

# OCI – Windows KMS Activation

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This guide explains how to configure a Windows instance to use an OCI-Provided license with OCI KMS.

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## 2 Executive Summary

Organizations importing custom Windows images into Oracle Cloud Infrastructure may choose to switch from existing Windows licenses to **OCI-provided Windows licensing**. To ensure compliance and seamless activation, OCI uses an **internal Key Management Service (KMS)** endpoint that activates Windows using Microsoft's standard **Generic Volume License Key (GVLK)** model.

Transitioning to OCI licensing is a simple procedure:

- remove the existing product key,
- clear the activation registry,
- reset the activation state,
- register the OCI KMS server,
- install the GVLK, and force activation.

The activation is then renewed periodically and automatically, no outbound internet access is required.

OCI's KMS-based model provides:

- **Compliance and governance** aligned with Microsoft licensing
- **Centralized activation** without requiring external servers
- **Operational flexibility** for dynamic, cloud-native environments
- **Automatic revalidation** every 7 days (180-day activation cycle)

This approach ensures that instances become fully aligned with OCI's managed Windows licensing framework, reducing administrative overhead and improving lifecycle control.

## 3 Understanding OCI-Provided Windows Licensing

When you import a Windows custom image into OCI, the operating system retains its existing product key and activation state.

To switch to an **OCI-provided license**, the system must be reconfigured to use OCI's **internal KMS endpoint** for activation. This process applies in both scenarios:

- **You imported a custom Windows image into OCI** and want to use an OCI-provided Windows license instead of your existing license, follow this guide.
- **You created a Windows instance using a BYOL image** from the OCI Marketplace and now want to transition to an OCI-provided license model.

No matter if **Windows was never activated** or if **Windows was already activated** with an existing (OCI or non-OCI) key.

Switching to OCI-provided licensing ensures the instance is covered under OCI's official Windows licensing model and **will be billed accordingly**.

## 4 High-Level Procedure

The transition follows a structured and deterministic sequence:

1. Remove any existing Windows product key.
2. Clear activation data from the system registry.
3. Reset the activation state.
4. Register the instance to the OCI KMS endpoint.
5. Install the appropriate KMS client key (GVLK).
6. Trigger activation against the OCI KMS server.

These steps effectively rebaseline the instance so that the Windows OS activates normally under OCI's licensing framework.

## 5 Step-By-Step Activation Procedure on OCI

### 5.1 Enable the OCI-Provided License

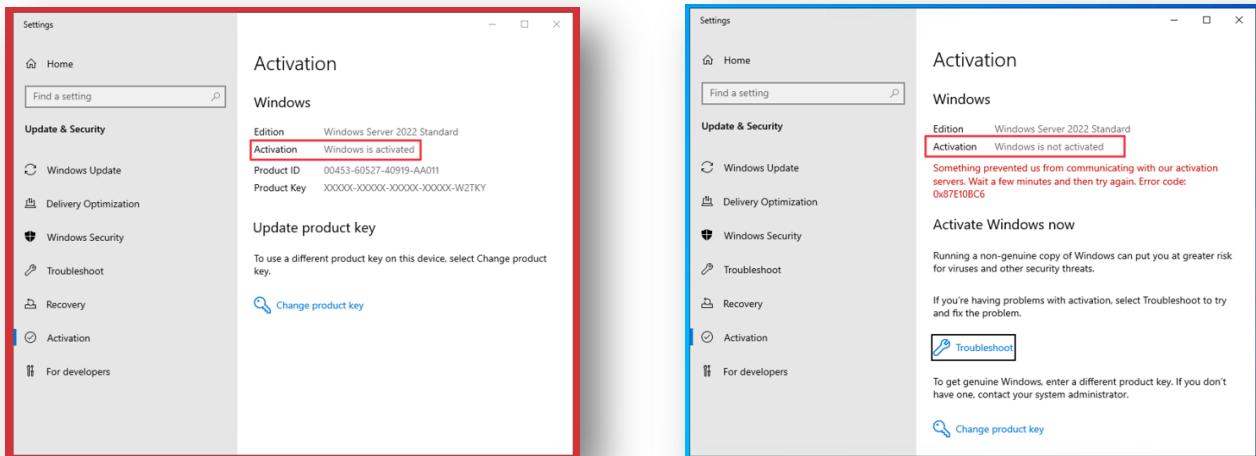
In the OCI Console, set the instance's license type to **OCI-Provided**.

The instance will automatically reboot to apply the change.

