



# Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010

Intel® Corporation

Published: May 2010

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# Introduction to the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010

Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 is used to provide end users of System Center Service Manager access to KVM Remote Control, IDE-Redirection and Power Control on clients enabled by Intel® Core™ vPro™ processor. KVM Remote Control provides IT Professionals remote keyboard, video, mouse control of a client that is Intel® Core™ vPro™ processor enabled. IDE-Redirection provides IT Professionals the ability to remote boot a client off a boot ISO image. Remote Power control allows IT Professionals to remotely and securely power up, power down, and perform power restart of the client independent of the operating system state.

The Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 download includes support for:

- Intel® Core™ vPro™ Processor KVM Remote Control:
  - Intel® AMT Firmware Version 6.x
- Intel® Core™ vPro™ Processor IDE-Redirection
  - Intel® AMT Firmware Version 6.x
- Intel® Core™ vPro™ Processor Power Control
  - Intel® AMT Firmware Version 3.x
  - Intel® AMT Firmware Version 4.x
  - Intel® AMT Firmware Version 5.x
  - Intel® AMT Firmware Version 6.x

## Document Version

Rev. 1.0, May 4, 2010

This guide was written based on the 1.0.0.0 version of the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010.

## Getting the Latest Management Pack and Documentation

You can find the latest Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 in the System Center Management Pack Catalog (http://pinpoint.microsoft.com/en-US/systemcenter/managementpackcatalog)

# What's New

The following features are new in this release of the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010:

- KVM Remote Control
- IDE-Redirection
- Power Control

# Changes in this update

The 1.0.0.0 version of the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 includes the following changes:

- Initial Release

# Files in This Management Pack

To use the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010, you must first download the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 from the Management Pack Catalog, located at http://pinpoint.microsoft.com/en-US/systemcenter/managementpackcatalog.

The Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 includes the following files:

| File Name | Description |
|---|---|
| Microsoft.SystemCenter.Intel.vPro.MP | The Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 MP definition file for Service Manager |
| Intel vPro System Center Service Manager 2010 MP.MSI | Contains binaries for KVM Remote Control Viewer and AMT Power Control Power Shell scripts |
| Setup.exe | Executable to install and configure KVM and the AMT Power Control Power Shell Scripts |
| Intel Core vPro Management For System Center Service Manager.pdf | Documentation for the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 |

| File Name | Description |
|---|---|
| vPro_EnableKVM.ps1 | PowerShell script to allow you to configure KVM Remote Control settings |
| Software License Terms | |

# Supported Configurations

The Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 supports the following operating systems:

- Windows Server 2008 R2
- Windows Server 2008
- Windows 7
- Windows Vista
- Windows XP

Note: Because this management pack is used directly with the System Center Service Manager Console, there is a direct dependency on the operating systems that the System Center Service Manager Console supports.

# Getting Started

This section describes the actions you should take before you import the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010, any steps you should take after you import the management pack, and information about customizations.

## Before You Import the Management Pack

Before you import the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010, note the following requirements and restrictions:

- Clients managed by Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 must be enabled with Intel® Core™ vPro™ processor
    - Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 only supports Intel® Core™ vPro™ Processor KVM Remote Control on Intel AMT Firmware 6.0 and higher with integrated Intel® HD graphics
    - Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 only supports Intel® Core™ vPro™ Processor IDE-Redirection on Intel AMT Firmware 6.0 and higher
    - Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 only supports Intel® Core™ vPro™ Processor Power Control on Intel AMT Firmware 3.0 and higher
- Intel® Core™ vPro™ Processor enabled clients must be provisioned and manageable by System Center Configuration Manager 2007 (Service Pack 1 or Higher). See Appendix A: Provisioning Intel® Core™ vPro™ Processor enabled clients with Microsoft System Center Configuration Manager 2007 at the back of this document for more information.
- Intel® Core™ vPro™ Processor KVM Remote Control must be configured in Intel AMT before it can be used by the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010. Because System Center Configuration Manager 2007 (Service Pack 1 and Service Pack 2) has no native knowledge on how to configure KVM Remote Control in Intel AMT, you must choose one of two approaches. Depending on your environment, one approach may be more appropriate than another. The steps to set up either method are provided in the section How to Configure KVM Remote Control in Intel® AMT later in this document.
    - **Pre Configuration**: Using Post Provisioning Scripts within System Center Configuration Manager 2007 to configure Intel vPro Technology KVM Remote Control.
    - **When Session is established**: The KVM Remote Control Viewer within the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 provides the ability to configure the KVM Remote Control settings at the time

the KVM Remote Control session is established. This can be done in one of two ways:

