

System Center Essentials 2010 Operations Guide

Microsoft Corporation

Published: January 2010

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Revision History

|  |  |
| --- | --- |
| Release Date | Changes |
| June 2007 | Original release of this guide. |
| October 2008 | New topics in this release: All topics contained under Backup and Restore of System Center Essentials |
| September 2009 | Updated for System Center Essentials 2010 Beta with procedures for using new features. |
| January 2010 | Updated for System Center Essentials 2010 Release Candidate to include information about backup, virtualization, optimization tips, and log file names and locations. |

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Getting Started with System Center Essentials 2010

The Microsoft System Center Essentials 2010 Operations Guide provides information about how to use Essentials to manage your IT environment. It provides detailed procedures for the following tasks:

In This Section

[Understanding the Essentials 2010 Console](#z781bf83772394811b1dfd3d30a8779bb)

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[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

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[Virtualizing Your Server Environment in Essentials](#zba825284352e42c9bd0e41c3a2cf44a5)

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[Reporting in Essentials](#z9cd9a68ded59458cbec375b8b0361140)

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See Also

[System Center Essentials 2010 Release Notes](http://go.microsoft.com/fwlink/?LinkID=155032)

[System Center Essentials 2010 Deployment Guide](http://go.microsoft.com/fwlink/?LinkID=164076)

About System Center Essentials 2010

System Center Essentials 2010 is a management solution designed for the IT system administrator in a medium-sized organization (up to 50 servers and 500 clients). Using the Essentials 2010 single console design, IT system administrators can easily secure, update, monitor, and track their entire IT environment.

In addition, Essentials 2010 includes many predefined reports that display various types of information and preloaded management packs to help monitor common operating system components, services, and applications.

Essentials 2010 enables you to centrally manage Windows–based servers and other computers and network devices in your organization. The following are just a sample of the tasks you can perform:

 Manage physical computers, virtual machines, and devices in your environment and examine computer hardware and software inventory. For more information about managing computers, see [Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f).

 Monitor the health of managed computers and devices. For more information about monitoring, see [Monitoring in Essentials](#zfbaf18f5def648d7a8b8dcd63fc545e4).

 Centrally manage updates, track installation progress, and troubleshoot problems by using the update management feature. For more information about update management, see [Update Management in Essentials](#z27b4f0d9159b4dbc806a8028c0f33d99).

 Centrally deploy software, track progress, and troubleshoot problems by using the software deployment feature. For more information about software deployment, see [Software Deployment in Essentials](#ze44aa029d4a84eefa92bd027b46a1dfa).

See Also

[Getting Started with System Center Essentials 2010](#z5068c1419f6d4595adfad158176877e3)

Understanding the Essentials 2010 Console

System Center Essentials 2010 introduces a unified management console for managing your IT environment. The console runs on the Essentials management server and provides access to all Essentials 2010 features and data. You can also administer Essentials 2010 by installing an additional Essentials 2010 console on a computer that is different from the Essentials management server computer.

In This Section

[Overview of the Essentials Console](#z9e32205d561846d585118d407b95938a)

|  |
| --- |
| Describes the various panes of the Essentials 2010 console. |

[Computers Pane in Essentials](#zc21316267032450badbde87d64c6f1bd)

|  |
| --- |
| Provides more detail about the elements of the Computers pane in Essentials 2010. |

[Monitoring Pane in Essentials](#z3d3b6b5182cd4b4dbca83c11d8bd8caa)

|  |
| --- |
| Provides more detail about the elements of the Monitoring pane in Essentials 2010. |

[Updates Pane in Essentials](#z12186aa988d8453eb39f8523a123b902)

|  |
| --- |
| Provides more detail about the elements of the Updates pane in Essentials 2010. |

[Software Pane in Essentials](#z71614ea316b94317805d497d1168bd39)

|  |
| --- |
| Provides more detail about the elements of the Software pane in Essentials 2010. |

[Reports Pane in Essentials](#z1589ffca7f0642f4a32b4ef796454aa6)

|  |
| --- |
| Provides more detail about the elements of the Reports pane in Essentials 2010. |

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

|  |
| --- |
| Provides more detail about the elements of the Administration pane in Essentials 2010. |

[Authoring in Essentials](#z5bcf74dff98d44d69a798bff35680cc2)

|  |
| --- |
| Provides more detail about the elements of the Authoring pane in Essentials 2010. |

See Also

[Getting Started with System Center Essentials 2010](#z5068c1419f6d4595adfad158176877e3)

Overview of the Essentials Console

System Center Essentials 2010 introduces a unified management console for managing your IT environment. The console can be run on either the Essentials management server or on a remote computer and provides access to all Essentials 2010 features and data.

To facilitate your management tasks, the Essentials 2010 console displays the following panes:

 Navigation pane

 Views pane

 Details pane

 Tasks pane

Navigation Pane

This pane is in the lower-left section of the console and is usually the first pane you use for navigation in the console. It provides the entry point for all the Essentials 2010 features.

The Navigation pane contains the following buttons:

 Computers—Provides access to the Computers Overview pane for computer and computer groups management, inventory, update management, and software deployment. For more information, see [Computers Pane in Essentials](#zc21316267032450badbde87d64c6f1bd).

 Monitoring—Provides access to the Monitoring Overview pane, which is used for monitoring objects. For more information, see [Monitoring Pane in Essentials](#z3d3b6b5182cd4b4dbca83c11d8bd8caa).

 Updates—Provides access to the Updates Overview pane, which is used for software update management. For more information, see [Updates Pane in Essentials](#z12186aa988d8453eb39f8523a123b902).

 Software—Provides access to the Software Overview pane, which is used for software deployment. For more information, see [Software Pane in Essentials](#z71614ea316b94317805d497d1168bd39).

 Reports—Provides access to the Reports Overview pane, which lists the Essentials 2010 reports that you can run to view various types of information. For more information, see [Reports Pane in Essentials](#z1589ffca7f0642f4a32b4ef796454aa6).

 Authoring—Provides access to the Authoring Overview pane, which is used for customization and configuration of Essentials 2010 monitoring settings. For example, you can customize settings for Management Pack groups, Management Packs, Distributed Application Modeling, and other monitoring configurations. For more information, see [Authoring Pane in Essentials](#z60a2cd9acd7b4a269c83a6cdda1ce13d).

 Administration—Provides access to the Administration Overview pane, which is used for administrative tasks such as device management and provides access to Essentials 2010 settings for features that are set up in the initial configuration wizards. For more information, see [Administration Pane in Essentials](#zb99869c37c214ba29a0f1488d3d76f8b).

Views Pane

This pane is located in the upper central section of the Essentials 2010 console. It displays overview panes, reports, and lists of objects as appropriate for the selected item in the navigation pane. You can use the Views pane to create custom views, and in some views you can filter the object lists based on your defined criteria.

Details Pane

This pane is located in the lower central section of the Essentials 2010 console. This pane displays specific details of objects that have been selected in the Views pane, such as alert details or computer inventory.

Tasks Pane

This pane is located on the right section of the Essentials 2010 console. It displays tasks and actions appropriate to items that have been selected in other panes.

See Also

[Computers Pane in Essentials](#zc21316267032450badbde87d64c6f1bd)

[Monitoring Pane in Essentials](#z3d3b6b5182cd4b4dbca83c11d8bd8caa)

[Updates Pane in Essentials](#z12186aa988d8453eb39f8523a123b902)

[Software Pane in Essentials](#z71614ea316b94317805d497d1168bd39)

[Reports Pane in Essentials](#z1589ffca7f0642f4a32b4ef796454aa6)

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

[Authoring in Essentials](#z5bcf74dff98d44d69a798bff35680cc2)

Computers Pane in Essentials

The Computers navigation button displays the Computers Overview pane, which contains information about the computers that System Center Essentials 2010 manages, and provides access to related tasks.

After installing Essentials 2010, if you did not complete the initial tasks for discovering objects to manage and for configuring Update Management, the Computers Overview pane displays a message prompting you to complete those tasks before using Essentials 2010.

When you click Computers, you can view the following information:

 A list of default and customized computer groups that can be used for software deployment and update management.

 A list of the members of each computer group.

 A list of virtual machines.

 A list of performance and resource optimization (PRO) tips that you can implement for virtual machines.

 A list of virtualization jobs that have been or are scheduled to run on virtual machines.

 Installed software for a selected computer.

 Update compliance for a selected computer.

 Disk space usage and other hardware inventory information for a selected computer.

 Performance monitoring information for a selected computer.

 Alerts for a selected computer.

 Tasks you can perform on a selected computer or on selected computer groups.

 Reports.

See Also

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

[Virtualizing Your Server Environment in Essentials](#zba825284352e42c9bd0e41c3a2cf44a5)

[Inventory in Essentials](#z03a1ae991d1248499a63fd37e10365ca)

Monitoring Pane in Essentials

The Monitoring navigation button displays the Monitoring Overview pane, which contains information about the health and other monitoring status for all the objects that System Center Essentials 2010 is monitoring and provides access to related tasks.

When you click Monitoring, you can view the following information:

 A summary of alerts for the last 24 hours and for the last 4 days for computers and for distributed applications.

 Alert, event, performance, diagram, and state view for managed objects. This includes the associated knowledge per alert and inventory information.

 A status summary of all tasks that were initiated for a selected monitored object and the task code.

In the Monitoring Overview pane, you can also perform the following actions:

 Change Management Pack and notification settings.

 View Help and how-to videos on monitoring.

 Manage maintenance mode.

The Monitoring pane in the Essentials 2010 console enables users who track and resolve issues to quickly find the monitoring data they need so that they can act on that data. The pane displays different aspects of monitoring data that is collected by Essentials 2010. Each item in the Monitoring pane is either a view type or a folder that contains views. The Find, Search, and Scope buttons can make it easier for users to manage that data.

Note

For more information about the different view types available, see [Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae).

The views listed directly under the Monitoring node are global views that display aspects of your entire environment, such as current active alerts. The folders listed in the navigation pane are containers for views defined within a Management Pack. The feature folders are created when Essentials 2010 is installed. The folders that contain views from Management Packs are created when the Management Pack is imported and are named after the Management Packs.

You cannot delete the folders or views that are created when Essentials 2010 is installed or when Management Packs are imported. However, you can personalize the display of these views by using the Personalize View feature in the Action pane. Also, you can hide any of the folders by clicking Show or hide views, located just above the navigation buttons, and making your selections by clearing the appropriate check boxes in the Show or hide views window.

See the following topics in this section for detailed information about the operations you can perform from the Monitoring pane:

 [Global Views in Essentials](#z406f677deb2f46248eb38d4e9115c970)

 [Agentless Exception Monitoring in Essentials](#zec5fa9dbaa0a45529e06095cab9f27f0)

 [About Health Explorer in Essentials](#zd2bc34e1b14349878ee49230accfc6ef)

 [Maintenance Mode in Essentials](#zd4d3b88c47294dbe84ce60db83d891ee)

See Also

[Groups in Essentials](#ze678ca8f86914eb586e357d43bbfa5a2)

[How to Create a Diagram View in Essentials](#z42252d830ded4621b704855b80fb7d8b)

[How to Create a State View in Essentials](#z5a28dd234a2e48c79313fc5bf293674b)

[How to Manage Monitoring Data Using Scope, Search, and Find in Essentials](#z312f208ac3744e52a67dc45a5e663f42)

[How to Personalize a View in Essentials](#zd51be470723948069f8423c3927cb21f)

[Overrides in Essentials](#z3909e213cf8d4f82aec922d0ed18bb9f)

[Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae)

Global Views in Essentials

Global views are a set of views, listed directly under the Monitoring node in the Monitoring pane of the Essentials 2010 console, that include information from all object types in your deployment of Essentials 2010. They are designed to give a high-level overview of the latest issues and actions that have occurred in your Management Group.

Because items in these views include all managed objects, each view can contain a lengthy list of objects. To find a particular object or group of objects from these lists, you can use the Scope, Search, and Find buttons on the Essentials 2010 toolbar. For more information, see [How to Manage Monitoring Data Using Scope, Search, and Find in Essentials](#z312f208ac3744e52a67dc45a5e663f42).

Default Global Views

The following global views are created by default when Essentials 2010 is installed, and they are listed directly under the Monitoring node.

Active Alerts

|  |
| --- |
| An alert view that displays an aggregation of all alerts that are not closed. |

Discovered Inventory

|  |
| --- |
| A state view that displays all objects located through discovery. |

Distributed Applications

|  |
| --- |
| A state view that displays all monitoring objects created by the Distributed Application Designer. |

Task Status

|  |
| --- |
| A task status view that lists all available tasks. |

Windows Computers

|  |
| --- |
| A state view that displays all discovered computers. |

See Also

[Monitoring Pane in Essentials](#z3d3b6b5182cd4b4dbca83c11d8bd8caa)

[How to Manage Monitoring Data Using Scope, Search, and Find in Essentials](#z312f208ac3744e52a67dc45a5e663f42)

Agentless Exception Monitoring in Essentials

Agentless Exception Monitoring (AEM) is a component of the Monitoring feature in System Center Essentials 2010. AEM enables you to monitor operating systems and applications for errors within your organization. By default, when a Microsoft application encounters a severe error, it creates a report that can be sent to Microsoft to consolidate data that can lead to a reduction in errors. Using AEM, you can direct these reports to an Essentials 2010 management server. Essentials 2010 can then provide detailed views and reports on this consolidated error data. Using this data, you can determine how often an operating system or application experiences an error and the number of affected computers and users.

AEM Views

By default, the following views display AEM data in the Monitoring area of the Essentials 2010 console:

Application Error Events

|  |
| --- |
| An event view that lists the application error reports generated by severe application or operating system failures. |

Application View

|  |
| --- |
| A state view that lists applications that have failures. |

Crash Listener View

|  |
| --- |
| A state view that lists the computers that are listening for failures that occur on other computers or applications. |

Error Group View

|  |
| --- |
| A state view that lists application errors by error group. |

System Crash View

|  |
| --- |
| A state view that lists the computers that have an operating system failure. |

See Also

[Monitoring Pane in Essentials](#z3d3b6b5182cd4b4dbca83c11d8bd8caa)

About Health Explorer in Essentials

In System Center Essentials 2010, you can use the Health Explorer tool to understand changes in managed objects. Health Explorer gives you the ability to view and then take action on alerts, state changes, and other significant issues generated by monitoring objects on your network.

You can start Health Explorer from the Actions pane after you select an object, alert, or event in the results pane. Health Explorer organizes health information into the following categories:

 Performance

 Security

 Availability

 Configuration

All monitors and rules that are defined for a selected object display in the appropriate category.

By default, when the Health Explorer windows first opens, all monitors that are in a failed, or red, state are expanded. If a monitor contains other monitors, as in the case of a roll-up monitor, all monitors are shown in a hierarchical layout so that monitoring data for all dependent services and applications is displayed. If you want to view more detail on any dependent monitor, you can right-click that monitor and then click Monitor Properties to open another Health Explorer window.

When the Health Explorer window is open, you can review a history of diagnostic tests that have run automatically and the output from those tasks. You can also run additional diagnostic tasks. Any task that is formatted as a hyperlink can run directly from the Knowledge tab.

The Health Explorer window refreshes automatically every 30 seconds. You can press the F5 function key for an immediate refresh.

See Also

[Monitoring Pane in Essentials](#z3d3b6b5182cd4b4dbca83c11d8bd8caa)

Maintenance Mode in Essentials

When a monitored object, such as a computer or distributed application, is taken offline for maintenance, Essentials 2010 detects that no agent heartbeat is being received and, as a result, might generate numerous alerts and notifications. To prevent alerts and notifications, place the monitored object into maintenance mode. In maintenance mode, alerts, notifications, rules, monitors, automatic responses, state changes, and new alerts are suppressed at the agent.

Important

We recommend that you do not put the Essentials management server (or a server running a remote Essentials 2010 database) into maintenance mode because configuration distribution, the heartbeat feature, and other features for the system might become unreliable.

You can initiate maintenance mode by clicking Start Maintenance Mode in the Actions pane of the Monitoring area in the Essentials 2010 console. You can define maintenance mode for a monitored object and the entities it hosts. While the monitored object is in maintenance mode, you can edit the maintenance mode settings. You can also specify duration for an object to remain in maintenance mode, or schedule a time for the managed object to be removed from maintenance mode.

See Also

[How to Edit Maintenance Mode Settings for a Monitored Object in Essentials](#zc26e883260bf4ebead3e776817d3ee78)

[How to Put a Monitored Object into Maintenance Mode in Essentials](#zfd61fef520774f8b9613195800606e5d)

[How to Stop Maintenance Mode on a Monitored Object in Essentials](#za36fb18770b346f8babe1674ed176ad7)

Updates Pane in Essentials

The Updates navigation button displays the Updates Overview pane, which contains information about update management and provides access to related tasks in System Center Essentials 2010.

When you click Updates, you can view the following information:

 Update deployment status summaries.

 List of available updates by categories.

 Properties of a selected update.

 Update synchronization status.

 Update management reports.

 Help on update management.

In the Updates Overview pane, you can also perform the following tasks:

 View unapproved updates.

 Create new updates.

 Configure update management settings.

 Start a manual synchronization.

 Import updates from catalogs.

See Also

[Update Management in Essentials](#z27b4f0d9159b4dbc806a8028c0f33d99)

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

Software Pane in Essentials

The Software navigation button displays the Software Overview pane, which displays information about software deployment and provides access to related tasks in System Center Essentials 2010.

When you click Software, you can view the following information:

 List of software packages.

 Software deployment status summaries.

 Properties of a selected software package.

 Software deployment reports.

 Help on software deployment.

In the Software Packages Overview pane, you can also perform the following tasks:

 Create software packages.

 Deploy software packages.

The Software pane in the Essentials 2010 console enables users who deploy software in their IT environment to quickly package and install software on managed computers.

See Also

[Software Deployment in Essentials](#ze44aa029d4a84eefa92bd027b46a1dfa)

Reports Pane in Essentials

The Reporting navigation button displays the Reporting Overview pane, from which you can run System Center Essentials reports. This pane also provides access to related tasks.

After installing System Center Essentials 2010, if you did not complete the initial tasks for discovering objects to manage and for configuring update management, the Reporting Overview pane displays a message prompting you to complete those tasks before using Essentials 2010.

When you click Reporting, you can view the following information:

 Essentials 2010 reports, including inventory reports, monitoring reports, and deployment reports.

In the Reporting Overview pane, you can run reports.

System Center Essentials 2010 integrates reporting capability into the Essentials console by adding a Reporting area that you can access from the console navigation pane. Security for reporting is integrated with Essentials 2010 security.

Reports

Reports in Essentials 2010 can be either targeted or generic.

All reports are shipped in management packs. If the object is monitored by a specific management pack that provides additional reports, selected reports are displayed in the Actions pane.

Targeted Reports

Targeted reports are run with parameters based on the console context at the time the report is run. Therefore, you do not have to search or enter the default parameters that are used by the report. Targeted reports are available in the Actions pane associated with the views within the monitoring section; for example, Alert View and State View.

Generic Reports

Generic reports are reports run from the Reporting Overview pane without context from the console. For example, an Availability report that needs the user to enter a monitored object to run the report against is a generic report. You would have to manually select parameters to run these reports.

Reporting Overview Pane

The Reporting Overview pane is where reports are always available and is accessed from the Reporting button in the navigation pane. These reports include a report library and authored reports. The report library contains generic reports. Reports launched from here have no pre-specified context. The context for the report is defined in the smart parameter header, located at the top of the Report window.

See Also

[How to Export a Report in Essentials](#zd220937e94bd48569c555e703a5a648f)

[How to Print a Report in Essentials](#z0fdaf9cd143f43db932cd9a06fa17f95)

[How to Run a Report in Essentials](#z51046b53d08f4d44850d18ab93f423f0)

Administration Pane in Essentials

Use the Administration pane of the Essentials 2010 console to configure groups and managed objects.

In This Section

[Device Management Node in Essentials](#z7be49aace8dd4cbd97ec045cb7ed2de3)

|  |
| --- |
| Provides information about managing specific agent managed computers and network devices in Essentials 2010. |

[Settings Node in Essentials](#z43f459f7ec454099af67e7426b96ee67)

|  |
| --- |
| Provides information about configuring global settings in Essentials 2010. |

[Security Node in Essentials](#zdaaba3ed82db4332a1d2629ad20f3e47)

|  |
| --- |
| Provides information about configuring security through Run As accounts and Run As profiles in Essentials 2010. |

[Management Packs Node in Essentials](#z0d10a80c5c7548dda15ff704c3786416)

|  |
| --- |
| Provides information about importing, exporting, and viewing the properties of Management Packs in Essentials 2010. |

[Notifications Node in Essentials](#z711a8463581f4406bb94bf5a6d9a2f18)

|  |
| --- |
| Provides information about enabling and configuring notifications in Essentials 2010. |

See Also

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

Device Management Node in Essentials

Use the Device Management node of the Essentials 2010 console Administration pane to perform the post-installation configuration of agent-managed computers and network devices. For more information about these managed objects, see [Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f).

Note

For information about configuring settings for a management group, which can also be referred to as configuring global settings, see [Settings Node in Essentials](#z43f459f7ec454099af67e7426b96ee67).

Agent-Managed Computers

Use the Agent Managed node of the Essentials 2010 console Administration pane to perform the following tasks on the selected agent-managed computer:

 Repair the installation of the agent on the selected agent-managed computers. For more information, see [How to Repair an Agent in Essentials](#zb477eb9f6aef4daf865ce02a2977975e).

 Uninstall the agent from the selected agent-managed computers. Uninstalling the agent also deletes the respective computer from each group of which the computer is a member. The computer is not deleted from the reporting database.

 Delete a computer from its computer group by using the Essentials 2010 console. For more information about deleting an agent-managed computer, see [How to Delete an Essentials Managed Object from a Group](#z2eb84eac8483410593b8d9f950cf10fe). For more information about uninstalling the agent, see [How to Uninstall an Essentials Agent](#za62c52ac8b674ff79364abeb7bcc40ac).

 Open views, such as an Alert view, for the selected agent-managed computer. For more information, see [How to Open a View for an Essentials Managed Object](#zb6997ef1669e49eea9e947f55c788647). For information about views, see [Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae).

 View the properties of an agent-managed computer. For more information, see [How to View the Properties of a Managed Object in System Center Essentials 2010](#zcb2cde1838a64411b0974692c52d1a20).

 Override the group agent heartbeat settings, and configure how often the selected agent-managed computer sends a heartbeat to its management server. A heartbeat is a periodic pulse from an agent to the management server that contains information related to the health of the agent. For more information, see [How to Override Heartbeat Settings for an Essentials Agent](#z66cdc25c5bc24e329cbc01ac669323d7).

Network Devices

Use the Network Devices node of the Essentials 2010 console Administration pane to perform the following tasks on the selected network devices and computers running operating systems other than a Windows operating system.

 Configure a managed network device or computer running an operating system other than Windows to use a different Essentials 2010 proxy agent. You would do this, for example, if you have to load balance the number of devices managed by a proxy agent. For more information, see [How to Configure a Network Device to Use a Different Essentials Proxy Agent](#z1da0448561e54de9b31190a4ffe2ba34).

 Open views, such as an Alert view, for the selected network device or computer running an operating system other than Windows. For more information, see [How to Open a View for an Essentials Managed Object](#zb6997ef1669e49eea9e947f55c788647). For information about views, see [Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae).

 Delete a network device from Essentials 2010. Deleting a managed object removes it from the Essentials 2010 database. The object is not deleted from the reporting database. Deleting a managed object is the only method to remove network device computers. For more information, see [How to Delete an Essentials Managed Object from a Group](#z2eb84eac8483410593b8d9f950cf10fe).

 View the properties of a network device. For more information, see [How to View the Properties of a Managed Object in System Center Essentials 2010](#zcb2cde1838a64411b0974692c52d1a20).

Pending Management

An agent installed with MOMagent.msi needs to be approved for the management group if the management group or the primary management server for the agent is configured to Review new manual agent installations in pending management view, but not Auto-approve new manually installed agents.

See Also

[How to Open a View for an Essentials Managed Object](#zb6997ef1669e49eea9e947f55c788647)

[Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae)

Settings Node in Essentials

Use the Settings node of the Essentials 2010 console Administration pane to perform the post-installation configuration of the Essentials management server and agent-managed computers. These product-wide settings are also referred to as global management settings.

Note

For information about overriding settings for the Essentials management server and agent-managed computers, see [Device Management Node in Essentials](#z7be49aace8dd4cbd97ec045cb7ed2de3).

Agent Heartbeat

Use the Agent Heartbeat setting to configure how often agent-managed computers send a heartbeat to their Essentials management server. A heartbeat is a periodic pulse from an agent to its Essentials management server that contains information related to the health of the agent.

Administration Account

Use the Administration Account setting to change the Essentials 2010 administration account.

Alerts

Use the Alerts setting to create, edit, and classify Essentials 2010 alerts into various states and define the behavior associated with each state.

Database Grooming

Grooming helps maintain the performance of the Essentials 2010 database by managing its size through the deletion of unnecessary records. Use the Management Group General Database Grooming setting to specify when record types, such as Resolved Alerts, are deleted from the Essentials 2010 database. The default grooming setting for all record types is for data older than 7 days.

Privacy

Use the Privacy settings to perform the following actions:

 Enable or disable participation in the Customer Experience Improvement Program (CEIP).

 Enable or disable sending operational data reports to Microsoft.

 Configure sending error reports for Essentials 2010 to Microsoft.

 Configure what information is included in error reports sent to Microsoft.

Reporting

If Essentials 2010 Reporting is installed, use the Reporting setting to change the path to the reporting server.

Users

Use the Users settings to add or remove user accounts or groups that control user accounts that are eligible to be Essentials 2010 administrators.

Note

The user account for an Essentials administrator must be a member of an Active Directory Domain Services group in the list.

Recommended Management Packs

Use the Recommended Management Packs setting to configure Essentials 2010 to discover and notify you about updates to management packs that monitor selected applications in your environment.

Server Heartbeat

Use the Server Heartbeat setting to configure the number of missed heartbeats the Essentials management server can allow from an agent-managed computer before the state of the computer is changed to critical.

Server Security

Use the Server Security setting to configure whether agents installed by using MOMAgent.msi will be rejected, displayed in Pending Management for review, or automatically approved.

Server Computer Discovery

Use the Server Computer Discovery setting to configure if and when the Essentials management server should automatically scan for new computers in the domain by using Active Directory Domain Services.

Server Daily Health Report

Use the Server Daily Health Report setting to configure whether and how the Daily Health Report should be e-mailed on a daily basis. To send the report to multiple subscribers, set up an e-mail distribution list containing the desired subscribers and use that distribution list as the subscriber.

Update Management Proxy Server

Use the Proxy Server setting to configure whether Essentials 2010 Update Management should use a proxy server to connect to the Internet and what that proxy server's settings should be.

Update Management Products and Classifications

Use the Products and Classifications setting to specify for which Microsoft products Essentials 2010 Update Management should download updates, and the types of updates that should be downloaded.

Update Management Update Files and Languages

Use the Files and Languages setting to specify the languages for which you want updates downloaded and to specify whether you want update files to be stored locally or on Microsoft Update.

Update Management Synchronization Schedule

Use the Synchronization Schedule setting to configure how and when Essentials 2010 Update Management should be synchronized with Microsoft Update to keep the list of available updates current.

Update Management Auto-Approvals

Use the Auto-Approvals settings to configure how and when to approve updates, how to approve revisions to released updates, and to automatically approve updates to Essentials 2010.

Update Management Maintenance

Use the Maintenance settings to configure scheduled maintenance for the updates database and for updates packages, to index or re-index the updates database, and to remove files that Essentials 2010 is no longer using.

See Also

[How to Configure Notifications in Essentials](#z23137433aad7418fa751e00784d89bc6)

[How to Discover and Prepare Objects for Management in Essentials](#z74cda36801ac45aab900d547511b3cc1)

[How to Configure Update Management and Scheduled Maintenance in Essentials](#zf39732a6d20e4b3a93f096fb3504b165)

[How to Configure Synchronization Frequency with Microsoft Update in Essentials](#z8e52f25c2d6647898d09c334b468e25c)

[How to Configure Essentials to Automatically Select and Approve Updates](#z488637d611204f6587eaef7f45b2dbe1)

[Configuring Update Management in Essentials](#z359934de0ef14f719291846e317a6a91)

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

Security Node in Essentials

Use the Security pane of the Essentials 2010 console to configure the Essentials management server and its managed objects.

In This Section

[About Run As Profiles and Run As Accounts in Essentials](#z0f974e309f30459d8e164f92427986d0)

|  |
| --- |
| Provides information about Run As Profiles and Run As Accounts in Essentials 2010. |

[Credential Types in Essentials](#zc7df65b3ad2e476da8993240701e0d67)

|  |
| --- |
| Provides information about credential types in Essentials 2010. |

[Running a Task, Rule, or Monitor with Run As in Essentials](#zacb24b68a31743929e5851ad8b6f43b2)

|  |
| --- |
| Provides information about executing a task, rule, or monitor by using Run As in Essentials 2010. |

See Also

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

About Run As Profiles and Run As Accounts in Essentials

In Essentials 2010, Run As Profiles and Run As Accounts are used to select users with the privileges needed for running rules, tasks, and monitors.

Management Pack authors create a rule, task, or monitor, and then associate it with a Run As Profile. The named Run As Profile is imported along with the Management Pack into Essentials 2010.

Note

Tasks, rules, and monitors consist of modules that receive credentials or secured data, such as user names and passwords. An administrator must understand the functionality of the modules and use appropriate precautions when sending such data to them.

The Essentials 2010 administrator creates a named Run As Account and specifies users and groups. The administrator then adds the Run As Account to the Run As Profile and specifies the target computers that the account should run on.

Note

The account that you select for the Run As Account must be able to log on to the local computer. Otherwise, the module will fail.

An administrator can associate multiple Run As Accounts with a Run As Profile. This functionality is useful in cases where the Run As Profile is used on different computers and each computer requires different credentials.

For example, Jane has the user rights that enable her to run the task on the first computer running SQL Server. Fred has the user rights that enable him to run the task on the second computer running SQL Server. A separate Run As Account is created for Jane and Fred, and both are associated with the single Run As Profile. The task and the appropriate credentials are pushed to the target computer so that the task can run with either Jane's or Fred's credentials. Account information sent between the Essentials management server and the target computer is encrypted.

To specify an appropriate account (for example, a least-privileged account), you can associate the rules in an unsealed Management Pack with a Run As Profile by editing the properties for the rule. For more information, see How to Edit Properties of a Rule in Operations Manager 2007.

See Also

[Security Node in Essentials](#zdaaba3ed82db4332a1d2629ad20f3e47)

Credential Types in Essentials

You use credentials in System Center Essentials 2010 with Run As Accounts. Essentials 2010 supports the following types of credentials for Run As Accounts:

 Windows Authentication. Authentication using Windows domain or local accounts. This is the only account type that you can specify a module to run under.

