

HƯỚNG DẪN

XÂY DỰNG HỆ THỐNG KMS CHO WINDOWS

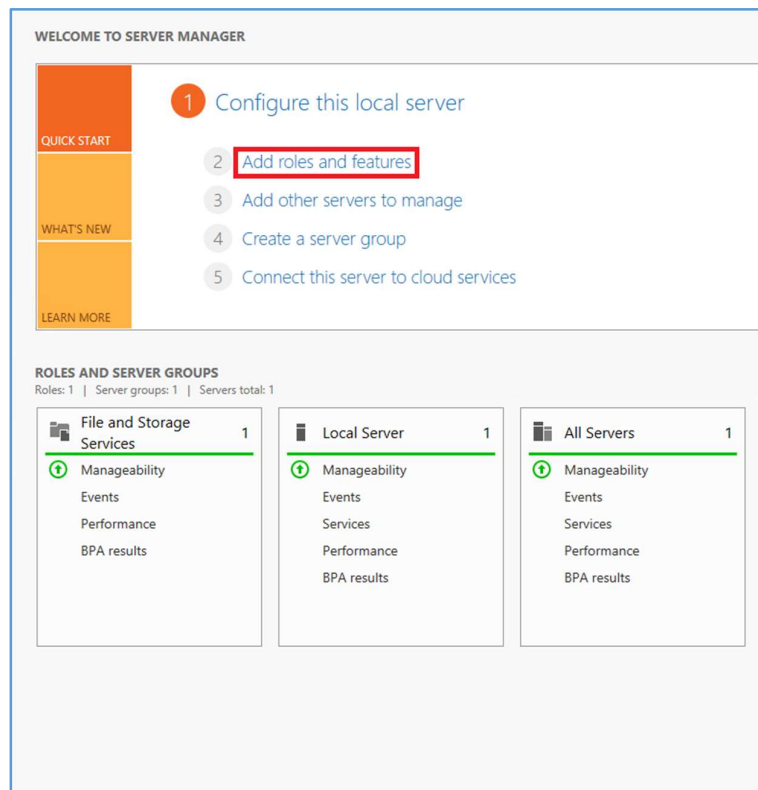
MỤC LỤC

I. XÂY DỰNG KMS HOST (Windows Server 2012 R2)	1
1. Cài đặt bằng GUI.....	1
2. Cài đặt bằng CLI	6
3. Thay đổi port KMS của KMS Host:.....	6
II. CẤU HÌNH CLIENT	7