- Elevating the users permission to include Intel AMT Platform Administrator Access
- By configuring an embedded privileged username credential that is used only to configure KVM Remote Control in Intel® AMT. The embedded privileged user must be granted Platform Administrator Access to the Intel® Core™ vPro™ processor based client.

- The users of the of the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 must be granted sufficient AMT Realm permission within System Center Configuration Manager prior to manage the Intel® Core™ vPro™ processor based client from within the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010. At a minimum, the user must be granted the following AMT Realm Access within System Center Configuration Manager 2007:
  - Media Redirection – Allows them to perform SOL/IDER and KVM Remote Control sessions
  - Remote control – Allows them to reboot the managed client as needed

  See Appendix B: Help Desk Permissions for Intel vPro Technology based clients via System Center Configuration Manager 2007 later in this document for more information.

# How to Configure KVM Remote Control in Intel® AMT

Before importing the Intel® Core™ vPro™ processor KVM Remote Control can be used, you must enabled and configured. As mentioned above, this can be done one of the following two ways: pre-configuration or at the time a KVM Remote Control session is established. The following two subsections describe how to perform each of these methods.

## For Pre-configuration

Since the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 depends on System Center Configuration Manager 2007 for doing the initial setup & configuration of the AMT client and Configuration Manager has no native knowledge on how to configuration KVM Remote Control, it will be necessary to configure the KVM Remote Control setting after the AMT client has been provisioning. Included with the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010, there is the vPro_EnableKVM.ps1 PowerShell script that can be executed remotely against the AMT client to set those settings for you. Note that script cannot be ran on the same client that you are trying to configure.

vPro_EnableKVM.ps1 PowerShell script supports the following configuration parameters:

- HOST: Fully Qualified Domain Name of the Intel vPro client. (I.E. vproclient.vprodemo.com)
- USER: For kerberos authentication enter “domain\username”. (I.E. vprodemo\administrator). For digest authentication enter username. (I.E. admin)
- PASSWORD: Enter the Intel Active Management Technology password for the client.
- OPTIN: Enter “true” to require consent – “false” to not require consent
- OPTINTIME: Set the time in seconds the user consent prompt should last (recommended 300 seconds)
- IDLETIME: Set the idel time in seconds before a session is automatically closed

To identify the KVM Remote Control capable clients in your environment that need to be configured, it may be necessary to build a custom collection within System Center Configuration Manager. Please reference the Identifying KVM Remote Control capable clients with System Center Configuration section in Appendix C: Pre Configuration

An Intel Reference Design on how to automatically execution vPro_EnableKVM.ps1 against the client immediately after the client is provisioning by System Center Configuration Manager is under development. Please visit the Intel vPro Expert Center (http://www.intel.com/go/vproexpert) for the latest updates on this process.

# For Configuration when a KVM Remote Control session is established

The KVM viewer within the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 provides the ability to configure the KVM Remote Control settings at the time the KVM Remote Control session is established. This can be done in either of two ways:

- Elevating the users permission to include Intel AMT Platform Administrator Access
- By configuring an embedded privileged username credential that is used only to configure KVM Remote Control in Intel® AMT. The embedded privileged user must be granted Platform Administrator Access to the Intel® Core™ vPro™ processor based client.

## Elevating the Help desk users permissions

By using this method, you are granting the user of the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 platform administrator access to the AMT client. These permissions \ AMT Realm Access are control by System Center Configuration Manager 2007 during the AMT provisioning process. Please reference the Appendix B: Help Desk Permissions for Intel vPro Technology enable clients via System Center Configuration

Manager 2007 and augment the help desk permission with the AMT realm rights of PT Administrator.