 Community string. Used for interacting with SNMP devices. Essentials 2010 uses SNMP 2.0, which sends the community string in plaintext format, so this credential is secured only down to the agent level. Any task, rule or monitor exposes it on the network in clear text.

 Basic. A user name and password intended to be used with HTTP Basic Authentication.

 Simple. Any credential which consists of a user name and password.

 Digest. A user name and password intended to be used with HTTP Digest Authentication.

 Binary. Used with Management Packs to store and retrieve security data for monitoring purposes, such as might be used with synthetic transactions.

 Action account. Credentials for use with agent action accounts in Essentials 2010.

See Also

[How to Create a Run As Account in Essentials](#z5a96ed9d95584803ab3324f8d7069d45)

[About Run As Profiles and Run As Accounts in Essentials](#z0f974e309f30459d8e164f92427986d0)

[Security Node in Essentials](#zdaaba3ed82db4332a1d2629ad20f3e47)

Running a Task, Rule, or Monitor with Run As in Essentials

Run As Profiles and Run As Accounts together provide an appropriate identity to run a task, rule, or monitor in Essentials 2010. A Run As Profile allows a Management Pack author to associate an identity, other than the default action account, with a module so that it can run as that identity.

A Run As Account represents an identity that can be associated with a Run As Profile. Management Pack authors with the necessary user rights can create tasks, rules, or monitors to perform various functions. Run As Accounts and Run As Profiles enable tasks, rules, or monitors to run with the account that has the necessary user rights.

Note

As an Essentials 2010 administrator, be sure you know what actions are going to be performed when importing Management Packs. This is especially important when importing Management Packs containing a task, rule, or monitor that uses a Run As Profile. Ensure that you understand the function of any module for which you specify a Run As Account associated with a Run As Profile.

The following example illustrates the relationship between Run As Profiles and Run As Accounts.

Sam is working on a Management Pack for his company's Line of Business (LOB) application and is creating a Get Data task. Sam knows that the action account that he is using might not have sufficient rights to run this task; however, Jane, the LOB Administrator, does have the sufficient user rights. So Sam will configure the task to run with Jane’s credentials.

While authoring the Management Pack, Sam creates a Run As Profile called Data Operators and associates it with the task module. When the LOB Management Pack containing the Get Data task is imported into Essentials 2010, the Run As Profile associated with the task will be included in the import and Data Operators will appear in the list of available Run As Profiles.

The Essentials 2010 administrator will create a Run As Account configured with Jane’s credentials. The Run As Account is then added to the Run As Profile that the task will use. The target computer on which the Run As Account will be used will also need to be explicitly specified in the Run As Profile.

Note

The default account for the Run As Profile is the action account. By default, all rules, monitors, and tasks on an agent run as the action account for that agent. Consider what the action account should be, and choose an account with appropriate rights. Given the wide range of rights of a domain administrator account, and considering the idea of using a least-privileged account, the domain administrator account would not be a good choice. Account credentials associated with a particular Run As Account should consist of the least amount of privileges necessary. It is suggested that you do not associate high-privilege accounts unless absolutely necessary.

Run As Profiles default to the action account when they are created but can later be overridden on a per-computer basis. Because each computer requires a different credential, Essentials 2010 administrators can associate multiple Run As Accounts with each Run As Profile, which is useful when the Run As Profile is used on different computers.

See Also

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

[Security Node in Essentials](#zdaaba3ed82db4332a1d2629ad20f3e47)

[Authoring in Essentials](#z5bcf74dff98d44d69a798bff35680cc2)

Management Packs Node in Essentials

In Essentials 2010, when you select the Management Packs node in the Administration pane, you get a list of all management packs imported into your management group. In the Administration pane, you can also import and create a new management pack. If you right-click an individual management pack in the results pane, you can view its properties, remove it, or export any customizations to another Management Group.

Note

You can export only management packs that are unsealed.

See Also

[How to Export Management Pack Customizations in Essentials](#z20f0fd3d438d471ca3f49ca0cee27b0d)

[How to Import a Management Pack in Essentials](#zf0f549c011de4ba99c18cf223bbc5cb5)

[How to Delete a Management Pack in Essentials](#z3320e82a001e4ffda1c04bb8fd5aca0c)

[Overrides in Essentials](#z3909e213cf8d4f82aec922d0ed18bb9f)

[Management Pack Templates and the Add Monitoring Wizard in Essentials](#z2a92131adbc9412b86065d980d66c8d5)

Notifications Node in Essentials

Notifications are messages that are automatically sent when an alert occurs on a monitored system. To configure a notification in Essentials 2010, you must first choose the format of the notification, then define what information the notification should contain, and finally define who should get the notifications. Each of these definitions must be completed in this order.

Choosing the format of the notification is called enabling a notification channel. The available notifications channels are command, e-mail, instant messaging, and Short Message Service (SMS). A command channel can run a script or executable file. After enabling the notification channel, you must then create at least one notification subscriber. You can then create a notification subscription, which defines when and from what device notifications can be sent, to whom they should be sent, and through which channels they should be sent. You can limit who receives notifications by group membership, object types, alert criteria such as severity, priority, resolution state, and even category of alert, and you can configure alert aging.

Notification Channel

To send notifications, Essentials 2010 uses a variety of channels, such as command, e-mail, text messaging, and instant messaging. The length and format of the message varies based on the media that receives the notification.

The protocols supported by Essentials 2010 notification can work with a variety of e-mail, instant messaging, and text messaging systems. Essentials 2010 supports sending e-mail through Simple Mail Transfer Protocol (SMTP), as well as Session Initiation Protocol (SIP) and short message service (SMS), which supports the transmission of short text messages to and from mobile phones.

In addition, you can configure a notification to run a command instead of or in addition to sending a notification message. A command can specify a path to an application or script that can perform basic troubleshooting functions for a particular failure.

Notification Message Content

Essentials 2010 administrators can configure message content and length for a notification. Essentials 2010 has two default message formats: short and verbose. The default short format has only a subject and is designed for small bandwidth channels and devices, such as instant messages and pagers. The default verbose format has a subject and a message body and is designed for notification channels that have more bandwidth available, such as e-mail.

Essentials 2010 uses variables to define the subject and body content of a notification message. An example of a variable is $Alert Name$. This variable is replaced with the name of the alert that triggered the notification. An administrator can accept the defaults for the short and verbose messages or edit the subject and content of a notification message.

Administrators can set a schedule to rotate which subscriber receives a notification message. Also, Essentials 2010 can accommodate different notification channels and endpoints with a variety of delivery protocols and formats. For example, some operators prefer to receive notifications on a pager, while others might prefer to receive notifications by e-mail.

Notification Subscriber

A subscriber is the user that receives the notification message. In Essentials 2010, you can define subscribers by list or by group membership.

Compiling a list manually is the most straightforward way to define notification subscriber. Use this approach if the list of recipients does not change. For a less labor-intensive method, use group membership. If you are using Essentials 2010 in an Active Directory network environment, you can use group membership to determine who receives notification messages. Additionally, Active Directory accounts can store all contact information, including e-mail addresses, telephone numbers, and pager information. With Active Directory integration, Essentials 2010 is automatically informed of any change to the contact information of an account.

See Also

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

[How to Configure Notifications in Essentials](#z23137433aad7418fa751e00784d89bc6)

Authoring Pane in Essentials

The Authoring navigation button displays the Authoring Overview pane, which displays a list of all installed and imported Management Packs and the objects defined by those Management Packs for System Center Essentials 2010.

When you click Authoring, you can view the following information:

 Management Pack templates.

 Distributed applications.

 Monitoring groups.

 A list of installed and imported Management Packs, and the classes defined by each Management Pack.

In the Authoring Overview pane, you can also perform the following tasks:

 Add a monitor to a Management Pack.

 Create Management Pack objects.

 Manage Management Packs objects.

 Manage distributed applications.

 Manage monitoring groups.

See Also

[Understanding the Essentials 2010 Console](#z781bf83772394811b1dfd3d30a8779bb)

[Authoring in Essentials](#z5bcf74dff98d44d69a798bff35680cc2)

Managing Computers and Devices in Essentials

To manage a computer using System Center Essentials 2010, the computer must be a member of at least one computer group. A computer group is a collection of managed computers, typically one that reflects some common characteristic.

In Essentials 2010, computer groups are used for software deployment, update management, monitoring, and inventory.

In This Section

[About Computers, Computer Groups and Discovery in Essentials](#z51f286e582c9494bb868c4cfa5a65cc7)

|  |
| --- |
| Describes computer groups in Essentials 2010. |

[How to Discover and Prepare Objects for Management in Essentials](#z74cda36801ac45aab900d547511b3cc1)

|  |
| --- |
| Explains how to discover and prepare objects for management in Essentials 2010. |

[How to Enable, Disable, and Schedule Computer Discovery in Essentials](#zc2a6ceae372749d0affcf9dee52cab3b)

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| Explains how to enable, disable and schedule subsequent computer discoveries in Essentials 2010. |

[How to Create a Computer Group in Essentials](#zd1fde5c66dd1428386f1c92546f2db13)

|  |
| --- |
| Explains how to create computer groups in Essentials 2010. |

[How to Add or Remove Computers from a Computer Group in Essentials](#zf4872e771f3840bfb995d68aa18b6eaa)

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| Explains how to add or remove computers from a computer group in Essentials 2010. |

[How to Stop Managing a Computer in Essentials](#z6aa3973e3f50425ea06b8f0deaa0771c)

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| Explains how to stop managing a computer in Essentials 2010. |

[How to Delete a Computer Group in Essentials](#z1935f9be862d42b593a08d2dd383d4e9)

|  |
| --- |
| Explains how to delete a computer group in Essentials 2010. |

[How to Run a Task for a Computer in Essentials](#z8a06a72a476f4b52a5add0eb39bfb50c)

|  |
| --- |
| Explains how to run a task for a computer in Essentials 2010. |

[How to View Computers, Devices, and Computer Groups in Essentials](#ze42b19375c804aebbdfd5fe2cb84dd7a)

|  |
| --- |
| Explains how to view computer groups and their associated managed computers and devices in Essentials 2010. |

[How to View Computer and Computer Groups Reports in Essentials](#zab29be75be8845d39b77d8c287d3ed46)

|  |
| --- |
| Explains how to view reports for computers and computer groups in Essentials 2010. |

[How to Search for Objects in Essentials](#z80e338956584480c82d2e338b4acc048)

|  |
| --- |
| Explains how to use the search features of Essentials 2010 for quick searches. |

[How to Use Advanced Search to Find Objects in Essentials](#zb329b08f94a342e8b4e6c66d76b2fd85)

|  |
| --- |
| Explains how to use the search features of Essentials 2010 for more complex searches. |

See Also

[Inventory in Essentials](#z03a1ae991d1248499a63fd37e10365ca)

About Computers, Computer Groups and Discovery in Essentials

To use any System Center Essentials 2010 feature, such as software deployment on a managed computer, a computer must be have been discovered and have a management agent installed on it. In Essentials 2010, a computer group is a logical collection of managed computers that you want to manage as a unit. Typically, the computers in a computer group share some common characteristic. Essentials 2010 contains several predefined computer groups, but you can also create your own.

Before a computer can be added to a computer group, the Essentials 2010 management agent must be deployed on that computer.

Discovering and Preparing Computers for Management

Computers that you want to manage by using Essentials 2010 must first be discovered and then be prepared for management by installing an agent on the discovered computers.

Discovery is the process Essentials 2010 uses to search for computers and network devices to be managed in your environment. You can then browse the list of objects that were discovered and select the objects that you want Essentials 2010 to manage. Essentials 2010 installs a management agent on discovered computers, but will not install an agent on a network device. Network devices will instead be managed remotely by the Essentials 2010 management server.

An agent is the Essentials 2010 component that you install on a computer to let the Essentials 2010 management server manage the computer. The agent communicates with the management server, sending data from the managed computers to the management server and downloading data from the management server to the managed computers. The agent also runs tasks on the managed computers.

Discovering computers and installing an agent on them are integral processes and run centrally from the Essentials management server when you run the Computer and Device Management Wizard. The wizard discovers computers in your environment and then installs an agent on each of the computers that you chose to manage.

Initial Discovery

Prepare computers for discovery immediately after installing Essentials 2010. Before discovering computers, be sure to complete the Configure System Center Essentials Wizard, in which you can configure the firewall exceptions to make computer discovery and agent installation successful.

Subsequent Discoveries

After the initial discovery is complete, new computers can be discovered by either of the following methods:

 When enabled by using the Configure System Center Essentials Wizard, the Scheduled Discovery process runs once a day. An option is provided in the Settings view of the Administration pane to change this interval.

 Manually run the Discovery Wizard. For more information, see [How to Discover and Prepare Objects for Management in Essentials](#z74cda36801ac45aab900d547511b3cc1).

Default Computer Groups

Essentials 2010 provides several predefined computer groups, as follows:

 All Windows Clients (n) Includes all managed computers that are running a non-server-based operating system.

 All Windows Computers (n) Includes all computers.

 All Windows Servers (n) Includes all managed computers that are running a server-based operating system.

These default computer groups are dynamic. When you discover and deploy the agent to computers in your organization, the new computers automatically join the appropriate computer groups.

If you have the Virtualization Management component installed, Essentials 2010 also displays an All Virtual Machines group, which lists all virtual machines, whether managed or unmanaged by Essentials 2010. If you have followed the procedures to designate a host server, create or import a virtual machine, and then install an operating system and guest services on the virtual machine, Essentials 2010 can discover it as if it were a physical computer.

Using Computer Groups

All Essentials 2010 features require using computer groups. However, there is a slight difference in how you interact with computer groups depending on the purpose of the computer group. To interact with computer groups that are used for monitoring, in the Essentials 2010 console, click Authoring, and then expand Groups. To interact with computer groups that are used for all other purposes, click Computers.

Computer Groups That Are Used for Monitoring

A monitoring computer group is associated with a management pack that contains the definition of the computer group. By default, several management packs are installed during Essentials 2010 setup. Those management packs typically contain computer groups that are relevant to the management pack, and which let you monitor the computers that are members of that group.

The members list of a monitoring computer group can be static or dynamic. You can define a list of specific computers, or you can define a formula that re-evaluates at a regular interval and updates the member list as necessary.

If you want to use a monitoring computer group for other purposes, you must manually extend the functionality of that group. Click Computers, and create a new computer group based on the monitoring group that you need.

Computer Groups That Are Used for Features Other Than Monitoring

The computer groups that are used for software deployment, update management, and inventory are automatically made available for monitoring purposes. This includes the default computer groups and any new computer groups that you create by using the New Computer Group – Properties dialog box. For example, after you create a new computer group for software deployment, if you select Authoring and expand Groups, the newly created computer group is listed.

The members list of those computer groups can be either a list of specific computers or a list based on an existing monitoring computer group. When specifying a monitoring computer group, the name of the new group is identical to the name of the monitoring group, and the members of the specified monitoring computer group become members of the new computer group. This is a dynamic computer group. When a new computer joins the monitoring computer group, it automatically joins this new computer group.

If you delete a computer group that is based on a monitoring computer group, the original monitoring computer group is not deleted; however, it is no longer available for use with any feature other than monitoring. For example, you can no longer deploy software to the deleted computer group.

See Also

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

[How to Create a Computer Group in Essentials](#zd1fde5c66dd1428386f1c92546f2db13)

[How to Enable, Disable, and Schedule Computer Discovery in Essentials](#zc2a6ceae372749d0affcf9dee52cab3b)

[How to View Computers, Devices, and Computer Groups in Essentials](#ze42b19375c804aebbdfd5fe2cb84dd7a)

[Virtualizing Your Server Environment in Essentials](#zba825284352e42c9bd0e41c3a2cf44a5)

How to Discover and Prepare Objects for Management in Essentials

Use the Computer and Device Management Wizard in System Center Essentials 2010 to discover computers and network devices and then install agents on the computers that you want to manage.

After initially configuring Essentials 2010, you might want to start managing new computers as they are added to the network, or you might want to manage computers that were previously discovered but not selected for management at that time. You can run the Computer and Device Management Wizard whenever you want to discover new computers on the network.

Note

It can take 90 minutes or more for the information about discovered objects to be added to the database.

To discover objects to manage and to install agents

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| --- |
| 1. In the Essentials console, click Computers.  2. In the Computers Overview pane, click Add New Computers and Devices.  3. Follow the prompts to complete the wizard. |

If there is a lack of connectivity between the Essentials management server and a computer you want to manage due to host firewall settings or a lack of administrative privileges on target the computer, the deployment (also known as a push-install) of the Essentials agent to that computer might fail. The backup agent deployment management pack rules Agent deployment using Update Services Event Based Rule and Agent deployment using Update Services Schedule Based Rule check for installation failures of the Essentials agent. In the event that Essentials 2010 has failed to push-install the agent on a computer that you want to manage, the Windows Server Update Services (WSUS) agent on that computer contacts the Essentials management server and then downloads and installs the Essentials agent. This process might take between 2-3 hours.

Computers that use WSUS to download and install the Essentials agent are automatically approved unless Agent deployment using Update Services Schedule Based Rule is disabled. Use the following procedure to disable automatic approvals for computers pending management due to failed agent installations.

To disable automatic approvals for computers pending management

|  |
| --- |
| 1. In the Essentials console, click Authoring.  2. In the Authoring pane, click Rules.  3. In the Look for box, type agent deployment, and then click Find Now.  4. When the results list appears, right-click Agent deployment using Update Services Schedule Based Rule, and then click Properties.  5. Click the Overrides tab, click Disable, and then select the objects or groups for which to disable this rule. When you have finished, click Close to save your changes. |

See Also

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

[How to View Computers, Devices, and Computer Groups in Essentials](#ze42b19375c804aebbdfd5fe2cb84dd7a)

How to Enable, Disable, and Schedule Computer Discovery in Essentials

After you install and deploy System Center Essentials 2010 and begin managing computers or network devices in your enterprise, you might also want to manage additional computers over time to accommodate growth and other changes in your organization.

If you enable this feature in the Configure System Center Essentials Wizard, one of the Essentials 2010 installed Management Packs performs discovery once each day. During that process, Essentials 2010 searches your network for computers that have not yet been discovered. If new computers are found, Essentials 2010 automatically installs an agent on them so that they can also be managed.

To enable or disable scheduled computer discovery

|  |
| --- |
| 1. In the Essentials console, click Authoring.  2. In the Authoring pane, click Rules.  3. In the Look for box, type Scheduled and click Find now.  4. In the Rules pane, click Scheduled Agent Discovery and Installation.  5. In the Rule details pane, click View knowledge.  6. On the Configuration tab, make changes. |

See Also

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

[How to Add or Remove Computers from a Computer Group in Essentials](#zf4872e771f3840bfb995d68aa18b6eaa)

[How to Create a Computer Group in Essentials](#zd1fde5c66dd1428386f1c92546f2db13)

[How to Discover and Prepare Objects for Management in Essentials](#z74cda36801ac45aab900d547511b3cc1)

How to Create a Computer Group in Essentials

Computer groups can be used in System Center Essentials 2010 to specify a subset of your managed computers, to which you can apply rules, apply monitors, deploy software, or use other Essentials management tools.

When you create a new computer group, it is displayed along with the default computer groups in the Computers and Monitoring views. It is also available when approving software and update deployments.

Note

After creating a new computer group, it might take several minutes for the group members to be displayed in the Computers pane. You might also need to right-click the new group and select Refresh.

To create a new computer group containing individually selected computers

|  |
| --- |
| 1. In the Essentials console, click Computers.  2. In the Computers pane, click Create a Computer Group.  3. Select the Select computers from the list below check box.  4. In the Create New Computer Group dialog box, enter a meaningful name for the new computer group. The names are displayed alphabetically in other locations in Essentials.  5. Select or clear check boxes for the individual computers that you want to add to the new group in the Members of this computer group list. Use the drop-down arrows at the column headings to filter the list on Computer Name, Operating System Version, or Computer Model.  6. Click OK. |

To create a computer group based on a managed computer group

|  |
| --- |
| 1. In the Essentials console, click Computers.  2. In the Computers pane, click Create a Computer Group.  3. Under Criteria, select Use a managed computer group from the drop-down list box, and then under Managed computer groups, select a managed computer group from the drop-down list box.  4. In the Members of this computer group dialog box, select the computers.  Note  The new computer group is given the same as that of the selected managed computer group. |

To create a computer group using dynamic membership

|  |
| --- |
| 1. In the Essentials console, click Computers.  2. In the Computers Overview pane, click Create a Computer Group.  3. Type a name for the new computer group in the Computer group name text box.  4. Under Choose computers, select Specify Criteria from the drop-down list box.  5. Select one or more criteria from the list to define and apply to the group:   Manufacturer   Model   Operating system   Service pack   Organizational unit  The list of values in the criteria drop-down list boxes (for the operators Equals and Does not equal) is based on inventory information reported by computers that are already under management. Changes to certain inventory may take up to 24 hours to appear in the drop-down list boxes, depending on when the managed computer reports the updated information. When using Pattern matching criteria, the search is case sensitive.  The Organizational Unit information displayed in the list of available values is reported by agents and not obtained from Active Directory. When matching against an OU, members of Child OUs are not included. It is necessary to explicitly match each Child OU that should be included in the group definition.  If multiple Membership Criteria are selected, all selected criteria will need to be matched for a computer to be added as a member of the group. For example, if selections are made for operating system and service pack, then both criteria need to match for a computer to be a member of the group you are creating.  6. After defining your search criteria, click Create.  After the dynamic membership group is created, it may take up to 10 minutes for group members to be displayed in the Computers pane. You might also need to right-click the new group and select Refresh. |

See Also

[Groups in Essentials](#ze678ca8f86914eb586e357d43bbfa5a2)

[How to Add or Remove Computers from a Computer Group in Essentials](#zf4872e771f3840bfb995d68aa18b6eaa)

[How to View Computers, Devices, and Computer Groups in Essentials](#ze42b19375c804aebbdfd5fe2cb84dd7a)

[How to Delete a Computer Group in Essentials](#z1935f9be862d42b593a08d2dd383d4e9)

How to Add or Remove Computers from a Computer Group in Essentials

Adding and removing computers is a simple process in System Center Essentials 2010. However, the default computer groups (All Windows Computers, All Windows Clients, and All Windows Servers) cannot be changed or removed.

You can change a nondefault computer group by adding or removing computers or changing the criteria defined for a computer group using the following Essentials 2010 console panes:

 Computers pane. This location provides a quick and easy way to add computers to or remove them from a computer group that you have created. However, you cannot change computer groups based on an existing Management Pack group. Essentials 2010 automatically adds computers to appropriate groups based on defined criteria.

 Authoring pane. This location provides a robust means to add many more types of available objects to more types of groups, including computer groups. This is the only location from which you can change the members of the default computer groups (All Windows Computers, All Windows Clients, and All Windows Servers) or computer groups based on an existing Management Pack group.

To change the criteria of a computer group in the Computers pane

|  |
| --- |
| 1. In the Essentials console, click the Computers button.  2. In the Computers pane, expand Computer Groups.  3. Right click a group you created and click Edit Group.  4. Change the criteria for this computer group based the properties of computer or device you want to add to the group, and then click Create.  Essentials automatically adds new computers and devices that match the selected criteria. |

How to add or remove computers from a computer group in the Authoring pane

|  |
| --- |
| 1. In the Essentials console, click the Authoring button.  2. In the Authoring pane, expand Authoring and click Groups.  3. In the Groups pane, right click a group and click Properties.  4. Click the Explicit Members tab, and click Add/Remove Objects. This opens the Create Group wizard Object Selection page.  5. On the Object Selection page, under Search for, select Computer.  6. Click Search. You can enter any portion of a computer name in Filter by part of name. Wildcards are not supported.  7. Do either of the following:   In Available items, select any computer you want to add and click Add.   In Selected objects, select any computer you want to remove and click Remove.  8. Click OK. |

See Also

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

[How to Create a Computer Group in Essentials](#zd1fde5c66dd1428386f1c92546f2db13)

[How to Delete a Computer Group in Essentials](#z1935f9be862d42b593a08d2dd383d4e9)

[How to Run a Task for a Computer in Essentials](#z8a06a72a476f4b52a5add0eb39bfb50c)

[How to Stop Managing a Computer in Essentials](#z6aa3973e3f50425ea06b8f0deaa0771c)

How to Stop Managing a Computer in Essentials

If you have reached the limit of devices that System Center Essentials 2010 can manage, or if you want to take computers and devices out of management so that you can rebuild, upgrade, or repurpose them, you can stop managing one or more computers at any time in Essentials 2010.

When you configure Essentials 2010 to stop managing a computer, the agent is uninstalled from that computer, the computer is removed from all the computer groups to which it belonged, and it is no longer displayed in the Essentials console.

When you stop managing a computer, the count of computers managed by Essentials 2010 is decreased by one.

To stop managing a computer

|  |
| --- |
| 1. In the Essentials console, click the Administration button.  2. In the Administration pane, expand Administration and then expand Device Management.  3. Select Agent Managed.  4. In the Views pane, select the computers that you want to stop managing.  5. Right-click one of the selected computers, and click Uninstall.  6. Confirm your action.  Note  Use this procedure when you are rebuilding or repurposing machines that will no longer be seen on the network. Use the following procedure when you want to stop managing a machine that will remain on the network. |

To manually uninstall the agent directly on the managed computer

|  |
| --- |
| 1. On the managed computer, open the Control Panel and select Add or Remove Programs.  2. In the Add or Remove Programs dialog box, select Microsoft Operations Manager R2 Agent.  3. Open the Essentials console.  4. In the navigation pane, select Administration.  5. In the Administration pane, expand Administration and then expand Device Management.  6. Select Agent Managed.  7. In the Views pane, highlight the computers from which you have manually removed the agent.  8. Click Delete. |

See Also

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

[How to Discover and Prepare Objects for Management in Essentials](#z74cda36801ac45aab900d547511b3cc1)

[How to View Computers, Devices, and Computer Groups in Essentials](#ze42b19375c804aebbdfd5fe2cb84dd7a)

How to Delete a Computer Group in Essentials

You can easily remove any computer group that you no longer need in System Center Essentials 2010, with the exception of the default computer groups (All Windows Computers, All Windows Clients, and All Windows Servers).

To delete a computer group

|  |
| --- |
| 1. In the Essentials console, click Computers.  2. Expand Computer Groups.  3. Right-click a computer group and click Delete. You cannot delete the All Windows Computers, All Windows Clients, or All Windows Servers group. |

See Also

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

[How to Add or Remove Computers from a Computer Group in Essentials](#zf4872e771f3840bfb995d68aa18b6eaa)

[How to Create a Computer Group in Essentials](#zd1fde5c66dd1428386f1c92546f2db13)

[How to Run a Task for a Computer in Essentials](#z8a06a72a476f4b52a5add0eb39bfb50c)

How to Run a Task for a Computer in Essentials

You can run common System Center Essentials 2010 tasks or many common Windows tasks against selected computers in computer groups without leaving the Essentials 2010 console. The runnable tasks include the following:

 Computer Management

 Detect software and updates

 Display account settings

 Display active connections

 Display active sessions

 Display local users

 Display network shares

 Display server statistics

 Display workstation statistics

 IPConfig

 List processes

 List services

 Remote Desktop

 Route print

To run a task on selected computers in a computer group

|  |
| --- |
| 1. In the Essentials console, click Computers.  2. Expand Computer Groups.  3. In the Views pane, select one or more computers.  4. On the Actions menu, point to Windows Computer Tasks and click that task you want to run.  5. If you see a task confirmation, add any required parameters or credentials, and confirm the task. |

See Also

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

[How to Add or Remove Computers from a Computer Group in Essentials](#zf4872e771f3840bfb995d68aa18b6eaa)

[How to View Computer and Computer Groups Reports in Essentials](#zab29be75be8845d39b77d8c287d3ed46)

[How to View Computers, Devices, and Computer Groups in Essentials](#ze42b19375c804aebbdfd5fe2cb84dd7a)

How to View Computers, Devices, and Computer Groups in Essentials

You can use the following procedures to view default and customized computer groups in System Center Essentials 2010. The list of computer groups is also displayed when setting up software or update deployment. Management Pack computer groups are listed separately from the default and custom computer groups. If you want to manage a Management Pack computer group in the same ways as the default and customized groups, see [How to Create a Computer Group in Essentials](#zd1fde5c66dd1428386f1c92546f2db13).

To view the members of a computer group

|  |
| --- |
| 1. In the Essentials console, click Computers.  2. Expand Computer Groups in the Computers pane.  3. Select one of the default computer groups—for example, All Computers, All Clients, or All Servers—or alternatively, select any computer group that you created. Each group name is followed by an indicator of the number of members in the group.  4. In the Views pane, view the list of members of the selected computer group. |

To view Management Pack computer groups

|  |
| --- |
| 1. In the Essentials console, click Monitoring.  2. Expand Overview in the Monitoring Configuration navigation pane.  3. Expand any Management Pack to view its specific computer groups. |

How to filter the list of managed computers

|  |
| --- |
| 1. When viewing the list of managed computers in the Results pane, in the Look For box, type a text string and click Find Now. The list then displays only the managed computers with names that contain your text string.  2. Click Clear to turn off the filter and display the complete list of managed computers. |

To view managed devices

|  |
| --- |
| 1. In the Essentials console, click Administration.  2. Expand Administration and Device Management in the Administration navigation pane.  3. Select Network Devices.  4. All discovered network devices are displayed in the Views pane. |

See Also

[About Computers, Computer Groups and Discovery in Essentials](#z51f286e582c9494bb868c4cfa5a65cc7)

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

[How to Add or Remove Computers from a Computer Group in Essentials](#zf4872e771f3840bfb995d68aa18b6eaa)

[How to Create a Computer Group in Essentials](#zd1fde5c66dd1428386f1c92546f2db13)

[How to View Computer and Computer Groups Reports in Essentials](#zab29be75be8845d39b77d8c287d3ed46)

How to View Computer and Computer Groups Reports in Essentials

In the Computers view, System Center Essentials 2010 is set up to generate a summary report on the hardware, software, and system health of the computers in a computer group. In addition, reports on the individual computers in the group are also available.

To view the computer group summary report

|  |
| --- |
| 1. In the Essentials console, click Computers.  2. Expand Computer Groups in the Computers pane.  3. Right-click one of the computer groups, and click Group Summary Report. |

To view reports for individual members of a computer group

|  |
| --- |
| 1. In the Essentials console, click Computers.  2. Expand Computer Groups in the Computers pane.  3. Select one of the computer groups. In the Views pane, right-click one of the members of the selected computer group and click one of the following:   Software Deployment Status   Update Deployment Status |

See Also

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

[How to Add or Remove Computers from a Computer Group in Essentials](#zf4872e771f3840bfb995d68aa18b6eaa)

[How to Create a Computer Group in Essentials](#zd1fde5c66dd1428386f1c92546f2db13)

[How to Delete a Computer Group in Essentials](#z1935f9be862d42b593a08d2dd383d4e9)

How to Search for Objects in Essentials

Use the following procedure to search for objects in System Center Essentials 2010. In Essentials 2010, you can only search for Monitoring and Authoring information. You cannot perform a global Search for updates, software, or computers.

