



# Windows Embedded 8.1 Activation Guide

## Introduction

This guide is intended to provide an overview and detailed guidance on how to activate and reactivate Windows Embedded 8 Standard and Windows Embedded 8.1 Industry images in both the factory and the field.

Note: This guide does not apply to Windows Embedded 8.1 Professional. Activation options for Windows Embedded 8.1 Professional are the same as for Windows 8.1 Professional.

All Windows Embedded 8 and 8.1 devices must be activated. Device activation must be completed by having each device contact Microsoft activation verification servers directly through an Internet connection, indirectly through a proxy, or via telephone. All three of these options are explained in this document.

This guide is primarily intended as a resource for individuals required to perform this activation process; however, it is also useful as a resource for administrators, planners, and technicians in other roles who need to understand how activation works or how to activate a device.

## What is activation?

Activation is the process of registering Windows Embedded 8.1 with Microsoft to ensure the product is genuine. Activation is used to:

- Reduce software piracy.
- Protect the software industry, corporate intellectual property, software development investments, and product quality.
- Ensure customers receive the product quality they expect. Every device must be individually activated.

By default, you must manually activate each device, or create an automated script to activate each device after setup. If the device is connected to the Internet, you can enable the device to automatically attempt to activate over the Internet. [You can do this by adding a registry key to the operating system image before the image is deployed to the device.](#) For more information, see [Automatically Activate a Device by Using a Direct Internet Connection after Setup.](#)

After a device has been activated, it will remain activated unless a significant change triggers a need to reactivate the device, such as a motherboard replacement or completely reimaging the device.

## Activation process overview

Each device must be activated, and the process of activation encompasses several distinct steps, as follows:

1. Obtain a product key and apply it to the device.
2. Retrieve the licensing status information from the device.
3. Send the licensing status information to the Microsoft licensing servers. You can send this information by using a direct
4. Internet connection, by using a proxy activation tool to indirectly connect to the Internet, or by using a telephone if no Internet connection is available.

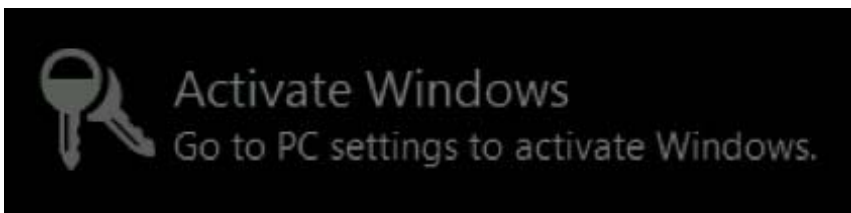
5. Retrieve a confirmation ID from the Microsoft licensing servers.
6. Apply the confirmation ID to your device. The device is now activated.

## Activation and write filters

All activation processes require that the device has write filters disabled. Activation succeeds if write filters are enabled, but restarting the device resets the activation status, and you must reactivate the device.

## Unactivated behavior

When a Standard 8, Industry 8, or Industry 8.1 device is not activated, the device displays an immersive watermark on the lower- right corner of each attached display. In addition, you cannot change the Windows personalization settings, such as the desktop background or the lock screen background, on a device that is not activated. These are the only differences between an activated device and a device that is not activated.



## Product keys

The following sections describe the product keys that apply to Standard 8 and Industry 8.1.

### Standard 8 and Industry 8.1 activation keys

#### **Embedded product key entry activation (embedded PKEA) key**

Embedded PKEA keys are distributed to and supported by an original equipment manufacturer (OEM). This type of product key is used to activate multiple devices, multiple times, up to the limit imposed on the key.

#### **OEM activation 3.0 (OA 3.0) key**

OA 3.0 keys are obtained solely by using the OEM Activation 3.0 system. If you are interested in using this system, please contact your Microsoft representative.

**Note:** This document does not address the use of this product key specifically.

## Activation methods

Because all Windows Embedded 8 images must be activated, the deciding factors in how and when to activate an image are usually what kind of Internet connection your device has available and the needs and expectations of the final customer.

### Available internet connections

The first factor in deciding how to activate your Windows Embedded 8 device is to determine what type of Internet connection is available to your device.

#### **Internet directly**

In this situation, a device has access to a public network so it can directly contact the Microsoft activation servers to complete

the activation process. The device must be able to send and receive information across TCP ports 80 and 443.

For more information about activating a device in this scenario, see [Activate a Windows Embedded 8.1 Device by Using a Direct Internet Connection](#).

### Internet via proxy tool

In these situations, a device may have access to a private network but no access directly to the Internet. Proxy activation tools are often used in this case to complete the activation process between the device on the private network and the Microsoft activation servers on the public network.

For more information about activating a device in this scenario, see [Activate a Windows Embedded 8.1 Device by Using a Proxy Connection to the Internet](#).

### No internet connectivity

Situations in which there is no Internet connectivity include when the device has no networking capability, the factory has no Internet connectivity, the device is connected to a private network that does not have Internet connectivity, or the device cannot be connected (even indirectly through a proxy) to the Internet because of security considerations. In these situations, you must use a telephone to activate your device.

For more information about activating a device in this scenario, see [Activate a Windows Embedded 8.1 Device by Using a Telephone](#).

## Activation tools

You use the following tools in various activation scenarios.

### Volume activation management Tool 3.1 (VAMT 3.1)

You can use VAMT 3.0 to centrally manage activation status for Windows Embedded 8.1 devices over a network. You can get this tool by downloading the [free Windows Assessment and Deployment Kit for Windows 8.1](#)

Just manually select **Volume activation management Tool (VamT)** to install, because it is not selected by default. If you do not have a Microsoft SQL Server 2008 or later database available for VAMT to use, you should also select **SQL Server Express 2012** to install, because VAMT requires a connection to a SQL Server database. You can choose not to install any of the other features, because they are not required for VAMT.

For more information about VAMT 3.0, see [Volume Activation Management Tool Technical Reference](#).

### Windows Software Licensing management Tool (Slmgr.vbs)

This command line tool enables you to manage product keys and activation status on a Windows Embedded 8.1 device. This tool is available on every Standard 8 and Industry 8 and 8.1 operating system.

For more information about Slmgr, see [Slmgr.vbs Options on TechNet](#).

### Windows activation UI (Slui.exe)

This tool launches the Windows Activation UI that enables you to manage the activation state of your device. This tool is available on every Industry 8.1 operating system, and on Standard 8 operating systems that include the following modules:

- Windows Security Center module (Features -> Security)
- Telephony API Client (Features -> Application Development Frameworks -> Legacy Support)

# Reactivation

Certain scenarios can cause a device to require to be reactivated. Any time a change is made to an activated device, the device is classified as either *in-tolerance* or *out-of-tolerance*. In many cases, you can make minor changes to the hardware, such as adding additional RAM or swapping out a hard drive, without requiring the device to be reactivated. Major hardware changes, such as changing the motherboard of a device, can cause a device to be considered out-of-tolerance, which sets the device back to an unactivated state. A large number of small hardware changes made at once can also push a device to out-of-tolerance, even if the individual changes themselves would be considered in-tolerance.