## Embedded Configuration User

With the management pack, an encrypted administrator username and password can be embedded in the KVM Remote Control Viewer (KVMView) configuration file to configure Intel® Core™ vPro™ processor KVM Remote Control when a KVM Remote Control session is established. In this way, a user with non-administrative rights (for example, a help desk user) can still use KVM Remote Control Viewer to establish a KVM Remote Control session to an Intel® Core™ vPro™ processor based system and configure KVM Remote Control

To embed an Intel® AMT administrator credential into KVM Remote Control Viewer's settings, run the following from the command line on the System Center Service Manager Console system where the Management Pack is installed after the installation has completed:

```
kvmview.exe –setadmin vprodemo\itproadmin P@ssw0rd
```

…where vprodemo\itproadmin is the desired configuration user with AMT PT Administrator realm rights and P@ssw0rd is the password associated to that user. Note that user must have permissions \ AMT Realm Access of AMT Platform Administrator. Please reference the Appendix B: Help Desk Permissions for Intel vPro Technology enable clients via System Center Configuration Manager 2007 and augment the help desk permission with the AMT realm rights of PT Administrator.

Once this command has been run, the admin username and password will be automatically used to apply KVM Remote Control settings to Intel® AMT on Intel® Core™ vPro™ processor based systems. The user name and password are stored encrypted in the KVM Remote Control Viewer settings file. However, the encryption is tied to a specific system. If you copy the settings file from one system to another, the admin credential will not be accessible on the second system.

To aid with security, it is recommended that you create an Active Directory account that has Intel AMT administrative access, but no other access to the environment. This way, if the password is compromised, only Intel AMT is at risk. Further, by disabling the Active Directory account, any breach can be quickly addressed. These steps vary depending on your Active Directory setup. As such, they are beyond the scope of this document.

# How to Install and Import the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010

**IMPORTANT!** Before you install and import the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010, take the following actions:

- Perform a full backup of the System Center Service Manager database.
- Uninstall any existing Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010

## External Dependencies

Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 has several external dependences which need to be installed prior installing.

- WinRM: WinRM is natively included within the Windows Operating system for all supported Operating Systems with the exception of Windows XP and Windows Server 2003. Please visit the following URL to download and install the latest version: http://www.microsoft.com/downloads/details.aspx?familyid=845289ca-16cc-4c73-8934-dd46b5ed1d33&displaylang=en
- .Net 3.5.1: http://www.microsoft.com/downloads/details.aspx?familyid=ab99342f-5d1a-413d-8319-81da479ab0d7&displaylang=en
- PowerShell 2.0: http://technet.microsoft.com/en-us/scriptcenter/dd772288.aspx

## Environmental changes the installer performs

The Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 installer makes a couple of operating system value changes that may be important for your environment, These changes include the following:

| OS Environment Change | Reason / Justification |
|---|---|
| Setting the PowerShell execution policy to all signed | Remote Power provided in the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 is provided through signed PowerShell scripts. The scripts cannot be executed unless PowerShell allows for signed scripts to be executed |

| OS Environment Change | Reason / Justification |
|---|---|
| Setting WINRM to the following:<br>• client @{AllowUnencrypted="true"}TrustedHosts="*"<br>• client @{TrustedHosts="*"}<br>• client/auth @{Digest="true"} | Required to allow KVM Remote Control Viewer and the PowerShell script within the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 to invoke WS-MAN commands over WinRM |
| AMTSCSMMP environmental variable added with value of the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 install directory | Simplify execution of KVM Remote Control Viewer and Power Control PowerShell scripts. Direct dependency from Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 definition. |
| Default Installation Directory:<br><br>C:\program files (x86)\intel corporation\Intel Core vPro processor Management Pack for System Center Service Manager 2010 MP01 | This is the default place where the setup will place the installation binaries unless otherwise changed during the installation process. |
| Application Data Directory:<br>Windows Visa \ Windows 7\ Windows Server 2008 R2<br>C:\ProgramData\Intel Corporation\KVMView<br><br>Windows XP/Windows Server 2008<br>C:\Documents and Settings\All Users\Application Data\Intel Corporation\KVMView | This is the location where log files and application settings will be stored. |