Documentation references:

- [Changing Windows license type](#)
- [Microsoft licensing on OCI](#)

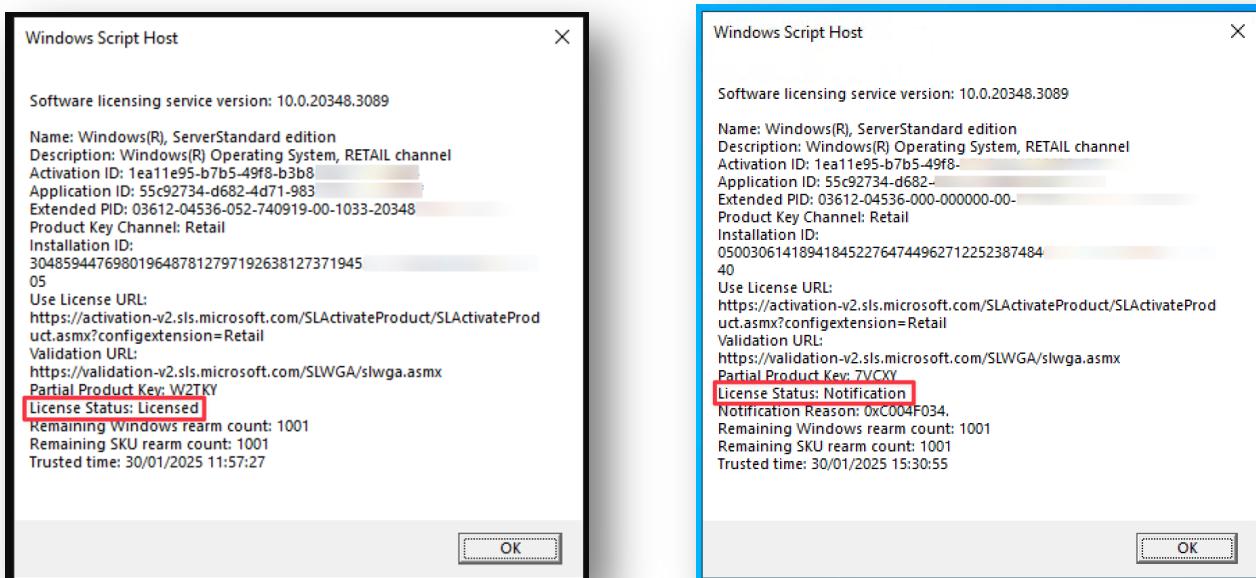
## 5.2 Check Current Activation Status



*It makes no difference whether the instance was activated or not:*

From an elevated Command Prompt run:

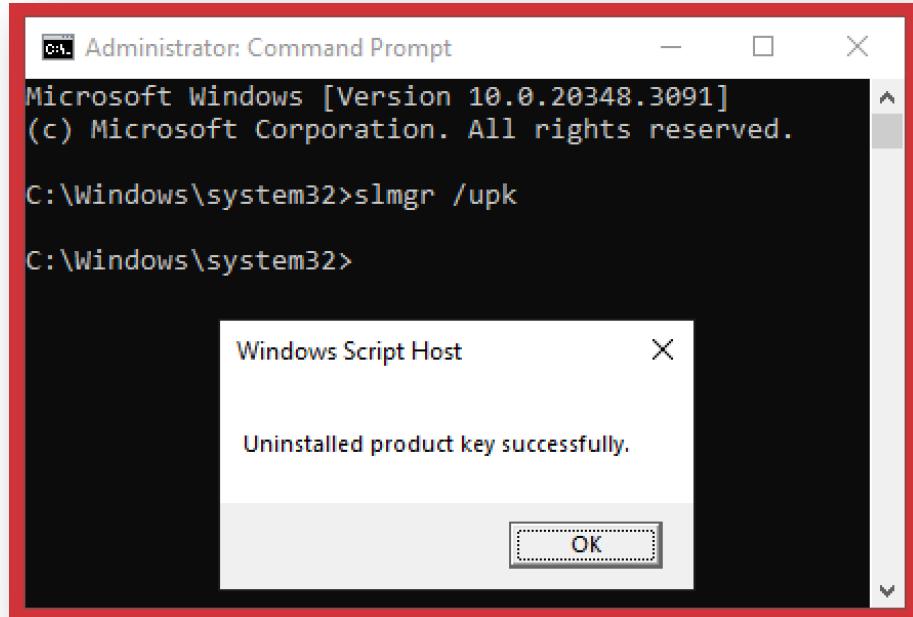
```
slmgr /dlv
```



*This command displays detailed information about the current Windows licensing and activation status.*