Attaching and detaching USB devices or other peripheral hardware has no effect on the tolerance state of the device. Reimaging your device erases the activation information on the device, which sets the device into an unactivated state.

When a Windows Embedded 8.1 device requires reactivation, a watermark is displayed in the lower-right corner of each attached

display, indicating that the device is unactivated. In addition, you cannot change the Windows personalization settings, such as the desktop background or the lock screen background. The device continues to work as normal, and there are no other changes in the behavior of the device.



In most cases, you can reactivate the device in the same manner that you would activate a new device, as outlined in this guide. Depending on the type of product key you have used, reactivating a device has different implications. For ePKEA keys, reactivating a device can use up one of the pool of available keys, although multiple reactivations of the same device should reuse the reactivated key, as long as the hardware of the device has not significantly changed.

If you need to reimage your Windows Embedded 8 device regularly as part of your business, contact your OEM to figure out the best way to perform the task while minimizing the process of reactivating the device.

## Activate a Windows Embedded 8.1 device by using a direct internet connection

This section discusses how you can activate a Standard 8 or Industry 8.1 device that has a direct connection to the internet.

You can use the following procedures to activate your device:

- Activate a Device Manually Using a Direct Internet Connection
- Automatically Activate a Device by Using a Direct Internet Connection After Setup
- Activate a Device over the Internet Using VAMT 3.1

## Activate a device manually by using a direct internet connection

If your device has a direct Internet connection, you can manually activate your device using either the command line or the Windows Activation UI.

Standard 8 and Industry 8.1 provide the following two command line tools that you can use to manage your activation status: ■ *Slmgr.vbs*—This Windows Software Licensing Management Tool lets you manage product keys and activation status. ■ *Slui.exe*—This tool launches the Windows Activation UI.

### Activate a device manually by using a direct internet connection and the command line prerequisites

- Standard 8 or Industry 8.1 is installed on your device.

- Your device has a direct Internet connection.
- You have administrator rights on the device.

### To activate a device manually using a direct Internet connection and the command line

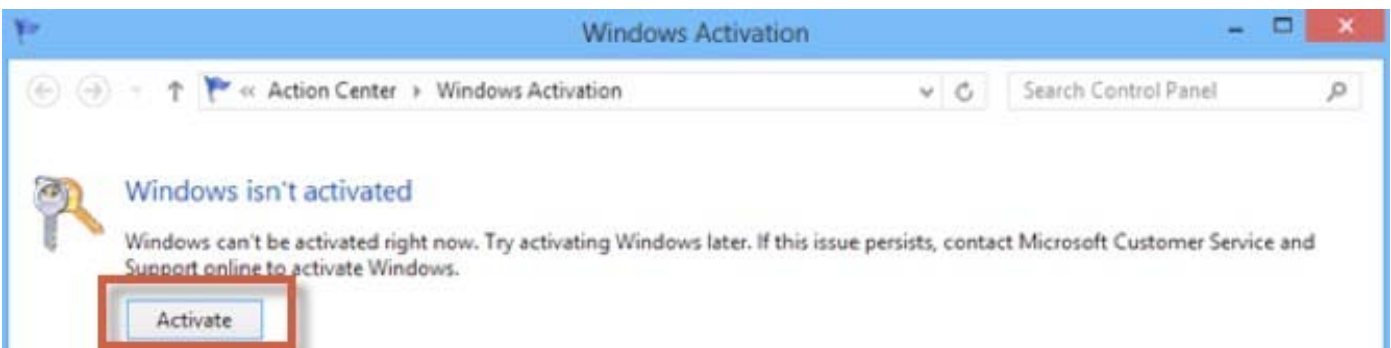
1. On your device, open a command prompt as Administrator.
2. Navigate to the <system drive>:\Windows\System32 folder, and then type: **cscript slmgr.vbs /ato**
3. Type the following, and then verify that the License Status now displays "Licensed." **cscript slmgr.vbs /dlv**

### Activate a device manually by using a direct internet connection and Windows activation UI prerequisites

- Industry 8.1 is installed on your device.
- -or-
- Standard 8 is installed on your device and includes the following:
  - Windows Security Center module (Features -> Security)
  - Telephony API Client (Features -> Application Development Frameworks -> Legacy Support)
- Your device has a direct Internet connection.
- You have administrator rights on the device.

### To activate a device manually by using a direct internet connection and SLUI

1. On your device, do one of the following:
  - a. Open a command prompt as Administrator and type the following command to launch the Windows Activation UI: **SLUI**
  - or-
  - b. Open the **Control panel**, and navigate to the **action Center**.
  - c. Click **Security** to expand the list of security options.
  - d. Under **Windows activation**, click **View activation details** to bring up the Windows Activation window.
2. In the **Windows activation** window, click **activate**.