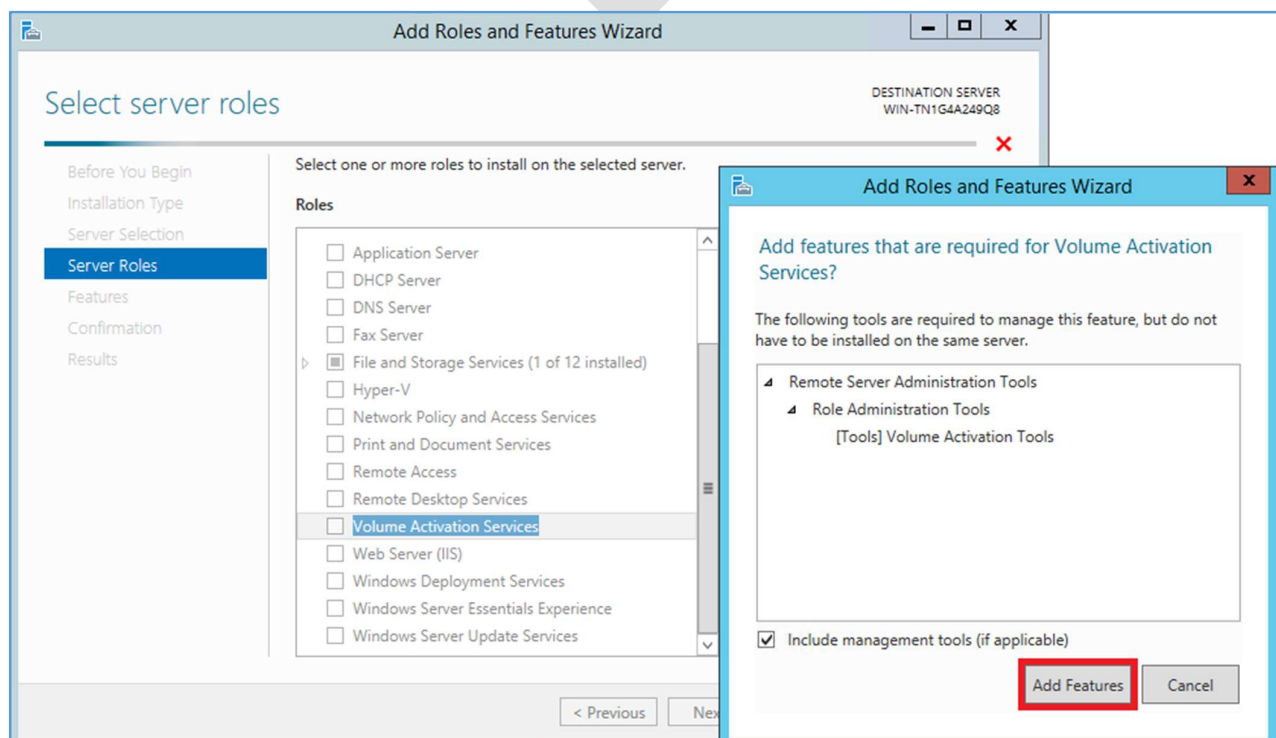
I. XÂY DỰNG KMS HOST (Windows Server 2012 R2)

1. Cài đặt bằng GUI

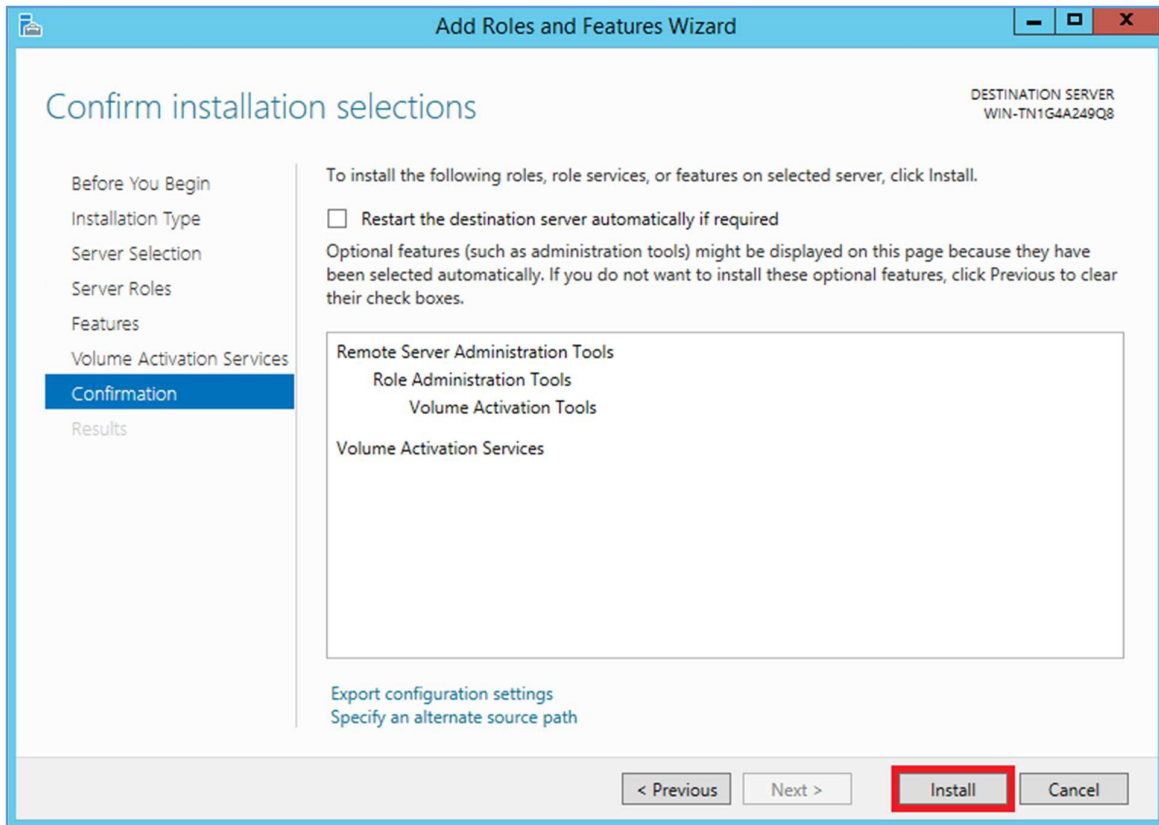
- Mở **Server Manager**. Click **Add Roles and Features**.