### 5.3 Remove Existing Product Key

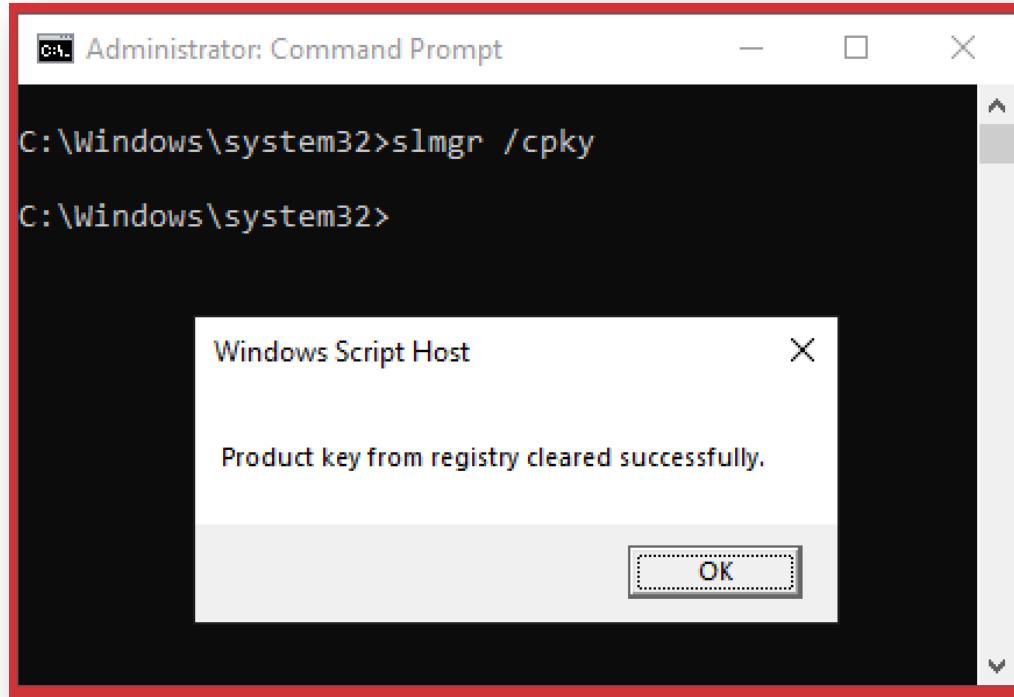
```
s1mgr /upk
```



*This command uninstalls (removes) the current Windows product key from the system*

### 5.4 Clear the license key from the registry

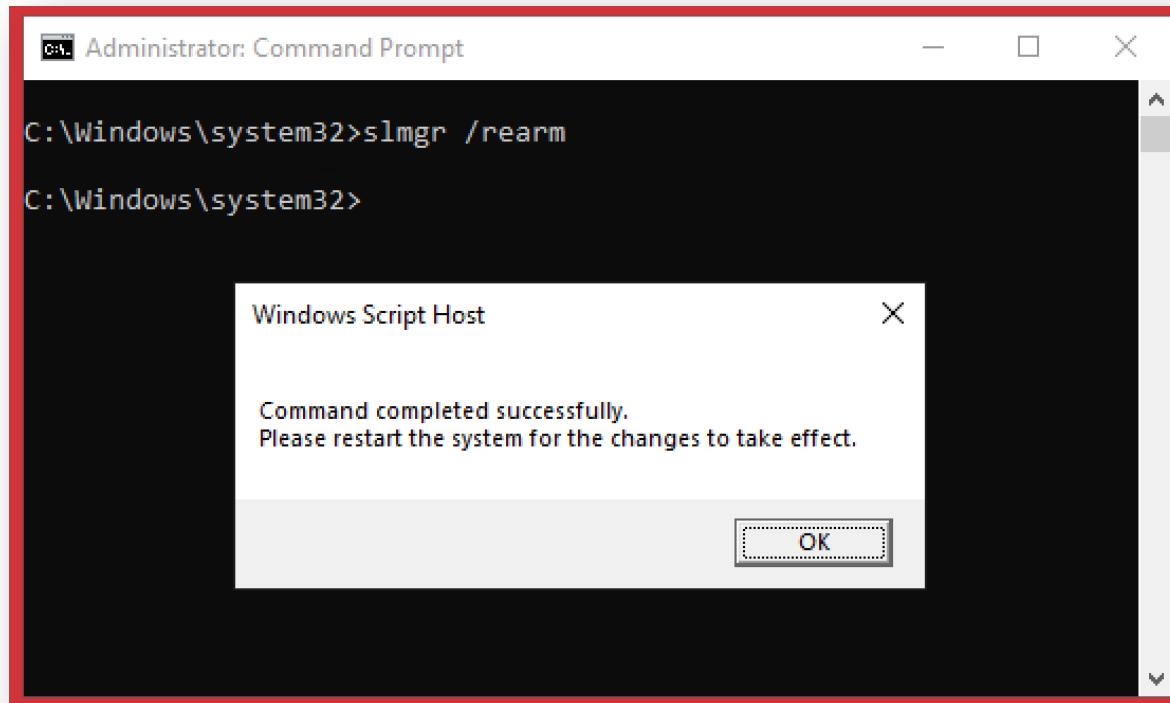
```
s1mgr /cpky
```



*This command clears the product key from the Windows registry, removing it from the Software Protection Platform database.*