To search for objects

|  |
| --- |
| 1. In the Essentials console, click Search.  2. In the Search text box, type part or all of the display name of an object and then click Search.  3. To narrow your search, click the Search arrow, and then click one of the following search types:   Managed Objects   Alerts   Events   Rules   Monitors   Tasks   Views  4. Click any object in the list of objects. Additional information about the selected object is displayed in the Detail View pane. |

See Also

[How to Use Advanced Search to Find Objects in Essentials](#zb329b08f94a342e8b4e6c66d76b2fd85)

How to Use Advanced Search to Find Objects in Essentials

Use the following procedure to perform an advanced search for objects in System Center Essentials 2010.

To use advanced search to discover objects

|  |
| --- |
| 1. In the Essentials console, click the Search arrow, and then click Advanced Search.  2. In the Search for specific object types list, click the object type you are searching for.  3. Select one or more conditions for the search object.  4. Click Save parameters to My Favorites to save the search criteria.  5. Under Criteria description, click the underlined terms to define your search criteria, and then click OK.  6. Click Save parameters to My Favorites to save the search criteria.  7. Click Search. |

See Also

[How to Search for Objects in Essentials](#z80e338956584480c82d2e338b4acc048)

Inventory in Essentials

Using System Center Essentials 2010, you can view hardware and software inventory data for each managed computer, or generate inventory reports for a computer or computer group.

In This Section

[About Inventory in System Center Essentials](#z3e6d9f0d1ff24264816ae29193c36e7c)

|  |
| --- |
| Describes the inventory collection and display features in Essentials 2010. |

[How to View Software Inventory in System Center Essentials 2010](#z154a2e9ac9344f48a72e0799d00180d4)

|  |
| --- |
| Provides steps for viewing an ad hoc software inventory for a single managed computer. |

[How to View Hardware Inventory in System Center Essentials 2010](#zdd4f42d89a9f48c09726893ec7abf416)

|  |
| --- |
| Provides steps for viewing an ad hoc hardware inventory for a single managed computer. |

[How to View Inventory Reports in System Center Essentials 2010](#z8bfd2a263c5b4081b86b82a63a1a6312)

|  |
| --- |
| Provides steps for viewing inventory related reports, including summary reports for computer groups. |

See Also

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

About Inventory in System Center Essentials

In System Center Essentials 2010, after agents are deployed on managed computers, they inventory software and hardware on a regular 22-hour cycle. During this cycle, the agents contact the Essentials management server to synchronize updates and to send the collected inventory. Users can then view that data in the Essentials console. Along with the inventory data, Essentials 2010 also displays other important information about the managed computer, such as alerts and update compliance.

Administrators can use inventory data to monitor the health of individual managed computers, diagnose problems, evaluate the need for specific updates or for specific software, and evaluate hardware upgrade requirements in the organization.

Inventory Data Collected

The inventory information includes the following details about managed computers:

|  |  |
| --- | --- |
| Class | Property |
| Processor | DeviceID |
|  | Architecture |
|  | MaxClockSpeed |
|  | Name |
| BIOS | Name |
|  | Version |
|  | Manufacturer |
|  | ReleaseDate |
| OperatingSystem | Name |
|  | BuildNumber |
|  | OSLanguage |
|  | ProductType |
|  | SerialNumber |
|  | ServicePackMajorVersion |
|  | ServicePackMinorVersion |
|  | Version |
| DiskDrive | DeviceID |
|  | Name |
|  | Manufacturer |
|  | InterfaceType |
|  | Size |
| LogicalDisk | Name |
|  | DriveType |
|  | VolumeName |
|  | FileSystem |
|  | Size |
|  | FreeSpace |
| NetworkAdapterConfiguration | Index |
|  | Caption |
|  | Description |
|  | DHCPEnabled |
|  | DHCPLeaseExpires |
|  | DHCPLeaseObtained |
|  | DHCPServer |
|  | DNSDomain |
|  | DNSEnabledForWINSResolution |
|  | DNSHostName |
|  | DomainDNSRegistrationEnabled |
|  | IPAddress |
|  | IPFilterSecurityEnabled |
|  | WINSEnableLMHostsLookup |
|  | WINSPrimaryServer |
| NetworkAdapter | Index |
|  | Name |
|  | Caption |
|  | Description |
|  | Manufacturer |
|  | MACAddress |
| SoundDevice | Name |
|  | Manufacturer |
| VideoController | Description |
|  | AdapterRAM |
|  | DriverDate |
|  | VideoModeDescription |
| ComputerSystem | Name |
|  | Manufacturer |
|  | Model |
|  | TotalPhysicalMemory |
| Printer | Name |
| Software | Name |
|  | Version |
|  | Publisher |

See Also

[How to View Hardware Inventory in System Center Essentials 2010](#zdd4f42d89a9f48c09726893ec7abf416)

[How to View Software Inventory in System Center Essentials 2010](#z154a2e9ac9344f48a72e0799d00180d4)

How to View Software Inventory in System Center Essentials 2010

Use the following procedure to view software inventory for a managed computer in the System Center Essentials 2010 console.

To view software inventory

|  |
| --- |
| 1. In the Essentials console, click Computers.  2. In the Computers pane, select a computer group that contains the managed computer for which you want to view software inventory.  3. In the Views pane, select the computer that you want to view software inventory for.  4. In the Details pane, click the link under Installed Software.  The Installed Software Applications dialog box lists the name and version of software installed on the selected computer. |

See Also

[About Inventory in System Center Essentials](#z3e6d9f0d1ff24264816ae29193c36e7c)

[Computers Pane in Essentials](#zc21316267032450badbde87d64c6f1bd)

[How to View Hardware Inventory in System Center Essentials 2010](#zdd4f42d89a9f48c09726893ec7abf416)

How to View Hardware Inventory in System Center Essentials 2010

You can view hardware inventory for a specific managed computer in the System Center Essentials 2010 console.

To view hardware inventory

|  |
| --- |
| 1. In the Essentials console, click Computers.  2. In the Computers pane, select a computer group that contains the managed computer that you want to view hardware inventory for.  3. In the Views pane, select the computer for which you want to view hardware inventory.  4. In the Details pane, view the Computer and the Disk Space Usage information. |

See Also

[About Inventory in System Center Essentials](#z3e6d9f0d1ff24264816ae29193c36e7c)

[Computers Pane in Essentials](#zc21316267032450badbde87d64c6f1bd)

[How to View Software Inventory in System Center Essentials 2010](#z154a2e9ac9344f48a72e0799d00180d4)

How to View Inventory Reports in System Center Essentials 2010

You can view two types of reports in System Center Essentials 2010 that have been generated for computers or computer groups. The reports are the Computer Inventory report, which displays in the Properties dialog box for the specific computer, and the Group Summary report.

How to view a Computer Inventory report

|  |
| --- |
| 1. In the Essentials console, click Computers.  2. In the Computers pane, select the computer group that contains the computer for which you want to view the report.  3. Right-click the computer in the Views pane, and then click Properties.  The <computer\_name> Properties dialog box displays the computer's inventory details. |

How to view a Group Summary report

|  |
| --- |
| 1. In the Essentials console, click Computers.  2. In the Computers pane, right-click the computer group for which you want to view the report, and then click Group Summary Report.  The Group Summary Report - All Computers dialog box displays the report. |

See Also

[About Inventory in System Center Essentials](#z3e6d9f0d1ff24264816ae29193c36e7c)

[How to View Hardware Inventory in System Center Essentials 2010](#zdd4f42d89a9f48c09726893ec7abf416)

[How to View Software Inventory in System Center Essentials 2010](#z154a2e9ac9344f48a72e0799d00180d4)

Virtualizing Your Server Environment in Essentials

Virtualization management has been introduced in System Center Essentials 2010 to help small and mid-sized businesses maximize their technology resources. A virtual machine emulates a complete hardware system from processor to network card, in a self-contained, isolated software environment, enabling the simultaneous operation of otherwise incompatible operating systems. Using Essentials 2010 to virtualize your environment can help maximize limited IT resources by consolidating underutilized physical servers and more rapidly provisioning new virtual machines, which can be used as application servers or other similar tasks. This section provides step-by-step instructions that you can use to introduce virtualization management in your IT environment.

In This Section

[How to Designate a Host for Virtualization Management in Essentials](#z70661a77c694488eb863e47c8c57ea0c)

|  |
| --- |
| Describes how to designate a host server for virtual machines. |

[How to Create a New Virtual Machine from a Template in Essentials](#z1a272d9c9a2e437daad1b64586f9ba3a)

|  |
| --- |
| Describes how to create a new virtual machine using a template. |

[How to Create a New Virtual Machine from a Server in Essentials](#zaee4c2e1927f443cb4f6d94cf1a20737)

|  |
| --- |
| Describes how to convert a physical computer to a virtual machine. |

[How to Create a New Virtual Machine from a Virtual Disk in Essentials](#z40480b54b7f44df8aec8ca9e1fd05e30)

|  |
| --- |
| Describes how to create a new virtual machine from a virtual disk. |

[How to Configure a Virtual Machine for Management in Essentials](#zc6429bebffd84fe296c23e8993369888)

|  |
| --- |
| Describes how to install an operating system, virtual guest services, and agent on a virtual machine so it can be managed by Essentials 2010. |

[How to Connect to a Virtual Machine in Essentials](#z5fd0b7beeffd4b9d8b6fb4e01f55b179)

|  |
| --- |
| Describes how to connect to a virtual machine. |

[How to View or Change Virtual Machine Properties in Essentials](#zdc5d1bdd0b574ea7addbdcb4da61d7ee)

|  |
| --- |
| Describes how to configure virtual machine properties such as disk space, memory, CD/DVD drive, and network properties. |

[How to Change the Virtual Machine State in Essentials](#zb86ee6caa41f443e800f7cab0be80395)

|  |
| --- |
| Describes how to start, stop or pause virtual machines. |

[How to Migrate Virtual Machines to New Host Servers in Essentials](#z26a88fe7fa4843c9b00d290d44e5d9f5)

|  |
| --- |
| Describes how to move virtual machines from one host server to another. |

[How to Manage Virtual Machine Templates in Essentials](#zf590204710224b4d8babc40b4d854d2b)

|  |
| --- |
| Describes how to work with virtual machine templates. |

[How to Manage Virtual Machine Snapshots in Essentials](#z536ea25050224c9f80b9dc0bead0b9cb)

|  |
| --- |
| Describes how to work with virtual machine snapshots. |

[How to Delete a Virtual Machine in Essentials](#z9640411c2ce740ae9b7a3314b664b637)

|  |
| --- |
| Describes how to delete virtual machines. |

[How to Remove a Host Server in Essentials](#zc8265f7775d84329bc05bdb01722571c)

|  |
| --- |
| Describes how to remove a host server after virtual machines have been migrated to a new host server. |

About Virtualization Management in Essentials

Virtualization is a computing technology whereby one computer can host complete environments on areas of storage space, called virtual machines. A user can log on to a virtual machine, and the environment appears and functions just as it would if it were running on the physical computer itself.

Organizations often assign a virtual machine host to a particular business component. For example, a company might have all of its databases built on virtual machines hosted by a single computer. The company’s Web content might be stored on another host.

After computers have been installed and joined to a network, you can use System Center Essentials 2010 discovery to locate physical computers that meet the system requirements for designation and preparation as hosts. Essentials will only manage one virtual machine host per physical host.

You can designate and configure servers as hosts for virtual machines in Essentials 2010 from the Essentials management server or from the Essentials console. You can also set up and manage the virtual machines on hosts in trusted domains, workgroups, or perimeter networks.

Important

If you have Essentials 2010 installed with Virtualization Management and you also have System Center Virtual Machine Manager (VMM) 2008 installed, we recommend that you only manage virtual machines in Essentials 2010 instead of in the VMM Administrator console to prevent conflicts between applications.

After you have designated a server as a host for virtual machines, Essentials 2010 recommends performance and resource optimization (PRO) tips, also named optimization tips, which you can implement to help improve the performance of host servers and virtual machines in your environment. You can manually implement optimization tips, configure Essentials 2010 to implement optimization tips, or disable optimization tips. New optimization tips and future optimization tips will be available as management packs.

How to Designate a Host for Virtualization Management in Essentials

Host Server Requirements for Virtualization Management

To create and manage virtual machines in System Center Essentials 2010, you must designate a physical server capable of supporting virtual machines as the host server. Choose a server that meets the following system requirements and has the necessary prerequisites before designating it as a host.

Supported Operating Systems

 Windows Server 2008 R2 (x64 only)

 Windows Server 2008 Standard or Enterprise Edition (x86 and x64)

 Windows Server 2003 Service Pack 1 (SP1) or later (x86 and x64)

Prerequisites

 Host servers running Windows Server 2003 Service Pack 1 (SP1) must have the following components installed:

 Windows Virtual Server 2005 R2 or later

 WS-Management (WinRM) 1.1 or later

 Host servers running Windows Server 2008 must have the following components installed:

 Windows Virtual Server 2005 R2 or later (x86)

 On 64-bit platforms, the Hyper-V role must be enabled and Hardware-Assisted Virtualization (HAV) must be enabled in the BIOS.

 Host servers running Windows Server 2008 must have the following components installed:

 Windows Virtual Server 2005 R2 or later (x86)

 On 64-bit platforms, the Hyper-V role must be enabled and Hardware-Assisted Virtualization (HAV) must be enabled in the BIOS.

 Host servers running Windows Virtual Server 2005 R2 must have the following updates installed:

 [Update 948515](http://go.microsoft.com/fwlink/?LinkId=160366) from the Microsoft Knowledge Base at <http://go.microsoft.com/fwlink/?LinkId=160366>

 Host servers running Windows Server 2008 with the Hyper-V role enabled must have the following updates installed:

 [Update 950050](http://go.microsoft.com/fwlink/?LinkId=160367) from the Microsoft Knowledge Base at <http://go.microsoft.com/fwlink/?LinkId=160367>

 [Update 956589](http://go.microsoft.com/fwlink/?LinkId=160370) from the Microsoft Knowledge Base at <http://go.microsoft.com/fwlink/?LinkId=160370>

 [Update 956774](http://go.microsoft.com/fwlink/?LinkId=160372) from the Microsoft Knowledge Base at <http://go.microsoft.com/fwlink/?LinkId=160372>

Note

Essentials 2010 only shows available physical servers that meet the requirements to be designated as host for virtual machines. On a server running Windows Server 2008, Essentials 2010 enables the Hyper-V role for you during the host designation process. After a host has been designated, the Hyper-V role should not be uninstalled. If you have an existing host, it must still be designated as a host in Essentials 2010 to be used for virtualization management.

To designate a host server

|  |  |
| --- | --- |
| 1. In the Essentials console, click Computers, click Computer Groups, and then click All Windows Servers.  2. In the Tasks pane, click Designate a Host.  3. On the Select a computer to use as a host page, select a computer from the provided list that has sufficient resources to be used as a host server for virtualization management, and then click Select to continue.  Important  If you are running Essentials 2010 on a virtual machine and try to designate this machine as a host for virtual machines, you might lose connectivity to the Essentials console.  4. On the Provide account credentials page, specify an account that has administrative privileges on the selected computer, and then click OK to continue.  5. A dialog box appears notifying you that the process of designating a host computer might require the computer to be shut down and be restarted. Click Yes to continue.  6. A progress bar appears while Essentials designates the selected server as a host. Clear the check box if you do not want to view the new host after closing the wizard. When the wizard has completed and the selected computer has been successfully designated as a host, click Close.  Important  If Essentials encounters any error from which it cannot recover while designating the host, you will be notified of the cause and a recommended solution. You have to repeat the steps to designate a host after the issue has been resolved.  Designating a host results in the creation of a virtual network. If you add a new physical network card to the host server, use the following procedure to assign the new network adapter to the network location.  Warning  Changing the network configuration of a virtual host might cause a loss of connectivity on the host and its virtual machines.  To change host server network configuration   |  | | --- | | 1. In the Essentials console, click Computers.  2. In the Computers pane, expand Computer Groups, and then click All Windows Servers.  3. Right-click the host server whose network configuration you want to change, and then click Properties.  4. Click the Host Networking tab. In the list of network adapters, select the new adapter, and then choose the network location to use for the adapter from the list.  5. Click Apply and OK to save your changes. |   If you later experience network connection problems, remove the server designated as host and repeat the steps to re-designate it as a host. Essentials will treat both the server and the virtual machines like any other Essentials-managed computer until you re-designate the host server.  Tip  We recommend choosing hosts that use Hyper-V over Virtual Server technology for users of Essentials 2010. Core feature set differences between these technologies include support for up to 64 guest virtual machines, SMP support, 64-bit guest and host support, host clustering, and overall performance improvements. Hyper-V also leverages several new networking technologies contained in Windows Server 2008 R2 to improve overall virtual machine networking performance. The technology type for host servers is displayed in Essentials 2010 when you perform tasks such as creating new virtual machines, converting physical machines to virtual machines, importing virtual machines or migrating virtual machines to a new host. |

On a clustered host server or a host server running Windows Virtual Server 2005 R2, you must enable the agent on that computer to act as a proxy for the health service to submit discovery data about other computers. Use the following procedure to enable an agent to act as a proxy.

To enable an agent to act as a proxy in a clustered environment or on a host running Windows Virtual Server 2005 R2

|  |
| --- |
| 1. In the Essentials console, click Administration.  2. In the Administration pane, click Agent Managed.  3. Right-click the computer whose agent you want to act as a proxy, and then click Properties.  4. In the Agent Properties dialog box, click the Security tab, select the box to let the agent act as a proxy and discover managed objects on other computers, and then click OK. |

See Also

[How to Migrate Virtual Machines to New Host Servers in Essentials](#z26a88fe7fa4843c9b00d290d44e5d9f5)

[How to Remove a Host Server in Essentials](#zc8265f7775d84329bc05bdb01722571c)

How to Create a New Virtual Machine from a Template in Essentials

After a server has been designated as a host in System Center Essentials 2010, virtual machines can be created and managed. Use the following procedure to create a virtual machine from a template. Using a virtual machine template, which consists of a hardware profile and an operating system profile, you can either accept the default properties or modify them according to your requirements.

To create a new virtual machine from a template

|  |
| --- |
| 1. In the Essentials console, click the Computers button, click Computer Groups, and then click All Virtual Machines.  2. In the Tasks pane, click New Virtual Machine.  Important  You must first designate a host server for virtualization management in order to create a virtual machine from a template. Complete the procedure [How to Designate a Host for Virtualization Management in Essentials](#z70661a77c694488eb863e47c8c57ea0c) if this has not yet been done.  3. When the Select Template page of the New Virtual Machine wizard appears, you will be provided with a preconfigured template to use to create the virtual machine. Choose from Recommended configuration, high-end server or basic server in the drop-down list box.  Tip  For more information about the default template profiles, see [How to Manage Virtual Machine Templates in Essentials](#zf590204710224b4d8babc40b4d854d2b).  4. If you want to change the properties shown for the selected template, click the Change Properties button. Change the hardware configuration or operating system according to your requirements and click OK.  Hardware Configuration Properties   Processor—select the number of processors for this virtual machine.   Memory—select the total memory in megabytes for this virtual machine.   Hard Disks—select the size in gigabytes of the hard disk for this virtual machine.   Network—select the network to which this virtual machine will be connected, if applicable.  Operating System Properties   Install from network—select this if you want to install an operating system from the network.   Install from DVD—select this if you want to install an operating system from a DVD.   Select from the available ISO images—select this if you want to install an operating system from an ISO image.  Important  If the ISO image you want to install is not in the list, use Windows Explorer to locate and add the ISO file to the library folder, then click Refresh List to update the library and select the file.  5. Click Next to continue creating the new virtual machine.  6. When the Select a Host page appears, select a host from the list that has sufficient resources to host the virtual machine you want to create and click Next.  7. When the Virtual Machine Name page appears, type a name for the virtual machine, an optional description, and either accept or change the default path for the host folder for virtual machine files. Click Next to continue.  8. On the Summary page, review the details for the virtual machine that will be created. Click Previous to go back and change properties or click Create to proceed with the creation of the virtual machine.  A progress bar will be displayed while Essentials creates the virtual machine. Once the virtual machine is created, Essentials will automatically start the virtual machine and connect you to it. |

See Also

[How to View or Change Virtual Machine Properties in Essentials](#zdc5d1bdd0b574ea7addbdcb4da61d7ee)

[How to Designate a Host for Virtualization Management in Essentials](#z70661a77c694488eb863e47c8c57ea0c)

[How to Configure a Virtual Machine for Management in Essentials](#zc6429bebffd84fe296c23e8993369888)

[How to Manage Virtual Machine Templates in Essentials](#zf590204710224b4d8babc40b4d854d2b)

How to Create a New Virtual Machine from a Server in Essentials

Requirements for Virtual Machines Created on Physical Servers

System Center Essentials 2010 allows you to create virtual machines from existing physical servers, also known as P2V conversion. In order to create a virtual machine from a physical server in Essentials 2010, the physical server must have one of the following operating systems installed.

Supported Operating Systems

 Windows Server 2008 without Hyper-V (x86 and x64)

 Windows Server 2003 with Service Pack 1 (SP1) and above (x86 only)

 Windows Vista with Service Pack 1 (SP1) and above (x86 and x64)

 Windows 2000 with Service Pack 4 (SP4) and above (Offline P2V only)

 Windows 2000 Advanced Server with Service Pack 4 (SP4) and above (Offline P2V only)

 Windows XP Professional with Service Pack 2 (SP2) and above (x86 and x64)

To create a new virtual machine from a physical server

|  |
| --- |
| 1. In the Essentials console, click the Computers button, click Computer Groups, and then click All Windows Servers.  2. In the Tasks pane, click Convert to Virtual Machine.  3. When the Copy Server wizard starts, read the information in Before you begin and then click Next to continue.  4. You will be prompted to enter a user name, password and domain to use to connect to the physical host server. Click the Test button to check the credentials and then click Next to continue.  5. A progress bar will be displayed while Essentials retrieves the source details for the host server. Upon completion, configuration properties for the selected computer will be displayed. Click the Change Properties button to make changes to the default configuration properties. Click OK when you are finished changing properties in order to return to the wizard.  6. Click Next after configuring the properties of the host server. Essentials will search for computers that have sufficient resources to host the virtual machine you want to run.  7. In the list of available computers, select the one you want to use as a host for the virtual machine and click Next.  8. On the Virtual Machine Identity page, type in a name for the virtual machine, type an optional description, choose the host location for virtual machines files (for example, C:\Program Files\System Center Essentials\VM), and then click Next.  9. On the Summary page, confirm the new virtual machine details and then click Create.  Warning  The source computer will be automatically shut down when you click Create.  10. A progress bar will be displayed while Essentials creates the virtual machine. Upon completion, you will be notified that the new virtual machine was successfully created. Clear the check box if you do not want to start the new virtual machine when the wizard closes, and then click Close to exit the wizard.  Important  If Essentials cannot create a virtual machine, you will receive an error message that provides steps to correct the issue. After the issue has been resolved, click Retry to scan the computer again. |

See Also

[How to Configure a Virtual Machine for Management in Essentials](#zc6429bebffd84fe296c23e8993369888)

How to Create a New Virtual Machine from a Virtual Disk in Essentials

In System Center Essentials 2010, you can create new virtual machines from existing VMware and Microsoft Virtual Server virtual disks. Use the following procedure to import the virtual hard disks from your VMware and Microsoft Virtual Server virtual machines to create new virtual machines.

To create a new virtual machine from a virtual disk

|  |
| --- |
| 1. In the Essentials console, click the Computers button, click Computer Groups, and then click All Windows Servers.  2. In the Tasks pane, click Import Virtual Hard Disk.  3. When the Select virtual hard disk page appears, you will be prompted to create a new virtual machine from an existing virtual hard disk (.vhd) file or VMware (.vmx) file. Select Import a Microsoft virtual hard disk or Import a VMware virtual hard disk, click Browse to locate and add the file and related support files to the library folder (for example, files containing VMware settings), and click Refresh List to select the file. After you have selected the file to import, click Next.  4. On the Specify Configuration page, review the hardware configuration properties for the virtual server. If you want to change the properties shown for the selected template, click the Change Properties button. Change the hardware configuration according to your requirements and click OK.  Hardware Configuration Properties   Processor—select the number of processors for this virtual machine.   Memory—select the total memory in megabytes for this virtual machine.   Hard Disks—select the size in gigabytes of the hard disk for this virtual machine.   Network—select the network to which this virtual machine will be connected, if applicable.  5. Click Next to continue creating the new virtual machine.  6. When the Select a Host page appears, select a host from the list that has sufficient resources to host the virtual machine you want to create and click Next.  7. When the Virtual Machine Name page appears, type a name for the virtual machine, an optional description, and either accept or change the default path for the host folder for virtual machine files. Click Next to continue.  8. On the Summary page, review the details for the virtual machine that will be created. Click Previous to go back and change properties, or click Create to proceed with the creation of the virtual machine.  A progress bar will be displayed while Essentials creates the virtual machine. After the virtual machine has been created, Essentials will automatically start the virtual machine and connect you to it. |

See Also

[How to Designate a Host for Virtualization Management in Essentials](#z70661a77c694488eb863e47c8c57ea0c)

[How to View or Change Virtual Machine Properties in Essentials](#zdc5d1bdd0b574ea7addbdcb4da61d7ee)

[Virtualizing Your Server Environment in Essentials](#zba825284352e42c9bd0e41c3a2cf44a5)

How to Configure a Virtual Machine for Management in Essentials

In System Center Essentials 2010, an unmanaged virtual machine is one that either does not have an operating system installed or does not have an Essentials management agent deployed to it. To manage a virtual machine requires that you first install an operating system, install virtual guest services, and then run the Computer and Device Management wizard to install the agent. The All Virtual Machines view in the Computers workspace provides a list of all managed and unmanaged virtual machines. Use the following procedures to view or change the properties of, connect to, install operating systems and guest services on, discover, or delete virtual machines.

Important

If you have Essentials 2010 installed with virtualization management and you also have System Center Virtual Machine Manager (VMM) installed, we recommend that you only manage virtual machines in Essentials 2010 instead of in the VMM 2008 Administration console to prevent conflicts between applications.

After a new virtual machine is created, click Configure Virtual machine, which contains a list of actions that must be completed in sequence, for Essentials 2010 to manage the virtual machine. First, install the operating system. The operating system installation media is specified in the virtual machine properties. During the operating system installation, ensure the machine is configured as part of the appropriate domain so it can be discovered by Essentials 2010. After the operating system has been installed, install guest services, and then discover the virtual machine, which installs the agent required to monitor the machine.

To install an operating system on a virtual machine

|  |
| --- |
| 1. Before you can install an operating system, decide whether to install from the network, from a CD or DVD, or from an ISO image file. Then, ensure the installation files are present, and change the BIOS startup order to load the selected media.  2. In the Essentials console, click Computers. In the Computers pane, click All Virtual Machines.  3. In the All Virtual Machines view, right-click the new virtual machine in the list, and then click Configure Virtual Machine. This command is also in the Tasks pane.  4. In the Configure Virtual Machine dialog box, click Install an operating system.  5. When the Virtual Machine Viewer window appears, the virtual machine starts, and the operating system installation begins. Follow the instructions on the screen to complete the operating system installation.  Important  If the virtual machine is in a stopped state, Essentials first starts the virtual machine before connecting to it. You see an exclamation mark beside the new virtual machines that require these steps, and the preview pane below the list of virtual machines alerts you that additional steps need to be followed.  To discover and manage the virtual machine after the operating system has been installed, ensure that guest services are installed, that the user account on the virtual machine has administrator rights, and that the virtual machine has been joined to the domain, if applicable. |

To install virtual guest services on a virtual machine

|  |
| --- |
| 1. In the Configure Virtual Machine dialog box, click Install Virtual Guest Services.  Note  Guest services provide features that securely integrate a virtual machine with a physical computer. For example, guest services provide mouse functionality and time synchronization. These services also enable a host server to more effectively manage the virtual machine. An operating system must be installed on a virtual machine before you can install guest services. When guest services are installed, Essentials determines the appropriate services to install for your hypervisor. Refer to the appropriate Hyper-V or Virtual Server 2005 product documentation for more details on specific services.  2. A dialog box appears reminding you that an operating system must be installed before you can install guest services. If an operating system has already been installed, click Yes; otherwise, click No, and follow the procedure to connect to the virtual machine and to install the operating system.  While guest services are installed on the virtual machine, the virtual machine will be stopped, and a progress bar will be displayed in the All Virtual Machines view. |

To discover a virtual machine

|  |
| --- |
| 1. In the Configure Virtual Machine dialog box, click Add the new virtual machine to management.  2. In the Computer and Device Management wizard, leave the discovery type set to Windows Computers, and then click Next.  3. On the Auto or Advanced page, accept the default selection for Computer and Device Classes, and then click Next.  4. On the Discovery Method page, click Browse for, type the virtual machine computer name, and then click Next.  Note  The name of the virtual machine in Essentials should be the same as the computer name you chose when you installed the operating system on the virtual machine. If they are different, you can edit the properties of the virtual machine when the machine is in a stopped state so that the names match. To be discovered, the virtual machine must be in the same domain as the Essentials management server.  5. On the Administrator Account page, use either the credentials you used to set up Essentials, or click Other user account. Supply a user name, a password, and the domain for a user with administrator rights on the virtual machine, and then click Discover. The progress will be displayed while Essentials discovers the virtual machine.  6. On the Select Objects to Manage page, select the virtual machine in the list of devices, and then click Next.  7. On the Summary page, review the information to ensure it is correct, and then click Finish.  The Agent Management Task Status dialog box will be displayed while Essentials installs the agent, and the results will be shown in the Task Output window upon completion. |

See Also

[How to View or Change Virtual Machine Properties in Essentials](#zdc5d1bdd0b574ea7addbdcb4da61d7ee)

[How to Delete a Virtual Machine in Essentials](#z9640411c2ce740ae9b7a3314b664b637)

How to Connect to a Virtual Machine in Essentials

To connect to a managed virtual machine in System Center Essentials 2010—for example, so that users in your organization can access applications on other computers—use the following procedure to connect to a virtual machine from the Essentials console.

To connect to a virtual machine

|  |
| --- |
| 1. In the Essentials console, click Computers, and then click All Virtual Machines.  2. Either select a virtual machine from the list and, in the Tasks pane, click Connect to Virtual Machine, or double-click the image of the selected virtual machine in the Preview pane to connect to it.  Note  If the virtual machine is in a stopped state, Essentials first starts the virtual machine before connecting to it.  3. A message might appear notifying you that the information you are about to exchange with the server will be sent over an unencrypted connection and you will be asked if you want to continue. Select the check box if you do not want to be notified about this again, and then click Yes to continue connecting to the virtual machine.  Note  If another user is connected to the virtual machine, another message appears warning you that if you proceed, that user will be disconnected first. Click Yes to continue. |

See Also

[Virtualizing Your Server Environment in Essentials](#zba825284352e42c9bd0e41c3a2cf44a5)

[How to Configure a Virtual Machine for Management in Essentials](#zc6429bebffd84fe296c23e8993369888)

How to View or Change Virtual Machine Properties in Essentials

In System Center Essentials 2010, you can change the hardware properties of a virtual machine from the Essentials console, such as the number of processors or the amount of memory currently allocated to it to improve performance. Use the procedure below to change virtual machine properties.

