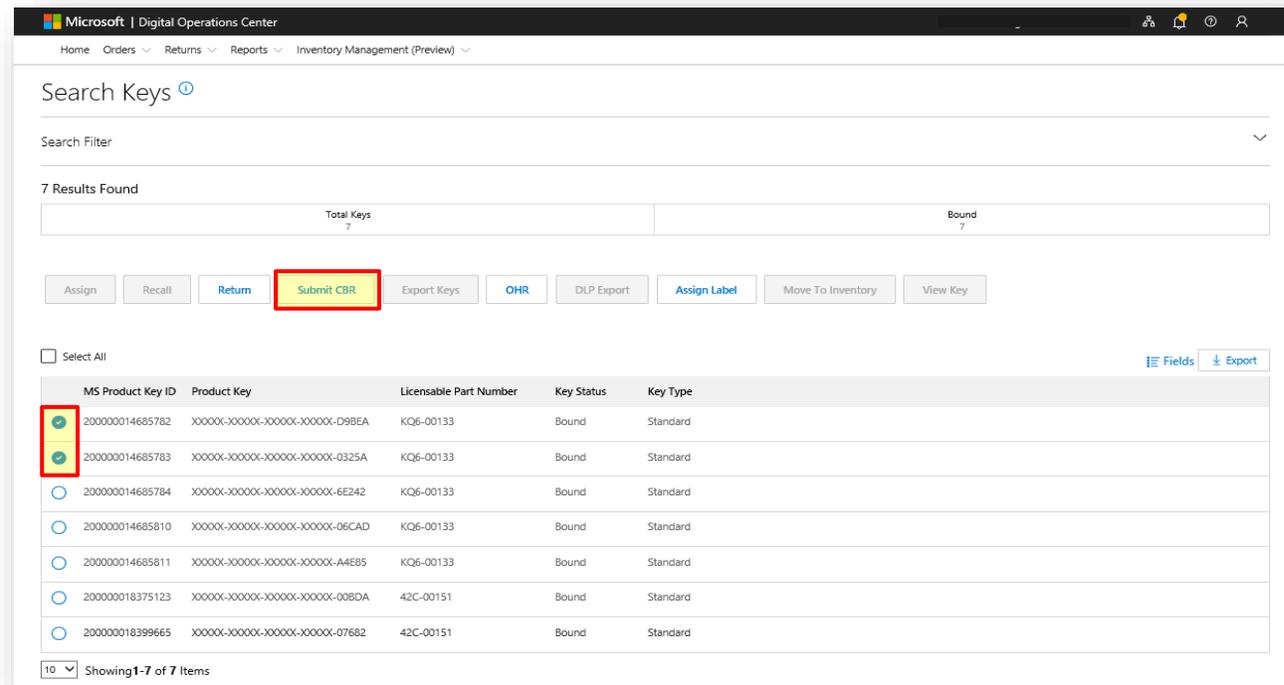
Clear All Search Keys



**New:** Quick support is available by hovering over the "i" icon. Callouts provide high-level data points to support you through each activity.

# How to submit a CBR using the Search Keys menu

- Select the relevant keys, then select [Submit CBR](#).
- Once the CBR has been submitted, a message saying “Key(s) reported successfully” will briefly pop up in the green-highlighted banner.



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Home Orders Returns Reports Inventory Management (Preview)

### Search Keys

Search Filter

7 Results Found

Total Keys	Bound
7	7

Assign Recall Return **Submit CBR** Export Keys OHR DLP Export Assign Label Move To Inventory View Key

Select All [Fields](#) [Export](#)

MS Product Key ID	Product Key	Licensable Part Number	Key Status	Key Type
<input checked="" type="checkbox"/> 200000014685782	XXXXX-XXXXX-XXXXX-XXXXX-D98EA	KQ6-00133	Bound	Standard
<input checked="" type="checkbox"/> 200000014685783	XXXXX-XXXXX-XXXXX-XXXXX-0325A	KQ6-00133	Bound	Standard
<input type="checkbox"/> 200000014685784	XXXXX-XXXXX-XXXXX-XXXXX-6E242	KQ6-00133	Bound	Standard
<input type="checkbox"/> 200000014685810	XXXXX-XXXXX-XXXXX-XXXXX-06CAD	KQ6-00133	Bound	Standard
<input type="checkbox"/> 200000014685811	XXXXX-XXXXX-XXXXX-XXXXX-A4EB5	KQ6-00133	Bound	Standard
<input type="checkbox"/> 200000018375123	XXXXX-XXXXX-XXXXX-XXXXX-008DA	42C-00151	Bound	Standard
<input type="checkbox"/> 200000018399665	XXXXX-XXXXX-XXXXX-XXXXX-07682	42C-00151	Bound	Standard

Showing 1-7 of 7 Items

 Key(s) reported successfully!