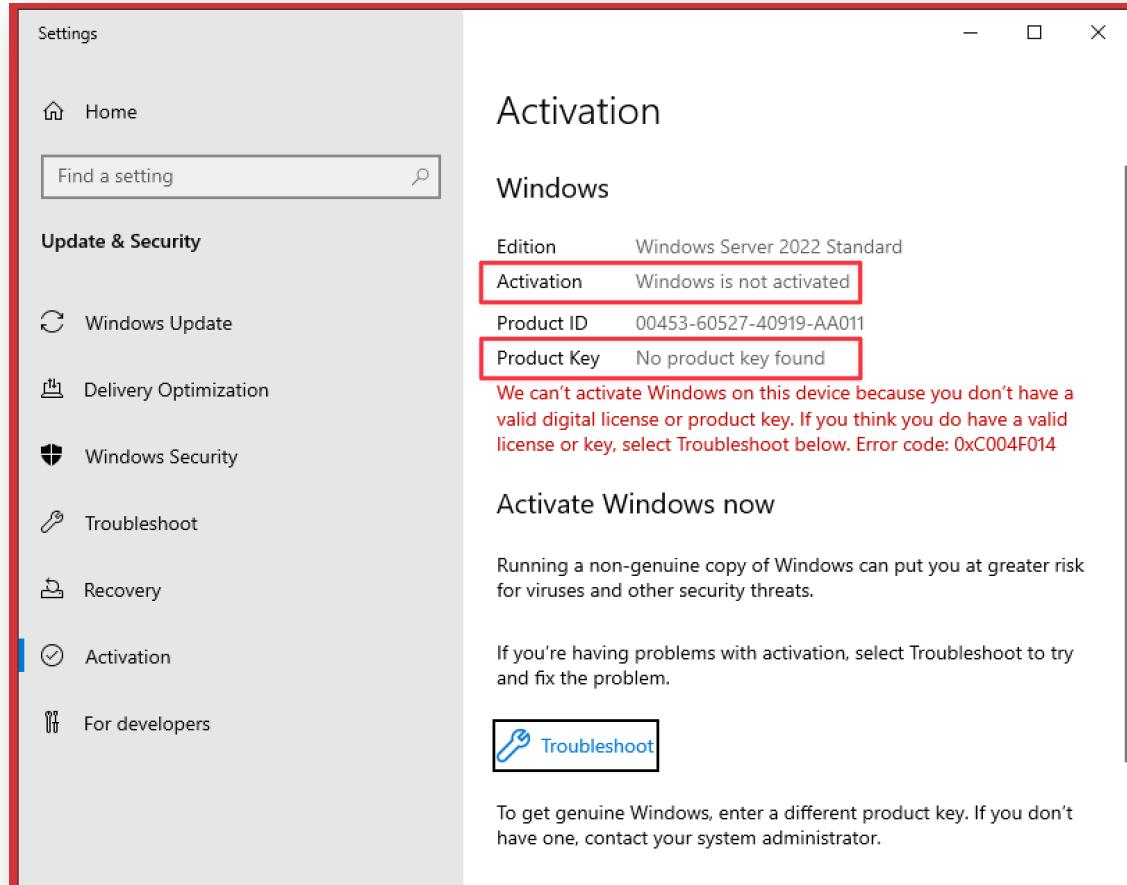
## 5.5 Reset the Activation State

```
s1mgr /rearm
```



This command resets the activation timers, allowing a fresh licensing attempt

## 5.6 Check license key has been removed and activation has been disabled



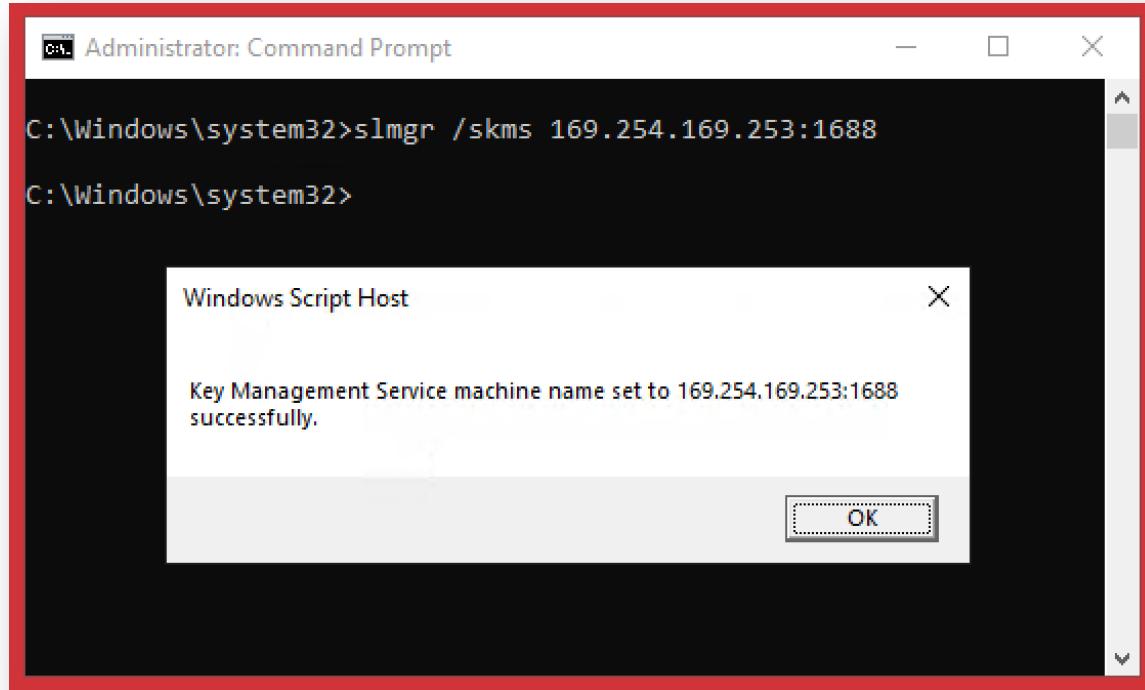
## 5.7 Restart the instance

```
shutdown /r /t 0
```