To view or change virtual machine properties

|  |
| --- |
| 1. In the Essentials console, click Computers, and then click the All Virtual Machines node.  2. Select a virtual machine from the list, and then, in the Tasks pane, click Properties.  3. When the Virtual Machine Properties dialog box appears, you can view and change the following properties:   Virtual Machine Identification—View or change the virtual machine name and description, and view the host name and host folder for virtual machine files.  Note  If the virtual machine is not stopped when you open Virtual Machine Properties, you cannot modify some settings. To modify a setting that is unavailable, shut down the virtual machine, and then reopen the Virtual Machine Properties dialog box.   Processor—View or change the number of processors for this virtual machine.   Memory—View or change the amount of memory used based on application and operating system requirements.   Hard Drives—View or change the number of hard disks, amount of hard disk space, or disk names.  Note  If you decide to change the hard disk properties, and the hard disk is a small computer system interface (SCSI) device, or you have taken a snapshot of the virtual machine, you cannot change the size of the hard disk.   Network—View or change the network connection that is used for this virtual machine.  Tip  If you plan to install an operating system on the virtual machine from the network, select the host computer’s network connection from the list of available network locations.   BIOS Boot Order—View or change the order in which the startup devices are checked to start the operating system.   CD/DVD Drives—View or change the CD/DVD information for this virtual machine.  If you change any of the virtual machine properties, click OK when you are done. A message appears asking you to confirm the changes you have made. Click Yes to accept the changes. Upon completion, you will be returned to the list of unmanaged virtual machines.  Important  If you try to connect to a virtual machine that does not yet have an operating system installed, the Virtual Machine Viewer window displays a message prompting you either to restart with the proper startup device selected, or to insert startup media into the selected startup device. You might have to edit the properties of the virtual machine and either select to use the host CD/DVD drive or add an ISO image file to the Library folder.  If you plan to install the operating system from a CD/DVD, edit the properties for this virtual machine to use the host CD/DVD drive. If you plan to install the operating system from an ISO image, make sure the ISO file is copied to the Library folder. Change the BIOS startup order so that the appropriate disk is loaded first. For more information about how to add a file to the Library folder, see [How to Manage Virtual Machine Templates in Essentials](#zf590204710224b4d8babc40b4d854d2b).  If you configured the virtual machine network properties to use an existing network connection and the IT environment supports the installation of operating systems over the network, you can modify the BIOS startup order in the virtual machine properties and move PXE Boot to the top of the list to start a remote operating system installation. |

See Also

[How to Create a New Virtual Machine from a Template in Essentials](#z1a272d9c9a2e437daad1b64586f9ba3a)

[How to Connect to a Virtual Machine in Essentials](#z5fd0b7beeffd4b9d8b6fb4e01f55b179)

[How to Manage Virtual Machine Templates in Essentials](#zf590204710224b4d8babc40b4d854d2b)

[How to Configure a Virtual Machine for Management in Essentials](#zc6429bebffd84fe296c23e8993369888)

How to Change the Virtual Machine State in Essentials

In System Center Essentials 2010, if you have multiple virtual machines running on a designated host server and you want to be able to start, shut down, pause, or turn off these virtual machines from the Essentials console, use the following procedure to change the virtual machine state.

To change the virtual machine state

|  |
| --- |
| 1. In the Essentials console, click Computers, click Computer Groups, and then click All Windows Servers.  2. Select a virtual machine from the list of computers. In the Tasks pane, click one of the tasks described below. The available states are based on the current virtual machine state.   Start—Starts a stopped or paused virtual machine.   Shut down— Shuts down the operating system on the virtual machine. This action has the same effect on the virtual machines as does performing a proper shutdown on a physical computer.   Pause—Saves the current state of the virtual machine and stops the virtual machine from running without discarding memory. When the virtual machine is restored from the saved state, it returns to the condition that it was in when its state was saved.   Turn off—Stops a virtual machine and does not save any state information. This action has the same effect on the virtual machine as pulling the plug on a physical computer.  A dialog box might appear and ask you to confirm a selection. After this has been done, the state will be changed and you will be returned to the All Windows Servers list. The new state for the virtual machine will be displayed in the VM Status column. |

See Also

[Virtualizing Your Server Environment in Essentials](#zba825284352e42c9bd0e41c3a2cf44a5)

How to Migrate Virtual Machines to New Host Servers in Essentials

To migrate a virtual machine from an existing host server to a new server you must first designate the new server to be a host in System Center Essentials 2010, so that when you migrate the virtual machine, you will be able to select the new host server from the list of available hosts.

To migrate a virtual machine to a new host server

|  |
| --- |
| 1. In the Essentials console, click the Computers button, click Computer Groups, and then click All Windows Servers.  2. Select a virtual machine from the list of computers and then click Migrate to New Host from the Tasks pane.  Important  To migrate the virtual machine to a new host server, the new server must first be designated as a host. Follow the steps in [How to Designate a Host for Virtualization Management in Essentials](#z70661a77c694488eb863e47c8c57ea0c) before you continue with this procedure.  3. When the Migrate Virtual Machine to New Host window appears, select the new host server for the virtual machine from the list of available hosts and click the Migrate button.  Warning  The virtual machine will be stopped before it is migrated to the new host.  4. When the Confirm Migration dialog box appears, click Yes to continue. A progress bar will be displayed while Essentials migrates the virtual machine to the new host server.  5. Another dialog box will appear notifying you when the virtual machine has been successfully migrated to the new host server. To complete the migration, click Close. When Essentials returns you to the All Windows Servers list, the new host name will be displayed in the summary for the selected virtual machine. |

See Also

[How to Designate a Host for Virtualization Management in Essentials](#z70661a77c694488eb863e47c8c57ea0c)

[How to Remove a Host Server in Essentials](#zc8265f7775d84329bc05bdb01722571c)

[How to Delete a Virtual Machine in Essentials](#z9640411c2ce740ae9b7a3314b664b637)

[Virtualizing Your Server Environment in Essentials](#zba825284352e42c9bd0e41c3a2cf44a5)

How to Manage Virtual Machine Templates in Essentials

In System Center Essentials 2010, you can create, modify, or delete virtual machine templates and store them in a library of different hardware configurations. These customized templates make creating virtual machines faster and easier. Use the procedures below to change the settings of the existing templates or create new templates.

The following table lists the virtual machine templates that are included with Essentials 2010.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Recommended (Default) server | Basic server | High-end server |
| Processors | 1 | 1 | 2 |
| Memory | 2 GB | 1 GB | 4 GB |
| Hard Disk | 16 GB | 16 GB | 60 GB |
| Network | Show locations | Show locations | Show locations |
| CD/DVD Drive | None | None | None |
| BIOS Boot Order | CD/DVD, Virtual Hard Drive, Network | CD/DVD, Virtual Hard Drive, Network | CD/DVD, Virtual Hard Drive, Network |

Note

The names and descriptions of preconfigured templates cannot be changed. You can edit hardware properties for these templates, but we recommend that you leave these settings unchanged and instead add new templates if you want to use alternative hardware configurations.

To view or edit an existing virtual machine template

|  |
| --- |
| 1. In the Essentials console, click Computers, click Computer Groups, and then click All Windows Servers.  2. In the Tasks pane, click Manage Templates.  3. When the Manage Virtual Machine Templates dialog box appears, click one of the templates, and then click View/Edit.  4. On the Template Information page, change the name or optional description for this virtual machine template.  5. On the Processor page, change the number of processors to use for this template.  6. On the Memory page, change the amount of memory to use to meet application and operating system requirements for this template.  7. On the Hard Disk page, change the name for the hard disk, change the size, or change the Virtual Hard Disk (VHD) file to be used for this template.  Important  A link to the Library folder is provided on this page. If the VHD file you want to use is not in the list, add the file to this folder, and then, on the Hard Disk page, click Refresh List to add the file to the list so you can select it.  8. On the Network page, select from a list of available host network connections or select Not connected if you do not want to configure the network connection when using this template to create a virtual machine.  9. On the BIOS Boot Order page, select a device from the list, and then click Move up or Move down to change the boot order for this template.  10. On the CD/DVD Drives page, select the host computer’s CD/DVD, or leave the setting as None if you do not want to configure the CD/DVD drive when using this template to create a virtual machine.  11. If you have made any changes to the virtual machine template settings, click Save to save the settings. |

To create a new virtual machine template

|  |
| --- |
| 1. In the Essentials console, click Computers, click Computer Groups, and then click All Windows Servers.  2. In the Tasks pane, click Manage Templates.  3. When the Manage Virtual Machine Templates dialog box appears, click New to open the Template Properties dialog box.  4. On the Template Information page, in the provided boxes, type a name and optional description for the new template.  5. On the Processor page, select the number of processors to use for this template.  6. On the Memory page, select the amount of memory to use to meet application and operating system requirements for this template.  7. On the Hard Disk page, select a virtual hard disk (VHD) to use from the list.  Important  A link to the Library folder is provided on this page. If the VHD file that you want to use is not in the list, add the file to this folder, and then, on the Hard Disk page, click Refresh List to add the file to the list so that you can select it.  8. On the Network page, select from a list of available host network connections, or select Not connected if you do not want to configure the network connection when using this template to create a virtual machine.  Note  The Not Connected value is the only available value in the Network box if you have not designated a host. After you designate a host, the network connection will be available when you create a new virtual machine or change the properties of an existing virtual machine.  9. On the BIOS Boot Order page, select a device from the list, and then click Move up or Move down to change the boot order for this template.  10. On the CD/DVD Drives page, select the host computer’s CD/DVD, or leave the setting as None if you do not want to configure the CD/DVD drive when using this template to create a virtual machine.  11. When you have finished configuring the virtual machine template settings, click Save to save the settings. |

To delete a virtual machine template

|  |
| --- |
| 1. In the Essentials console, click Computers, and then click All Virtual Machines.  2. In the Tasks pane, click Manage Templates.  3. When the Manage Virtual Machine Templates dialog box appears, click one of the templates, and then click Delete.  Note  Preconfigured templates cannot be deleted.  4. When the Confirm Delete Template dialog box appears, click Yes to delete the template you selected. |

See Also

[How to Create a New Virtual Machine from a Template in Essentials](#z1a272d9c9a2e437daad1b64586f9ba3a)

[How to View or Change Virtual Machine Properties in Essentials](#zdc5d1bdd0b574ea7addbdcb4da61d7ee)

[How to Configure a Virtual Machine for Management in Essentials](#zc6429bebffd84fe296c23e8993369888)

[About Virtualization Management in Essentials](#zdecdcba6abd0414c87bab29727f82a43)

How to Manage Virtual Machine Snapshots in Essentials

A snapshot saves the state of the virtual machine by recording changes made to it since the last snapshot. In System Center Essentials 2010, if a software installation or update fails, you can roll back to a previous snapshot and restore the virtual machine to a working state.

If you plan to deploy software updates you can take a new snapshot in the event that you need to undo changes made to virtual machines after the update. You can also roll back to the previous state if the software update fails, and remove a snapshot if it is no longer required.

To create a new virtual machine snapshot

|  |
| --- |
| 1. In the Essentials console, click the Computers button, click Computer Groups, and then click All Windows Servers.  2. Select a virtual machine from the list of computers and then click Manage Snapshots in the Tasks pane.  3. To take a new snapshot, select the virtual machine and click the New button in the Manage Snapshots window.  4. When the Snapshot dialog box appears, enter a name and description for the snapshot and click Save. After the snapshot has been saved, you will be returned to the Manage Snapshots window. |

To restore a virtual machine snapshot

|  |
| --- |
| 1. In the Essentials console, click the Computers button, click Computer Groups, and then click All Windows Servers.  2. Select a virtual machine from the list of computers and then click Manage Snapshots in the Tasks pane.  3. From the Manage Snapshots window, select the virtual machine snapshot you want to restore and click the Restore button.  4. When the Confirm Restore dialog box appears, click Yes to continue. After the snapshot has been restored, you will be returned to the list of snapshots and the one you restored will no longer be in the list of available snapshots. |

To delete a virtual machine snapshot

|  |
| --- |
| 1. In the Essentials console, click the Computers button, click Computer Groups, and then click All Windows Servers.  2. Select a virtual machine from the list of computers and then click Manage Snapshots in the Tasks pane.  3. From the Manage Snapshots window, select the virtual machine snapshot you want to remove and click the Delete button.  4. When the Delete Snapshot dialog box appears, click Yes to continue. After the snapshot has been deleted, you will be returned to the list of snapshots and the one you deleted will no longer be in the list of available snapshots. |

See Also

[Virtualizing Your Server Environment in Essentials](#zba825284352e42c9bd0e41c3a2cf44a5)

How to Delete a Virtual Machine in Essentials

In System Center Essentials 2010, deleting a virtual machine permanently removes all computer data and any snapshots that were saved for the virtual machine. Use the following procedure to permanently delete a virtual machine.

To delete a virtual machine

|  |
| --- |
| 1. In the Essentials console, click the Computers button, click Computer Groups, and then click All Windows Servers.  2. In the list of servers, select the virtual machine you want to delete and then click Delete Virtual Machine.  Important  If the virtual machine is still running, a dialog box will appear prompting you to stop the virtual machine and try again.  3. A dialog box will appear asking if you want to permanently delete the selected virtual machine. Click Yes to continue.  A progress bar will be displayed while Essentials deletes the virtual machine. After the virtual machine has been deleted, you will be returned to the list of computers. |

See Also

[Virtualizing Your Server Environment in Essentials](#zba825284352e42c9bd0e41c3a2cf44a5)

How to Remove a Host Server in Essentials

In System Center Essentials 2010, after you migrate virtual machines to a new host server and are ready to stop using the existing server as a host, you can remove it. When you remove a host in Essentials, the server is no longer able to use virtualization management features. Essentials 2010 will treat both the server and the virtual machines like any other Essentials-managed computer.

To remove a host server

|  |
| --- |
| 1. In the Essentials console, click the Computers button, click Computer Groups, and then click All Windows Servers.  2. In the list of servers, select the host server you want to delete and then click Remove host in the Tasks list.  Note  When you remove a host server, it is removed it from the list of available hosts when you create or migrate a new virtual machine; however, any virtual machines you created will remain on the host unless they are migrated to a new host server.  3. A dialog box will appear asking you to confirm removal of the host. Click Yes to continue.  A progress bar will be displayed while Essentials removes the host. After the host has been removed, you will be returned to the list of computers. |

See Also

[How to Migrate Virtual Machines to New Host Servers in Essentials](#z26a88fe7fa4843c9b00d290d44e5d9f5)

[How to Designate a Host for Virtualization Management in Essentials](#z70661a77c694488eb863e47c8c57ea0c)

[How to Delete a Virtual Machine in Essentials](#z9640411c2ce740ae9b7a3314b664b637)

[Virtualizing Your Server Environment in Essentials](#zba825284352e42c9bd0e41c3a2cf44a5)

Monitoring in Essentials

System Center Essentials 2010 enables you to use the rules and monitors in Management Packs to track performance of managed computers and aggregate performance data, such as the number and types of current active alerts.

In This Section

[How to View and Close an Alert in Essentials](#z079456a97ee54aafafc6fabc20918cae)

|  |
| --- |
| Provides step-by-step procedures for viewing and closing alerts in the Monitoring pane. |

[How to Create a State View in Essentials](#z5a28dd234a2e48c79313fc5bf293674b)

|  |
| --- |
| Provides a step-by-step procedure for creating a state view in the Monitoring pane. |

[How to Create a Diagram View in Essentials](#z42252d830ded4621b704855b80fb7d8b)

|  |
| --- |
| Provides a step-by-step procedure for creating a diagram view in the Monitoring pane. |

[How to Manage Monitoring Data Using Scope, Search, and Find in Essentials](#z312f208ac3744e52a67dc45a5e663f42)

|  |
| --- |
| Provides step-by-step procedures for using the Scopes, Search, and Find buttons on the Monitoring pane toolbar. |

[How to Personalize a View in Essentials](#zd51be470723948069f8423c3927cb21f)

|  |
| --- |
| Provides a step-by-step procedure for personalizing a view in the Monitoring pane. |

[How to Create a Folder in the Essentials Monitoring Pane](#z3b998f855c3148ee896d9c996b87a3c3)

|  |
| --- |
| Provides a step-by-step procedure for creating a folder for views in the Monitoring pane. |

[How to Create a Ping Monitor in Essentials](#z38e5569ce4ae400797ff940c68a3631e)

|  |
| --- |
| Provides a step-by-step procedure for creating a ping monitor to check the availability of computers and devices that do not have agents installed on them. |

[How to Work with Maintenance Mode in Essentials](#z55ef9e845ec247d39518860eb171e07b)

|  |
| --- |
| Provides step-by-step procedures for performing maintenance mode operations. |

[Agentless Exception Monitoring in Essentials](#zf6d505edfd9f4eef8f6716894aa8870f)

|  |
| --- |
| Provides step-by-step procedures for starting and stopping agentless exception monitoring and for changing Group Policy settings for agentless exception monitoring. |

See Also

[Monitoring Pane in Essentials](#z3d3b6b5182cd4b4dbca83c11d8bd8caa)

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

How to View and Close an Alert in Essentials

Use the following procedures to view and close alerts that have been generated in System Center Essentials 2010.

To view an alert

|  |
| --- |
| 1. In the Essentials console, click Monitoring.  2. In the Monitoring pane, expand Monitoring, and then click Active Alerts.  3. In the Active Alerts pane, click an alert to view more information about the alert. |

Tip

You can also configure Essentials 2010 to take specific actions when critical alerts are detected by creating Command notifications or by notifying you via e-mail, instant message (IM) or text message (SMS). For more information about setting up notifications, see [How to Configure Notifications in Essentials](#z23137433aad7418fa751e00784d89bc6).

To close an alert

|  |
| --- |
|  In the Active Alerts pane, right-click the alert, and then click Close Alert.  Note  You can select multiple alerts by pressing and holding down the CTRL key when clicking alerts. |

See Also

[Monitoring Pane in Essentials](#z3d3b6b5182cd4b4dbca83c11d8bd8caa)

[How to Configure Notifications in Essentials](#z23137433aad7418fa751e00784d89bc6)

How to Create a State View in Essentials

The State view in System Center Essentials 2010 is like most other view types in that you use the Criteria tab in the Properties dialog box of the view to define which objects you want shown in your view. You then you use the Display tab to customize how the data looks in your view. Each section of the Criteria tab adds an additional filter to your view. For more information about view types, see [Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae).

By default, your new view is added to the list of global views that are located directly under the Monitoring node on the Monitoring pane. If you want your view saved to a folder, you must select that folder before you click New View.

To create a state view

|  |
| --- |
| 1. In the Essentials console, click Monitoring.  2. At the bottom of the Monitoring pane, click New View , and then click State View. The Properties dialog box of your new state view displays.  3. Type a descriptive name for the State view in the Name box, and then type a short description in Description.  4. On the Criteria tab, click the ellipses button (…) next to the Show data related to box. The Select a Target Type dialog box displays a list of the object types available in your management group. Click to select the object type that most specifically describes the objects that you want to view, and then click OK. The object type you select is listed in the Show data related to box. If you want to narrow the focus of the view, you can also click the ellipses button (…) next to Show data contained in a specific group. Click a group to filter the objects shown in your view, and then click OK. For more information about targeting, see [Targeting in Essentials](#z3ff0d507fd7441de95a21f9c95ea40f3).  Note  If you do not see the object type that you want, click View all targets and then type a word or phrase in Look for to filter the displayed list.  5. Use the check boxes provided to select individual criteria to apply additional filters to the objects that you want to display in your view. You might need to further define the criteria in the Criteria description box.  6. Click the Display tab. By default, all columns in your State view display. Click to cancel one or more columns that you do not want to display. Choose how you want to sort the objects in your view in Sort columns by. The Preview section displays how the State view looks before it is customized.  7. Click OK to create the view. |

See Also

[Monitoring Pane in Essentials](#z3d3b6b5182cd4b4dbca83c11d8bd8caa)

[Global Views in Essentials](#z406f677deb2f46248eb38d4e9115c970)

[How to Create a Diagram View in Essentials](#z42252d830ded4621b704855b80fb7d8b)

[How to Create a Folder in the Essentials Monitoring Pane](#z3b998f855c3148ee896d9c996b87a3c3)

[Targeting in Essentials](#z3ff0d507fd7441de95a21f9c95ea40f3)

[Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae)

How to Create a Diagram View in Essentials

In System Center Essentials 2010, a Diagram view uses a template to control the layout of the information in the diagram. You can choose from an existing template or create your own template. If you choose to create your own template, you configure the layout of the view while you are creating the view.

To create a diagram view

|  |
| --- |
| 1. In the Essentials console, click the Monitoring button.  2. At the bottom of the Monitoring pane, click New View , and then click Diagram View. The Create Diagram View dialog box displays.  3. In Name, type a descriptive name for the diagram view and then type a short description in Description.  4. Click Browse. In the Select Object dialog box, click the group that best describes the type of objects that you want to include in your Diagram view, and then click OK.  5. Click Create your own template to design a layout for your Diagram view.  6. If you want to accept the default settings for the Diagram view, click Create. If you want to change the default settings, continue with this procedure.  7. On the Diagram Properties tab, type a number in Levels to show to display the number of related classes and subclasses that you want in your view. This number includes the top-level class. In Layout Direction, click the drop-down arrow to view a list of display options for the objects in your view. North South displays the objects in a vertical arrangement, and East West displays the objects side by side.  8. Click the Object Properties tab. Click Boxes if you want to delineate your related object types and child object types by containing them in a box. You can also adjust the Nodes Per Row setting to define how many of your related object types are listed before beginning another row.  9. On the Line Properties tab, choose the format for the lines of the boxes in your diagram by using the Containment Line settings. Choose the format for objects that are not grouped by boxes using the Non Containment Line settings. Click Create. |

See Also

[How to Create a State View in Essentials](#z5a28dd234a2e48c79313fc5bf293674b)

[Targeting in Essentials](#z3ff0d507fd7441de95a21f9c95ea40f3)

[Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae)

How to Manage Monitoring Data Using Scope, Search, and Find in Essentials

In a large network environment, System Center Essentials 2010 can monitor several hundred to several thousand objects. You can use the Scope, Find, and Search buttons on the Essentials console toolbar to filter your view of monitoring data so that you can find the exact monitoring object or group of objects that you need.

The Scope, Search, and Find features apply a temporary filter that is not saved for reuse later. You can use views with these features to quickly find data on a particular monitored object. If you need to view the same set of monitoring data, often you can personalize a view so that the same filters are always applied to the data. You can also save a search for later use.

To change the scope of a view

|  |
| --- |
| 1. In the Essentials console, click Monitoring.  2. Click the Scope button on the Essentials toolbar. If this button is not available, check to make sure that you have an object, not a folder, selected in the Monitoring pane. The Change View Scope dialog box displays.  3. The Change View Scope dialog box displays a list of existing groups and distributed applications. If the list is too long, you can find a specific group or distributed application by entering a word or phrase in the Look for box. Once you make a selection, click OK. Only the objects that meet the scope criteria are shown in the results pane. |

To remove an applied scope

|  |
| --- |
| 1. In the Essentials console, click Monitoring.  2. When the Essentials console first starts, by default, all object types display and no scope is applied. If a scope is currently applied, it displays at the top of the results pane.  3. To remove the current scope, click the X at the top right-hand corner of the scoping area at the top of the results pane. |

Find and Search

Use the Find button when the list of objects in the results pane is too long to quickly pick out a particular object. Use the Search button if you want to find all objects that meet a certain criteria.

To use the Find button to locate an object within a list

|  |
| --- |
| 1. In the Essentials console, click Monitoring.  2. Click to select a view that is available in the Monitoring pane.  3. Check to see if a Look for box is at the top of the results pane. If there is no Look for box, click the Find button on the Essentials toolbar. In Look for, type a word, such as the name of an object, that you want to find in the list, and then click Find.  4. Click Clear to go back to the original list of objects. |

To use the Search feature to create a list of objects

|  |
| --- |
| 1. In the Essentials console, click Monitoring.  2. Click the Search button in the Essentials toolbar.  3. In the Search window, type the word or phrase that describes the set of objects you want to find. A list of objects that meet your criteria displays. The list is sorted by object type. |

See Also

[Monitoring in Essentials](#zfbaf18f5def648d7a8b8dcd63fc545e4)

How to Personalize a View in Essentials

In System Center Essentials 2010, views, like other monitoring objects, are contained in management packs. If a view is contained in a sealed management pack, you can open the properties of the view, but you cannot save any changes to it. Instead, you can change the display options of the view and then save the view as a personalized view.

For more information about views, see [Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae).

To personalize a state view

|  |
| --- |
| 1. In the Essentials console, click Monitoring.  2. In the Monitoring pane, right-click the view that you want to personalize, and then click Personalize view. The Personalize view dialog box displays the default settings of the view.  3. In Columns to display, select the property that you want to display in your view. You can also click to clear any selections set by the original view. In the Sort columns by box, click the drop-down arrow to choose a property by which you want to sort the monitored objects in your view, and then click OK.  Note  In a State view, the option to sort by groups is not available. This option is available in other views, such as the Alert view and Event view. |

See Also

[How to Create a State View in Essentials](#z5a28dd234a2e48c79313fc5bf293674b)

[Monitoring in Essentials](#zfbaf18f5def648d7a8b8dcd63fc545e4)

[Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae)

How to Create a Folder in the Essentials Monitoring Pane

In System Center Essentials 2010, you can use the following procedure to create a folder in the Monitoring pane to store views that you have created.

To create a folder in the Monitoring pane

|  |
| --- |
| 1. In the Essentials console, click Monitoring.  Note  When you run the Essentials console on a computer that is not the Essentials management server, the Connect To Server dialog box displays. In the Server name text box, type the name of the Essentials management server.  2. In the Monitoring pane, right-click Monitoring, point to New, and then click Folder.  3. In the Create new folder dialog box, type a descriptive name in Folder Name. Next to Select the destination management pack, click the down-arrow to view a list of unsealed Management Packs. You can save the folder only to an unsealed Management Pack. Click New if you want to create a new Management Pack. After you select a Management Pack, click OK. |

See Also

[Monitoring Pane in Essentials](#z3d3b6b5182cd4b4dbca83c11d8bd8caa)

[Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae)

[How to Create a Diagram View in Essentials](#z42252d830ded4621b704855b80fb7d8b)

[How to Create a State View in Essentials](#z5a28dd234a2e48c79313fc5bf293674b)

How to Create a Ping Monitor in Essentials

Ping Monitor can be used to test server availability, monitor network devices that cannot be monitored using Simple Network Management Protocol (SNMP), or monitor devices that do not have agents installed on them. Use the following procedure to choose the devices you want to test, create a monitoring rule and store it in a management pack, and then select which computer or group of computers will be used to watch for ping results.

Ping Unmonitored Computers and Devices

Use the following procedure to create a new Ping Monitor in System Center Essentials 2010.

To create a Ping Monitor

|  |
| --- |
| 1. In the Essentials console, click the Authoring button.  2. At the bottom of the Authoring pane, click Add Monitoring Wizard.  3. On the Select Monitoring Type page in the wizard, select Ping Monitor, and click Next.  4. On the Ping Monitor Name and Description page, type a name for the monitor in the Name box. This name is mandatory and will appear in the monitoring pane when you view the list of monitors. It is recommended that the IP address be included in the monitor name (for example, My Internet Provider 192.168.1.1). Type an optional description for the monitor in the Description box.  5. Select the destination management pack from the list under Select destination management pack:, or click New to create a new management pack. The monitoring rules created with the new ping monitor will be stored in the management pack. Click Next.  Important  If you choose to create a new management pack, the Management Pack General Properties page will prompt you to enter a name for the management pack, a version number, and an optional description. You can also enter knowledge for the new management pack. After the new management pack is created, you will be returned to the Ping Monitor Name and Description page.  6. On the Enter and Test Server Settings page, enter the IP address or DNS host name of the device being monitored. Click Test to make sure the device is visible to the monitor. This test is not mandatory. Click Next.  Note  If the test is unsuccessful, click Previous to return to the previous step and try again. When Essentials is able to connect to the IP address or device, the message Request processed successfully should appear on this page.  7. On the Choose Watcher Nodes page, select one or more computers to act as watchers of the ping signal. The pings will be sent from the selected computers. Also select the number and time units used to schedule the ping signal. Click Next.  8. The Ping Monitor Settings Summary page shows the result of your selections. If you want to change them, click Previous to step back through the wizard; otherwise, click Create to create the new Ping Monitor.  Once created, you can view the status of this Ping Monitor from the Ping Monitor folder in the Monitoring workspace. |

Ping Managed Computers

It is not necessary to create a Ping Monitor for Windows computers that are being managed with agents; the agent is already monitoring the computer’s availability. You can create a Ping Monitor for Windows computers, but it is not necessary. To enable ping monitoring on a managed Windows computer, follow the steps below.

To enable ping status on managed computers

|  |
| --- |
| 1. Click Monitors. Expanding the list of monitors may take several seconds.  2. In the Monitors list, expand Windows Server.  3. Expand Entity Health.  4. Expand Availability.  5. Right-click Ping Status, click Overrides, click Override the Monitor, and then click For a specific object of class: Windows Server.  6. In the Select Object pane, select the server that is doing the monitoring. Click OK.  7. In the Override Properties pane, select the check box in the Override column for the parameter type Enabled.  8. Ensure that the value in the Effective Value column is set to True. If it is False, use the procedure below to set the value to True.  a. Ensure that the Override box is checked.  b. In the Enabled parameter row, ensure that the Override Value is set to True. If it is not, click the value and select True.  c. Click Apply, and ensure that the Effective Value switches to True.  d. Click OK. |

See Also

[Monitoring in Essentials](#zfbaf18f5def648d7a8b8dcd63fc545e4)

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

[Authoring in Essentials](#z5bcf74dff98d44d69a798bff35680cc2)

How to Work with Maintenance Mode in Essentials

Maintenance mode, available from the Monitoring pane of the Essentials 2010 console, enables you to avoid any alerts or errors that might occur when a monitored object, such as a computer or distributed application, is taken offline for maintenance.