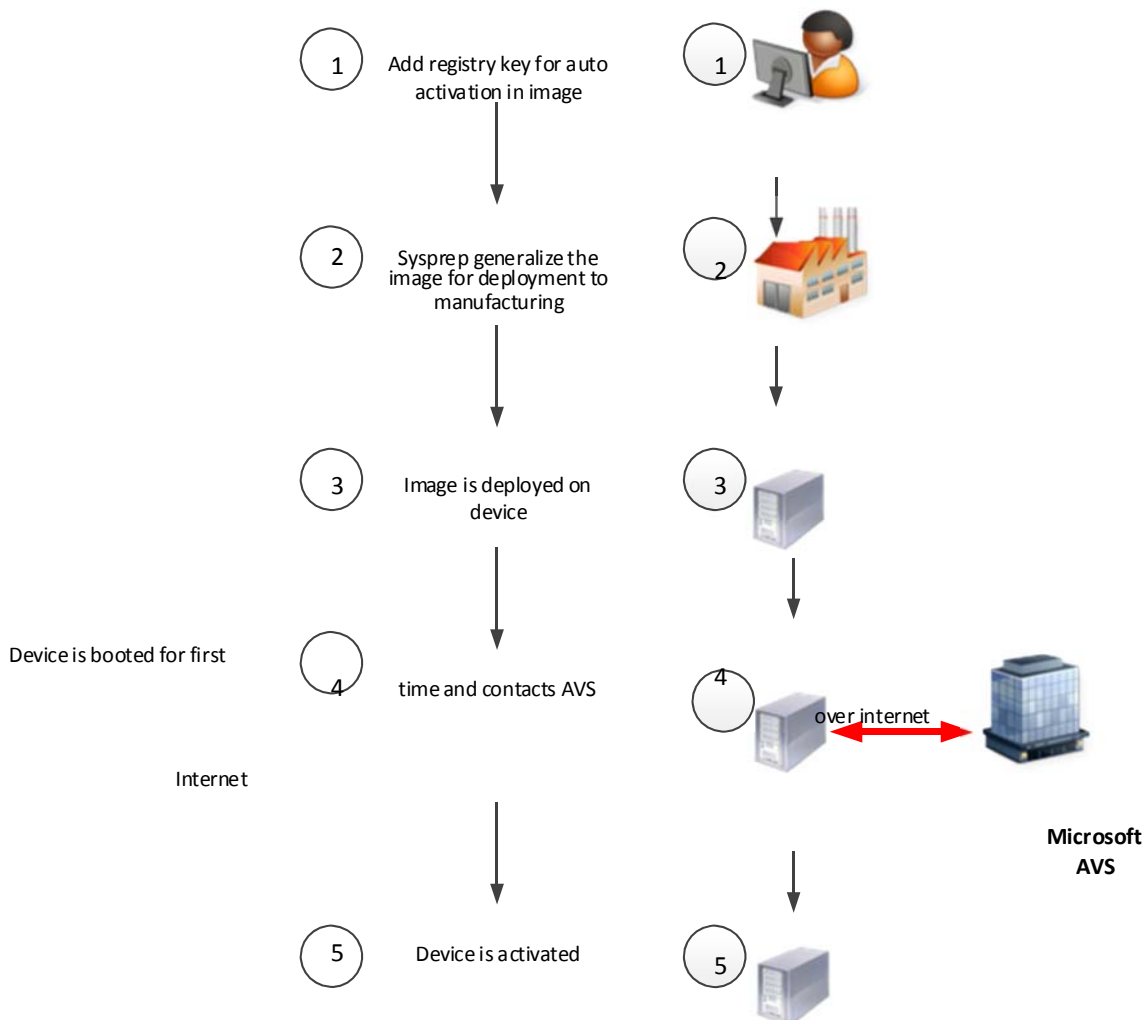


3. After a few minutes, your device will be activated.

## Automatically activate a device by using a direct internet connection after setup

By default, Standard 8 and Industry 8.1 devices do not automatically activate. You can change this setting when you create your image so that your device tries to automatically activate after setup by using a direct Internet connection. You do this by setting a registry key on the master or reference image, before it is generalized for deployment.

The general process for this is illustrated as follows:



### prerequisites

- Direct Internet connection for your device.
- Your device's master image has been created with a valid product key.
- Administrator user rights to the master or reference image.

### To activate a Device automatically Using a Direct Internet Connection after OObE

1. On your master or reference device, open a command prompt as an Administrator.
2. Type the following to add the registry key to enable automatic activation:

```
Reg add HkLm\Software\microsoft\Windows\CurrentVersion\RunOnce /v autoactivate /t REG_SZ /d "<system drive>:\windows\system32\slmgr.vbs /ato"
```

3. In the command prompt window, navigate to the %systemdrive%\Windows\System32\Sysprep folder and generalize

your image by typing: **sysprep /generalize**

4. Deploy the sysprepped image to manufacturing. When this image is deployed to a device and the device is started for the first time, it will automatically attempt to activate when an Internet connection is available. Activate a device over the internet by using VAMT 3.1

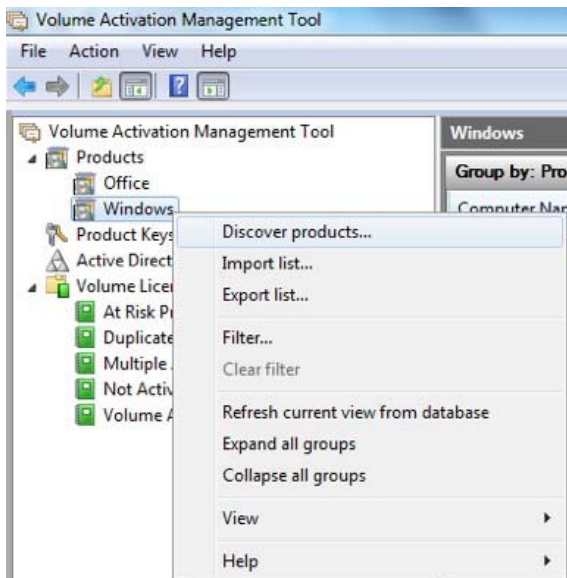
If your device does not have a display or does not have a method of user input, or if you have a large number of devices on a network and you want to activate them remotely, you can use the Volume Activation Management Tool 3.1 (VAMT 3.1) to remotely activate devices on a network. This tool is distributed as part of the free [Windows Assessment and Deployment Kit for Windows 8](#).

For more information about VAMT 3.1, please see [Volume Activation Management Tool Technical Reference](#).

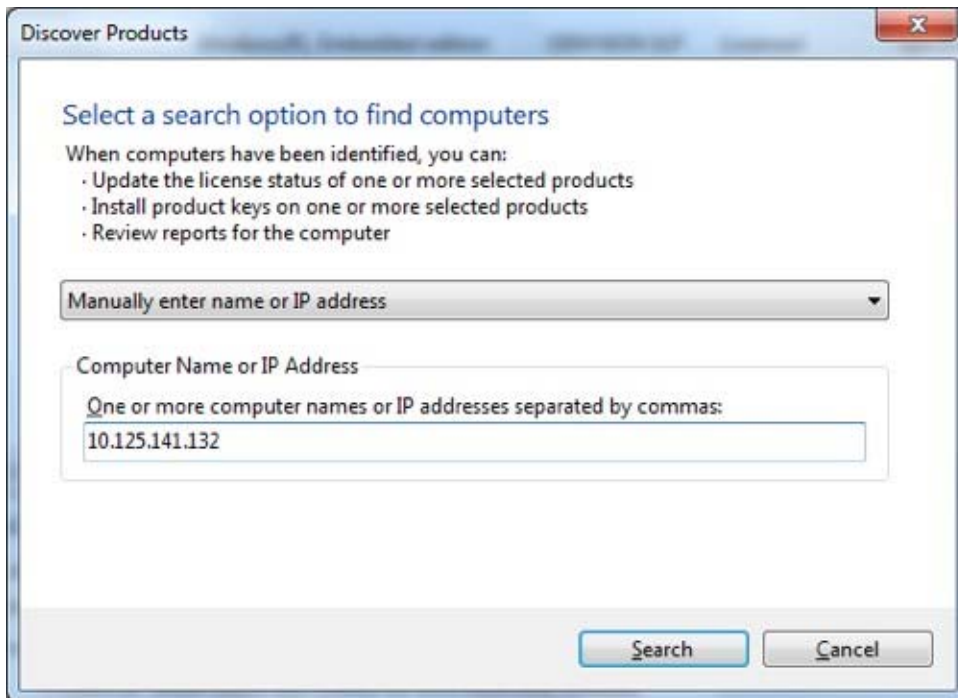
### To activate a device over the internet by using VAMT 3.1

#### prerequisites

- VAMT 3.1 host, which includes the following:
  - Windows 8 Assessment and Deployment Kit is installed.
  - The VAMT 3.1 host has Internet access.
  - The VAMT 3.1 host has private network connectivity.
- Windows PowerShell 4.0 is installed.
- The device to be activated contains the following:
  - Configured WMI/PowerShell remote access.
  - For more information, see [Allow WMI/PowerShell Remote Access on a Device](#).
  - Private network connectivity.
  - Direct Internet connectivity.
  - An administrator account with a password.