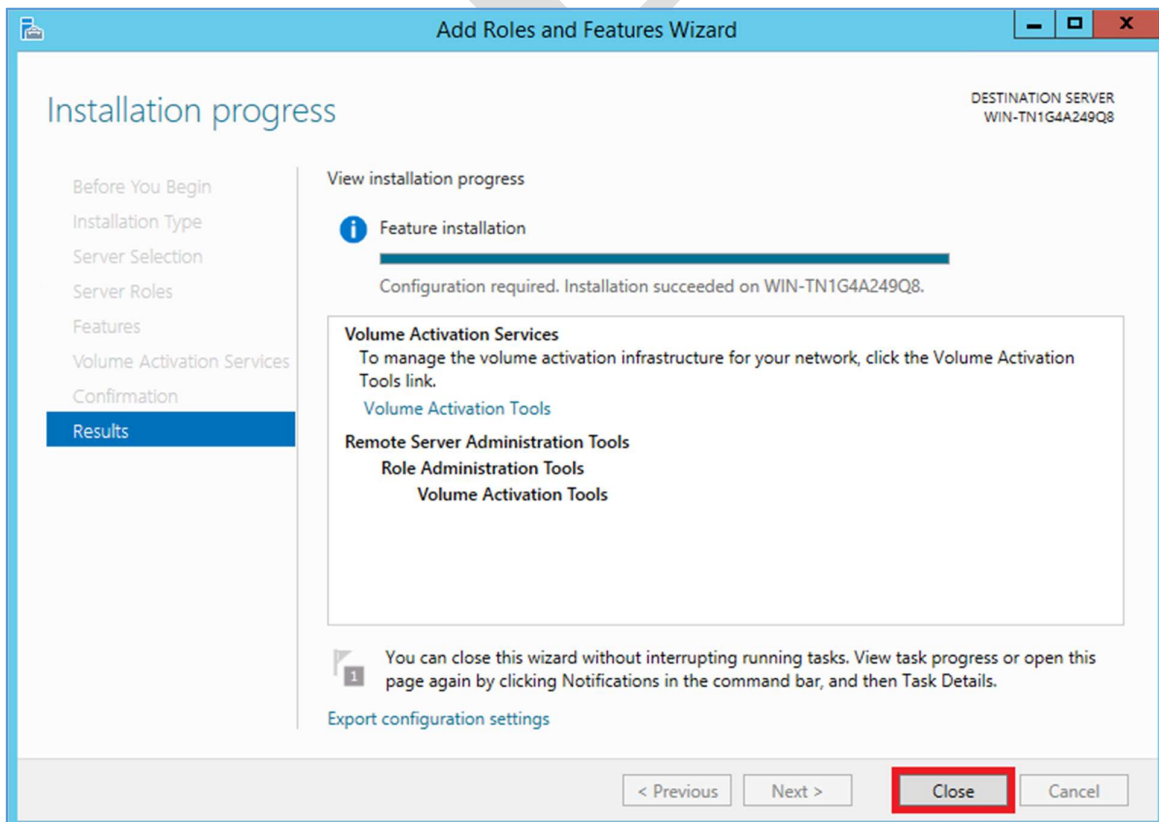
- Click **Next**. Ở phần **Server Roles**, chọn **Volume Activation Services**. Click **Add Features**.