In This Section

[How to Edit Maintenance Mode Settings for a Monitored Object in Essentials](#zc26e883260bf4ebead3e776817d3ee78)

|  |
| --- |
| Provides a step-by-step procedure for editing maintenance mode settings for a monitored object that is already in maintenance mode in Essentials 2010. |

[How to Put a Monitored Object into Maintenance Mode in Essentials](#zfd61fef520774f8b9613195800606e5d)

|  |
| --- |
| Provides a step-by-step procedure for placing a monitored object into maintenance mode in Essentials 2010. |

[How to Stop Maintenance Mode on a Monitored Object in Essentials](#za36fb18770b346f8babe1674ed176ad7)

|  |
| --- |
| Provides a step-by-step procedure for stopping maintenance mode on a monitored object in Essentials 2010. |

See Also

[Monitoring in Essentials](#zfbaf18f5def648d7a8b8dcd63fc545e4)

[Maintenance Mode in Essentials](#zd4d3b88c47294dbe84ce60db83d891ee)

How to Put a Monitored Object into Maintenance Mode in Essentials

Use the following procedure to place a monitored object into maintenance mode in System Center Essentials 2010.

Note

Because Essentials 2010 polls maintenance mode settings only once every 5 minutes, there can be a delay in an object's scheduled removal from maintenance mode.

To put a monitored object into maintenance mode

|  |
| --- |
| 1. In the Essentials console, click Monitoring.  2. In the Monitoring pane, expand Monitoring, and then click Computers.  3. In the Computers pane, right-click the computer that you want to place into maintenance mode, click Maintenance Mode, and then click Start Maintenance Mode.  4. In the Maintenance Mode Settings dialog box, under Apply to, click The selected objects only if only the computer is to be placed into maintenance mode; otherwise, click The selected objects and all their contained objects.  5. Select Planned if this is a planned event; otherwise, leave it cleared.  6. In the Maintenance Category list, click the appropriate category.  7. In Maintenance Mode duration, select and enter the Number of minutes or select and enter the Specific end time, and then click OK. A maintenance mode icon appears in the Computers pane, in the Maintenance Mode column for the computer you selected.  Note  The minimum value for Number of minutes is 5. The maximum value is 1,051,200 (2 years). |

See Also

[Maintenance Mode in Essentials](#zd4d3b88c47294dbe84ce60db83d891ee)

[How to Edit Maintenance Mode Settings for a Monitored Object in Essentials](#zc26e883260bf4ebead3e776817d3ee78)

[How to Stop Maintenance Mode on a Monitored Object in Essentials](#za36fb18770b346f8babe1674ed176ad7)

How to Edit Maintenance Mode Settings for a Monitored Object in Essentials

Use the following procedure to edit maintenance mode settings for a monitored object that is already in maintenance mode in System Center Essentials 2010.

To edit maintenance mode settings for a monitored object

|  |
| --- |
| 1. In the Essentials console, click Monitoring.  2. In the Monitoring pane, expand Monitoring, and then click Computers.  3. Right-click the computer in the Computers pane whose settings you want to edit, click Maintenance Mode, and then click Edit Maintenance Mode settings.  4. In the Maintenance Mode dialog box, edit the settings you want to change, and then click OK. |

See Also

[How to Put a Monitored Object into Maintenance Mode in Essentials](#zfd61fef520774f8b9613195800606e5d)

[How to Stop Maintenance Mode on a Monitored Object in Essentials](#za36fb18770b346f8babe1674ed176ad7)

[Maintenance Mode in Essentials](#zd4d3b88c47294dbe84ce60db83d891ee)

How to Stop Maintenance Mode on a Monitored Object in Essentials

Use the following procedure to stop maintenance mode on a monitored object in System Center Essentials 2010.

To stop maintenance mode on a monitored object

|  |
| --- |
| 1. In the Essentials console, click the Monitoring button.  2. In the Monitoring pane, expand Monitoring, and then click Computers.  3. In the Computers pane, right-click the computer that you want to take out of maintenance mode, point to Maintenance Mode, and then click Stop Maintenance Mode.  4. In the Maintenance Mode dialog box, do the following:   If you selected The selected objects and all their contained objects when you placed the computer into maintenance mode, select Remove contained objects and then click Yes.   If you selected The selected objects only, clear Remove contained objects and then click Yes.  5. In the Computers pane, the maintenance mode icon disappears from the Maintenance Mode column for the computer you selected. |

See Also

[How to Edit Maintenance Mode Settings for a Monitored Object in Essentials](#zc26e883260bf4ebead3e776817d3ee78)

[How to Put a Monitored Object into Maintenance Mode in Essentials](#zfd61fef520774f8b9613195800606e5d)

[Maintenance Mode in Essentials](#zd4d3b88c47294dbe84ce60db83d891ee)

Agentless Exception Monitoring in Essentials

Agentless Exception Monitoring is the process by which managed computers send error reports to a specified location on the Essentials management server when an application error such as a program crash occurs on the managed computer. The error reports can help you understand which applications in your environment are having problems.

You can activate or deactivate Agentless Exception Monitoring in the Configure Essentials 2010 wizard.

In This Section

[How to Start or Stop Agentless Exception Monitoring in Essentials](#z0bd7810d89bb4c768df52d597990d4ed)

|  |
| --- |
| Describes how to start or stop collecting application error reports in Essentials 2010. |

[How to Change Group Policy Settings for Agentless Exception Monitoring in Essentials](#z6045537e22df46d1aa801c7a44bc7ffd)

|  |
| --- |
| Describes how to change Group Policy settings and Agentless Exception Monitoring settings from the command line. |

How to Start or Stop Agentless Exception Monitoring in Essentials

To turn on or turn off Agentless Exception Monitoring in System Center Essentials 2010, you must use the Product Configuration Wizard. For the initial configuration, you can run this wizard from any overview pane. After that, you can run the wizard from the Administration Overview pane.

To turn on or turn off Agentless Exception Monitoring

|  |
| --- |
| 1. Start the Product Configuration Wizard as follows:  a. If this is the initial configuration of Essentials 2010, open any overview pane and select Configure Product Features from the list under Required: Configure important features.  b. Otherwise, click Administration in the Essential console, and in the Administration Overview pane, under Configuration, click the link beside Agentless Exception Monitoring.  2. In the Product Configuration Wizard, select Error Monitoring from the links in the navigation pane.  3. Select Yes or No to turn Agentless Exception Monitoring on or off. When you turn on this feature, you must also specify a folder where error reports can be stored.  4. Complete the wizard. |

See Also

[Agentless Exception Monitoring in Essentials](#zf6d505edfd9f4eef8f6716894aa8870f)

[How to Change Group Policy Settings for Agentless Exception Monitoring in Essentials](#z6045537e22df46d1aa801c7a44bc7ffd)

How to Change Group Policy Settings for Agentless Exception Monitoring in Essentials

The SCECertPolicyConfigUtil utility (SCECertPolicyConfigUtil.exe) changes Group Policy settings and Agentless Exception Monitoring (AEM) settings from the command line.

To install the SCECertPolicyConfig utility

|  |
| --- |
| 1. In the HelperObjects\i386 folder of the Essentials 2010 installation media, start SCECertPolicyConfig.msi.  2. To verify the installation, on the computer, open the folder %Program Files%\System Center Essentials and confirm the presence of the file SCECertPolicyConfigUtil.exe. |

Example

Description

The following table describes the command-line switches you can use with SCECertPolicyConfigUtil.exe to change policy settings.

|  |  |  |
| --- | --- | --- |
| Switch | Required | Description |
| /PolicyType <local/domain> | Required, unless using /Uninstall | <local/domain> controls whether client computers are configured with local or domain Group Policy settings. |
| /Management Group <Essentials management server netbios name>\_MG | Required | The name of the Essentials 2010 management group. This will always be <Essentials management server name>\_MG. |
| /SCEServer <Essentials management server FQDN> | Required, unless using /Uninstall | The FQDN of the Essentials management server. This is used when configuring Windows Update settings. |
| /AEMFileShare <file share name> | Required if ConfigureAEM=True | The UNC path for the share that is used for error reporting. |
| /AEMport <port> | Required if ConfigureAEM=True | The port that is used for error reporting. |
| /ConfigureRemoteControl <true/false> | Optional | True enables Remote Assistance in the domain or local Group Policy. The default if this switch is omitted is False. |
| /ConfigureFirewallPolicy <true/false> | Optional | True enables Windows Firewall exceptions in the domain or local Group Policy. The default if this switch is omitted is False. |
| /ConfigureAEM <true/false> | Optional | If True, Error Reporting settings are configured in the domain or local Group Policy. The default if this switch is omitted is False. |
| /Uninstall | Optional | Removes all AEM settings for the specified Essentials management server in the domain or local Group Policy. |

The Windows Firewall exceptions for client computers are configured in the computer’s policy settings under Computer Configuration\Administrative Templates\Network\Network Connections\Windows Firewall\Domain Profile. When the SCECertPolicyConfigUtil.exe program or the Configure System Center Essentials Wizard is used to configure the policy, they enable the following settings:

|  |  |  |
| --- | --- | --- |
| Name | Configuration | Description |
| Windows Firewall: Allow file and printer sharing exception | Allow unsolicited incoming messages from:  <Essentials management server IP address> | Opens UDP ports 137 and 138, and TCP ports 139 and 445. This allows for client push installation from the Essentials management server. |
| Windows Firewall: Allow remote administration exception | Allow unsolicited incoming messages from:  <Essentials management server IP address> | Opens TCP ports 135 and 445. This allows for Remote Assistance requests from the Essentials management server. |

Code

SCECertPolicyConfigUtil.exe /PolicyType <local domain> /ManagementGroup <management group name> /SCEServer <server FQDN> /AEMFileShare <file share name> /AEMPort <port> /ConfigureRemoteControl <true/false> /ConfigureAEM <true/false> /ConfigureFirewallPolicy <true/false> /Uninstall

Example

Description

The following command will remove local or domain Group Policy settings. For example, you can this command to switch from using one to the other. After running the command, in the Essentials console, run the Configure System Center Essentials Wizard again.

Code

SCECertPolicyConfigUtil.exe /Uninstall /ManagementGroup <Essentials management server netbios name>\_MG

Update Management in Essentials

System Center Essentials 2010 allows administrators to view, download, and deploy software updates required by operating systems and other software on managed computers.

In This Section

[About Update Management in Essentials](#zf3b728398f1a46828d54536df80d81c7)

|  |
| --- |
| Describes how update management works. |

[Configuring Update Management in Essentials](#z359934de0ef14f719291846e317a6a91)

|  |
| --- |
| Describes how to configure update management settings. |

[Managing Updates in Essentials](#zf11e70280b584a9e80f18b36f35cc4e1)

|  |
| --- |
| Describes how to manage updates in Essentials 2010. |

See Also

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

About Update Management in Essentials

System Center Essentials 2010 provides update management features that enable administrators to view, download, and deploy software updates that operating systems and other software require on managed computers.

To manage updates in Essentials 2010, you must access the Updates Overview pane. In the Essentials console, click Updates. In the Overview pane, you can view updates, determine what updates managed computers need, centrally deploy updates to those computers, and then view deployment and other related reports.

Note

If you did not run the Computer and Device Management Wizard to discover computers or did not run the Updates Management Configuration Wizard to configure Update Management, you cannot manage updates. In those cases, the Updates Overview screen displays a message stating that the Essentials configuration is incomplete. You must complete the listed tasks before you can manage updates.

Before you start to manage updates, you should become familiar with the following terms.

Update

|  |
| --- |
| A software package that fixes an issue with a specific operating system or application. |

Security updates

|  |
| --- |
| Updates that help protect the operating system or applications from product or administrative vulnerabilities. |

Essentials 2010 required updates

|  |
| --- |
| Updates published by Microsoft that are related to Essentials 2010. |

Update Management Process on the Management Server

Microsoft publishes security updates and other updates on the Microsoft Updates Web site. Essentials 2010 accesses that Web site to download information about available updates and to download the updates that are needed in your organization.

Deploying updates to managed computers consists of the following phases:

1. Synchronize Essentials 2010 information about available updates with the information at the Microsoft Updates Web site.

2. If you configured Update Management to store updates locally on the Management Server (by default, in the %SYSTEMDRIVE%\SCE\WSUSContent folder, or in a folder you specify), Essentials 2010 downloads the updates and stores them locally.

3. View available updates, and identify any updates that must be deployed.

4. Identify the computers that require the respective update. If necessary, create a new computer group that contains those computers.

5. Approve the update for deployment to the specified computer group.

6. Run reports to track the progress of the deployment and to identify any potential problems.

Using Computer Groups for Update Deployment

To deploy an update to a managed computer, the computer must be a member of a computer group. You can either use Essentials 2010 predefined computer groups or create a new group. In a single update deployment, you can deploy multiple updates to multiple computer groups.

Initial Synchronization

To start to deploy updates to managed computers, Essentials 2010 must complete an initial synchronization with Microsoft Updates. During this initial synchronization, Essentials 2010 downloads information about updates and then downloads the updates according to the criteria that you specified. This process might require extensive resources, depending on your settings.

Subsequent synchronization runs on a regular schedule; however, it is faster than the initial synchronization because Essentials 2010 downloads only those updates that were published since the previous synchronization. When you configure update management for the first time after you install Essentials 2010, you can select to perform the initial synchronization.

Automatic Approval

You can configure update management with automatic approval for selected types of updates and for selected computer groups. After you configure automatic approval, the selected updates are automatically approved for the specified groups when Essentials 2010 downloads updates of the specified type. Deployment of those updates starts immediately without additional administrative intervention.

Update Management Process on Managed Computers

The agent on managed computers checks for new updates every 22 hours. After the administrator approves updates for deployment, in its next cycle, the agent on an approved computer detects that a new update is available. The agent then determines when the update must be installed and displays a notification icon in the computer's notification area.

If an update requires a restart, the agent complies with the current domain restart policies that are in effect on the computer.

Important

Automatic Updates must be enabled on the managed computer to enable Essentials 2010 to deploy updates to that managed computer. To view the status of Automatic Updates, in Control Panel, select Automatic Updates.

Installation Schedule

The installation schedule of an approved update depends on whether you set an installation deadline for the update and on the Automatic Updates settings:

 If you set a deadline, the update is automatically installed during the next check-in from the client computer.

 If you did not set a deadline, the installation time depends on how Automatic Updates is configured on the computer:

 If Automatic Updates is configured to automatically download and install at a certain time, the update is installed automatically at that time unless the user manually installs it before that time.

 If Automatic Updates is configured for automatic download and manual installation, the user can install the update at any time.

Keeping a Computer Up-to-Date When Disconnected from the Corporate Network

Computers managed by Essentials 2010 typically check the Essentials management server to determine which updates have been approved for installation. If the managed computer is a laptop or portable computer and is disconnected from the corporate network for more than six hours, the managed computer will be reconfigured to obtain updates from Microsoft Update. During this time, the computer receives all important updates, regardless of which updates were approved. When the managed computer is reconnected to the corporate network, it reconfigures itself to be managed by the Essentials management server and only installs approved updates.

To prevent this behavior, configure an override to disable the Microsoft.SystemCenter.Essentials.WindowsUpdateRoaming rule in the Authoring workspace of the Essentials console. For more information, see [Targeting in Essentials](#z3ff0d507fd7441de95a21f9c95ea40f3) and [Overrides in Essentials](#z3909e213cf8d4f82aec922d0ed18bb9f).

See Also

[How to Approve or Decline an Update for Deployment in Essentials](#z8590286db117430fb6be2a9bc97a8bb5)

[How to Configure Essentials to Automatically Select and Approve Updates](#z488637d611204f6587eaef7f45b2dbe1)

[How to Configure Automatic Approvals to Support Deadlines in Essentials](#z2fecd40ad7b745cfbfa40531473b7be0)

[How to Manually Synchronize Updates with Microsoft Update in Essentials](#za3bdfa9269a2448a90c5cb136deadc2d)

[How to View Synchronization Status in Essentials](#zafaf002a062148cea5463d904f7d15b6)

[Update Management in Essentials](#z27b4f0d9159b4dbc806a8028c0f33d99)

[Targeting in Essentials](#z3ff0d507fd7441de95a21f9c95ea40f3)

[Overrides in Essentials](#z3909e213cf8d4f82aec922d0ed18bb9f)

Configuring Update Management in Essentials

Use the procedures in this section to configure update management in System Center Essentials 2010.

In This Section

[How to Configure Update Management and Scheduled Maintenance in Essentials](#zf39732a6d20e4b3a93f096fb3504b165)

|  |
| --- |
| Configure update management settings and scheduled maintenance settings. |

[How to Configure Synchronization Frequency with Microsoft Update in Essentials](#z8e52f25c2d6647898d09c334b468e25c)

|  |
| --- |
| Configure how often Essentials 2010 synchronizes with Microsoft Update. |

[How to Configure Essentials to Automatically Select and Approve Updates](#z488637d611204f6587eaef7f45b2dbe1)

|  |
| --- |
| Configure Essentials 2010 to automatically select new updates and approve them for installation. |

[How to Configure Automatic Approvals to Support Deadlines in Essentials](#z2fecd40ad7b745cfbfa40531473b7be0)

|  |
| --- |
| Configure deadlines for installing automatically approved updates. |

[How to Manually Synchronize Updates with Microsoft Update in Essentials](#za3bdfa9269a2448a90c5cb136deadc2d)

|  |
| --- |
| Manually synchronize updates with Microsoft Update. |

[How to Create Custom Update Settings for Client and Server Computers in Essentials](#z24b05a680a6a4e7ba3637d25d954af0d)

|  |
| --- |
| Create customized update management settings for computers. |

See Also

[Updates Pane in Essentials](#z12186aa988d8453eb39f8523a123b902)

How to Configure Update Management and Scheduled Maintenance in Essentials

Configuring Update Management

To start deploying updates to managed computers, you must complete the Update Management Configuration Wizard to synchronize the management server with the Microsoft Update Web site. You should typically complete these tasks immediately after you install System Center Essentials 2010.

Several settings can affect the behavior of the update management feature in Essentials 2010. Most of those settings apply to the synchronization of the updates. For example, you can configure settings such as the type and language for the updates that you want to deploy in your organization, whether a proxy server should be used to connect to the Microsoft Update Web site, and a synchronization schedule.

After the initial configuration of update management, you can modify any update management setting to accommodate new requirements in your organization.

To initially configure and synchronize update management

|  |
| --- |
| 1. The first time you run Essentials, under Essential Configuration incomplete, select Required: Configure Microsoft Update settings.  2. Complete the Update Management Configuration Wizard. On the Summary page, choose the Synchronize updates when this wizard closes option.  3. Finish the wizard. |

To subsequently configure update management using the Update Management Configuration Wizard

|  |
| --- |
| 1. In the Essentials console, click the Updates navigation button.  2. In the Updates Overview screen, select Configure Microsoft Update settings in the Actions section.  3. Use the Update Management Configuration Wizard to update settings and complete the wizard.  Note  The wizard contains a synchronization page that performs synchronization. The synchronization must complete before you can continue updating settings. |

To subsequently configure individual settings of update management

|  |
| --- |
| 1. In the Essentials console, click the Administration button.  2. Select Settings by either expanding Administration in the Administration navigation pane or by selecting Go to Settings in the Settings section in the Administration Overview screen.  3. In the Settings pane, in the Type: Update Management section, double-click any update management item that you want to configure. |

Configuring Scheduled Maintenance

Updates to the Windows Server Update Services (WSUS) database caused previous versions of Essentials to run slowly because the WSUS index tables were becoming increasingly fragmented over time. In addition, there was no way to purge updates and software packages that were no longer needed. In this release of Essentials you can configure scheduled maintenance to ensure that the WSUS database is regularly re-indexed to remove updates and packages that are no longer required and to delete updates and software packages for inactive subscriptions. Configuring scheduled maintenance will free up disk space and improve the overall performance of Essentials.

To re-index the WSUS database and clean up content

|  |
| --- |
| 1. In the Essentials console, click the Administration button and then click Settings.  2. In the Settings pane under Type: Update Management, double-click Maintenance.  3. In the Update Management Settings – Maintenance window, select the Schedule maintenance check box. Choose the frequency and start time for maintenance from the drop-down list boxes provided.  Tip  You can also click the Updates button and then click Configure Windows Server Update Services Maintenance under the Actions list in the Updates Overview pane to change these settings.  4. Under Database maintenance, select the check box Re-index to defragment the updates database at the scheduled time. You can also click the Re-index Now button to perform database maintenance manually.  5. Under Updates maintenance, select the check box Decline unneeded updates to remove any updates that are not required, have not been approved, or have been superseded by other updates in the last 30 days. You can also click the Decline Now button to decline unneeded updates manually.  6. Under Updates maintenance, select the check box Update canceled or renewed subscriptions to decline updates for inactive subscriptions. You can also click the Update Now button to update canceled or renewed subscriptions manually.  Note  Updates maintenance does not remove unneeded or inactive subscriptions to third party updates in Essentials 2010.  7. When you have completed the configuration of these maintenance settings, click OK to save the changes. |

How to Configure Synchronization Frequency with Microsoft Update in Essentials

You can configure System Center Essentials 2010 to synchronize with Microsoft Update multiple times per day to ensure that new updates are downloaded immediately. Use the following procedure to specify the frequency of automatic synchronization with Microsoft Update.

To enable synchronization with Microsoft Update to occur multiple times per day

|  |
| --- |
| 1. In the Essentials console, click the Administration button, click Settings, and then double-click Synchronization Schedule under Type: Update Management in the Settings view.  Tip  You can also click the Updates button and then click Configure Microsoft Update Settings under the Actions list in the Updates Overview pane and complete the wizard to change these settings.  2. When the Update Management Settings – Synchronization Schedule dialog box appears, select to synchronize daily. The option to synchronize manually will not be available if you have configured Essentials to automatically select the updates based on scans of your environment.  Important  Synchronization will begin 30 minutes after the specified time.  3. Type or select the time of day to synchronize, select the number of synchronizations to occur per day from the drop-down list, and then click OK.  Note  The default value is once per day. Essentials supports up to 24 syncs per day. |

See Also

[Configuring Update Management in Essentials](#z359934de0ef14f719291846e317a6a91)

[Managing Updates in Essentials](#zf11e70280b584a9e80f18b36f35cc4e1)

How to Configure Essentials to Automatically Select and Approve Updates

In this release of System Center Essentials 2010, we recommend that you let Essentials automatically select the updates to be downloaded when synchronizing with Microsoft Update. Essentials regularly scans the environment to ensure that only relevant update packages are downloaded. Use the Update Management Configuration wizard to configure Essentials to automatically select updates when synchronizing with Microsoft Update. As a result, overall performance of Essentials improves, you have to review fewer packages for deployment, and you only see the available updates relevant to your IT environment.

Note

When synchronizing updates, except for updates requiring that Microsoft Software License Terms first be accepted, new updates that are configured by using automatic approval are automatically approved and deployed to the specified computer group without any additional intervention.

To configure Essentials to select updates automatically

|  |
| --- |
| 1. In the Essentials console, click the Updates navigation button, and then, in the Tasks pane, click Configure Microsoft Update Settings.  2. When the Introduction page of the Update Management Configuration wizard appears, click Next to begin. Select the Do not show this page again box if you want to skip the introduction the next time you start the wizard.  Tip  You can change Update management settings by clicking the Administration button in the Essentials console and clicking Configure update management settings under Microsoft Updates in the Administration Overview pane.  3. On the Proxy Server page, if you do not use a proxy server to connect to the Internet, leave the setting at No, and then click Synchronize. If you do use a proxy server, click Yes, complete the required fields as described in the following section, and then click Synchronize.   Server name—Choose between HTTP or HTTPS, and then type the proxy server domain name in the text box.   Port number—Type the port number to use for the proxy in the text box.  Select the check box to specify an account that uses permissions to connect to the proxy server, if required. Type the user name and password in the text boxes, select the domain to which the user account belongs, and then click OK to save and apply the changes.  4. After synchronization is complete, the Products page will be displayed. You will be prompted to decide whether to have Essentials automatically download updates or you can manually specify which updates should be downloaded. To ensure that managed computers stay as secure as possible, we strongly recommend that you keep the default setting to Automatically to enable Essentials to determine the required updates based on scans of your environment. If you decide to manually specify which products to update, click Manually, select one of the options described in the following section, and then click Next.   Download updates for Operating Systems only—If you choose this option, Essentials only downloads updates for Windows operating systems.   I will choose products from the list below—If you select this option, you will have to select Microsoft products manually from the list for which Essentials should download updates.  5. On the Update Languages page, click Yes to download updates based on the locale of the Essentials server, or click No to select which languages to synchronize, and then click Next.  6. On the Classifications page, click Yes to download only critical, security, and service pack updates from Microsoft, or click No to select the classifications of updates to synchronize, and then click Next.  7. On the Synchronization page, specify the time of day and select the number of synchronizations per day to check for new updates from Microsoft Update, and then click Next.  Important  If you chose to automatically download Microsoft updates based on your environment as recommended, the Synchronize manually option will not be available. Synchronization begins 30 minutes after the specified time.  8. On the Summary page, review the configured settings. Select the Synchronize updates when this wizard check box to run synchronization for the first time after the wizard is complete, and then click Finish.  Note  First-time synchronization can be very resource-intensive and may take several hours to complete, depending on your configuration settings. |

Essentials 2010 uses Group Policy to configure the Windows Update agent to receive updates from the Essentials management server. These settings apply to all computers managed by Essentials unless you create a new Group Policy object (GPO) to customize the update management settings. Instructions on how to create and apply customized Windows Update settings by using a new GPO are in the Update Management section of the Essentials 2010 Operations Guide. The default Windows Update settings that Essentials uses are shown in the following table.

|  |  |
| --- | --- |
| Setting | Default Value |
| Configure automatic updates | Enabled |
| Configure automatic updating | 4 (auto-download and schedule the installation) |
| Scheduled install day | 0 (every day) |
| Scheduled install time | 03:00 |
| Specify intranet Microsoft Update Service location | Enabled |
| Intranet update server | https://<SCEServer FQDN>:8531 |
| Intranet statistics server | https://<SCEServer FQDN>:8531 |
| Allow signed content from Intranet Microsoft Update service locations | Enabled |
| No auto-restart for scheduled Automatic Updates installations | Enabled |

See Also

[How to Configure Update Management and Scheduled Maintenance in Essentials](#zf39732a6d20e4b3a93f096fb3504b165)

[How to Configure Synchronization Frequency with Microsoft Update in Essentials](#z8e52f25c2d6647898d09c334b468e25c)

[How to Configure Automatic Approvals to Support Deadlines in Essentials](#z2fecd40ad7b745cfbfa40531473b7be0)

[How to Manually Synchronize Updates with Microsoft Update in Essentials](#za3bdfa9269a2448a90c5cb136deadc2d)

[How to Create Custom Update Settings for Client and Server Computers in Essentials](#z24b05a680a6a4e7ba3637d25d954af0d)

How to Configure Automatic Approvals to Support Deadlines in Essentials

In addition to configuring System Center Essentials 2010 to automatically approve critical and security updates, you can set a deadline so that users are offered a specified time to install the required updates themselves, otherwise the packages will be automatically installed when the deadline has been reached. Use the following procedure to configure a deadline for update installation.

To configure automatic approvals to support deadlines

|  |
| --- |
| 1. In the Essentials console, click the Updates button and then click Configure Auto-Approvals in the Actions list.  2. On the Approvals tab, click Yes, I want to approve synchronized updates according to the following rules if it is not selected already, and then click Add.  3. When the Add Approval Rule dialog box opens, type a rule name in the text box and then select one or more criteria from the list to apply to approvals. In the Criteria description box, click the underlined text to edit the values.  a. Deploy to specified computer groups— Select one or more computer groups and click OK.  b. Within specified update classifications— Select one or update classifications from the list of available types and click OK.  c. For specified products— Select the Microsoft software you want to update from the list of available products and click OK.  d. When updates arrive at the client computer, begin installing them after a specified time— Select either to install updates immediately or install them after a specified interval. If you select to install after an interval, select the number of days to wait before automatically installing, select the time of day to automatically install, and then click OK.  Tip  If the update is not installed on a given computer by the specified deadline, it will be automatically installed at the end of this interval.  4. Click OK after completing the configuration for the selected criteria. After the new rule has been created, you will be returned to the list of automatic approval rules. Click Run Rule Now to apply the new rule immediately. |

To configure additional automatic approval settings

|  |
| --- |
| 1. On the Revisions tab, choose to automatically approve the latest revision to an update or continue using the older version of an update that will continue to be approved, and then click Apply.  2. On the Updates to Essentials tab, select the check box to automatically approve updates to System Center Essentials, and then click Apply. |

See Also

[Configuring Update Management in Essentials](#z359934de0ef14f719291846e317a6a91)

How to Manually Synchronize Updates with Microsoft Update in Essentials

To start deploying updates to managed computers, you must complete the initial configuration of update management and the initial synchronization with the Microsoft Updates Web site. You should typically complete both tasks by using the Update Management Configuration Wizard immediately after you install System Center Essentials 2010.

Microsoft publishes updates as necessary to handle various product issues. Therefore, after initial synchronization, Essentials 2010 must periodically synchronize with the Microsoft Updates Web site to download any newly-published updates.

Use the following procedures to configure Essentials 2010 with a recurring synchronization schedule or to manually synchronize at any time.

To manually synchronize Microsoft updates

|  |
| --- |
| 1. In the Essentials console, click Updates.  2. In the Updates Overview pane, in the Synchronization status area, click Synchronize now. |

To manually synchronize Microsoft updates using the Update Management Configuration Wizard

|  |
| --- |
| 1. In the Essentials console, click Updates.  2. In the Updates Overview pane, in the Actions area, click Change updates settings.  3. Enter the required information in the Update Management Configuration Wizard, and on the Summary page, select the Synchronize updates when this wizard closes check box.  Note  The wizard contains pages for all update management settings. Select the specific settings you want to change, and then proceed to the last page of the wizard. |

See Also

[About Update Management in Essentials](#zf3b728398f1a46828d54536df80d81c7)

[Configuring Update Management in Essentials](#z359934de0ef14f719291846e317a6a91)

[How to View Synchronization Status in Essentials](#zafaf002a062148cea5463d904f7d15b6)

[Update Management in Essentials](#z27b4f0d9159b4dbc806a8028c0f33d99)

How to Create Custom Update Settings for Client and Server Computers in Essentials

System Center Essentials 2010 uses Group Policy to configure the Windows Update agent to receive updates from the Essentials management server. These settings apply to all computers managed by Essentials unless you create a new Group Policy object (GPO) to customize the update settings. This section provides information about the default Windows Update agent settings and instructions on creating a GPO to apply to a specific group of computers, such as clients or servers, with customized Windows Update settings.