# To import the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010

On the primary System Center Service Manager Console computer:

1. Within the System Center Service Manager Console, select **Administration** from the left action pane.
2. In the Administration left action pane, select Management Packs
3. In the right tasks pane, click **Import.**
4. When the file browse windows appears, navigate to the file location you extracted the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010, select **Microsoft.ServiceManager.Intel.vPro.mp** and click **Open.**
5. When the Import Management Packs windows appears, click **Import.**

## To install the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010

On each computer that is running the System Center Service Manager Console:

1. Execute setup.exe with Administrator permission from where you extracted the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010.
2. Acknowledge the license agreement and click **Next.**
3. If necessary, change default installation folder and click **Next.**
4. Click **Next** to Confirm Installation.
5. When the installation is complete, click **Close.**
6. Open of a command prompt and executed **powershell.exe ./vPro_PowerManagement.ps1** from the Management Pack installation directory.
7. When prompted to trust the publisher, select **A** to allow script to be trusted

## After you import the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010

By default, the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 assumes that the KVM Remote Control setting in Intel® AMT should be configured at the time the session is established, with user consent required. In this configuration, the local logon credentials you used when logging into the Service Manager Console will be used to connect to the Intel® Core™ vPro™ processor enabled client and configure the associated KVM Remote Control settings in Intel® AMT.

The following KVM Remote Control Viewer settings are configured by default to allow an Intel vPro Technology enabled client provisioned by System Center Configuration Manager 2007 to be accessible by the KVM Remote Control Viewer of the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010. With the KVM Remote Control Viewer open, select the **Tools** menu, **Options**, **General** Tab. By default the settings are set to the following:

- **Use currently logged on credentials**: Checked
- **Use TLS Server Authentication**: Checked
- **Use standard port**: Uncheck

## For pre-configuration

If you chose to use pre-configuration for your environment, you will need to uncheck the session configuration option within the KVM Remote Control Viewer. This can be performed by changing the following value in the KVM Options window:

1. Within the KVM Remote Control Viewer application of the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010, select **Tools** menu then **Options.**
2. Click the **Advanced** Tab.
3. Uncheck the **Configure KVM Access Point when on session start**.
4. Click **OK**.

## For configuration when session is established, no user consent

If you plan to perform KVM Remote Control configuration when the session is established and not requiring user consent, you need to uncheck “Require User Consent” within the KVM Remote Control Viewer. This can be performed by changing the following value in the KVM Option:

1. Within the KVM Remote Control Viewer application of the Intel vPro Technology Management Pack , select **Tools** menu then **Options.**
2. Click the **Session Settings** Tab.
3. Uncheck the **Require User Consent.**
4. Click **OK.**

## For configuration when session is established, using embedded credential

If you plan to perform KVM Remote Control configuration when the session is established using an embedded privileged username credential, you will need to specify the credential. This can be performed by running the following command line:

```
Kvmview.exe –setadmin vprodemo\itproadmin P@ssw0rd
```

…where vprodemo\itproadmin is the desired configuration user and P@ssw0rd is the password associated to that user.

### Duplicating configuration on multiple Intel vPro Technology Management Pack installs

If you want to duplicate the configuration settings of the KVM Remote Control Viewer on multiple consoles when the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 is installed, you can copy the kvmview.exe.config file after making the desired setting changes on one console and use the updated copy of the kvmview.exe.config to overwrite the one installed by default. The only setting that is not carried over is the configuration credential since it is uniquely encrypted for each computer the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 is installed on.

To set the configuration credential, type the following command in the Command Shell:

```
kvmview.exe –setadmin vprodemo\itproadmin P@ssw0rd
```

…where vprodemo\itproadmin is the desired configuration user and P@ssw0rd is the password associated to that user.