## 5.8 Register the OCI KMS Activation Server

Upon reboot, configure the KMS endpoint:

```
s1mgr /skms 169.254.169.253:1688
```



This command sets the OCI KMS server IP and port for Windows volume activation, directing the system to a specific Key Management Service host instead of auto-detection.

## 5.9 Retrieve the Appropriate KMS Client (GVLK) Key

The Microsoft documentation lists the **Generic Volume License Keys (GVLK)** for each Windows version.

# Generic Volume License Keys

In the tables that follow, you'll find the GVLKs for each version and edition of Windows. LTSC is *Long-Term Servicing Channel*, while LTSB is *Long-Term Servicing Branch*.

## Windows Server LTSC

Windows Server 2025	Windows Server 2022	Windows Server 2019	Windows Server 2016
<a href="#">Expand table</a>			
<b>Operating system edition</b>			<b>KMS Client Product Key</b>
Windows Server 2022 Standard			VDYBN-27WPP-V4HQT-9VMD4-VMK7H
Windows Server 2022 Datacenter			WX4NM-KYWYW-QJJR4-XV3QB-6VM33
Windows Server 2022 Datacenter: Azure Edition			NTBV8-9K7Q8-V27C6-M2BTW-KHMXV

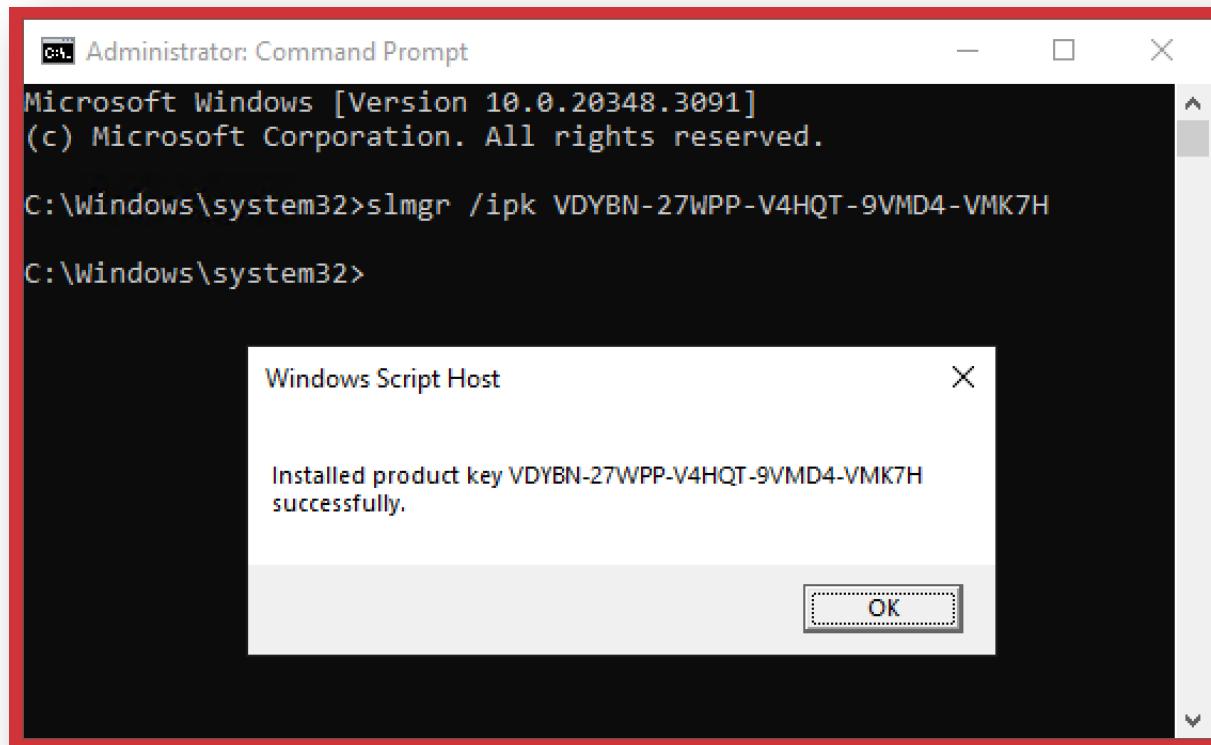
Operating system edition	KMS Client Product Key
Windows Server 2025 Standard	TVRH6-WHNXV-R9WG3-9XRFY-MY832
Windows Server 2025 Datacenter	D764K-2NDRG-47T6Q-P8T8W-YP6DF
Windows Server 2022 Standard	VDYBN-27WPP-V4HQT-9VMD4-VMK7H
Windows Server 2022 Datacenter	WX4NM-KYWYW-QJJR4-XV3QB-6VM33
Windows Server 2019 Standard	N69G4-B89J2-4G8F4-WWYCC-J464C
Windows Server 2019 Datacenter	WMDGN-G9PQG-XVVXX-R3X43-63DFG
Windows Server 2019 Essentials	WVDHN-86M7X-466P6-VHXV7-YY726
Windows Server 2016 Standard	WC2BQ-8NRM3-FDDYY-2BFGV-KHKQY
Windows Server 2016 Datacenter	CB7KF-BWN84-R7R2Y-793K2-8XDDG
Windows Server 2016 Essentials	JCKRF-N37P4-C2D82-9YXRT-4M63B
Windows Server 2012 R2 Standard	D2N9P-3P6X9-2R39C-7RTCD-MDVJX
Windows Server 2012 R2 Datacenter	W3GGN-FT8W3-Y4M27-J84CP-Q3VJ9
Windows Server 2012 R2 Essentials	KNC87-3J2TX-XB4WP-VCPJV-M4FWM
Windows Server 2012	BN3D2-R7TKB-3YPBD-8DRP2-27GG4
Windows Server 2012 Standard	XC9B7-NBPP2-83J2H-RHMBY-92BT4
Windows Server 2012 Datacenter	48HP8-DN98B-MYWDG-T2DCC-8W83P
Windows Server 2012 Essentials	HTDQM-NBMMG-KGYDT-2DTKT-J2MPV
Windows Server 2008 R2 Standard	YC6KT-GKW9T-YTKYR-T4X34-R7VHC
Windows Server 2008 R2 Enterprise	489J6-VHDMP-X63PK-3K798-CPX3Y
Windows Server 2008 R2 Datacenter	74YFP-3QFB3-KQT8W-PMXWJ-7M648