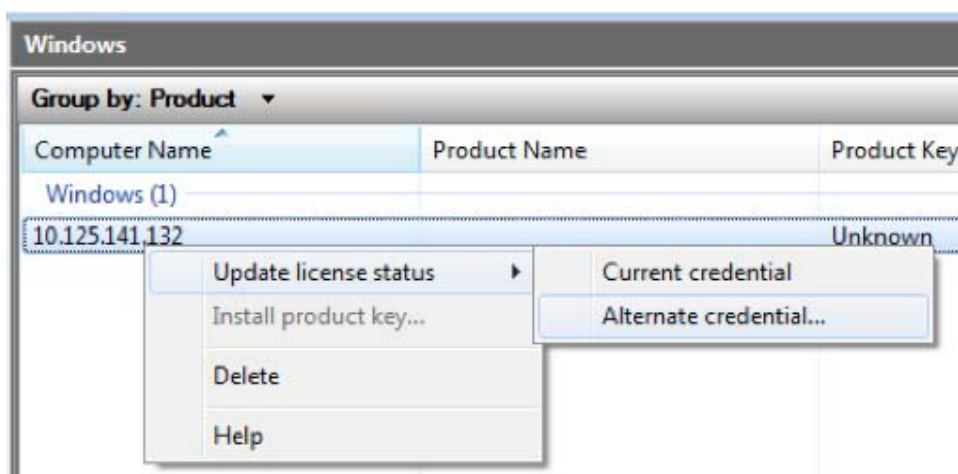
2. On the VAMT 3.1 host, open VAMT 3.1.
3. In the left pane, expand the **products** node, right-click the **Windows** node, and then click **Discover products**.
4. In the **Discover products** dialog box, select **manually enter name or Ip address**, and then enter the name or IP address of the device you are going to activate.



When VAMT 3.1 successfully locates the device, it will display it in the center pane.

**Note:** You can search for the device or devices you want to activate in several different ways. For information about the other options, see [Volume Activation Management Tool Technical Reference](#).

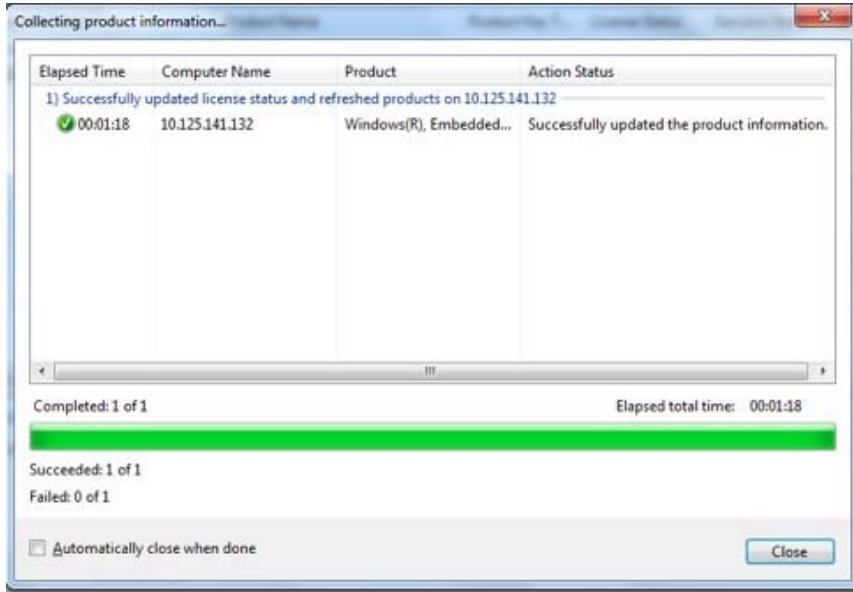
1. Right-click the device in the center pane, click **Update license status**, and then click **alternate credential**.



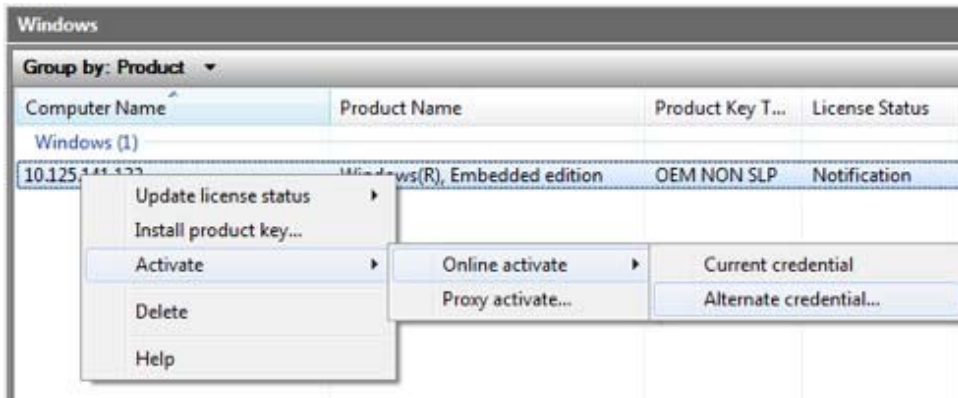
2. In the **Windows Security** dialog box, enter the user name and password for an account with Administrator user rights on the device, and then click **Ok**. Note that the administrator account must have a password or VAMT 3.1 will fail.
3. A window will open and display the status of the attempts by VAMT 3.1 to update the device's information.



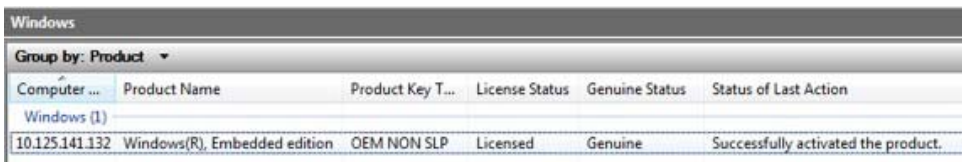
This update can take several minutes to complete.



- When the process has completed, click **Close**. VAMT 3.1 now displays the **License Status** value of the device as **Notification** in the center pane.
- Right-click the device in the center pane, click **activate**, click **Online activate**, and then click **alternate Credential**.



- In the **Windows Security** dialog box, enter the user name and password for an account with Administrator user rights on the device and click **Ok**.



- A window displays the status of the attempts by VAMT 3.1 to activate the device over the Internet. After a few minutes, the device will be activated. Note that the value in the **Licensed Status** column has now changed to **Licensed**.

## Activate a Windows Embedded 8.1 Device by Using a Proxy Connection to the Internet

If your device is (or can be) connected to a private network, but does not have direct access to the Internet, you can use a proxy server to act as an intermediary between the device and the Internet. The proxy server functions as a bridge between the private

network and the Internet, and enables the device to communicate indirectly with the Microsoft activation servers.

The tool that enables you to use a proxy server to activate Windows Embedded 8 devices over a network is the Volume Activation

Management Tool 3.0 (VAMT 3.0). This tool is distributed as part of the free [Windows Assessment and Deployment Kit for Windows 8](#).