- Click **Next**. Ở phần Confirmation. Click **Install**.



- Hoàn tất quá trình cài đặt. Click **Close**.



- Tắt Server Manager. Mở **Volume Activation Tools**.
- Click **Next**. Nhập tên KMS Host (computer name hoặc domain name).

Volume Activation Tools

Select Volume Activation Method

Introduction

Activation Type

Product Key Management

Configuration

You can modify an existing volume activation configuration or create a new one. Select the method you want to manage and, for the Key Management Service, the server on which the service is installed.

If you need to use credentials other than your current account, enter the username and password before proceeding.

☐ Active Directory-Based Activation

☒ Key Management Service (KMS)

WIN-TN1G4A249Q8

☐ Alternate credentials (optional)

User name:

Password:

- Click **Next**. Điền thông tin KMS Host Key. Click **Commit**.

Volume Activation Tools

Manage KMS Host

KMS Host:
User Name: Administrator

Introduction

Activation Type

Product Key Management

Configuration

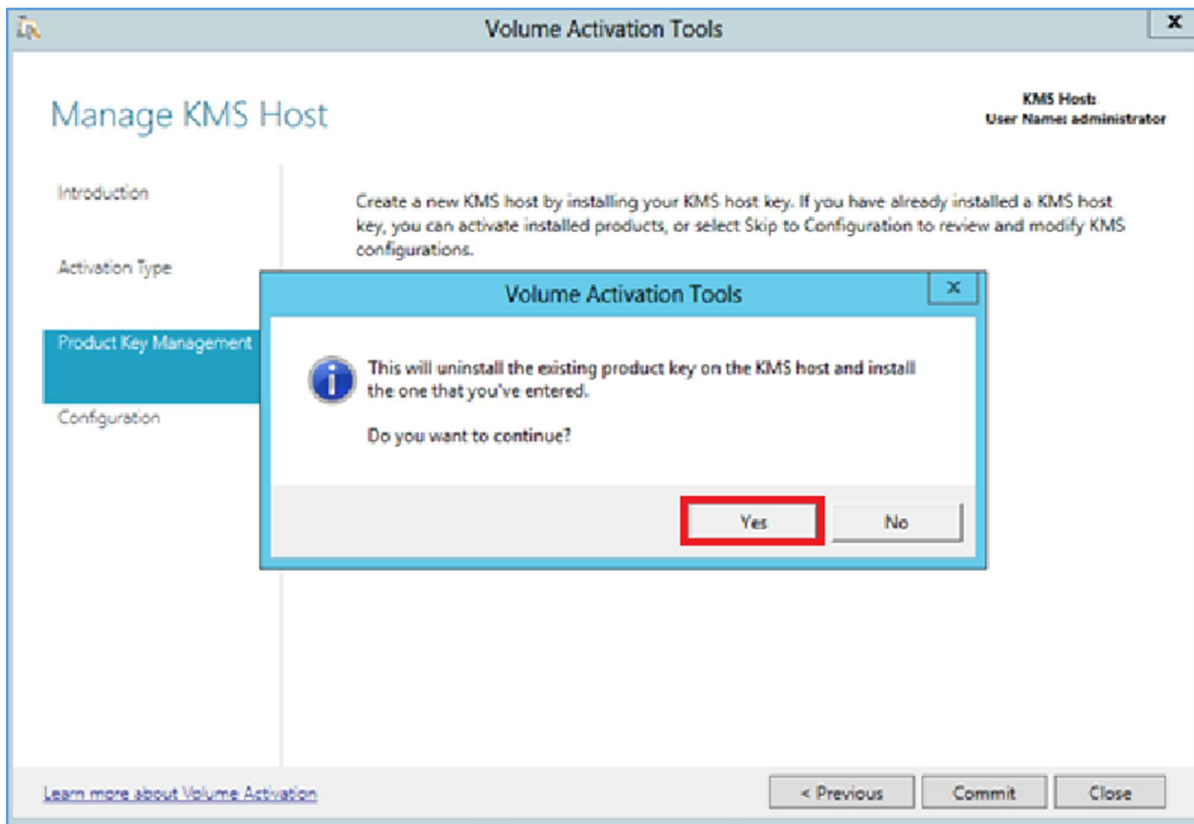
Create a new KMS host by installing your KMS host key. If you have already installed a KMS host key, you can activate installed products, or select Skip to Configuration to review and modify KMS configurations.