<https://learn.microsoft.com/en-us/windows-server/get-started/kms-client-activation-keys>

## 5.10 Install the GVLK Key

Example for Windows Server 2025 Standard:

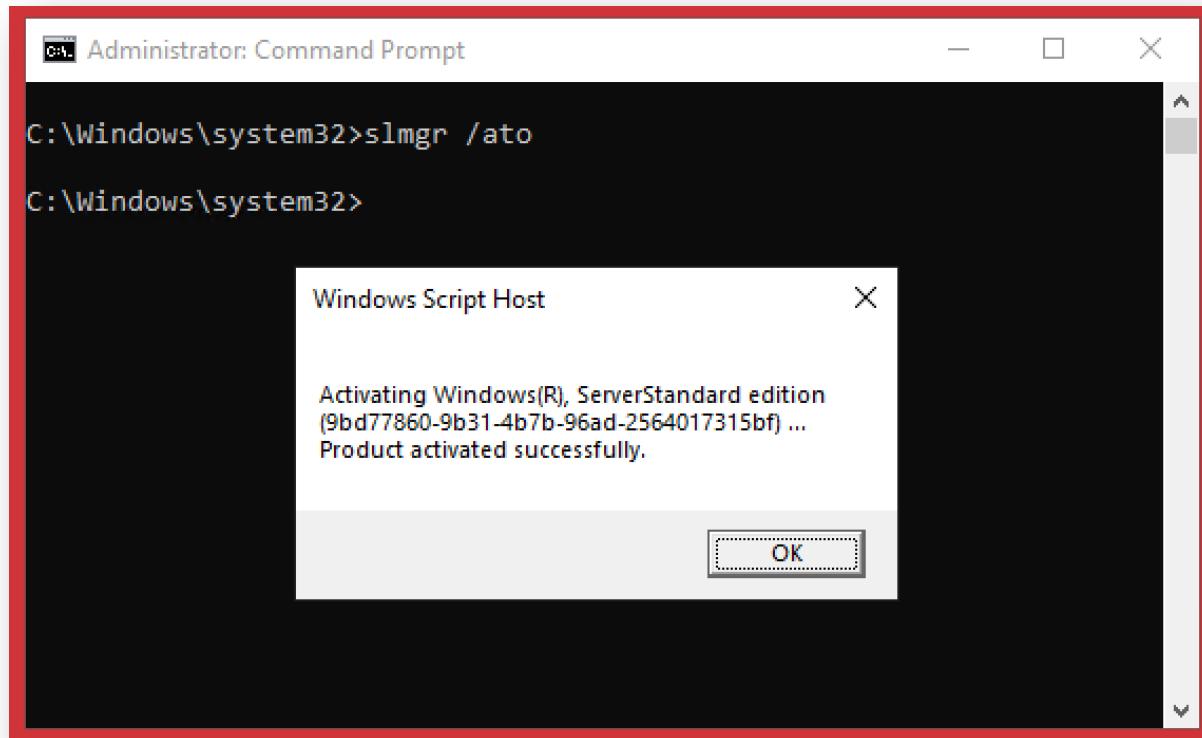
```
s1mgr /ipk TVRH6-WHNXV-R9WG3-9XRFY-MY832
```