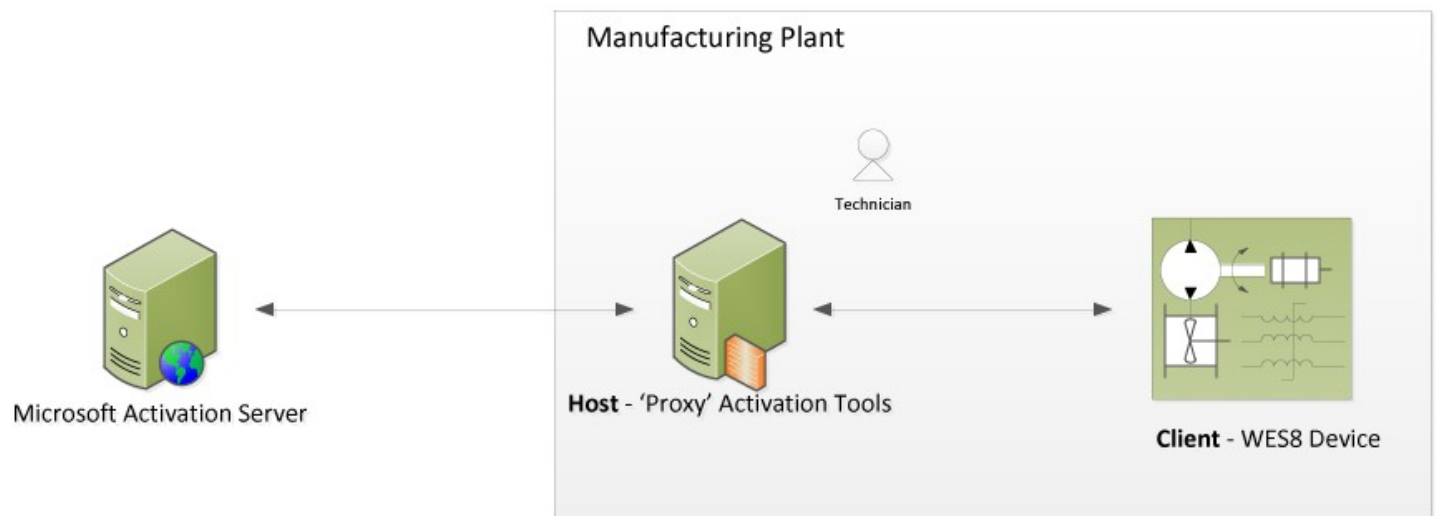
For more information about VAMT 3.0, please see [Volume Activation Management Tool Technical Reference](#).

### Activate a device over a private network by using VAMT 3.1 on a proxy computer

The basic flow of this process is:

1. Connect your proxy computer, which has VAMT 3.1 installed on it and access to the Internet, to the private network that your Windows Embedded 8 device is on.
2. Use VAMT 3.1 to discover your device and add your device information to the VAMT 3.1 host's database.
3. The VAMT 3.1 host contacts the Microsoft activation server over the Internet and transmits the license information of the device.
4. The Microsoft activation server returns a Confirmation ID (CID) for the device to the VAMT 3.1 host.
5. The VAMT 3.1 host applies that confirmation ID to the device. The device is now activated.

This process can be done on a device-by-device basis but is also scriptable to allow for automation or multiple-device activation.



The following procedures describe this process in greater detail:

- Activate a Device over a Private Network by Using VAMT 3.1
- Activate Multiple Devices as a Batch over a Private Network by Using VAMT 3.1

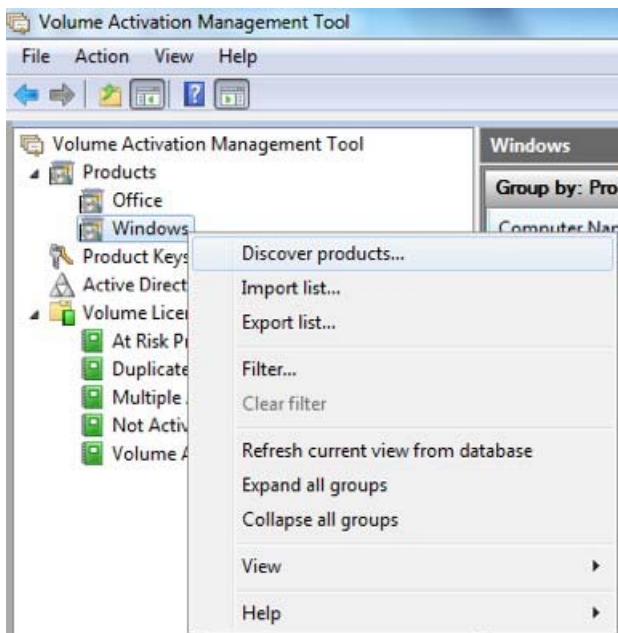
### Activate a device over a private network by using VAMT 3.1

#### prerequisites

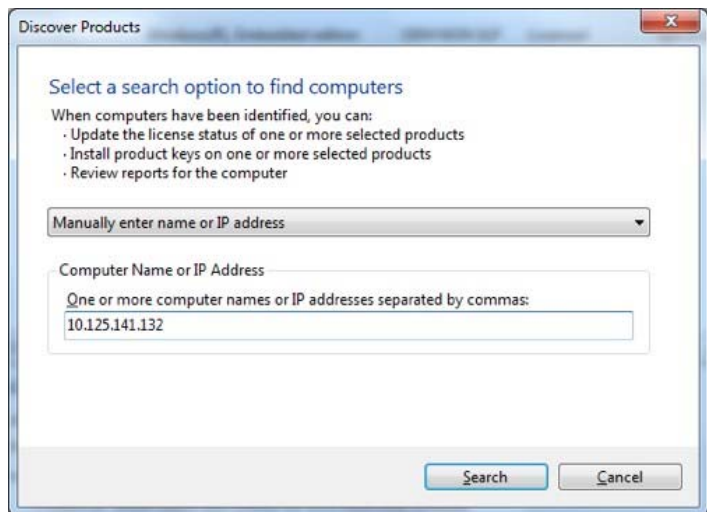
- VAMT 3.1 host, which includes the following:
  - VAMT 3.1 is installed.
  - A SQL Server database is installed.
  - The VAMT 3.1 host has Internet access.
  - The VAMT 3.1 host has private network connectivity.
  - Access to TCP ports 80 and 443.
- The device to be activated contains the following:
  - Configured WMI/PowerShell remote access.
- For more information, see [Allow WMI/PowerShell Remote Access on a Device](#).
  - Private network connectivity.
  - An administrator account with a password.

### To activate an individual device over a private network using VAMT 3.1

1. On the VAMT 3.1 host, open VAMT 3.1.
2. In left pane, expand the **products** node, right-click the **Windows** node, and then click **Discover products**.



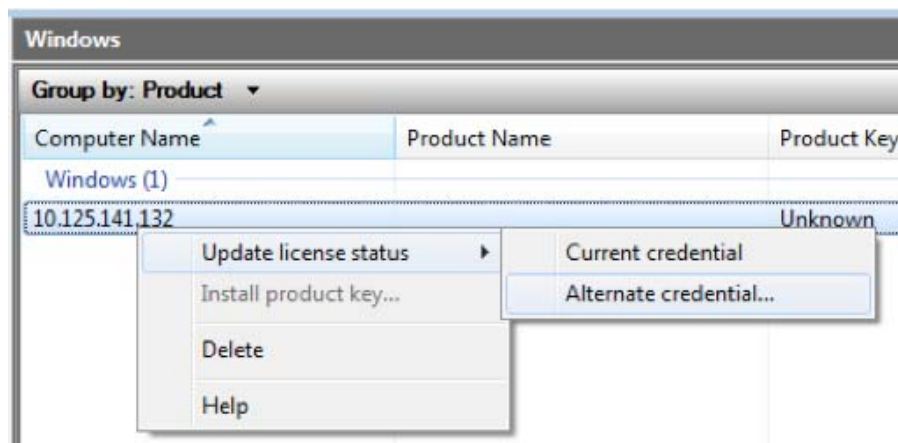
3. In the **Discover products** dialog box, select **manually enter name or Ip address**, and then enter the name or IP address of the device you are going to activate.