☒ Install your KMS host key

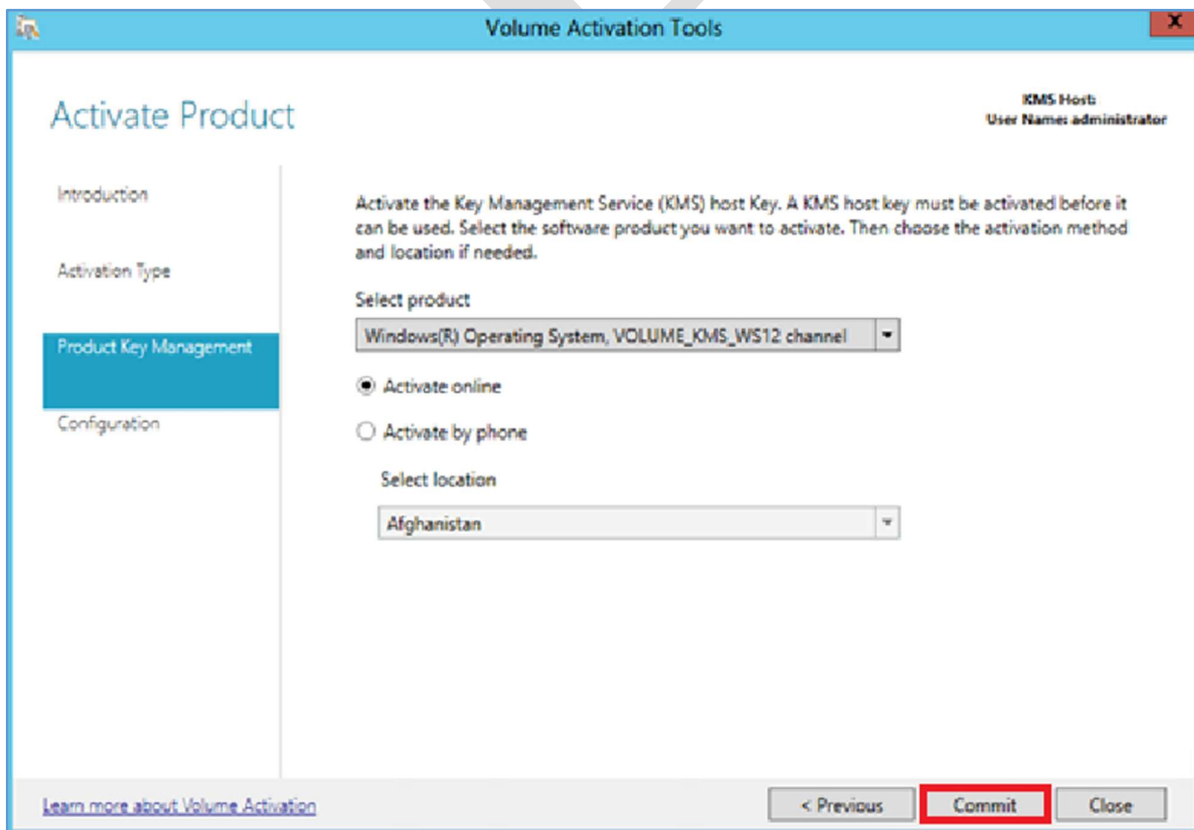
☐ Skip to Activation

☐ Skip to Configuration

- Xuất hiện thông báo xóa Key đang có trên KMS Host (nếu có). Click **Yes**.



- Click **Next**. Click **Commit** để active KMS Host.



- Click **Next**. Chỉnh sửa thông tin cấu hình như bên dưới. Click **Commit**.