*This command installs a new product key on the Windows system, replacing the existing one for licensing and activation purposes.*

## 5.11 Force Activation Against OCI KMS

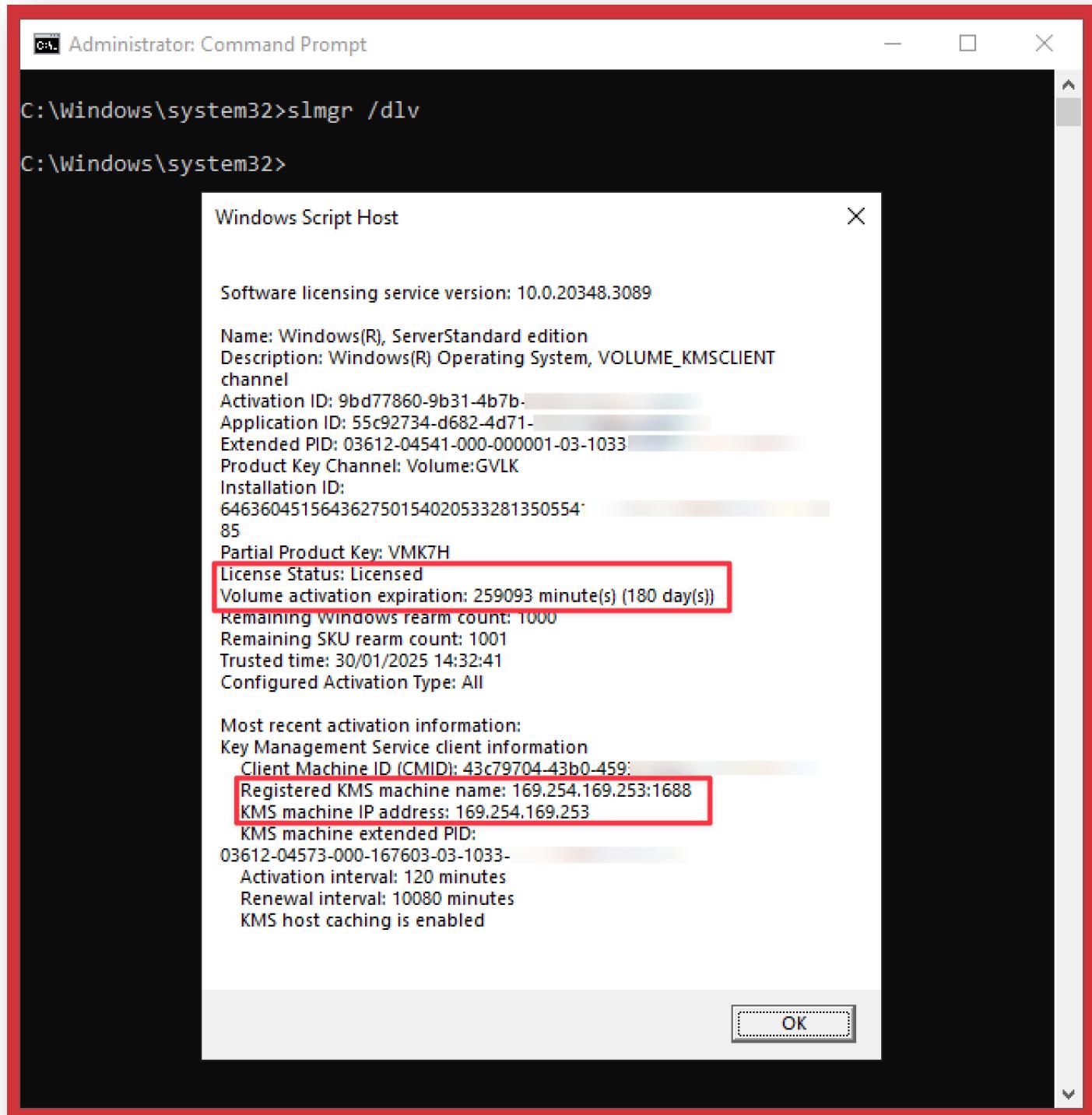
```
s1mgr /ato
```



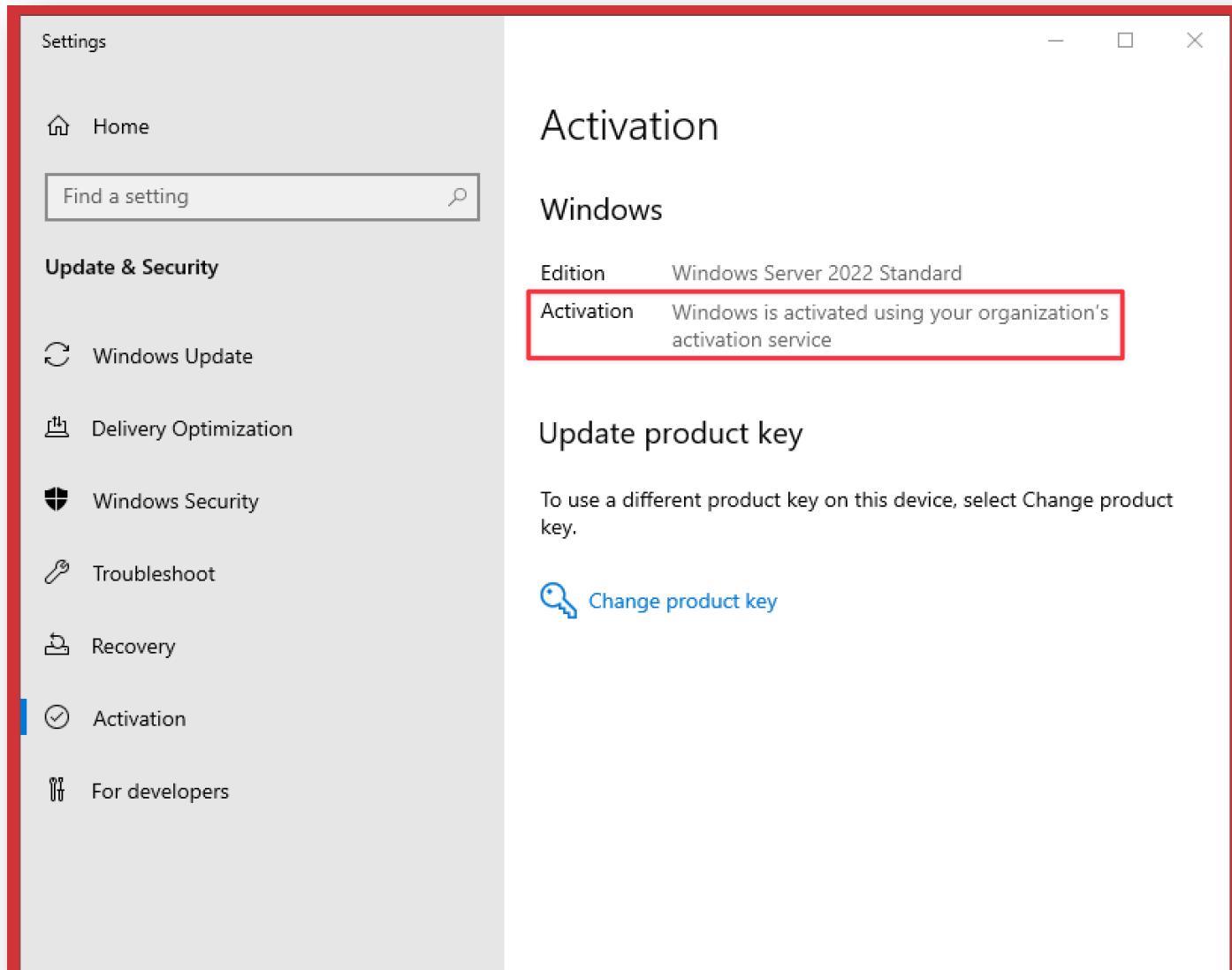
*This command attempts to automatically activate Windows online using the installed product key, through the configured KMS host.*

## 5.12 Validate Activation

```
s1mgr /dlv
```



*This command displays detailed licensing and activation status information, including the product key, license type, and activation state.*



## 6 Why OCI Uses KMS for Windows Licensing

Activation via KMS provides a **renewable, centrally managed licensing model** suitable for cloud environments and large-scale deployments.

### 6.1 Temporary Activation Model

KMS activation is not permanent. It uses keys that must be renewed periodically, typically every 180 days, with revalidation attempts occurring every 7 days. This minimizes service disruption in case of network issues or temporary KMS unavailability.

### 6.2 Benefits of KMS in OCI

- Centralized Activation Management

Activation is handled through OCI's internal KMS endpoint without requiring any external Microsoft activation servers.

- Compliance and Governance

Using OCI's official Windows licensing ensures compliance with Microsoft requirements and avoids licensing drift across instances.

- Flexibility for Dynamic Cloud Environments

KMS is ideal for environments where instances are frequently created, modified, or retired. Deactivated systems naturally fall out of compliance if disconnected, reducing risk.

## 7 Conclusion

Transitioning an imported Windows custom image to OCI-provided licensing is a straightforward and repeatable process. Using OCI's internal KMS infrastructure ensures that:

- Windows activations remain compliant with Microsoft requirements.
- Licensing is centrally managed and aligned with OCI's billing model.
- Activation renewals occur seamlessly and automatically.
- Large-scale or ephemeral environments maintain consistent licensing hygiene.

By following the structured steps outlined above, administrators can reliably migrate custom Windows images into OCI's licensing ecosystem while maintaining operational clarity and reducing administrative overhead.