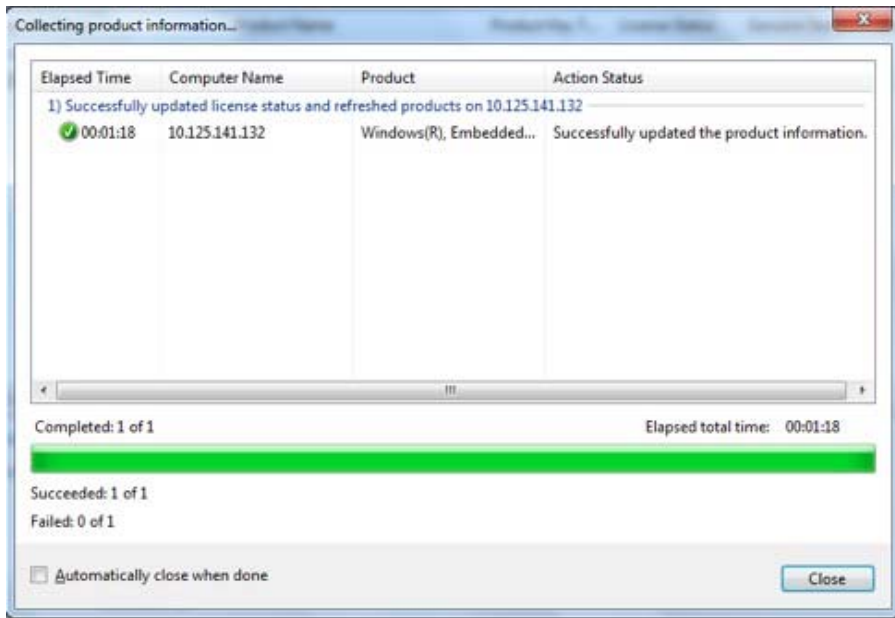
When VAMT 3.1 successfully locates the device, it will display it in the center pane.

**Note:** You can search for the device or devices you want to activate in several different ways. For information about the other options, see [Volume Activation Management Tool Technical Reference](#).

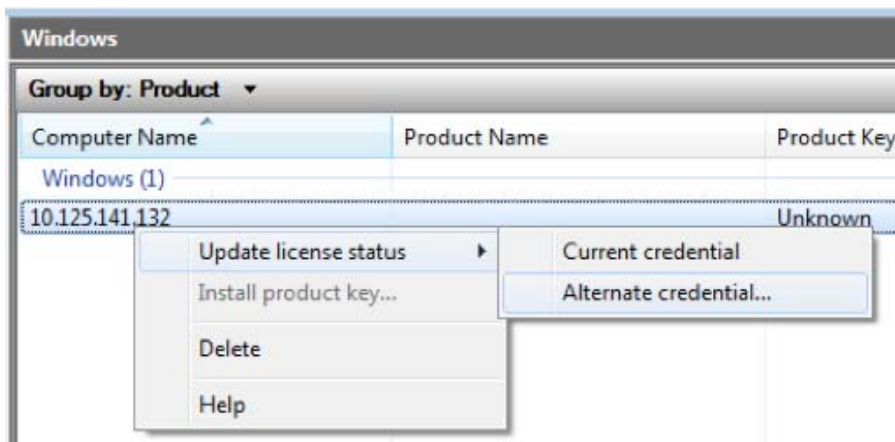
4. Right-click the device in the center pane, click **Update license status**, and then click **alternate credential**.



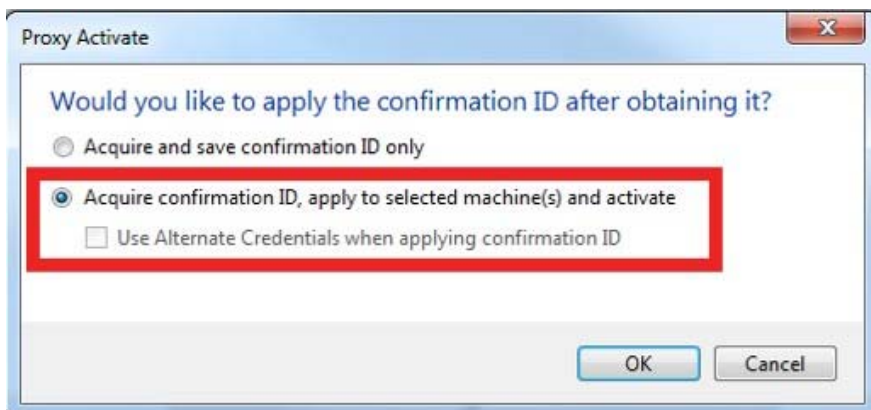
5. In the **Windows Security** dialog box, enter the user name and password for an account with Administrator user rights on the device, and then click **Ok**. Note that the administrator account must have a password or VAMT 3.1 will fail.
6. A window will open and display the status of the attempts by VAMT 3.1 to update the device's information. This update can take several minutes to complete.



7. When the process has completed, click **Close**. Note that the center pane will now have the value **Notification** in the **License Status** column for this device.
8. Right-click the device in the center pane, click **activate**, and then click **proxy activate**.



9. In the **proxy activate** dialog box, select **Acquire confirmation ID, apply to selected machine(s) and activate**, select **Use Alternate Credentials when applying confirmation ID**, and then click **Ok**.



10. In the **Windows Security** dialog box, enter the user name and password for an account with Administrator user rights on the device and click **Ok**.
11. A window displays the status of the attempts by VAMT 3.1 to activate the device over the Internet. After a few minutes, the device will be activated. Note that the value in the **Licensed Status** column has now changed to **Licensed**.

The screenshot shows the Windows Activation Manager (VAMT) interface. At the top, it says 'Windows' and 'Group by: Product'. Below this is a table with the following columns: Computer Name, Product Name, Product Key Type, License Status, Genuine Status, and Status of Last Action. The table contains one entry for 'Windows (1)' with the following details:

Computer Name	Product Name	Product Key Type	License Status	Genuine Status	Status of Last Action
10.125.141.132	Windows(R), Embedded edition	OEM NON SLP	Licensed	Genuine	Successfully activated the product.

### Activate multiple devices as a batch over a private network by using VAMT 3.1

Windows Embedded 8 Standard provides a Windows PowerShell command line interface script and two associated files that you can use to automate mass activation tasks. This script enables you to create a scheduled task that periodically runs the activation script and activate your devices.