The screenshot shows the 'Configure Key Management Service Options' window. The title bar is 'Volume Activation Tools'. The window has a sidebar on the left with links: 'Introduction', 'Activation Type', 'Product Key Management', and 'Configuration' (which is highlighted). The main area contains the following information:

- KMS Host:** User Name: Administrator
- Introduction:** KMS configuration options determine the performance and discoverability of the KMS host. To modify the configuration, edit the fields below and click Commit. To accept the current configuration, click Cancel. For more information on configuring KMS options, review the tooltips or see Volume Activation Help.
- Configuration:**
 - Volume license activation interval (Hours): 2
 - Volume license renewal interval (Days): 7
 - KMS TCP listening port: 1688
 - KMS firewall exceptions: ☒ Private ☒ Domain ☒ Public
 - DNS Records: ☐ Publish
 - Publish to custom DNS zones: [Empty text box]
 - [Add... Remove... Revert buttons]

At the bottom right, there are three buttons: '< Previous', 'Commit' (highlighted with a red box), and 'Cancel'.

- Click **Close**. Hoàn tất quá trình cài đặt.

The screenshot shows the 'Configuration Succeeded' window. The title bar is 'Volume Activation Tools'. The window has a sidebar on the left with links: 'Introduction', 'Activation Type', 'Product Key Management', and 'Configuration' (which is highlighted). The main area contains the following information:

- KMS Host:** User Name: Administrator
- Configuration Succeeded:** Click Next to start another activation or configuration task. Otherwise, click Close to close this tool.

At the bottom right, there are three buttons: '< Previous', 'Next >', and 'Close' (highlighted with a red box).

2. Cài đặt bằng CLI

- Mở **Windows PowerShell** để cài đặt Volume Activation Services:

Install-WindowsFeature -Name VolumeActivation -IncludeAllSubFeature

- Tắt Windows PowerShell. Mở **Command Prompt**.

- Cài đặt KMS Host Key:

- Xóa Key đang có: **slmgr.vbs -upk**
- Cài đặt KMS Host Key: **slmgr.vbs -ipk <KMS Host Key>**

- Active / reactive License: **slmgr.vbs -ato**

- Cấu hình Firewall:

Netsh advfirewall firewall add rule name=" Key Management Service" dir=in action=allow protocol=TCP localport=1688

- Kiểm tra thông tin License: **slmgr.vbs -dlv**

```
Microsoft (R) Windows Script Host Version 5.8
Copyright (C) Microsoft Corporation. All rights reserved.

Software licensing service version: 6.3.9600.18376

Name: Windows(R), ServerDatacenter edition
Description: Windows(R) Operating System, VOLUME_KMS_WS12_R2 channel
Activation ID: dcb88f6f-b090-405b-850e-dabcccf3693f
Application ID: 55c92734-d682-4d71-983e-d6ec3f16059f
Extended PID: 06401-00206-271-919892-03-1033-9600-00000-2662016
Product Key Channel: Volume:CSULK
Installation ID: 015733158086820731928562625216728786167342710906500341
Use License URL: https://activation-v2.sls.microsoft.com/SLActivateProduct/SLAct
ivateProduct.aspx?configextension=Retail
Validation URL: https://validation-v2.sls.microsoft.com/SLWGA/slwga.aspx
Partial Product Key: 
License Status: Licensed
Remaining Windows rearm count: 1000
Remaining SKU rearm count: 1001
Trusted time: 9/23/2016 9:51:11 AM

Key Management Service is enabled on this machine
Current count: 5
Listening on Port: 1688
DNS publishing disabled
KMS priority: Normal

Key Management Service cumulative requests received from clients
Total requests received: 152
Failed requests received: 15
Requests with License Status Unlicensed: 0
Requests with License Status Licensed: 77
Requests with License Status Initial grace period: 0
Requests with License Status License expired or Hardware out of tolerance: 0
Requests with License Status Non-genuine grace period: 0
Requests with License Status Notification: 60
```

License Status: trạng thái License của KMS Host (Licensed → đã active)