Default Windows Update Agent Settings in Essentials 2010

The default Windows Update settings used by Essentials are shown in the following table.

|  |  |
| --- | --- |
| Windows Update Setting | Default Value |
| Configure automatic updates | Enabled |
| Configure automatic updating | 4 (auto-download and schedule the install) |
| Scheduled install day | 0 (every day) |
| Scheduled install time | 03:00 |
| Specify intranet Microsoft Update Service location | Enabled |
| Intranet update server | https://<SCEServer FQDN>:8531 |
| Intranet statistics server | https://<SCEServer FQDN>:8531 |
| Allow signed content from intranet Microsoft Update service locations | Enabled |
| No auto-restart for scheduled Automatic Updates installations | Enabled |

To customize Windows Update settings using a Group Policy Object

|  |
| --- |
| 1. Create an Active Directory Group Policy object (GPO) in the same domain as the computers to which you want to apply customized settings. For more information, see “Create a Group Policy Object” in the Microsoft TechNet Library (<http://go.microsoft.com/fwlink/?LinkId=161344>).  2. Change the security filtering of the GPO from Authenticated Users to the SCE Managed Computers <management group name> security group. For more information, see “Assign Security Group Filters to the GPO” in the Microsoft TechNet Library (<http://go.microsoft.com/fwlink/?LinkId=161346>).  3. Link the Group Policy object to the organization units (OU) containing the computers to which you want to apply the customized Windows Update Agent settings. For more information, see “Link the GPO to the Domain” in the Microsoft TechNet Library (<http://go.microsoft.com/fwlink/?LinkId=161347>).  4. Edit the Windows Update Agent settings in the GPO.  5. After the group policy refresh interval has elapsed (every 90 minutes by default, with a random offset of 0 to 30 minutes) the computers with customized Windows Update Agent settings will be configured.  6. If you want to revert back to the original Windows Update settings configured by Essentials 2010, you can delete the customized GPO you created in step 1.  7. If you uninstall Essentials 2010, be sure to delete any customized GPOs you have created. |

Supported Customizations to Windows Update Agent Settings in Essentials 2010

The supported customizations to Windows Update settings used by Essentials 2010 are shown in the following table. For more information, see “Configure Automatic Updates by Using Group Policy” in the Microsoft TechNet Library (<http://go.microsoft.com/fwlink/?LinkId=161349>).

|  |  |
| --- | --- |
| Windows Update Setting | Supported Customizable Value |
| Configure Automatic Updates | Yes |
| Configure Automatic Updating | Yes |
| Scheduled Install Day | Yes |
| Scheduled Install Time | Yes |
| Specify intranet Microsoft Update Service location | No |
| Intranet Update Server | No |
| Intranet Statistics Server | No |
| Allow signed content from intranet Microsoft Update service locations | No |
| Enable client-side targeting | No |
| Reschedule Automatic Update scheduled installation | Yes |
| No auto-restart for scheduled Automatic Updates installations | Yes |
| Automatic Update detection frequency | Must be less than 24 hours |
| Allow Automatic Update Immediate Installation | Yes |
| Delay Restart for Scheduled Installations | Yes |
| Re-prompt for Restart with Scheduled Installations | Yes |
| Allow non-Administrators to Receive Update Notifications | Yes |
| Remove Links and Access to Windows Update | Yes |



|  |
| --- |
|  |

See Also

[Configuring Update Management in Essentials](#z359934de0ef14f719291846e317a6a91)

[Managing Updates in Essentials](#zf11e70280b584a9e80f18b36f35cc4e1)

Managing Updates in Essentials

Use the procedures in this section to manage the deployment of updates to managed computers and devices in System Center Essentials 2010.

In This Section

[How to Approve or Decline an Update for Deployment in Essentials](#z8590286db117430fb6be2a9bc97a8bb5)

|  |
| --- |
| Approve or decline updates for deployment to selected computers and devices. |

[How to Uninstall an Update in Essentials](#z79b6891a257945cfb836a1a49510288c)

|  |
| --- |
| Uninstall updates previously deployed by Essentials that are no longer required. |

[How to Import Content From a Catalog in Essentials](#zc20d6f2e9a4a4f6b915f046888ce83de)

|  |
| --- |
| Import Microsoft Update or Microsoft partner content from a catalog. |

[How to Create an Update Package in Essentials](#z3e8bbfe4983146a28c7b0ae717bd0718)

|  |
| --- |
| Create an update package for updates that do not come from Microsoft. |

[How to Create a Customized Updates View in Essentials](#zab3dea3897914b51b2d5ac56161cf2ba)

|  |
| --- |
| Create a customized view of updates. |

[How to View Microsoft Critical and Security Update Status Reports in Essentials](#z05d547afe9cc4bfe8a1861578396fb59)

|  |
| --- |
| View deployment status reports for critical and security updates. |

[How to View the Status of a Deployed Update in Essentials](#zdb806d21a41f4040b43adc5ad6e16e8c)

|  |
| --- |
| View the status of updates deployed in your environment. |

[How to View Update Package Details in Essentials](#z963b8d58b4a647d7950cee4c4d4b5428)

|  |
| --- |
| View the details about update packages you have downloaded. |

[How to View Synchronization Status in Essentials](#zafaf002a062148cea5463d904f7d15b6)

|  |
| --- |
| View the status of synchronization with Microsoft Update |

See Also

[Updates Pane in Essentials](#z12186aa988d8453eb39f8523a123b902)

[Configuring Update Management in Essentials](#z359934de0ef14f719291846e317a6a91)

How to Approve or Decline an Update for Deployment in Essentials

After you approve an update for deployment, System Center Essentials 2010 installs the update on the computers it was approved for. You can monitor the progress of the update installation by running the Installation progress for Approved Updates report from the Updates Overview screen.

Some updates might not be needed in your organization, and you may want to remove them from the default update views in the Essentials console. To accomplish this, you can use the procedure to decline an update.

To view declined updates you must create a new view and specify you must make a new view yourself and specify “declined” as the update attribute for the view. You can approve declined updates in that view.

To approve updates for deployment

|  |
| --- |
| 1. In the Essentials console, click Updates.  2. In the Updates pane, select the category for which you want to approve updates.  3. In the Results pane, select the updates that you want to approve.  4. Right-click the selected updates and click Approve.  5. In the Approve Groups for Installation dialog box, specify the computer groups with the computers on which you want to install the update. You can do either of the following:  a. Select one or more groups from the Computer Groups list.  b. Click Create New Group to create a new computer group, if needed.  6. Click Set Deadline if you want the update to be installed by a certain time. |

To decline an update

|  |
| --- |
| 1. In the Essentials console, click Updates.  2. In the Updates pane, select the category in which you want to decline one or more updates.  3. In the Results pane, select the updates that you want to decline.  4. Right-click the selected updates and click Decline.  5. After the current view is refreshed, the declined updates may no longer be displayed. |

See Also

[About Update Management in Essentials](#zf3b728398f1a46828d54536df80d81c7)

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

[How to Configure Essentials to Automatically Select and Approve Updates](#z488637d611204f6587eaef7f45b2dbe1)

[Update Management in Essentials](#z27b4f0d9159b4dbc806a8028c0f33d99)

How to Uninstall an Update in Essentials

Several updates, such as a custom Windows Installer-based update, support an uninstall operation. Use the following procedure to uninstall an update previously deployed by System Center Essentials 2010 that is no longer needed.

To uninstall an update

|  |
| --- |
| 1. In the Essentials console, click Updates.  2. In the Updates pane, select a category containing the update that you want to uninstall.  3. In the Results pane, right-click the update that you want to uninstall and select Uninstall.  4. In the Select Groups for Uninstall dialog box, select the computer groups from which you want to uninstall the update, and then click OK. |

See Also

[About Update Management in Essentials](#zf3b728398f1a46828d54536df80d81c7)

[Update Management in Essentials](#z27b4f0d9159b4dbc806a8028c0f33d99)

How to Import Content From a Catalog in Essentials

In System Center Essentials 2010 you can import catalogs and distribute software and updates from Microsoft or from third party software vendors to your IT environment. Essentials 2010 can detect available pre-verified partner catalogs based on scans of your environment, or you can import a catalog from a specified URL. The catalog content provided by hardware and software vendors is compressed into a CAB file, and usually signed by a certificate corresponding to that vendor. Use the following procedures to acquire content from a catalog.

To import updates from partner catalogs

|  |
| --- |
| 1. In the Essentials console, click Updates and then click Import updates from partner catalogs in the Updates Overview pane.  2. When the Update Catalog Import Wizard opens, click Next.  Important  A dialog box will appear warning you that files downloaded from the Internet can potentially harm your computer and will ask if you want to continue. Click Yes to proceed.  3. On the Select Product Catalog page, click Yes, import the specified catalog to import a partner updates catalog, select the catalog from the drop-down list, and then click Next.  Note  If you choose to import a catalog from a specific URL or file location, click No, import a catalog from the following URL, type the URL into the text box provided—for example, www.example.com/file.cab or c:\\directory\file.cab—and then click Next.  4. On the Review the Catalog page, a progress bar will appear while Essentials locates the catalog. A dialog box will appear with details about the update source, warning you that content from catalogs can potentially harm computers. If you trust the source, click Yes, otherwise click No.  5. When the catalog has loaded, you can review the list of all importable packages and non-importable packages and see details about what each package contains. When you have finished reviewing the update details, click Import.  Tip  It is recommended that you leave the check box selected to create a view for this catalog in Essentials.  6. On the Import the Catalog page, a progress bar will be displayed while Essentials imports the updates. When all the updates have been imported, click Finish and you will be returned to the new view you created in the wizard. The view you create for software and updates from third party catalogs will provide the same level of detail as displayed for Microsoft updates, including deployment status reports. |

To import updates from the Microsoft Update catalog

|  |
| --- |
| 1. In the Essentials console, click Updates and then click Import from Microsoft Update Catalog in the Updates Overview pane.  2. The Microsoft Update Catalog Web site will open in a Web browser. Use the text box to search for the software you want to import and then click Search.  3. Click the Add button to add the file or files to your basket. When you have finished adding files, click the view basket link.  4. Review the files you have selected. If you want to download the file without importing it directly into Essentials, clear the check box, and then click Import.  Note  If you have chosen to import the file, a new window will open and display the status of the import. If the import fails, click the Failed link under the Progress column for that update; a new window will open with an error description to help you resolve the issue.  5. Once the import is complete, click Close. |

See Also

[How to Create an Update Package in Essentials](#z3e8bbfe4983146a28c7b0ae717bd0718)

[How to View Synchronization Status in Essentials](#zafaf002a062148cea5463d904f7d15b6)

[Managing Updates in Essentials](#zf11e70280b584a9e80f18b36f35cc4e1)

How to Create an Update Package in Essentials

You can use System Center Essentials 2010 to create an update package for an arbitrary software product. If you would like to deploy an update that does not come from Microsoft Update, for example, Essentials 2010 supports this task.

To create a new update package from a stand-alone setup file

|  |
| --- |
| 1. In the Essentials console, click the Updates button. In the Updates Overview pane, click Create a new update.  2. When the New Update wizard opens, select Deploy a package from a stand-alone setup file, click Browse to locate and select the setup file, and click Next.  Tip  Choose from .msi or .exe files.  3. On the Update details page, type a name and description for the package in the text boxes provided. To enter this information in another language, select Alternate Locale, select a language from the drop-down list box, and then type the name and description for the update in the selected language. When finished, click Next.  4. On the Target System Types page, leave the default setting to No if the package is applicable to all managed computers. If you want to offer the package to only certain types of systems, click Yes, and select from the operating systems, architectures, and locales displayed. When you have finished, click Next.  5. On the Return code page, specify a return code if you want to track the deployment of the update package by mapping its own return codes to values that Essentials can report on. For example, a return code of 0 means the software installation was successful. Type a digit in the Code text box, select a value for the code from the drop-down list box, and click Add. When you have finished, click Next.  Note  You might need to refer to the documentation provided by the software publisher for further details on return codes.  6. On the Install/Uninstall Parameters page, specify any command-line installation parameters that are required to install the software; for example, to enforce a silent or unattended installation. Leave the default setting to No if there are no additional parameters required; otherwise, click Yes, and type the installation parameters in the text box provided. When you have finished, click Next.  7. On the Summary page, review the information about the update package that will be prepared for deployment. Click Previous if you need to go back and change any settings; otherwise, click Finish.  8. A progress bar will appear while Essentials creates the update package. Leave the check box selected to show deployment options when the wizard closes, and click Finish.  Update packages are not deployed until you select one or more computer groups to approve for installation. If you chose to show deployment options after the wizard closed, the Approve Groups for Deployment dialog box will appear next, prompting you to select the computer groups for which you want to deploy the software. Select the appropriate groups and optionally set a deadline for a selected group, or create a new group. Select the check box if you want the package to be visible in Add/Remove Programs for the selected computer groups. |

To deploy a new update package from a setup file requiring additional folders

|  |
| --- |
| 1. From the New Update wizard, select Deploy a package from a setup file requiring additional folders, click Browse to locate and select the root installation folder for the software, and click Next.  Important  The installation folder must be selected before the package setup file can be specified.  2. Click Browse to select the package setup file from the folder or subfolder in which it resides.  3. Repeat steps 3 through 8 in the previous procedure to complete the preparation of this update package for deployment. |

To deploy an existing software package

|  |
| --- |
| 1. In the Essentials console, click the Updates button. In the Updates pane, expand Updates, and click the Unapproved Updates node.  2. Select an update package name in the list, and click Add and Remove Approvals in the Tasks pane.  3. In the Add and Remove Approvals dialog box, select the appropriate groups and optionally set a deadline for a selected group, or create a new group. Select the check box if you want the package to be visible in Add/Remove Programs for the selected computer groups.  4. Click OK to apply the approval settings. A progress bar is displayed while the settings are applied. Click Close after the settings have been applied.  Note  The update package will be moved from Unapproved Updates to All Updates after the update has been approved for deployment. |

See Also

[How to Approve or Decline an Update for Deployment in Essentials](#z8590286db117430fb6be2a9bc97a8bb5)

[How to View the Status of a Deployed Update in Essentials](#zdb806d21a41f4040b43adc5ad6e16e8c)

[How to Create a Customized Updates View in Essentials](#zab3dea3897914b51b2d5ac56161cf2ba)

[How to View Microsoft Critical and Security Update Status Reports in Essentials](#z05d547afe9cc4bfe8a1861578396fb59)

How to Create a Customized Updates View in Essentials

In System Center Essentials 2010 you can customize your view of available updates. New updates can be filtered by whether they are approved or declined, by whether or not they are mandatory, by product and product family, by classification (critical, security, etc.), or by when they were released. Use the following procedure to create a custom view of updates.

To set up a custom updates view

|  |
| --- |
| 1. In the Essentials console, click the Updates button and then click All Updates.  2. In the Tasks pane, click New View.  3. When the Create New Updates View dialog box opens, type a name for the new view and an optional description in the text boxes provided, then select one or more criteria from the list to apply to the view. In the Criteria description box, click the underlined text to edit the values.  a. With a specified ‘Approval’ attribute—view updates with an approval status of any, approved, declined, or unapproved.  b. With a specified ‘Mandatory’ attribute—view updates based on whether they are mandatory or not by selecting true or false.  c. With a specified ‘Needed’ attribute— view updates based on whether they are needed or not by selecting true or false.  d. Applicable with specified products—select the products or product family to include in the custom view.  e. With specified update classifications—select the type of updates you want to include in the custom view.  f. Released within a specified time frame—select to view updates released anytime or those released within the past 30 or 60 days.  g. Deploy to specified computer groups—select the computer group or groups to include in the custom view.  Note  If you specify a computer group for the custom view, you can only view approved updates. This attribute should not be used to customize a view with an approval status of unapproved, declined or any.  4. Click OK after completing the configuration for the selected criteria. After the new view has been created, Essentials will apply the settings and display the new view. This custom view will be accessible from the list of all available views in the Navigation pane. |

See Also

[How to View Microsoft Critical and Security Update Status Reports in Essentials](#z05d547afe9cc4bfe8a1861578396fb59)

[How to View the Status of a Deployed Update in Essentials](#zdb806d21a41f4040b43adc5ad6e16e8c)

[How to View Update Package Details in Essentials](#z963b8d58b4a647d7950cee4c4d4b5428)

How to View Microsoft Critical and Security Update Status Reports in Essentials

In System Center Essentials 2010, the presentation of reports for Microsoft critical and security updates has been reorganized to display updates grouped by Knowledge Base number or Microsoft Security Response Center bulletin number. Use the following procedure to view the report, which summarizes the update status for all computers, regardless of approval status, and sorts them by status: not needed, installed, needed, failed and unknown. Only approved updates are counted in the Needed column of the report.

To view the Microsoft Critical and Security updates status report

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| 1. In the Essentials console, click the Updates button. In the Updates Overview pane under Reports, click Microsoft Critical and Security Updates Status.  2. When the report is displayed, expand one of the Knowledge Base (KB) articles to view all related updates and their status by computer count. Click the linked KB article heading in the report to view it.  3. Click the numeric link in any status column to view the Update Deployment Status report, which provides additional details about update deployment on the affected computers. |

See Also

[About Update Management in Essentials](#zf3b728398f1a46828d54536df80d81c7)

[Managing Updates in Essentials](#zf11e70280b584a9e80f18b36f35cc4e1)

[How to View the Status of a Deployed Update in Essentials](#zdb806d21a41f4040b43adc5ad6e16e8c)

How to View the Status of a Deployed Update in Essentials

In System Center Essentials 2010, after an update package is deployed, you can review its status. You can use this status display to find out information such as the percentage of completion of an installation still in progress, whether the package installed successfully, or whether the computer has been contacted.

To view the deployment status of a deployed update

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| 1. In the Essentials console, click Updates.  2. In the Updates pane, select the category for which you want to view the status of deployment, and then select an update in the list.  3. In the Tasks pane, click Deployment Status.  4. The Update Compliance dialog box displays the deployment status of the selected update on managed computers. The following list describes each status message.   Failed—the number of computers on which the update was approved but has not been successfully installed.   Successful—the number of computers on which the update was approved and has been successfully installed.   Pending—the number of computers on which the update was approved but installation has not yet begun, the number of computers on which the update has been downloaded but not yet been installed, or the number of computers on which the update has been installed and is pending restart.   Not Applicable—the number of computers to which this update does not apply.   Unknown—the number of computers for which Essentials 2010 has not yet determined that they require this update. |

See Also

[How to View Microsoft Critical and Security Update Status Reports in Essentials](#z05d547afe9cc4bfe8a1861578396fb59)

[How to Approve or Decline an Update for Deployment in Essentials](#z8590286db117430fb6be2a9bc97a8bb5)

[How to Configure Essentials to Automatically Select and Approve Updates](#z488637d611204f6587eaef7f45b2dbe1)

[Update Management in Essentials](#z27b4f0d9159b4dbc806a8028c0f33d99)

How to View Update Package Details in Essentials

In System Center Essentials 2010, you can view the details about downloaded software and update packages, such as release dates, related Knowledge Base (KB) articles, classifications (critical, security, etc.), supported languages, dependencies, and more. Essentials 2010 also provides details on the contents of bundled packages, updates that have been superseded by new updates, and updates that replace a selected update. You can use the following procedure to view the details about packages that have been downloaded so that you can decide which ones to approve.

To view the details of an update package

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| 1. In the Essentials console, click the Updates button. In the Updates pane, expand Updates, and click All Updates.  2. To view the details of an update, select a package from the list. The Details pane will open below the list of update packages with the Summary contents displayed first. The summary details are listed below.  Tip  General update details and revisions to an update package can also be viewed by right-clicking a package in the list and then clicking Properties. When the Properties dialog box opens for the selected update, you can view general update package details, view the status of deployment for the update, and view changes made to the update over its lifetime. Click the Revisions tab to view changes made to the package over its lifetime.   Release date—The date the package was released by Microsoft.   KB Article—The related KB article number with a hyperlink to the article in the Microsoft Knowledge Base.   Classification—The type of update: critical, security, service pack, etc.   Deployment Status—The number of computers that have evaluated the update, the installation state, and a link to a detailed deployment status report. See [How to View the Status of a Deployed Update in Essentials](#zdb806d21a41f4040b43adc5ad6e16e8c) and [How to View Microsoft Critical and Security Update Status Reports in Essentials](#z05d547afe9cc4bfe8a1861578396fb59) for more information about deployment status reports.   Description—A brief description of the update package. This description may contain an alert about related updates, which can be viewed by clicking the Related Updates tab.   Groups approved for install—Which computer groups have been approved to install the update; for example, the All Windows Clients group.   Groups approved for uninstall—Which computer groups have been approved to uninstall the update.  Important  At least one synchronization with Microsoft Update must first have taken place and some updates been created or downloaded in order for you to view update package details.  3. Click the Updates Details tab to view more details about the update package. The details in this view are shown below.  General details:   Classification—The type of update: critical, security, service pack, etc.   Release Date—The date this update package was released by Microsoft.   MSRC Number—The Microsoft Security Response Center number, if available, with a hyperlink to the corresponding Microsoft Security Bulletin.   MSRC Rating—The Microsoft Security Response Center rating, if available.   Update ID—The update identification number.  Products: The Microsoft product to which this update applies.  Installation Information:   Removable—Whether or not the update can be uninstalled.   May request user input—Whether or not user input will be required during update installation.   Restart behavior—Whether or not the update will require a computer restart.   Update Status—Whether or not the update has been approved, unapproved, or declined for installation.  Languages: The available languages for this update.  4. Click the Related Updates tab to view information about bundled updates, dependencies, superseded updates, and updates that replace the selected update, as shown below.   This update is replaced by—Lists newer updates that supersede this update.   This update replaces—Lists older updates that this update supersedes.   This update depends on—Lists other updates that are required before this update can be installed.   This update bundles—Lists multiple updates contained in one package, in the order they will be installed. |

See Also

[How to View the Status of a Deployed Update in Essentials](#zdb806d21a41f4040b43adc5ad6e16e8c)

[How to View Microsoft Critical and Security Update Status Reports in Essentials](#z05d547afe9cc4bfe8a1861578396fb59)

[Managing Updates in Essentials](#zf11e70280b584a9e80f18b36f35cc4e1)

[How to View Synchronization Status in Essentials](#zafaf002a062148cea5463d904f7d15b6)

[How to Manually Synchronize Updates with Microsoft Update in Essentials](#za3bdfa9269a2448a90c5cb136deadc2d)

[How to Configure Synchronization Frequency with Microsoft Update in Essentials](#z8e52f25c2d6647898d09c334b468e25c)

How to View Synchronization Status in Essentials

You can view synchronization status for updates in System Center Essentials 2010.

To view synchronization status

|  |
| --- |
| 1. In the Essentials console, click Updates.  2. In the Updates Overview pane, in the Updates status summary section, expand a category to view status for updates in that category.  3. In the Updates Overview pane, in the Synchronization status section, note the Last Synchronization and Next Synchronization status. |

See Also

[About Update Management in Essentials](#zf3b728398f1a46828d54536df80d81c7)

[Configuring Update Management in Essentials](#z359934de0ef14f719291846e317a6a91)

[How to Manually Synchronize Updates with Microsoft Update in Essentials](#za3bdfa9269a2448a90c5cb136deadc2d)

Software Deployment in Essentials

You use software deployment in System Center Essentials 2010 to centrally deploy software to your managed computers. By using Essentials 2010, you can specify criteria to group the computers that require the software, deploy the software to those computers, and then review deployment status.

To assist you in software deployment, Essentials 2010 provides a single-page overview screen that provides a central point of access to all functions related to software deployment. By using the status summaries, tasks, reports, help, and other information about this overview screen, you can easily deploy software to managed computers.

In This Section

[About Software Deployment in Essentials](#z91f54932613b4ff697d46896a0467291)

|  |
| --- |
| Describes the software deployment feature. |

[How to Create and Deploy a Software Package in Essentials](#zd186e510166946d3982b17aab17f7fcc)

|  |
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| Provides steps for creating a new software deployment package and specify how and to which managed computers it will be deployed. |

[How to Create a Software Package That Contains a Response File in Essentials](#z05cdbacbef704bc9bcd859621c1dd7bc)

|  |
| --- |
| Provides steps for creating a new software deployment package when an unattended install is required. |

[How to Approve Software for Deployment in Essentials](#z8022daf35d214a6189dab3aafe99c317)

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| Provides steps for approving software for deployment. Approval is required before deploying. |

[How to Modify a Software Package in Essentials](#zfefab1ce7df14afabca44e9d93959b62)

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| --- |
| Provides steps for changing a software deployment package; for example, to change installation parameters. |

[How to Delete a Software Package in Essentials](#z7ebc62080f44481d9169f11b9585493a)

|  |
| --- |
| Provides steps for deleting a software package from Essentials 2010. Using this procedure will not uninstall software. |

[How to Uninstall Deployed Software in Essentials](#z75dcae288bb24533a04fddd3b6eb5e82)

|  |
| --- |
| Provides steps for uninstalling software that was previously installed on managed computers. |

[How to View Software Packages in Essentials](#z32045a5aaaa743c98e0acb432a0c3b9a)

|  |
| --- |
| Provides steps for viewing and checking properties for software packages. |

See Also

[Managing Computers and Devices in Essentials](#zdab5546d0ba4496781959644ef6ec16f)

About Software Deployment in Essentials

System Center Essentials 2010 allows you to centrally deploy software to your managed computers. Using Essentials 2010, you package the software for deployment, use computer groups to specify on which computers you want to install the software, and then run reports to monitor the deployment status.

To understand how Essentials 2010 deploys software, you should become familiar with the following terms:

Software package

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| The combination of files, settings, and related general information that is required to install software on managed computers.  The general information includes items such as the command line that needs to run on computers to install the software, hardware requirements that must be met before the software can be successfully installed, and a schedule for the installation. |

Computer group

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| A collection of managed computers that satisfies certain criteria. A computer group must be configured for software deployment before you can deploy software to its members. |

Approval

|  |
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| The step of approving a software package for deployment to computer groups. After a software package is approved, Essentials 2010 deploys the approved software to the specified computer groups. |

Software Deployment Installation Files

During the software deployment process, you might need to work with the following types of installation files:

 EXE applications

 Windows Installer applications

 EXE-wrapped Windows Installer applications

EXE Applications

EXE applications are characterized by an .exe installation file and possibly additional files, all of which must be located in a single folder.

For EXE application deployments, you can specify the following:

 Installation parameters

 Whether to add the software to Add or Remove Programs in Control Panel

Note

Programs that are published to Add or Remove Programs can be seen only by members of the local Administrators group.

Windows Installer Applications

Windows Installer applications are characterized by a Windows Installer installation file and possibly additional files, all of which must be located in a single folder. When you specify a Windows Installer file, Essentials 2010 retrieves information, such as the package name, directly from the file.

For Windows Installer application deployments, you can specify the following:

 Installation and removal parameters

 An installation configuration file

 Whether to add the software to Add or Remove Programs in Control Panel

Note

Programs that are published to Add or Remove Programs can be seen only by members of the local Administrators group.

EXE Wrapped Windows Installer Applications

EXE wrapped Windows Installer applications are characterized by .exe and Windows Installer files and possibly additional files, all of which must be located in a single folder.

When deploying an EXE wrapped Windows Installer application, Essentials 2010 uses the Windows Installer files to monitor the installation status of the application.

For EXE wrapped Windows Installer application deployments, you can specify the following:

 Installation parameters

 The Windows Installer files to be used for deployment status detection

 An installation configuration file

 Whether to add the software to Add or Remove Programs in Control Panel

Note

Programs that are published to Add or Remove Programs can be seen only by members of the local Administrators group.

Software Deployment Process on the Management Server

Deploying software to managed computers consists of the following phases:

1. Create a software deployment package. You need to specify the software source files that are needed for the deployment, the command line that installs the software, and other general information required for the software deployment.

By default, Essentials 2010 stores the source files and other package-related files in the %SYSTEMDRIVE%\SCE\UpdateServicesPackages\<package> folder, or in the(%PROGRAMFILES%\Update Services\UpdateServicesPackages\ folder if, during Setup, you chose to not store updates locally.

2. Select an existing computer group or create a new group that contains the computers that you want to deploy the software to.

3. Approve the deployment for the appropriate computer group.

4. View reports and alerts to monitor the progress of the deployment and to identify and understand problems that caused the software installation to fail on certain computers.

Using Computer Groups for Software Deployment

To deploy software to a managed computer, the computer must be a member of a computer group. You can either use an existing computer group or create a new group. In a single software deployment, you can deploy software to multiple computer groups.

Software Deployment Process on the Managed Computers

The agent on approved managed computers checks for new software deployments every 22 hours. After the administrator approves software for deployment, the agent, in its next cycle, detects that new software is available. The agent then determines when the software needs to be installed and displays a notification icon in the computer's notification area. The agent adds the software to Add or Remove Programs in Control Panel, if the software is configured as optional.

Users are notified about new software and new updates in the same way. For example, the same notification icon displays when new software becomes available and when new updates become available.

Restart Behavior

If a software installation requires that the computer restart, the agent complies with the current domain restart policies that are in effect on the computer.

Important

Automatic Updates must be enabled on the managed computer to allow Essentials 2010 to deploy software to that managed computer. To view the status of Automatic Updates, open Automatic Updates in Control Panel.

Installation Schedule

The installation schedule of the software depends on how you configured the software package, and the settings of Automatic Updates:

 If you set a deadline, the software is automatically installed at the deadline.

 If you configured the package as optional, the software is added to Add or Remove Programs in Control Panel on the managed computer, and the user can install it at any time.

Note

Programs that are published to Add or Remove Programs can be seen only by members of the local Administrators group.

 If you did not set a deadline, and the installation is mandatory (you did not configure it as optional) the installation time depends on how Automatic Updates is configured on the computer:

 If Automatic Updates is configured to automatically download and install at a certain time, the software installs automatically at that time unless the user has already manually installed it.

 If Automatic Updates is configured for automatic download and manual install, the user can install the software at any time.

 If Automatic Updates is configured to notify users about updates, the software is installed immediately upon the user's approval of the notification message.

See Also

[How to Create and Deploy a Software Package in Essentials](#zd186e510166946d3982b17aab17f7fcc)

[How to View Software Packages in Essentials](#z32045a5aaaa743c98e0acb432a0c3b9a)

[How to Uninstall Deployed Software in Essentials](#z75dcae288bb24533a04fddd3b6eb5e82)

[Software Pane in Essentials](#z71614ea316b94317805d497d1168bd39)

How to Create and Deploy a Software Package in Essentials

How to Create and Deploy a Software Package

To deploy software to managed computers, you must first create a software package and then approve the software package for deployment on computer groups.

The New Software Package Wizard facilitates software deployment. If, after finishing the package wizard you approve the deployment, the deployment begins immediately. If you complete the wizard without approving the deployment, the software package is created, but the software deployment does not start on the managed computers until you specifically approve it.

When deploying a Windows Installer application, if the agent on the managed computer detects that the deployed application is already installed, it does not reinstall the application.

Important

If you are deploying a version of Microsoft Office to an Application Install Point (AIP), and if you deploy a version of Office that is not aligned with a major release such as RTM, SP1, SP2 (specifically, if you install a major release with some updates applied), then Office updates cannot be properly detected or downloaded for the AIP afterward.