The default location for these files is %systemdrive%\Windows Embedded Standard 8\Toolset\Activation. The files are:

- **activationHelper.ps1**
  - Windows PowerShell script file
- **Config.xml**
  - Configuration file
- **Config.xsd**
  - Configuration schema file

The steps taken by the ActivationHelper.ps1 script are:

1. Import the VAMT module into Windows PowerShell.
2. Parse the Config.xml file to get the device IP address/name information and generate a machine list.
3. Add the machines into the VAMT database by specifying the device name or IP address. This is done as a background job.
4. Sends the device's license information to Microsoft AVS. This is a background job.
5. Obtains a confirmation ID from AVS for the device. This is a background job.
6. Applies the confirmation ID to the device. This is a background job.
7. Enables Universal Write Filter (UWF), if the flag is set in the configuration file.
8. Shuts down the device, if the flag is set in the configuration file.

### prerequisites

- VAMT 3.1 host, which includes the following:
  - VAMT 3.1 is installed.
  - A SQL Server database is installed.
  - The VAMT 3.1 host has Internet access.
  - The VAMT 3.1 host has private network connectivity.
  - The Activation Script from the Standard 8 Toolkit has been copied to the VAMT 3.1 host and is correctly

configured for your environment.

- Windows PowerShell 4.0 is installed.
- Access to TCP ports 80 and 443.
- The device to be activated contains the following:
  - Configured WMI/PowerShell remote access.
- For more information, see [Allow WMI/PowerShell Remote Access on a Device](#).
  - Private network connectivity.
  - An administrator account with a password.

### To activate multiple devices over a private network by using VAMT 3.1 and a scheduled task

Before setting up this periodic activation process, you must modify the activation script's configuration file for your environment. The following snippet is a sample of the Config.xml configuration script:

```
<?xml version="1.0" encoding="utf-8"?>
<Configurations>
  <Vamt
    InstallLocation="C:\Program Files (x86)\Windows Kits\8.0\Assessment and
Deployment Kit\VAMT 3.0"
    maxThreads="3"
    checkConnectivity="false"
  />
  <Machineidentity
    Prefix="192.168.0."
    Start="100"
    End="105"
  />
  <UserAccount
    UseAlternateCredential="true"
    Username="john"
    Password="1234"
  />
  <PostActivationTasks
    EnableUWF="false"
    ShutDownMachine="Shutdown"
  />
  <LogInfo
    Level="ErrorOnly"
    Logfile="script.log"
  />
</Configurations>
```

The settings that you use for the periodic activation process are described in the following table.

**Note:** The element and attribute names are case sensitive.

Element/Attribute	Description	Schema
<b>Vamt</b>	Specifies VAMT 3.1 related info, include installation path, maximum threads count, and checkConnectivity flag.	<pre>&lt;xs:complexType name="vamtInfo" &gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Vamt information&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:attributename="InstallLocation" use="required" type="xs:string" /&gt; &lt;/xs:complexType&gt;</pre>
<b>maxthreads</b>	Specifies the maximum threads running in the background.	<pre>&lt;xs:simpleType name="smallInteger" &gt;   &lt;xs:restriction base="xs:nonNegativeInteger" &gt;     &lt;xs:maxInclusive value="100" /&gt;     &lt;xs:minInclusive value="1" /&gt;   &lt;/xs:restriction&gt; &lt;/xs:simpleType&gt;</pre>
<b>checkConnectivity</b>	Specifies whether to ping the machine to check connectivity first, instead of passing whole list into VAMT directly. Client machines must enable network discovery for ping operation.	<pre>&lt;xs:attributename="checkConnectivity" use="optional" type="xs:boolean" default="false" /&gt;</pre>
<b>machineIdentity</b>	Specifies the element that will be used to generate the machine ID. The rule is Prefix+index [index is from Start to End]; this sample uses IP address as a prefix string; you can easily change it to computer name like "MS-machine".	<pre>&lt;xs:complexType name="MachineIdentityInfo" &gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Machine discovery phase to generate machine list,     MachineName is {Prefix + [Start..End]}&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:attributename="Prefix" use="required" type="xs:string" /&gt;   &lt;xs:attributename="Start" use="required" type="xs:int" /&gt;   &lt;xs:attributename="End" use="required" type="xs:int" /&gt; &lt;/xs:complexType&gt;</pre>
<b>UserAccount</b>	Specifies whether an alternate credential is needed; if yes, then specify the user name and password; if no, all the operations inside the script will use the current credential.	<pre>&lt;xs:complexType name="useraccountInfo" &gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Needed to perform remote operation&lt;/   xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:attributename="UseAlternateCredential" use="required"   type="xs:boolean" /&gt;   &lt;xs:attributename="Username" type="xs:string" /&gt;   &lt;xs:attribute name="Password" type="xs:string" /&gt; &lt;/xs:complexType&gt;</pre>
<b>EnableUWF</b>	Specifies whether to enable UWF on target machine after activation is complete.	<pre>&lt;xs:attributename="EnableUWF" use="optional" type="xs:boolean" default="false" /&gt;</pre>
<b>Shutdowntype</b>	Specifies the post-activation operations. You can specify any of the following options: <ul style="list-style-type: none"> <li>• Reboot</li> <li>• Shutdown</li> <li>• Log off</li> <li>• Power off</li> <li>• Do nothing</li> </ul>	<pre>&lt;xs:simpleType name="shutdownType" &gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Post-activation phase to perform shutdown     operation&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:restriction base="xs:string" &gt;     &lt;xs:enumeration value="NO" /&gt;     &lt;xs:enumeration value="LogOff" /&gt;     &lt;xs:enumeration value="Shutdown" /&gt;     &lt;xs:enumeration value="Reboot" /&gt;     &lt;xs:enumeration value="PowerOff" /&gt;   &lt;/xs:restriction&gt; &lt;/xs:simpleType&gt;</pre>
<b>LogInfo</b>	Specifies the log level and log file location.	<pre>&lt;xs:simpleType name="loglevelType" &gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;To specify the log level&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:restriction base="xs:string" &gt;     &lt;xs:enumeration value="NoLog" /&gt;     &lt;xs:enumeration value="ErrorOnly" /&gt;     &lt;xs:enumeration value="Info" /&gt;   &lt;/xs:restriction&gt; &lt;/xs:simpleType&gt;</pre>

After you set up your configuration file and save it as Config.xml, you can set up the scheduled task, by using the following steps:



1. On your VAMT 3.1 host, add the location of the script files to the %path% system variable.
2. Open the Task Scheduler by doing either of the following:
  - In Windows 8, in **Control panel**, click **administrative Tools**, and then double-click **Task Scheduler**.
  - In Windows 7, in **Control panel**, click **System and Security**, click **administrative Tools**, then double-click **Task Scheduler**.
3. In **Task Scheduler**, click **action**, and then click **Create a basic Task**.
4. In the **Create basic Task Wizard**, enter a name and description for your task, and then click **Next**.
5. On the **Task Trigger** page, click **Next**.
6. On the **Daily** page, click **Next**.
7. On the **action** page, select **Start a program**, and then click **Next**.
8. On the **Start a program** page, browse to or enter the full path to powershell.exe on your machine in the Program/script box.