Current Count: số lượng KMS Client đang active với KMS Host

3. Thay đổi port KMS của KMS Host:

- Thay đổi bằng GUI (sử dụng Volume Activation Tools): **Configuration → chỉnh sửa lại phần KMS TCP listening port**

- Thay đổi bằng CLI (sử dụng Command Prompt): **slmgr.vbs /sprt <Port>**

II. CẤU HÌNH CLIENT

KMS Client Key		
(Source: https://technet.microsoft.com/en-us/library/jj612867(v=ws.11).aspx)		
OS	Edition	Key
Windows Server 2016	Standard	WC2BQ-8NRM3-FDDYY-2BFGV-KHKQY
	Datacenter	CB7KF-BWN84-R7R2Y-793K2-8XDDG
	Essentials	JCKRF-N37P4-C2D82-9YXRT-4M63B
Windows Server 2012 R2	Standard	D2N9P-3P6X9-2R39C-7RTCD-MDVJX
	Datacenter	W3GGN-FT8W3-Y4M27-J84CP-Q3VJ9
	Essentials	KNC87-3J2TX-XB4WP-VCPJV-M4FWM
Windows Server 2012		BN3D2-R7TKB-3YPBD-8DRP2-27GG4
	N	8N2M2-HWPGY-7PGT9-HGDD8-GVGGY
	Single Language	2WN2H-YGCQR-KFX6K-CD6TF-84YXQ
	Country Specific	4K36P-JN4VD-GDC6V-KDT89-DYFKP
	Standard	XC9B7-NBPP2-83J2H-RHMBY-92BT4
	MultiPoint Standard	HM7DN-YVMH3-46JC3-XYTG7-CYQJJ
	MultiPoint Premium	XNH6W-2V9GX-RGJ4K-Y8X6F-QGJ2G
	Datacenter	48HP8-DN98B-MYWDG-T2DCC-8W83P
Windows Server 2008 R2	Web	6TPJF-RBVHG-WBW2R-86QPH-6RTM4
	HPC edition	TT8MH-CG224-D3D7Q-498W2-9QCTX
	Standard	YC6KT-GKW9T-YTKYR-T4X34-R7VHC
	Enterprise	489J6-VHDMP-X63PK-3K798-CPX3Y
	Datacenter	74YFP-3QFB3-KQT8W-PMXWJ-7M648
	for Itanium-based Systems	GT63C-RJFQ3-4GMB6-BRFB9-CB83V
Windows Server 2008	Web	WYR28-R7TFJ-3X2YQ-YCY4H-M249D
	Standard	TM24T-X9RMF-VWXK6-X8JC9-BFGM2
	Standard without Hyper-V	W7VD6-7JFBR-RX26B-YKQ3Y-6FFFJ
	Enterprise	YQGMW-MPWTJ-34KDK-48M3W-X4Q6V
	Enterprise without Hyper-V	39BXF-X8Q23-P2WWT-38T2F-G3FPG
	HPC	RCTX3-KWVHP-BR6TB-RB6DM-6X7HP
	Datacenter	7M67G-PC374-GR742-YH8V4-TCBY3
	Datacenter without Hyper-V	22XQ2-VRXRG-P8D42-K34TD-G3QQC
	for Itanium-Based Systems	4DWFP-JF3DJ-B7DTH-78FJB-PDRHK
Windows 10	Professional	W269N-WFGWX-YVC9B-4J6C9-T83GX
	Professional N	MH37W-N47XK-V7XM9-C7227-GCQG9
	Enterprise	NPPR9-FWDCX-D2C8J-H872K-2YT43
	Enterprise N	DPH2V-TTNVB-4X9Q3-TJR4H-KHJW4
	Education	NW6C2-QMPVW-D7KKK-3GKT6-VCFB2
	Education N	2WH4N-8QGBV-H22JP-CT43Q-MDWWJ
	Enterprise 2015 LTSC	WNMTR-4C88C-JK8YV-HQ7T2-76DF9
	Enterprise 2015 LTSC N	2F77B-TNFGY-69QQF-B8YKP-D69TJ
	Enterprise 2016 LTSC	DCPHK-NFMTC-H88MJ-PFHPY-QJ4BJ
	Enterprise 2016 LTSC N	QFFDN-GRT3P-VKWWX-X7T3R-8B639
Windows 8.1	Professional	GCRJD-8NW9H-F2CDX-CCM8D-9D6T9
	Professional N	HMCNV-VVBFX-7HMBH-CTY9B-B4FXY
	Enterprise	MHF9N-XY6XB-WVXMC-BTDCT-MKKG7
	Enterprise N	TT4HM-HN7YT-62K67-RGRQJ-JFFXW