To create a software package and approve the deployment

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| 1. In the Essentials console, click Software.  2. In the Software Overview pane, in the Tasks list, click Create new package to start the New Software Package Wizard.  3. Continue through the New Software Package Wizard.  Note  When you specify the path and Setup file name, the file name, including the file path, must be less than 260 characters long, and the folder name must be less than 248 characters long. You can change the structure of folders so they are not nested as deeply or shorten the folder names until all file paths are shorter than 248 characters long.  When using executable (.exe) files, the Target System Types page of the wizard prompts you if the software should be installed on all managed computers or on specific systems, letting you select operating system, architecture, and locale. When using Windows Installer (.msi) files, you can specify installation and uninstall properties, but not the operating system type. Supported operating system information is contained in the Windows Installer file.  4. On the final page of the wizard when software package creation is in progress, select the Show deployment options when this wizard closes check box, and then click Finish.  5. In the Add and Remove Approvals dialog box, select the computer groups that contain the computers to which you want to deploy the software, or click Create New Group to create a new computer group.  6. Select Publish Update(s) to ‘Add/Remove Programs’ if you want the program to appear in the list of installed programs on target computers.  7. Select Set a deadline for this group to schedule the deployment for a specific time, and then click OK. |

To approve a previously created software package for deployment

|  |
| --- |
| 1. In the Essentials console, click Software.  2. In the Software pane, expand Software Packages, and then click All Software Packages.  3. In the All Software Packages pane, select the software package that you want to approve for deployment.  4. In the Actions pane, click Add and Remove Approvals.  5. In the Add and Remove Approvals dialog box, select the computer groups that contain the computers to which you want to deploy the software, or click Create New Group to create a new computer group.  6. Select Publish Update(s) to ‘Add/Remove Programs’ if you want the program to appear in the list of installed programs on target computers.  7. Select Set a deadline for this group to schedule the deployment for a specific time, and then click OK. |

How to Create a Software Package That Contains a Response File

Many software installation programs must receive input from end users in the form of responses to messages. A silent installation is one that does not prompt the user for input. The silent installation gets input from a response file at run time. A response file is a text file that contains configuration and setup parameters for the products and components that are being installed. The format of response files resembles that of an .ini file, but with an .iss extension.

To create a response file when the executable setup file supports relative paths

|  |
| --- |
| 1. Create the response file for the Setup program.  2. Copy the response file to the same folder as the Setup files.  3. In the command-line parameters for the package, specify the response file name. For example, in this example you are packaging a TEST-Install.iss, setup.log, and TEST.exe setup program together. The following code example shows how you specify the file names in the command-line parameters.  c:\test\_temp> TEST.exe /s /f1"TEST-Install.iss" /f2"setup.log" |

To create a response file when the executable Setup file supports absolute paths

|  |
| --- |
| 1. Create the response file for the Setup program.  2. Copy the configuration file to a local network location. The computers on which you are installing software should have a drive mapped to this location.  3. In the command-line parameters for the package, specify the response file name. For example, if you are packaging a TEST-Install.iss, setup.log, and TEST.exe Setup program together, you can specify the file names in the command-line parameters as follows, assuming that the mapped drive is the Z: drive:  c:\test\_temp> TEST.exe /s /f1"Z:\test\_temp\response\TEST-Install.iss" /f2"Z:\test\_temp\setup.log" |

See Also

[How to Create a Computer Group in Essentials](#zd1fde5c66dd1428386f1c92546f2db13)

[How to Modify a Software Package in Essentials](#zfefab1ce7df14afabca44e9d93959b62)

[How to Delete a Software Package in Essentials](#z7ebc62080f44481d9169f11b9585493a)

[How to Uninstall Deployed Software in Essentials](#z75dcae288bb24533a04fddd3b6eb5e82)

[How to View Software Packages in Essentials](#z32045a5aaaa743c98e0acb432a0c3b9a)

How to Create a Software Package That Contains a Response File in Essentials

Many software installation programs must receive input from end users in the form of responses to dialogs. A silent installation is one that does not prompt the user for input. The silent installation gets input from a response file at run time. A response file is a text file that contains configuration and setup parameters for the products and components that are being installed. The format of response files resembles that of an .ini file, but with an .iss extension.

To create a response file when your executable setup file supports relative paths

|  |
| --- |
| 1. Create the response file for the Setup program.  2. Copy the response file to the same folder as the Setup files.  3. In the command-line parameters for the package, specify the response file name. For example, in this example you are packaging a TEST-Install.iss, setup.log, and TEST.exe setup program together. Specify the file names in the command-line options as follows:  c:\test\_temp> TEST.exe /s /f1"TEST-Install.iss" /f2"setup.log" |

To create a response file when your executable setup file supports absolute paths

|  |
| --- |
| 1. Create the response file for the Setup program.  2. Copy the configuration file to a local network location. The computers on which you are installing software should have a drive mapped to this location.  3. In the command-line parameters for the package, specify the response file name. For example, if you are packaging a TEST-Install.iss, setup.log, and TEST.exe setup program together, you can specify the file names in the command-line options as follows (assuming that the mapped drive is the Z: drive):  c:\test\_temp> TEST.exe /s /f1"Z:\test\_temp\response\TEST-Install.iss" /f2"Z:\test\_temp\setup.log" |

See Also

[About Software Deployment in Essentials](#z91f54932613b4ff697d46896a0467291)

[How to Approve Software for Deployment in Essentials](#z8022daf35d214a6189dab3aafe99c317)

[How to Create and Deploy a Software Package in Essentials](#zd186e510166946d3982b17aab17f7fcc)

[How to View Software Packages in Essentials](#z32045a5aaaa743c98e0acb432a0c3b9a)

How to Approve Software for Deployment in Essentials

After creating a software package in System Center Essentials 2010, you must approve the package for deployment for the computers that require the software. Use the following procedures to approve the deployment immediately after you create the package, or to approve the deployment at a later time.

To approve a package for deployment while creating the package

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| --- |
| 1. Run the New Software Package Wizard and create a new package on the Preparing a Package for Deployment page.  2. After the package has been created, select the Show deployment options when this wizard closes option, and then click Finish.  3. In the Approve Groups for Deployment dialog box, select the computer groups on which you want to install the software, and then click OK. |

To approve an existing package for deployment

|  |
| --- |
| 1. In the Essentials console, click the Software button.  2. In the Software pane, expand Software Packages, and then click All Software Packages.  3. In the Results pane, right-click the software package that you want to approve for deployment, and then click Approve for Deployment.  4. In the Approve Groups for Deployment dialog box, select the computer groups on which you want to install the software, and then click OK. |

See Also

[How to Create and Deploy a Software Package in Essentials](#zd186e510166946d3982b17aab17f7fcc)

[How to Delete a Software Package in Essentials](#z7ebc62080f44481d9169f11b9585493a)

[How to Uninstall Deployed Software in Essentials](#z75dcae288bb24533a04fddd3b6eb5e82)

How to Modify a Software Package in Essentials

In System Center Essentials 2010, you can modify properties of a package, such as the installation and removal parameters, the name, and the description.

To modify a package

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| --- |
| 1. In the Essentials console, click Software.  2. In the Software pane, expand Software Packages, and then click All Software Packages.  3. In the All Software Packages pane, right-click the software package that you want to modify, and then click Properties.  4. In the <package> Properties dialog box, use the General and Installation tabs to make the needed changes, and then click OK. |

See Also

[How to Create and Deploy a Software Package in Essentials](#zd186e510166946d3982b17aab17f7fcc)

[How to Delete a Software Package in Essentials](#z7ebc62080f44481d9169f11b9585493a)

[How to Uninstall Deployed Software in Essentials](#z75dcae288bb24533a04fddd3b6eb5e82)

How to Delete a Software Package in Essentials

You can use System Center Essentials 2010 to remove software that is obsolete or no longer needed in your organization. After you delete a package, you will no longer be able to deploy that software. However, the software remains on any computers on which it is already installed. To uninstall the software from managed computers, you must specifically approve it for uninstall before deleting the package.

Note

When a Windows Installer package is deleted, it is removed from Essentials 2010 views, but the files still exist on the Essentials management server. This enables you to use the Windows Installer repair capability, in case it is needed by computers on which the software is installed. To remove the package files, use wsusdebugtool.exe as described in [WSUS Tools and Utilities](http://go.microsoft.com/fwlink/?LinkID=109473).

To delete a package

|  |
| --- |
| 1. In the Essentials console, click Software.  2. In the Software pane, expand Software Packages, and then click All Software Packages.  3. In the Results pane, right-click the software package that you want to delete, and then click Delete. |

See Also

[How to Create and Deploy a Software Package in Essentials](#zd186e510166946d3982b17aab17f7fcc)

[How to Delete a Software Package in Essentials](#z7ebc62080f44481d9169f11b9585493a)

[How to Uninstall Deployed Software in Essentials](#z75dcae288bb24533a04fddd3b6eb5e82)

How to Uninstall Deployed Software in Essentials

You can use System Center Essentials 2010 to uninstall previously deployed software from managed computers. Approving software for uninstallation does not affect the respective package. You can later use the package to reinstall the software.

When Essentials 2010 uninstalls software from managed computers, it uses the uninstall parameters that are specified in the Essentials 2010 software package. If the software is listed in Add or Remove Programs in Control Panel, the uninstall process removes it from that list.

Note

Programs that are published to Add or Remove Programs can be seen only by members of the local Administrators group.

For more information about software deployment types, see [About Software Deployment in Essentials](#z91f54932613b4ff697d46896a0467291).

To uninstall an EXE application

|  |
| --- |
| 1. In the Essentials console, click Software.  2. In the Software Overview pane, click Create and deploy new software package.  3. Use the New Software Package Wizard to create an uninstall package for the software that you want to uninstall.  4. On the Specify Installation Parameters page, click Yes, and then enter any parameters that should be used with the setup file to uninstall the software. Many applications have an uninstall parameter that is used to uninstall the application.  5. On the final page of the wizard, select Show deployment options when this wizard closes, and then click Finish.  6. In the Approve Groups for Deployment dialog box, select the computer groups from which you want to uninstall the software.  7. Click OK. |

To uninstall a Windows Installer application

|  |
| --- |
| 1. In the Essentials console, click Software.  2. In the Software pane, expand Software Packages Overview, and select All Software Packages.  3. In the All Software Packages pane, right-click the software package that you want to uninstall, and select Approve for Uninstall.  4. In the Approve Groups for Uninstall dialog box, select the computer groups from which you want to uninstall the software, and then click OK. |

See Also

[About Software Deployment in Essentials](#z91f54932613b4ff697d46896a0467291)

[How to Create and Deploy a Software Package in Essentials](#zd186e510166946d3982b17aab17f7fcc)

[How to Approve Software for Deployment in Essentials](#z8022daf35d214a6189dab3aafe99c317)

How to View Software Packages in Essentials

Using the System Center Essentials 2010 console, you can view and modify a software package.

Essentials 2010 includes the predefined software package called Microsoft System Center Essentials Monitoring Agent. Essentials 2010 uses this software package to install the agent on computers during deployment, and you should not delete or modify this package.

Important

If you delete or modify the Microsoft System Center Essentials Monitoring Agent software package, computer deployment will fail and you will not be able to manage computers in your organization.

To view the list of software packages

|  |
| --- |
| 1. In the Essentials console, click Software.  2. In the Software pane, expand Software Packages, and then click All Software Packages.  3. In the All Software Packages pane, view the list of software packages. |

To view properties of a software package

|  |
| --- |
| 1. In the list of software packages, right-click a package, and click Properties.  2. The <package name> Properties dialog box displays the package properties. |

See Also

[Software Pane in Essentials](#z71614ea316b94317805d497d1168bd39)

[About Software Deployment in Essentials](#z91f54932613b4ff697d46896a0467291)

[How to Create and Deploy a Software Package in Essentials](#zd186e510166946d3982b17aab17f7fcc)

[How to Uninstall Deployed Software in Essentials](#z75dcae288bb24533a04fddd3b6eb5e82)

Reporting in Essentials

System Center Essentials 2010 includes predefined reports that provide you with a wide range of status and summary information. You can run those reports to evaluate the status of your computers and network devices and to decide if there are any actions that you need to take.

In This Section

[About Reporting in Essentials](#z5a13091f325d4d8fb5c563d3cd0e86ff)

|  |
| --- |
| Describes reporting in Essentials 2010. |

[How to Run a Report in Essentials](#z51046b53d08f4d44850d18ab93f423f0)

|  |
| --- |
| Explains how to find and run Essentials 2010 reports. |

[How to Print a Report in Essentials](#z0fdaf9cd143f43db932cd9a06fa17f95)

|  |
| --- |
| Explains how to print a report once it has been rendered. |

[How to Export a Report in Essentials](#zd220937e94bd48569c555e703a5a648f)

|  |
| --- |
| Explains how to export an Essentials 2010 report to formats such as Excel or Word. |

About Reporting in Essentials

The System Center Essentials 2010 Reporting component must be installed for the Reporting feature to be available in the Essentials console. The System Center Essentials 2010 Reporting feature provides you with predefined reports. To view and run those reports, you have to access the Reporting Overview pane. In the Essentials console, click Reporting. This overview screen lists common reports that can help you in your daily work.

You can access additional predefined reports from other Overview windows. For example, In the Essentials console, if you select Updates, the Updates Overview pane shows links to reports that are related to Update Management.

Note

If you did not run the Discovery Wizard to discover computers or did not run the Update Management Configuration wizard to configure Update Management, you cannot run reports. In this case, the Reporting Overview pane displays a message stating that essential configuration is incomplete. You must complete the listed tasks before you can run reports.

Essentials 2010 retains reporting data for 37 days.

The Daily Health Report

The Daily Health Report is a health summary report that System Center Essentials produces automatically every day and sends through e-mail to the Essentials 2010 administrator. The Essentials 2010 administrator can then review the information conveniently while reading e-mail.

The Daily Health Report contains summary information about inventory, software, updates, monitoring data, and key actions that you have to complete.

Management Pack Reports

If you import a Management Pack that contains reports, Essentials 2010 lists those reports along the existing predefined reports. You can then run those reports as needed.

See Also

[How to Print a Report in Essentials](#z0fdaf9cd143f43db932cd9a06fa17f95)

[How to Run a Report in Essentials](#z51046b53d08f4d44850d18ab93f423f0)

How to Run a Report in Essentials

After you have installed and configured System Center Essentials 2010, you can run reports. Any Management Pack reports are automatically imported with the Management Pack.

To run a report

|  |
| --- |
| 1. In the Essentials console, click Reporting.  2. In the Reporting pane, select a report category.  3. In the <category\_name> Reports pane, select a report.  4. In the Actions pane, click Open.  5. In the report window, set up any report parameters.  6. In the report window, click the Run button. |

See Also

[About Reporting in Essentials](#z5a13091f325d4d8fb5c563d3cd0e86ff)

[How to Print a Report in Essentials](#z0fdaf9cd143f43db932cd9a06fa17f95)

How to Print a Report in Essentials

You can use System Center Essentials 2010 to print a report for when you need to send a paper copy of a report or to take one with you.

To print a report

|  |
| --- |
| 1. In the Essentials console, click Reporting.  2. In the Reporting pane, select a report category.  3. In the <category\_name> Reports pane, select a report.  4. In the Actions pane, click Open.  5. In the report window, set up any report parameters.  6. In the report window, click the Run button.  7. After the report is displayed, on the File menu, click the Print command. |

See Also

[About Reporting in Essentials](#z5a13091f325d4d8fb5c563d3cd0e86ff)

[How to Run a Report in Essentials](#z51046b53d08f4d44850d18ab93f423f0)

How to Export a Report in Essentials

When a Management Pack is imported, System Center Essentials 2010 automatically imports any reports from the Management Pack. You do not need do anything more in Essentials 2010 to add these reports.

After a report has been created, you can export the report into one of several formats.

To export a report

|  |
| --- |
| 1. After a report has been rendered, click the File menu, point to Export, and then click the format to which you want to export the file.  2. In the Save As dialog box, select the folder where you want to save the report, and then click Save. |

See Also

[About Reporting in Essentials](#z5a13091f325d4d8fb5c563d3cd0e86ff)

[How to Print a Report in Essentials](#z0fdaf9cd143f43db932cd9a06fa17f95)

[How to Run a Report in Essentials](#z51046b53d08f4d44850d18ab93f423f0)

Administration in Essentials

The Administration navigation button displays the Administration Overview pane, which contains general System Center Essentials management information and settings.

When you click Administration, you can view the following information:

 A list of agents that are installed on managed computers.

 A list of devices and other computers that have been discovered, and details of selected devices.

 General administration settings.

 Security related information.

 A list of installed Management Packs.

In the Administration Overview pane, you can also perform the following actions:

 Run the Discovery Wizard to discover computers to manage.

 Install agents.

 Import Management Packs.

 Export Management Packs.

 Configure product settings.

 Configure security settings.

 Configure notifications.

You can use the Administration pane of the System Center Essentials 2010 console to configure managed objects and Essentials 2010 settings.

In This Section

[Administration Pane in Essentials](#zb99869c37c214ba29a0f1488d3d76f8b)

|  |
| --- |
| Provides information about using the Administration pane in Essentials 2010. |

[How to Use the Device Management Node in Essentials](#z70d597cfb8b6412faa107b63f4332a8b)

|  |
| --- |
| Provides information about performing the post-installation configuration of agent-managed computers and network devices. |

[How To Work with Management Packs in Essentials](#zd01a1aedacdf42cfb674e37d65ba99bd)

|  |
| --- |
| Provides information about Management Pack concepts and tasks in Essentials 2010. |

[How to Configure Notifications in Essentials](#z23137433aad7418fa751e00784d89bc6)

|  |
| --- |
| Provides procedures for configuring notifications. |

[How to Create a Run As Account in Essentials](#z5a96ed9d95584803ab3324f8d7069d45)

|  |
| --- |
| Provides the procedure to add a Windows account to a Run As Account in Essentials 2010. |

[How to Create a Run As Profile in Essentials](#zce2b8321258d451cb282f1c23f536bcb)

|  |
| --- |
| Provides the procedure to add a Windows account to a Run As Profile in Essentials 2010. |

See Also

[Understanding the Essentials 2010 Console](#z781bf83772394811b1dfd3d30a8779bb)

How to Use the Device Management Node in Essentials

Use the procedures in this section to perform the post-installation configuration of a specific System Center Essentials 2010 management server, agent-managed computer, agentless-managed computer, or network device.

Note

For information about configuring settings for Essentials 2010, which can also be referred to as configuring global settings, see [Settings Node in Essentials](#z43f459f7ec454099af67e7426b96ee67).

In This Section

[How to Administer the Management Server in Essentials](#z1700f422c15b4f29add12b1ba02b368e)

|  |
| --- |
| Provides procedures to configure a management server in Essentials 2010. |

[How to Administer an Agent-Managed Computer in Essentials](#zc5efde50d7224816b8f66030e795c4e0)

|  |
| --- |
| Provides procedures to configure an agent-managed computer in Essentials 2010. |

[How to Configure a Network Device to Use a Different Essentials Proxy Agent](#z1da0448561e54de9b31190a4ffe2ba34)

|  |
| --- |
| Provides the procedure to configure a network device or computer that is running an operating system other than a Windows operating system to use a different Essentials 2010. |

[How to Open a View for an Essentials Managed Object](#zb6997ef1669e49eea9e947f55c788647)

|  |
| --- |
| Provides the procedure to open a view for an Essentials 2010 agent-managed computer or network device. |

[How to Delete an Essentials Managed Object from a Group](#z2eb84eac8483410593b8d9f950cf10fe)

|  |
| --- |
| Provides the procedure to delete an agent-managed computer or network device from Essentials 2010. |

[How to View the Properties of a Managed Object in System Center Essentials 2010](#zcb2cde1838a64411b0974692c52d1a20)

|  |
| --- |
| Provides the procedure to view the properties of an Essentials 2010 agent-managed computer or network device. |

How to Administer the Management Server in Essentials

Use the procedures in this section to perform the post-installation configuration of an Essentials 2010 management server.

In This Section

[How to Override the Heartbeat Failure Setting for the Essentials Management Server](#z02c16508ff0041b7839ada3654231f05)

|  |
| --- |
| Provides the procedure to override the Essentials 2010 management server heartbeat failure setting and configure the number of missed heartbeats the management server will allow for an agent before it changes the state of the respective computer to critical. |

[How to Configure the Internet Proxy Settings for the Essentials Management Server](#zc8f4012858c04912b358b2e3d7f30c30)

|  |
| --- |
| Provides the procedure to configure the Internet proxy settings for the management server. |

See Also

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

How to Override the Heartbeat Failure Setting for the Essentials Management Server

Use the following procedure to override the heartbeat failure setting to configure the number of missed heartbeats that the Essentials 2010 management server allows for an agent before it changes the state of the respective computer to critical. For more information, see [Device Management Node in Essentials](#z7be49aace8dd4cbd97ec045cb7ed2de3).

To override the heartbeat failure setting for a Management Server

|  |
| --- |
| 1. In the Essentials 2010 console, click the Administration button.  2. In the Administration pane, click Settings.  3. In the Settings pane, expand Type: Server and right-click Heartbeat.  4. In the Server Settings - Heartbeat dialog box, do the following:  a. Select Override global server settings.  b. Change the Number of missing heartbeats to the desired number.  5. Click OK. |

See Also

[Device Management Node in Essentials](#z7be49aace8dd4cbd97ec045cb7ed2de3)

[How to View the Properties of a Managed Object in System Center Essentials 2010](#zcb2cde1838a64411b0974692c52d1a20)

How to Configure the Internet Proxy Settings for the Essentials Management Server

Use the following procedure to configure the Internet proxy settings for the Essentials 2010 management server. You must configure these settings if features of Essentials 2010 are enabled that require the Essentials management server to communicate over the Internet.

To configure the Internet proxy settings for an Essentials management server

|  |
| --- |
| 1. In the Essentials 2010 console, click the Administration button.  2. In the Administration pane, click Settings.  3. In the Settings pane, expand Update Management and double-click Proxy Server.  4. In the Update Management Setting - Proxy Server dialog box, select Yes and do the following:   Select http:// or https:// from the drop-down list, and type the name of the Internet proxy server in the Address text box.   Type the Port number, and then click OK. |

See Also

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

[How to View the Properties of a Managed Object in System Center Essentials 2010](#zcb2cde1838a64411b0974692c52d1a20)

How to Administer an Agent-Managed Computer in Essentials

Use the procedures in this section to perform the post-installation configuration of an Essentials 2010 agent-managed computer.

In This Section

[How to Repair an Agent in Essentials](#zb477eb9f6aef4daf865ce02a2977975e)

|  |
| --- |
| Provides the procedures to repair the installation of the agent on agent-managed computers. |

[How to Uninstall an Essentials Agent](#za62c52ac8b674ff79364abeb7bcc40ac)

|  |
| --- |
| Provides the procedures to uninstall an agent from an agent-managed computer. |

[How to Override Heartbeat Settings for an Essentials Agent](#z66cdc25c5bc24e329cbc01ac669323d7)

|  |
| --- |
| Provides the procedure to override the agent heartbeat settings on a specific agent. A heartbeat is a periodic pulse from an agent to the Essentials management server. |

See Also

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

[How to Delete an Essentials Managed Object from a Group](#z2eb84eac8483410593b8d9f950cf10fe)

[How to Open a View for an Essentials Managed Object](#zb6997ef1669e49eea9e947f55c788647)

[How to View the Properties of a Managed Object in System Center Essentials 2010](#zcb2cde1838a64411b0974692c52d1a20)

How to Repair an Agent in Essentials

Use the one of the following procedures to repair the installation of the agent on agent-managed computers.

To repair the installation of the agent using the Essentials 2010 console

|  |
| --- |
| 1. In the Essentials 2010 console, click the Administration button.  2. In the Administration pane, expand Administration, expand Device Management, and then click Agent Managed.  3. In the Agent Managed pane, select the computers for which you want to repair the agent, right-click them, and select Repair.  4. In the Repair Agents dialog box, either leave Use selected Management Server Action Account selected or do the following:  a. Select Other user account.  b. Type the User name and Password, and type or select the Domain from the list. Select This is a local computer account, not a domain account if the account is a local computer account.  Important  The account must have administrative rights on the computer for the repair to succeed.  c. Click Repair.  5. Notice that in the Agent Management Task Status dialog box, the Status for each selected computer changes from Queued to Success. If the task fails for a computer, click the computer. The reason for the failure is displayed in the Task Output text box.  6. Click Close. |

To repair the agent by using the MOMAgent.msi setup wizard

|  |
| --- |
| 1. Log on to a managed computer with an account that is a member of the Administrators security group for the computer.  2. In Add or Remove Programs, click Change for System Center Operations Manager 2007 R2 Agent.  3. In the Agent Setup Wizard, click Next.  4. On the Program Maintenance page, select Repair, and then click Next.  5. On the Ready to Repair the Program page, click Install.  6. On the Completing the System Center Operations Manager Agent Setup Wizard page, click Finish. |

To repair the agent by using MOMAgent.msi from the command line

|  |
| --- |
| 1. Log on to the managed computer with an account that is a member of the Administrators security group for the computer.  2. Open the command window.  3. At the prompt, for example, type the following:  %WinDir%\System32\msiexec.exe /fomus <path>\MOMAgent.msi./qb  Note  For more information about Windows Installer command-line options, see <http://go.microsoft.com/fwlink/?LinkId=70004>. |

See Also

[Device Management Node in Essentials](#z7be49aace8dd4cbd97ec045cb7ed2de3)

How to Uninstall an Essentials Agent

Use one of the following procedures to uninstall an Essentials 2010 agent from an agent-managed computer. For more information about the Device Management node of the Essentials console, see [Device Management Node in Essentials](#z7be49aace8dd4cbd97ec045cb7ed2de3).

To uninstall the agent by using the Essentials console

|  |
| --- |
| 1. Log on to the computer with an account that is a member of the Administrators role for Essentials 2010.  2. In the Essentials 2010 console, click the Administration button.  Note  When you run the Essentials 2010 console on a computer that is not an Essentials management server, the Connect to Server dialog box will display. Type the name of the Essentials management server in the Server name text box.  3. In the Administration pane, expand Administration, expand Device Management, and then click Agent Managed.  4. In the Agent Managed pane, select the computers for which you want to uninstall the agent, right-click them, and then select Uninstall.  5. In the Uninstall Agents dialog box, either leave Use selected Management Server Action Account selected or do the following:  a. Select Other user account.  b. Type the User name and Password, and type or select the Domain from the list. Select This is a local computer account, not a domain account if the account is a local computer account.  Important  The account must have administrative rights on the computer or the uninstall will fail.  c. Click Uninstall.  6. In the Agent Management Task Status dialog box, the Status for each selected computer changes from Queued to Success.  Note  If the task fails for a computer, click the computer, and you can read the reason for the failure in the Task Output text box.  7. Click Close. |

To uninstall the agent by using the MOMAgent.msi agent setup wizard

|  |
| --- |
| 1. Log on to a managed computer with an account that is a member of the administrators security group for the computer.  2. In Add or Remove Programs, click Remove for System Center Operations Manager 2007 R2 Agent, and then click Yes.  Note  The Agent Setup Wizard can also be run by double-clicking MOMAgent.msi, which is available on the Essentials 2010 installation media. |

To uninstall the agent by using MOMAgent.msi from the command line

|  |
| --- |
| 1. Log on to the managed computer with an account that is a member of the Administrators security group for the computer.  2. Open the command window.  3. At the prompt, for example, type the following:  %WinDir%\System32\msiexec.exe /x <path>\MOMAgent.msi./qb  Note  For more information about Windows Installer command-line options, see <http://go.microsoft.com/fwlink/?LinkId=70004>. |

See Also

[Device Management Node in Essentials](#z7be49aace8dd4cbd97ec045cb7ed2de3)

How to Override Heartbeat Settings for an Essentials Agent

Use the following procedure to override the agent heartbeat settings for a specific agent in System Center Essentials 2010. A heartbeat is a periodic pulse from an agent to the Essentials management server that contains information related to the health of the agent. For more information, see [Device Management Node in Essentials](#z7be49aace8dd4cbd97ec045cb7ed2de3).

To override the agent heartbeat setting for a specific agent

|  |
| --- |
| 1. In the Agent Properties dialog box, select Override global server settings.  Note  For information about how to get to the Agent Properties dialog box, see [How to View the Properties of a Managed Object in System Center Essentials 2010](#zcb2cde1838a64411b0974692c52d1a20).  2. Change the Heartbeat interval. The maximum value allowed for the heartbeat interval is 86,400 seconds (60 days). The minimum value allowed is 5 seconds.  3. Click OK. |

See Also

[Device Management Node in Essentials](#z7be49aace8dd4cbd97ec045cb7ed2de3)

[How to View the Properties of a Managed Object in System Center Essentials 2010](#zcb2cde1838a64411b0974692c52d1a20)

Using Certificates in Essentials

In System Center Essentials 2010, you can use certificates as an alternative to the Kerberos protocol for mutual authentication and encryption between an agent and the Essentials management server.

Essentials 2010 includes the MOMCertImport tool, which configures Essentials to use a certificate. For more information, see [How to Create Certificates in System Center Essentials 2010](#zc1423c0380d0456ab1f27386776d0e57).

When you obtain and install certificates for use with Essentials 2010, consider the following:

 Certificates used on various components in Essentials 2010, for example, agent, remote console, or Essentials management server, must be issued by the same certification authority (CA).

 Each computer requires its own unique certificate.

 Each computer must also contain the root certification authority certificate in its Trusted Root Certification Authorities store and any intermediate certification authorities in the Intermediate Certification Authorities store.

 The Subject Name box for the certificate must contain the DNS fully qualified domain name (FQDN) of the host computer.

 The certificates have to support the following two enhanced key usage boxes, server authentication and client authentication, which are represented by the two object identifiers (OIDs) 1.3.6.1.5.5.7.3.1 and 1.3.6.1.5.5.7.3.2.

Note

When entering OIDs, separate each OID by a comma. For example, enter 1.3.6.1.5.5.7.3.1,1.3.6.1.5.5.7.3.2 exactly as shown.

The basic order of operations for installing a certificate is as follows:

1. Obtain the certificate for each Essentials 2010 component.

2. Use the MOMCertImport tool to select the certificate in the certificate store.

See Also

[How to Create Certificates in System Center Essentials 2010](#zc1423c0380d0456ab1f27386776d0e57)

[How to Import Certificates in System Center Essentials 2010](#z15e1c096376b4a4cbc1cdb66aed794a4)

[How to Remove a Certificate That Was Imported with the MOMCertImport Tool](#zca0b70e88f5e45af89b13067d63b1f39)

How to Create Certificates in System Center Essentials 2010

The following procedures provide the steps to obtain a certificate from a stand-alone certification authority (CA) by using Certificate Services, which is a component of Windows Server 2003 and Windows Server 2008. The procedures must be performed in the following order:

1. Request a certificate from a stand-alone CA.

2. Approve the pending certificate request. If Certificate Services is configured to auto-approve certificates, proceed to the procedure to retrieve the certificate. Otherwise, the CA administrator must issue the certificate. If you are the CA administrator, issue the certificate by using the procedure in this topic.