**Note:** It is important to run the x86 version of Windows PowerShell with this script because of a VAMT 3.1 requirement. If you are running this script on an x64 system, the default path for the x86 Windows PowerShell application is %SystemRoot%\syswow64\WindowsPowerShell\v1.0\powershell.exe.

9. In the **add arguments** box, enter the script location using the -File parameter and the full path to the ActivationHelper.ps1 file, and then click **Next**.
10. On the **Summary** page, select the **Open the Properties dialog for this task when I click Finish**, and then click **Finish**.
11. In the **properties** dialog box:
  - a. On the **General** tab, select the **Run with highest privileges** check box.
  - b. On the **Conditions** tab, clear the **Start the task only if the computer is idle** check box.
  - c. On the **Conditions** tab, clear the **Start the task only if the computer is on aC power** check box if it is selected.
12. Click **Ok** to complete scheduling this task.

## Activate a Windows Embedded 8.1 device by using a telephone

If your Windows Embedded 8.1 device is not connected to the Internet or you can't connect your device to the Internet either directly or via a proxy connection from a private network, you must use a telephone and the Windows Software Licensing Management Tool (SLMGR) command line tool to activate the device.

If your device is connected to the Internet, but you still want to use telephone activation, you can use either SLMGR or the Windows Activation UI (SLUI).

### Activate a device by using a telephone

You can activate your device by using a telephone to call the Microsoft Product Activation Center. You will need to provide your information and your 63-digit Installation ID, and you will receive a 48-digit confirmation ID from the Microsoft Product Activation Center.

You must then use either SLMGR or SLUI to activate the device by entering the confirmation ID onto the device. Your device must be connected to the Internet to use SLUI.

- Activate a Device by Using a Telephone and SLMGR.
- Activate a Device by Using a Telephone and SLUI.

### Activate a device by using a telephone and Slmgr prerequisites

- Telephone.
- Standard 8 or Industry 8.1 is installed on your device.

- You have administrator user rights on the device.

### To activate a device by using a telephone and Slmgr

1. On your device, open a command prompt with administrator user rights.
2. Navigate to the <system drive>:\Windows\System32 folder, and then type: **cscript slmgr.vbs /dti**
3. Record the 63-digit **Installation ID**.

```

Microsoft Windows
(c) 2012 Microsoft Corporation. All rights reserved.

C:\windows\system32>cscript slmgr.vbs /dti
Microsoft (R) Windows Script Host Version 5.8
Copyright (C) Microsoft Corporation. All rights reserved.

Installation ID: [REDACTED]

C:\windows\system32>_

```

- 4.
5. Call the Microsoft Product Activation Center. In the United States, call (855) 469-9468. For a list of other phone numbers, see

How to Contact a Microsoft Product Activation Center by Phone.

6. Follow the automated instructions and provide the 63-digit Installation ID when prompted.

**Note:** The phone activation system will expect the Installation ID to be entered in blocks of seven digits. It may be easier to break your Installation ID up into blocks of seven digits before placing the call.

7. Record the confirmation ID provided by the phone activation system.
8. On your device, in the command prompt window, type the following, where <confirmation id> is the confirmation ID provided by the phone activation system. **cscript slmgr.vbs /atp <confirmation id>**

```

Name: Windows(R), Embedded edition
Description: Windows(R) Operating System, TIMEBASED_EVAL channel
Activation ID:
Application ID: 55c92734-d682-4d71-983e-d6ec3f16059f
Extended PID:
Installation ID:
Use License URL: https://activation.sls.microsoft.com/SLActivateProduct/SLActivateProduct.aspx?configextension=Retail
Validation URL: https://validation.sls.microsoft.com/SLWGA/sluga.aspx
Partial Product Key: D9-ITL
License Status: Licensed
Timebased activation expiration: 43003 minute(s) (30 day(s))
Evaluation End Date: 4/1/2013 4:59:59 PM
Remaining Windows rearm count: 5
Trusted time: 9/18/2012 1:47:52 PM

```

9. Type the following, and then verify the License Status now displays "Licensed." **cscript slmgr.vbs /dlv**

**Note:** Each device must be activated separately. Batch activation is not supported.

### Activate a device by using a telephone and SLUI

#### prerequisites

- Telephone.
- Standard 8 is installed on your device and includes the following:
  - Windows Security Center module (Features -> Security)
  - Telephony API Client (Features -> Application Development Frameworks -> Legacy Support)
- Administrator user rights on the device.

### To activate a device by using telephone activation and SLUI

1. On your device, open a command prompt as Administrator and launch SLUI by typing: SLUI 4  
**Note:** The 4 option instructs SLUI to launch the telephone activation UI.
2. In the **Windows activation** tool, on the **Click the nearest location** page, click **Next** to continue.
3. Call the Microsoft Product Activation Center. In the United States, call (855) 469-9468. For a list of other phone numbers, see [How to Contact a Microsoft Product Activation Center by Phone](#).
4. Follow the automated instructions and, when prompted, provide the 63-digit Installation ID.

The screenshot shows the 'Windows Activation' window with the title bar 'Windows Activation'. The main heading is 'Activate Windows by phone'. Below this, it says 'Step 1: Call one of the phone numbers to get a confirmation ID'. It lists 'Toll free: not available' and 'Toll: (971) (4) 391 7000'. A note states 'Note: Some charges may still apply for toll free numbers'. 'Step 2: Provide these numbers when you're asked' is followed by a numeric keypad with digits 1-9. A red box highlights the keypad. 'Step 3: Enter the confirmation ID you get over the phone' is followed by a grid of letters A-H and corresponding input boxes. A link 'Read the Privacy Statement online' is present. At the bottom right, there are 'Activate' and 'Cancel' buttons.

5. Enter the 48-digit confirmation ID provided by the phone activation system, and then click **activate**.

← Windows Activation

Activate Windows by phone

**Step 1: Call one of the phone numbers to get a confirmation ID**

**Toll free:** not available **Note:** Some charges may still apply for toll free numbers

**Toll:** (971) (4) 391 7000

**Step 2: Provide these numbers when you're asked**

1 2 3 4 5 6 7 8 9

Step 3: Enter the confirmation ID you get over the phone

A B C D E F G H

[Read the Privacy Statement online](#)

Activate Cancel

- To verify the licensing status, open a command prompt as Administrator on the device.
- Navigate to the <system drive>:\Windows\System32 folder, type the following, and then verify that the License Status now displays "Licensed." `cscript slmgr.vbs /dlv`

```

Name: Windows(R), Embedded edition
Description: Windows(R) operating system, TIMEBASED_EVAL channel
Activation ID:
Application ID: 55c92734-d682-4d71-983e-d6ec3f16059f
Extended PID:
Installation ID:

Use License URL: https://activation.sls.microsoft.com/SLActivateProduct/SLActivateProduct.aspx?configextension=Retail
Validation URL: https://validation.sls.microsoft.com/SLWGA/slwga.aspx
Partial Product Key: D9JTT
License Status: Licensed
Timebased activation expiration: 43003 minute(s) (30 day(s))
Evaluation End Date: 4/1/2013 4:59:59 PM
Remaining Windows rearm count: 5
Trusted time: 9/18/2012 1:47:52 PM

```