# How to submit a CBR using the offline import functionality

- Sign into DOC at [www.microsoftoem.com](http://www.microsoftoem.com)
- Go to [Device Management](#)-> [Computer Build Report](#) -> [Submit CBRs Offline Import](#)



This menu allows the user to report bound keys to Microsoft by quantity.

Keys must be in **Bound** status in order to be reported in the CBR. Once validated, the keys will be activated for use by an end user.

# How to submit a CBR using the offline import functionality

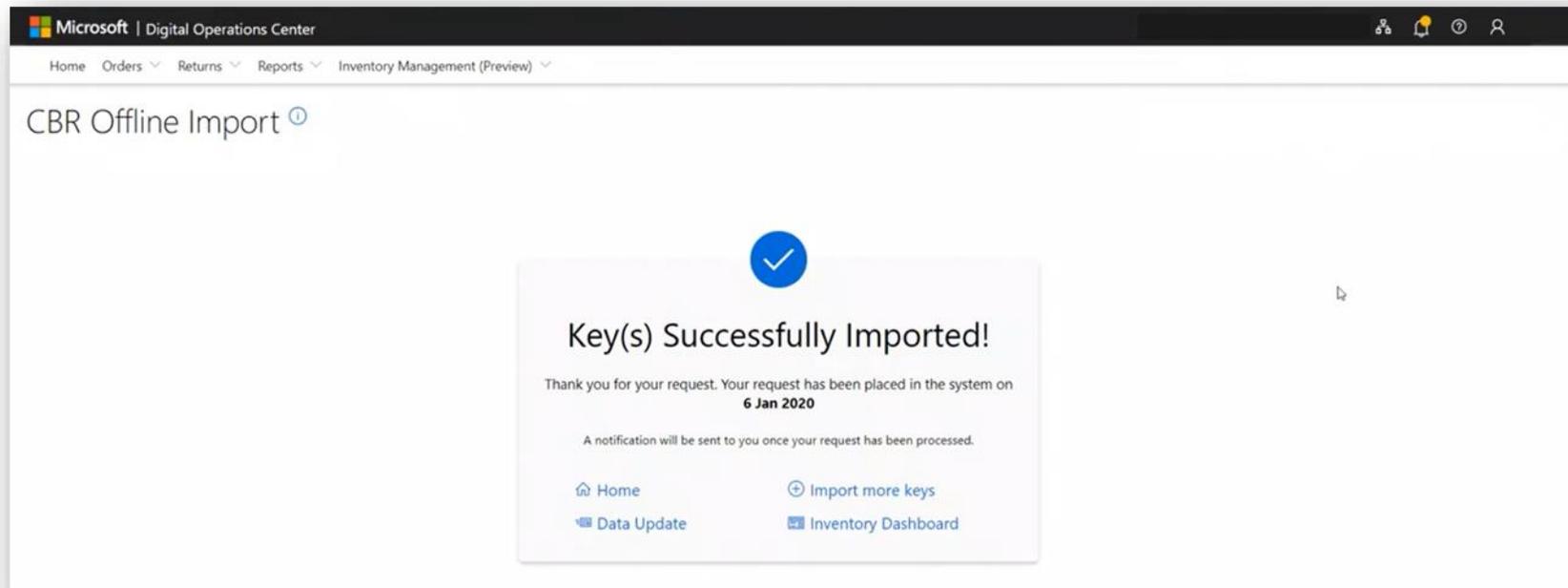
- Browse for the XML file to upload, then select [Submit](#).



**New:** Quick support is available by hovering over the “i” icon. Callouts provide high-level data points to support you through each activity.

# How to submit a CBR using the offline import functionality

- A message will pop up, confirming that the CBR has been successfully imported.



# Understanding CBR results

- After successful submission of a CBR, validation results will be available from Microsoft for each digital product key (DPK).
- At this point, the **Key State** changes from **Reported Bound** to **Activation Enabled** or **Activation Denied**.
- End user activation is not possible until the DPK status is updated to **Activation Enabled**, therefore we recommend that your organization does not ship PCs until the **Activation Enabled** state is confirmed.
- OA 3.0 DPKs which are flagged as **Activation Denied** should be investigated further and the errors addressed before resubmitting to Microsoft. Common causes of OA 3.0 DPK CBR validation failure include:
  - OA 3.0 DPKs were not originally fulfilled to the OEM\TPI from whom the CBR was received.
  - OA 3.0 DPKs were in a previously submitted CBR.
  - OA 3.0 DPKs have been returned to Microsoft.

 You can find the full details of CBR validation failures in the OEM Activation Web Services Guide in the [OA3.0 Implementation Kit](#) on DPC.

**Thank you!**