Windows 8.1	Professional	NG4HW-VH26C-733KW-K6F98-J8CK4
	Professional N	XCVCF-2NXM9-723PB-MHCB7-2RYQQ
	Enterprise	32JNW-9KQ84-P47T8-D8GGY-CWCK7
	Enterprise N	JMNMF-RHW7P-DMY6X-RF3DR-X2BQT
Windows 7	Professional	FJ82H-XT6CR-J8D7P-XQJJ2-GPDD4
	Professional N	MRPKT-YTG23-K7D7T-X2JMM-QY7MG
	Professional E	W82YF-2Q76Y-63HXB-FGJG9-GF7QX
	Enterprise	33PXH-7Y6KF-2VJC9-XBBR8-HVTHH
	Enterprise N	YDRBP-3D83W-TY26F-D46B2-XCKRJ
	Enterprise E	C29WB-22CC8-VJ326-GHFJW-H9DH4
Windows Vista	Business	YFKBB-PQJJV-G996G-VWGXV-2V3X8
	Business N	HMBQG-8H2RH-C77VX-27R82-VMQBT
	Enterprise	VKK3X-68KWM-X2YGT-QR4M6-4BWMV
	Enterprise N	VTC42-BM838-43QHV-84HX6-XJXKV

- Mở **Command Prompt**.

- Cài đặt KMS Client Key: (các media Windows thuộc chương trình Volume Licensing đã cài đặt sẵn Key này → nếu media được download từ VLSC có thể bỏ qua bước này)

- Xóa Key đang có: `slmgr.vbs -upk`
- Cài đặt KMS Client Key: `slmgr.vbs -ipk <KMS Client Key>`

- Chỉ định KMS Host:

- Xóa thông tin KMS Host đang có: `slmgr.vbs -ckms`
- Chỉ định KMS Host: `slmgr.vbs -skms <KMS Host>:<Port>`

<KMS Host>: domain name hoặc IP của KMS Host

<Port>: port KMS của KMS Host (nếu là port mặc định thì không cần thêm vào)

- Active / reactive License: `slmgr.vbs -ato`

- Kiểm tra thông tin License: `slmgr.vbs -dlv`

```
Name: Windows(R), ServerDatacenter edition
Description: Windows(R) Operating System, VOLUME_KMSCLIENT channel
Activation ID: 00091344-1ea4-4f37-b789-01750ba6988c
Application ID: 55c92734-d682-4d71-983e-d6ec3f16059f
Extended PID: 06401-02535-000-000000-03-1033-9600.0000-2652016
Product Key Channel: Volume:GULK
Installation ID: 558537174229437415900326213305129441638786837815647673761506565

Partial Product Key: Q3UJ9
License Status: Licensed
Volume activation expiration: 257572 minute(s) <179 day(s)>
Remaining Windows rearm count: 1000
Remaining SKU rearm count: 1001
Trusted time: 9/30/2016 3:15:43 AM
Configured Activation Type: All

Most recent activation information:
Key Management Service client information
Client Machine ID (CMID): 13f09f2c-c327-4f61-a553-9f67ec2e2d66
Registered KMS machine name: 
KMS machine IP address: 
KMS machine extended PID: 06401-00206-271-919892-03-1033-9600.0000-2662016
Activation interval: 120 minutes
Renewal interval: 10080 minutes
KMS host caching is enabled
```

License Status: trạng thái License của client (Licensed → đã active)

Registered KMS machine name: thông tin KMS Host

KMS machine IP address: IP của KMS Host