# Using the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 Operations

Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 is used to provide end users of System Center Service Manager access to KVM Remote Control, IDE-Redirection and Power Control on clients enabled by Intel® Core™ vPro™ processor. KVM Remote Control provides IT Professionals remote keyboard, video, mouse control of a client that is Intel® Core™ vPro™ processor enabled. IDE-Redirection provides IT Professionals the ability to remote boot a client off a boot ISO image. Remote Power control allows IT Professionals to remotely and securely power up, power down, and perform power restart of the client independent of the operating system state.

# KVM Remote Control

KVM Remote Control provides IT Professional remote keyboard, video, mouse control of a Intel® Core™ vPro™ processor client. KVM Remote Control is available on AMT Firmware 6.0 and higher with Intel® integrated graphics; previous FW version and systems with discrete graphics system are not KVM Remote Control capable.

KVM Remote Control on Intel® Core™ vPro™ processor enabled clients can be configured to work in 2 distinct mode: User Consent required and non-User consent. When configured where user consent is not required, when the KVM Remote Control session is established after successful authentication you will be able to interact directly with the remote client. However, if user consent is required, when the KVM Remote Control session is established, a six digit code will be displayed on the remote client. The KVM Remote Control Viewer within the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 will required you to enter in that code being displayed on the managed client. Once the consent code has been successfully entered, you will be allowed access to the KVM Remote Control session.

To establish a KVM Remote Control session to a capable client:

1. In the System Center Service Manager Console, on the navigation panel, select **Configuration Item**
2. Under **Configuration Items**, select the desired Intel vPro Technology client from **Computer** list
3. Once the client is selected, click on **Intel vPro KVM Remote Control** from the **Task Panel**
4. When the KVM Remote Control session is established, you may be presented with a user consent screen depending on how the Intel® Core™ vPro™ processor enabled client was configured. You should now be able to remotely interact with the client over the KVM session.

# IDER-Redirection

IDE-Redirection provides IT Professionals the ability to remote boot a client off a bootable ISO image. This feature works well with KVM Remote Control to allow IT professionals to boot clients off remediation media, such as Microsoft Diagnostic and Repair Tool from MDOP, to fix issue when the Operating System is unavailable.

To remotely boot the client of remote media:

1. In the System Center Service Manager Console, on the navigation panel, select **Configuration Item**

2. Under **Configuration Items**, select the desired Intel vPro Technology client from **Computer** list
3. Once the client is selected, click on **Intel vPro KVM Remote Control** from the **Task Panel**
4. Within the KVM Remote Control Viewer application, select **Tools** menu, **Power Control**, and then **Boot with IDER**
5. **Browse** for the desired ISO file to boot from
6. The Intel® Core™ vPro™ processor enabled client should now reboot of the ISO remotely.

# Power Control

Remote Power control allows IT Professionals to remotely and securely power up, power down, and perform power restart of the client independent of the operating system state.

To perform a Remote Power control on a capable client:

1. In the System Center Service Manager Console, on the navigation panel, select **Configuration Item**
2. Under **Configuration Items**, select the desired Intel vPro Technology client from **Computer** list
3. Once the client is selected, click on either **Intel vPro Power On, Intel vPro Power Off, or Intel vPro Power Restart,** from the **Task Panel** depending on the desired power operation

# Troubleshooting

**KVM Remote Control Viewer and Power Control PowerShell scripts take a long time to execute from within the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010.**

*Corrective Action***:** On first execution, the operating system will try to validate the digital signatures of the PowerShell scripts and KVM Remote Control Viewer via the internet. If you do not have an internet connection available on client running the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010, the verification process will need to time out prior

to starting. This verification is only required once after the installation of the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010.

**Intel vPro Power On, Intel vPro Power Off, and Intel vPro Power Reset appear to hang from within the System Center Service Manager Console.**

*Corrective Action***:** If this is the first time you have attempted to run the Power Control PowerShell scripts, it is likely the Power Control PowerShell is awaiting confirmation of Trusting the Publisher. From a command prompt, execute "powershell.exe ./vPro_PowerManagement.ps1" from within the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 installation directory. When prompted to trust the publisher, select A to allow script to be trusted.

# Appendix A: Provisioning Intel vPro Technology enabled clients with Microsoft System Center Configuration Manager 2007

The provisioning of Intel® Core™ vPro™ processor enabled client by Microsoft System Center Configuration Manager 2007 is critical step prior to the Intel® Core™ vPro™ processor Management Pack for System Center Service Manager 2010 working properly. Please refer to the following supplement documentation to walk you through the process of configuring System Center Configuration Manager 2007 to provision Intel Core vPro Processor enabled clients.

- Out of Band Management in Configuration Manager 2007 SP1 and Later: http://technet.microsoft.com/en-us/library/cc161989.aspx
- Configuration Manager AMT Provisioning Process for Out of Band Management: http://technet.microsoft.com/en-us/library/cc431371.aspx
- Intel vPro Expert Center Quick Start Guide: http://communities.intel.com/docs/DOC-1370#Microsoft_SCCM

# Appendix B: Help Desk Permissions for Intel vPro Technology enable clients via System Center Configuration Manager 2007

Intel® Core™ vPro™ processor enabled clients (Intel® AMT) provides many features that can be used by an IT support help desk. For a help desk staffer to take advantage of these features, he or she needs a user account in Intel AMT. This use case reference design puts forth a framework for managing help desk staffer's users and their Intel AMT permissions with Microsoft System Center Configuration Manager 2007 (ConfigMgr) and Active Directory integration.

- Help Desk Permissions Framework for Microsoft System Center Configuration Manager 2007: http://communities.intel.com/docs/DOC-4404

# Appendix C: Pre Configuration

## Identifying KVM Remote Control capable clients with System Center Configuration

In the System Center Configuration Manager Console, perform the following steps:

1. In the left-hand navigation pane, expand System Center Configuration Manager -> Site Database > Computer Management -> Collections.
2. Right-click on All Systems and select Out of Band Management -> Discover Management Controllers.
3. Right-click on Collections and select New > Collection from the menu.
4. In the General screen of the New Collections Wizard, enter a name for your collection (in the document example we use "Intel AMT KVM Capable Systems").
5. Click Next.
6. Click on the Query Rules Property button.
7. In the Query Rules Properties dialog, enter a name for the Query. In the example we use Intel AMT Version 6.
8. In the Resource Class drop down menu, select System Resource (default).
9. Click Edit Query Statement.
10. Select the Criteria tab.

11. Click the New Criteria button.
12. In the Criterion Properties dialog, select Simple Value from the Criterion Type drop-down menu.
13. Click Select and enter the following information:

- Attribute Class = AMT Agent
- Attribute = AMT

14. Click OK.
15. For the Operator field, select is greater than or equal to from the drop-down menu.
16. Enter 6.0.0 for the Value field and click OK.
17. An Integrated Intel Graphics adapter is required for KVM Remote Control. Click the New Criteria button.
18. In the Criterion Properties dialog, select Simple Value from the Criterion Type drop-down menu.
19. Click Select and enter the following information:

- Attribute Class = Video Controller
- Attribute = Adapter Compatibility

20. Click OK.
21. For the Operator field, select is like from the drop-down menu. Enter Intel Corporation for the Value field and click OK.
22. In the Query Statement Properties dialog, click OK.
23. In the Query Rules Properties dialog, click OK.
24. In the Membership Rules screen, click Next.
25. In the Advertisements screen, click Next.
26. In the Security screen, click Next.
27. In the Confirmation screen, click Close.
28. In the left-hand pane of the ConfigMgr Console, right-click on your new collection (Intel AMT KVM Capable Systems in the document example) and select Update Collection Membership from the menu.
29. Click OK in the warning dialog.
30. Right-click the new collection and choose Properties.
31. The Collection ID is displayed near the bottom. Write this value down. You will need it later in this procedure.

# Automatic execution of KVM Remote Control Configuration script immediately after System Center Configuration Manager provisioning

This section is TBD.  Please visit the Intel vPro Expert Center (http://www.intel.com/go/vproexpert) for updates.