3. Retrieve the certificate.

4. Import the certificate into Essentials 2010. For more information, see [How to Import Certificates in System Center Essentials 2010](#z15e1c096376b4a4cbc1cdb66aed794a4).

5. Import the CA certificate. For more information, see [How to Import Certificates in System Center Essentials 2010](#z15e1c096376b4a4cbc1cdb66aed794a4).

To request a certificate from a stand-alone CA

|  |
| --- |
| 1. Log on to the computer where you want to install a certificate, for example, gateway server or management server.  2. Start Internet Explorer, and connect to the computer that hosts Certificate Services, for example, http://<servername>/certsrv.  3. On the Microsoft Certificate Services Welcome page, click Request a certificate.  4. On the Request a Certificate page, click Or, submit an advanced certificate request.  5. On the Advanced Certificate Request page, click Create and submit a request to this CA.  6. On the Advanced Certificate Request page, do the following:  a. Under Identifying Information, in the Name box, enter a unique name, for example, the fully qualified domain name (FQDN) of the computer you are requesting the certificate for. For the remaining fields, enter the appropriate information.  Note  Event ID 20052 of type Error is generated if the FQDN entered into the Name field does not match the computer name.  b. Under Type of Certificate Needed, click the list and select Other. In the OID field, enter 1.3.6.1.5.5.7.3.1,1.3.6.1.5.5.7.3.2.  c. Under Key Options, click Create a new key set. In the CSP field, select Microsoft Enhanced Cryptographic Provider v1.0. Under Key Usage, select Both. Under Key Size, select 1024. Select Automatic key container name. Select Mark keys as exportable. Clear the Export keys to file check box, clear the Enable strong private key protection check box, and then click Store certificate in the local computer certificate store.  d. Under Additional Options, under Request Format, select CMC. In the Hash Algorithm list, select SHA-1, clear the Save request to a file check box, and then in the Friendly Name box, enter the fully qualified domain name (FQDN) of the computer that you are requesting the certificate for.  e. Click Submit.  f. If a Potential Security Violation dialog box appears, click Yes.  g. After the Certificate Pending page appears, close the browser. |

To approve the pending certificate request

|  |
| --- |
| 1. Log on to the computer hosting Certificate Services as a Certification Authority administrator.  2. On the taskbar, click Start, point to Programs, point to Administrative Tools, and then click Certification Authority.  3. In Certification Authority, expand the node for your certification authority name, and then click Pending Requests.  4. In the results pane, right-click the pending request from the previous procedure, point to All Tasks, and then click Issue.  5. Click Issued Certificates, and confirm that the certificate you just issued is listed.  6. Close Certification Authority. |

To retrieve the certificate

|  |
| --- |
| 1. Log on to the computer where you want to install a certificate, for example, the Essentials management server or a workgroup-joined computer.  2. Start Internet Explorer, and then connect to the computer that hosts Certificate Services, for example, http://<servername>/certsrv.  3. On the Microsoft Certificate Services Welcome page, click View the status of a pending certificate request.  4. On the View the Status of a Pending Certificate Request page, click the certificate that you requested.  5. On the Certificate Issued page, click Install this certificate.  6. In the Potential Scripting Violation dialog box, click Yes.  7. On the Certificate Installed page, after you see the message Your new certificate has been successfully installed, close the browser. |

How to Create a Certificate in an Enterprise CA for Essentials 2010

The following procedures provide the steps for obtaining a certificate from an enterprise certification authority (CA) by using Certificate Services, which is a component of Windows Server 2003 and Windows Server 2008. The procedures must be completed in the following order:

1. Create a certificate template.

2. Request a certificate from the enterprise CA.

3. Import the certificate into Essentials 2010. For more information, see [How to Import Certificates in System Center Essentials 2010](#z15e1c096376b4a4cbc1cdb66aed794a4)).

4. Import the CA certificate. For more information, see [How to Import Certificates in System Center Essentials 2010](#z15e1c096376b4a4cbc1cdb66aed794a4)).

To create a certificate template

|  |
| --- |
| 1. On the computer that is hosting the enterprise CA, on the taskbar, click Start, point to Programs, point to Administrative Tools, and then click Certification Authority.  2. In the navigation pane, expand the CA name, right-click Certificate Templates, and then click Manage.  3. In the Certificate Templates console, in the results pane, right-click IPSec (Offline request), and then click Duplicate Template.  4. In the Properties of New Template dialog box, on the General tab, in the Template display name box, type a new name for this template, for example, EssentialsCert.  5. In the Request Handling tab, select Allow private key to be exported, and then click CSPs.  6. In the CSP Selection dialog box, select the cryptographic service provider that best suits your business needs, and then click OK.  Note  Windows 2000 Server supports Microsoft Enhanced Cryptographic Provider 1.0. Windows Server 2008, Windows Server 2003, and Windows XP support Microsoft RSA SChannel Cryptographic Provider.  7. Click the Extensions tab, and in Extensions included in this template, click Application Policies, and then click Remove.  8. In the Edit Application Policies Extension dialog box, click IP security IKE intermediate,, and then click Remove.  9. Click Add and in the Application policies list, hold down the CTRL key to select multiple items. Click Client Authentication, click Server Authentication, and then click OK.  10. In the Edit Application Policies Extension dialog box, click OK.  11. Click the Security tab, make sure that the user's group has Read and Enroll permissions, and then click OK. |

To request a certificate from an enterprise CA

|  |
| --- |
| 1. Log on to the computer where you want to install a certificate, for example, the Essentials management server or a workgroup-joined computer.  2. Start Internet Explorer, and connect to the computer that hosts Certificate Services, for example, http://<servername>/certsrv.  3. On the Microsoft Certificate Services Welcome page, click Request a certificate.  4. On the Request a Certificate page, click Or, submit an advanced certificate request.  5. On the Advanced Certificate Request page, click Create and submit a request to this CA.  6. On the Advanced Certificate Request page, do the following:  a. Under Certificate Template, select the name of the template you created, for example, EssentialsCert.  b. Under Identifying Information For Offline Template, in the Name box, enter a unique name, for example, the fully qualified domain name (FQDN) of the computer you are requesting the certificate for. For the rest of the fields, enter the appropriate information.  Note  Event ID 20052 of type error is generated if the FQDN entered into the Name field does not match the computer name.  c. Under Key Options, click Create a new key set, and in the CSP field, select the cryptographic service provider that best suits your business needs. Under Key Usage, select Both, and under Key Size, select a key size that best suits your business needs. Select Automatic key container name. Make sure that Mark keys as exportable is selected, clear Export keys to file, clear Enable strong private key protection, and then click Store certificate in the local computer certificate store.  Note  Windows 2000 Server supports Microsoft Enhanced Cryptographic Provider 1.0. Windows Server 2008, Windows Server 2003, and Windows XP support Microsoft RSA SChannel Cryptographic Provider.  d. Under Additional Options, under Request Format, select CMC. In the Hash Algorithm list, select SHA-1, and clear Save request to a file. In the Friendly Name box, enter the fully qualified domain name (FQDN) of the computer that you are requesting the certificate for.  e. Click Submit.  f. When a Potential Scripting Violation dialog box appears, click Yes.  g. On the Certificate Issued page, click Install this certificate.  h. When a Potential Scripting Violation dialog box appears, click Yes.  i. On the Certificate Installed page, when you see the message Your new certificate has been successfully installed, close the browser. |

See Also

[Using Certificates in Essentials](#zd9efb72f3b36413f9b89b2f955cc59d3)

[How to Import Certificates in System Center Essentials 2010](#z15e1c096376b4a4cbc1cdb66aed794a4)

[How to Remove a Certificate That Was Imported with the MOMCertImport Tool](#zca0b70e88f5e45af89b13067d63b1f39)

How to Import Certificates in System Center Essentials 2010

You can use certificates as an alternative to the Kerberos protocol for mutual authentication in System Center Essentials 2010. Certificates provide encryption between an Essentials agent and the Essentials management server.

Use the MOMCertImport tool to import and configure certificates when needed on the Essentials management server, the agent on a managed computer, or on an Essentials console-only installation.

To import certificates

|  |
| --- |
| 1. Log on to the computer with an account that is a member of the Administrators group.  2. On the taskbar, click Start, and then click Run.  3. In the Run dialog box, type cmd, and then click OK.  4. At the command prompt, type <drive\_letter>: (where <drive\_letter> is the drive where the Essentials 2010 installation media is located), and then press ENTER.  5. Type cd\SupportTools\i386, and then press ENTER.  Note  On 64-bit computers, type cd\SupportTools\amd64.  6. Type MOMCertImport, and then press ENTER.  7. In the Select Certificate dialog box, click the certificate you want to import, and then click OK. |

The following procedure provides the steps to import a CA certificate in System Center Essentials 2010.

To import the CA certificate

|  |
| --- |
| 1. Log on to the computer where you installed a certificate.  2. Start Internet Explorer and connect to the computer hosting Certificate Services, for example, http://<servername>/certsrv.  3. On the Welcome page, click Download a CA Certificate, certificate chain, or CRL.  4. On the Download a CA Certificate, Certificate Chain, or CRL page, click Install this CA certificate chain.  5. In the Potential Scripting Violation dialog box, click Yes.  6. When the CA Certificate Installation page appears, close Internet Explorer. |

To copy the CA Certificate from Current User to Local Computer

|  |
| --- |
| 1. On the taskbar, click Start, and then click Run.  2. In the Run dialog box, type mmc, and then click OK.  3. In the Console1 window, click File, and then click Add/Remove Snap-in.  4. In the Add/Remove Snap-in dialog box, click Add.  5. In the Add Standalone Snap-in dialog box, click Certificates, and then click Add.  6. In the Certificates snap-in dialog box, make sure that My user account is selected, and then click Finish.  7. In the Add Standalone Snap-in dialog box, click Add.  8. In the Certificates snap-in dialog box, select Computer account, and then click Next.  9. In the Select Computer dialog box, make sure that Local computer: (the computer this console is running on) is selected, and then click Finish.  10. In the Add Standalone Snap-in dialog box, click Close.  11. In the Add/Remove Snap-in dialog box, click OK.  12. In the Console1 window, expand Certificates - Current User, expand Trusted Root Certification Authorities, and then click Certificates.  13. In the right pane, right-click the CA certificate that you imported, and then click Copy.  14. Expand Certificates (Local Computer), expand Trusted Root Certification Authorities, right-click Certificates, and then click Paste. |

See Also

[Using Certificates in Essentials](#zd9efb72f3b36413f9b89b2f955cc59d3)

[How to Remove a Certificate That Was Imported with the MOMCertImport Tool](#zca0b70e88f5e45af89b13067d63b1f39)

How to Remove a Certificate That Was Imported with the MOMCertImport Tool

Use the MOMCertImport tool to edit the registry and remove certificates that have been imported in System Center Essentials 2010.

Caution

Incorrectly editing the registry can severely damage your system. Before making changes to the registry, you should back up any important data.

To remove a certificate that was imported with the MOMCertImport tool

|  |
| --- |
| 1. Log on to the computer with an account that is a member of the Administrators group.  2. On the Windows desktop, click Start, click Run, type regedit, and then click OK.  3. On the Registry Editor page, expand HKEY\_LOCAL\_MACHINE, expand SOFTWARE, expand Microsoft, expand Microsoft Operations Manager, expand 3.0, and then click Machine Settings.  4. In the results pane, right-click ChannelCertificateSerialNumber and then click Modify.  5. In the Edit Binary Value dialog box, select the binary data, and then press Delete. |

See Also

[How to Import Certificates in System Center Essentials 2010](#z15e1c096376b4a4cbc1cdb66aed794a4)

How to Configure a Network Device to Use a Different Essentials Proxy Agent

Use the following procedure to change the proxy agent for network devices in System Center Essentials 2010. The proxy agent can be any agent-managed computer in the Management Group. It must have SNMP installed, an optional Windows component, and be able to connect to the devices using SNMP.

To change the proxy agent for network devices

|  |
| --- |
| 1. Log on to the computer with an account that is a member of the Administrators role for Essentials 2010.  2. In the Essentials 2010 console, click the Administration button.  Note  When you run the Essentials 2010 console on a computer that is not the Essentials management server, the Connect To Server dialog box displays. In the Server name text box, type the name of the Essentials management server.  3. In the Administration pane, expand Administration, expand Device Management, and then click Network Devices.  4. In the Network Devices pane, select the network devices for which you want to change the proxy agent, right-click them, and then select Change Proxy Agent.  5. In the Change Proxy Agent dialog box, select the computer you want to be the new proxy agent, and then click OK. |

See Also

[Device Management Node in Essentials](#z7be49aace8dd4cbd97ec045cb7ed2de3)

How to Open a View for an Essentials Managed Object

Use the following procedure to open a view for an agent-managed computer, agentless-managed computer, or network device in System Center Essentials 2010.

To open a view for a managed object

|  |
| --- |
| 1. Log on to the computer with an account that is a member of the Administrators role for Essentials 2010.  2. In the Essentials console, click Administration.  Note  When you run the Essentials console on a computer that is not an Essentials management server, the Connect To Server dialog box will display. Type the name of the Essentials management server in the Server name box.  3. In the Administration pane, expand Administration, expand Device Management, and then click Agent Managed or Network Device.  4. In the Results pane, right-click the object you want to open a view for, click Open, and then click the view you want, such as Event View. |

See Also

[Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae)

How to Delete an Essentials Managed Object from a Group

Use the following procedure to delete a managed object from a management group in System Center Essentials 2010. For more information about the Device Management node of the Essentials console, see [Device Management Node in Essentials](#z7be49aace8dd4cbd97ec045cb7ed2de3).

To delete a managed object from a management group

|  |
| --- |
| 1. In the Essentials console, click the Administration button.  2. In the Administration pane, expand Administration, expand Device Management, and then click Agent Managed, Agentless Managed, or Network Device.  3. In the results pane, select the objects you want to delete from the group, right-click them, and then click Delete.  4. In the Confirm dialog box, click Yes. |

See Also

[Device Management Node in Essentials](#z7be49aace8dd4cbd97ec045cb7ed2de3)

How to View the Properties of a Managed Object in System Center Essentials 2010

Use the following procedure to view the properties of a managed object in System Center Essentials 2010.

To view the properties of a managed object

|  |
| --- |
| 1. Log on to the computer with an account that is a member of the Administrators role for Essentials 2010.  2. In the Essentials console, click the Administration button.  Note  When you run the Essentials console on a computer that is not the Essentials management server, the Connect To Server dialog box displays. In the Server name text box, type the name of the Essentials management server.  3. In the Administration pane, expand Administration, expand Device Management, and then click Management Servers, Agent Managed, Agentless Managed, or Network Devices.  4. In the results pane, right-click the object whose properties you want to view the properties and then click Properties. |

See Also

[How to Delete an Essentials Managed Object from a Group](#z2eb84eac8483410593b8d9f950cf10fe)

How To Work with Management Packs in Essentials

Management Packs configure System Center Essentials 2010 to monitor specific applications, services, and devices. The topics in this section describe basic Management Pack concepts and tasks in Essentials 2010.

In This Section

[How to Import a Management Pack in Essentials](#zf0f549c011de4ba99c18cf223bbc5cb5)

|  |
| --- |
| Provides step-by-step instructions for importing a Management Pack in Essentials 2010. |

[How to Export Management Pack Customizations in Essentials](#z20f0fd3d438d471ca3f49ca0cee27b0d)

|  |
| --- |
| Provides step-by-step instructions for exporting a Management Pack in Essentials 2010. |

[How to Delete a Management Pack in Essentials](#z3320e82a001e4ffda1c04bb8fd5aca0c)

|  |
| --- |
| Provides step-by-step instructions for uninstalling a Management Pack in Essentials 2010. |

See Also

[Management Packs Node in Essentials](#z0d10a80c5c7548dda15ff704c3786416)

How to Import a Management Pack in Essentials

A management pack configures System Center Essentials 2010 to monitor a specific application, service, or device. When a management pack is imported into Essentials 2010, it immediately begins monitoring a specific application, service, or device. No additional configuration is required.

To import a management pack from a disk

|  |
| --- |
| 1. In the Essentials console, click Administration.  2. Right-click the Management Packs node, and then click Import Management Pack(s).  3. When the Import Management Packs dialog box appears, click Add, and then click Add from disk. If prompted to search the online catalog for dependencies that cannot be located locally, click Yes. Change to the directory that holds your management pack file. Select the management packs to import from that directory, and then click Open.  Note  Essentials 2010 cannot access the Microsoft Management Pack Catalog Web Service if your Windows Internet Explorer connection settings are not already configured for access to the Internet. You can add explicit configuration for a proxy server in your Internet Explorer Connections settings.  4. The Import Management Packs dialog box displays the management packs that you selected. Click Add or Remove to edit the list of management packs to be imported, and click Properties to view the details of a selected management pack. After you have finished selecting management packs, click Install.  Note  A message appears in the Status details window if you try to add a management pack that has already been imported.  5. After the import process is complete, and the dialog box displays an icon next to each management pack indicating success or failure of the importation, click Close.  The Management Packs pane of the Essentials console lists all imported management packs. |

To import a management pack from the Microsoft Management Pack Catalog Web Service

|  |
| --- |
| 1. In the Essentials console, click Administration.  2. Right-click the Management Packs node, and then click Import Management Pack(s).  3. When the Import Management Packs dialog box appears, click Add, and then click Add from catalog….  Note  Essentials 2010 cannot access the Management Pack Catalog Web Service if your Windows Internet Explorer Connections settings are not already configured for access to the Internet. You can add explicit configuration for a proxy server in your Internet Explorer connection settings.  4. Select the management packs that you want to import from the list of available management packs.  5. The Import Management Packs dialog box displays the management packs that you selected. Click Add or Remove to edit the list of management packs to be imported, and click Properties to view the details of a selected management pack. When you have finished selecting management packs, click Install.  Note  A message appears in the Status details window if you try to add a management pack that has already been imported.  6. After the import process is complete, and the dialog box displays an icon next to each management pack indicating success or failure of the importation, click Close.  The Management Packs pane of the Essentials console lists all imported management packs. |

See Also

[Management Packs Node in Essentials](#z0d10a80c5c7548dda15ff704c3786416)

[How To Work with Management Packs in Essentials](#zd01a1aedacdf42cfb674e37d65ba99bd)

How to Export Management Pack Customizations in Essentials

Exporting a management pack in System Center Essentials 2010 allows customizations to a sealed management pack to be saved to a file. Because sealed management packs cannot be changed, the customizations made to a management pack are saved to a separate management pack file, by default the default management pack. This file can then be imported to a different management group. However, this management pack is dependent on the original sealed management pack and can be imported only to management groups that have the original sealed management pack.

You can only export unsealed management packs.

To export management pack customizations

|  |
| --- |
| 1. In the Essentials console, click the Administration button.  2. In the Administration pane, click Management Packs to display the list of imported management packs.  3. In the Management Packs pane, right-click the management pack you want to export, and then click Export Management Pack.  4. In the Browse For Folder dialog box, expand the path for the location to save the file, and then click OK.  The management pack is saved as an Essentials 2010 XML management pack file and is ready for importing into another Management Group. |

See Also

[Management Packs Node in Essentials](#z0d10a80c5c7548dda15ff704c3786416)

[How To Work with Management Packs in Essentials](#zd01a1aedacdf42cfb674e37d65ba99bd)

How to Delete a Management Pack in Essentials

When you no longer need a Management Pack in System Center Essentials 2010, you can delete it. When you delete a Management Pack, all the settings and thresholds associated with it are removed from Essentials 2010. Also, the associated .mp or .xml file for that Management Pack is deleted from the hard disk of the Essentials management server. You can only delete a Management Pack after you have first deleted any dependent Management Packs.

To delete a Management Pack

|  |
| --- |
| 1. In the Essentials console, click the Administration button.  2. In the Administration pane, click Management Packs.  3. In the Management Packs pane, right-click the Management Pack you want to remove, and then click Delete.  4. If an alert is displayed stating that deleting the Management Pack might affect the scoping of some user roles, click Yes.  Note  If any other imported Management Packs are dependent on the Management Pack you are trying to delete, the Dependent Management Packs error message is displayed. You must delete the dependent Management Packs before you can continue.  Essentials 2010 deletes the selected Management Pack. |

See Also

[Management Packs Node in Essentials](#z0d10a80c5c7548dda15ff704c3786416)

[How to Export Management Pack Customizations in Essentials](#z20f0fd3d438d471ca3f49ca0cee27b0d)

[How to Import a Management Pack in Essentials](#zf0f549c011de4ba99c18cf223bbc5cb5)

How to Configure Notifications in Essentials

System Center Essentials 2010 can send a notification to operators as soon as an alert occurs. To configure a notification within a network environment, administrators must complete the following actions:

1. Enable a notification channel.

2. Create one or more notification recipients.

In This Section

[How to Create an E-Mail Notification Channel in Essentials](#zd125212af492479093d76fac2d51d3d1)

|  |
| --- |
| Provides a step-by-step procedure for enabling an e-mail notification channel. |

[How to Create a Notification Subscriber in Essentials](#z46d58ea08ede483dbf7e7ab7a1f7edaf)

|  |
| --- |
| Provides a step-by-step procedure for creating a notification subscriber. |

See Also

[Notifications Node in Essentials](#z711a8463581f4406bb94bf5a6d9a2f18)

How to Create an E-Mail Notification Channel in Essentials

Creating a notification channel in System Center Essentials 2010 is the first step in configuring notifications in System Center Essentials 2010. The following procedures show how to configure an e-mail notification channel, including steps on editing the format of message content, and how to create and configure the notification action account that is used by Essentials 2010 to send notifications.

To enable an e-mail notification channel

|  |
| --- |
| 1. In the Essentials console, click the Administration button.  2. In the Administration pane, click Notifications, and then click Channels. In the Tasks pane, click New, and then click E-Mail (SMTP)….  Note  You can also choose to enable other types of notification channels, such as instant messaging, text messaging, or commands, by selecting the option when you click New.  3. When the E-Mail Notification Channel wizard opens, provide a name and description for this channel or accept the default settings and click Next.  4. In the SMTP servers area, click Add to display the Add SMTP server dialog box.  5. Type the fully qualified domain name (FQDN) of a Simple Mail Transfer Protocol (SMTP) server, type the port number, select the authentication method, and then click OK.  6. Type the Return Address that should appear on e-mail notifications, and then in the Retry interval list, select the number of minutes to wait before trying to resend a notification to the primary SMTP server.  7. In the Default e-mail notification format area, specify the E-mail subject and E-mail message with wildcard parameters such as $Alert Source$ and $Alert Description$, and then specify the encoding type. You can click Placeholder for a full list of available variables.  8. Click OK to return to the Essentials console. |

To create and configure the notification action account

|  |
| --- |
| 1. In the Essentials console, click Administration.  2. In the Administration pane, right-click the Security node, and then click Run As Accounts. Use the Create Run As Account wizard to create an account to use as the Notification action account, which is used to send the notifications.  3. When the Create Run As Account wizard opens, click Next.  4. On the General Properties page, select Windows from the Run As Account type list, and then in Display name, type Notification action account. Click Next.  5. On the Credentials page, type the information for the user name, password, and domain of the user account that you are creating. Click Next.  6. Select the distribution security option. You have two choices: Less secure or More secure.  7. Click Create, and after the account has been created, click Close.  8. In the Administration pane, click Run As Accounts under Security.  9. In the details pane, right-click Notification action account under Type: Windows, and then click Properties.  10. On the Distribution tab, click Add to add the Essentials management server.  11. In the Computer Search window, click Search to display a name of available computers.  12. Select the server, click Add, and then click OK to close the search window.  13. Click OK to close the properties window.  14. In the Administration pane, click Run As Profiles under Security.  15. Right-click Notification Account, and click Properties.  16. When the Run As Profile wizard opens, click Next. The name and description for the Run As Profile will be populated for you. Click Next again.  17. On the Run As Accounts page, click Add, and then select the Notification action account you created from the Run As account list box. Select which objects this Run As Account will manage, and then click OK.  18. Click Save, and after the profile has been created, click Close.  19. Double-click Alert Notification Subscription Server in the resulting list, and click OK. |

See Also

[Notifications Node in Essentials](#z711a8463581f4406bb94bf5a6d9a2f18)

[How to Configure Notifications in Essentials](#z23137433aad7418fa751e00784d89bc6)

How to Create a Notification Subscriber in Essentials

In System Center Essentials 2010, creating a notification subscriber defines when and from which devices notifications can be sent. The following procedure describes how to configure subscribers for notifications. You must first enable a notification channel before performing this procedure. After this procedure is complete, you must create a notification subscription that defines the format of the notification message and any filters, such as age or severity of the alert.

To create a notification subscriber

|  |
| --- |
| 1. In the Essentials console, click the Administration button.  2. In the Administration pane, expand Notifications, right-click Subscribers, and then click New Subscriber, which will start the Notification Subscriber wizard.  3. On the Description page, type a display name for this subscriber in the Subscriber Name text box, and click Next.  4. On the Schedule page, select Always send notifications, or if you want to schedule when notifications should be sent to subscribers, click Notify only during the specified times and create a date range. Click Next.  5. On the Addresses page, click Add. When the Subscriber Address dialog box opens, type a descriptive name for the subscriber’s address in the text box, and click Next.  6. On the Channel page of the Subscriber Address dialog box, select the channel type, provide a delivery e-mail address for the selected channel, and then click Next.  7. On the Schedule page of the Subscriber Address dialog box, select whether to always send notifications to subscribers or specify the times you want to deliver notifications to subscribers.  8. Click Finish to create the notification subscriber, and click Close to exit the wizard.  9. Start the Create Notification Device Wizard by clicking the Add button.  10. Expand the Notification channel drop-down list, and then click Email.  11. In the Your address for the selected channel box, type an e-mail address. For example, type email@adventure-works.com. This is the e-mail address that is listed in the From box of each e-mail message that is sent to notification subscribers.  12. On the Schedule page, you can leave the default schedule or you can set a schedule that applies only to this notification, and then click Next.  13. On the General page, type a name for this notification device, and then click Finish.  14. Repeat these steps to define additional notification subscribers. New subscribers will be displayed in the Notifications pane under Subscribers. |

See Also

[Notifications Node in Essentials](#z711a8463581f4406bb94bf5a6d9a2f18)

[How to Create an E-Mail Notification Channel in Essentials](#zd125212af492479093d76fac2d51d3d1)

How to Create a Run As Account in Essentials

Use the following procedure to add a Windows account to a Run As Account in System Center Essentials 2010. You can use procedures similar to this one to add other account types. For more information about the other account types, see [Credential Types in Essentials](#zc7df65b3ad2e476da8993240701e0d67).

To create a Run As Account

|  |
| --- |
| 1. Log on to the computer with an account that is a member of the Administrators group on the Essentials management server.  2. In the Essentials console, click the Administration button.  Note  When you run the Essentials console on a computer that is not the Essentials management server, the Connect To Server dialog box displays. In the Server name text box, type the name of the Essentials management server.  3. In the Administration pane, expand Administration, expand Security, right-click Run As Accounts, and then click Create Run As Account.  4. In the Create Run As Account Wizard, on the Introduction page, click Next.  5. On the General page, do the following:  a. Select Windows in the Run As Account type list.  b. Type a display name in the Display Name text box,  c. As an option, type a description in the Description text box.  d. Click Next.  6. On the Account page, type a user name, password, and then select the domain for the account that you want to make a member of this Run As Account.  7. Click Create. |

See Also

[How to Create a Run As Profile in Essentials](#zce2b8321258d451cb282f1c23f536bcb)

[About Run As Profiles and Run As Accounts in Essentials](#z0f974e309f30459d8e164f92427986d0)

How to Create a Run As Profile in Essentials

Run As Profiles are associated with rules, tasks, or monitors in System Center Essentials 2010. Administrators add Run As Accounts to Run As Profiles. Before creating a Run As Profile, make sure that you have created the necessary Run As Accounts you plan to use.

To create a Run As Profile

|  |
| --- |
| 1. Log on to the computer with an account that is a member of the Administrators group on the Essentials management server.  2. In the Essentials console, click the Administration button.  Note  When you run the Essentials console on a computer that is not the Essentials management server, the Connect To Server dialog box displays. In the Server name text box, type the name of the Essentials management server.  3. In the Administration pane, expand Administration, expand Security, right-click Run As Profiles, and then click Create Run As Profile.  4. In the Create Run As Profile Wizard, on the Introduction page, click Next.  5. On the General page, type a display name in the Display Name text box, optionally type a description in the Description text box, and then click Next.  6. On the Run As Accounts page, click New.  7. On the Add Alternate Run As Account page, select a Run As Account from the Run As Account list for this Run As Profile, and then click OK.  8. On the Run As Accounts page, click Create. |

See Also

[How to Create a Run As Account in Essentials](#z5a96ed9d95584803ab3324f8d7069d45)

[About Run As Profiles and Run As Accounts in Essentials](#z0f974e309f30459d8e164f92427986d0)

How to Change the Credentials for the Administration Account in Essentials

The user name and password supplied for the administration account during System Center Essentials 2010 Setup are the credentials used as the default Action Account. The administrative account in Essentials is also used for the Data Warehouse Action Account and the SRS Report Execution Account.

If you decide to change the administration account credentials in Essentials 2010, you will need to grant privileges for this user account to access the Essentials SQL databases. This account must be granted the required privileges before you change the administration account credentials in Essentials 2010.

The following procedures describe how to grant privileges for the account to access the Essentials 2010 databases and how to change the credentials for the administration account.

To grant privileges to the Essentials administration account for access to the databases

|  |
| --- |
| 1. On the server hosting the System Center Essentials 2010 databases, open SQL Server Management Studio expand Security in the Object Explorer pane, and then expand Logins.  2. If the Action Account you plan to use as the Essentials 2010 administration account is not listed, right-click Logins and then click New Login and enter the account credentials. If the account is already listed, right-click the account name and click Properties.  3. In the Login Properties dialog box, in the Select a page pane, click User Mapping.  4. In the Users mapped to this login list, in the Map column, select the box that corresponds to SystemCenterEssentials.  5. In the Database role membership for: SystemCenterEssentials list, ensure that the following items are selected: db\_datareader, db\_datawriter, db\_ddladmin, dwsynch\_users and dbmodule\_users.  6. In the Users mapped to this login list, In the Map column, select the box that corresponds to OperationsManagerDW.  7. In the Database role membership for: OperationsManagerDW list, select OpsMgrReader, db\_datareader, OpsMgrWriter and db\_owner.  8. Click OK to save your changes and to close the Login Properties dialog box. |

To change the credentials for the Essentials administration account

|  |
| --- |
| 1. In the Essentials console, click the Administration button.  2. In the Administration pane, expand Administration, click Settings, and then double-click Administration Account under Type: Server.  3. In the Server Settings - Administration Account dialog box, enter the user credentials for the new administrative account and then click OK. |

See Also

[Administration in Essentials](#zea171bcd838b43baabadcd16619885e8)

[About Run As Profiles and Run As Accounts in Essentials](#z0f974e309f30459d8e164f92427986d0)

Authoring in Essentials

The Authoring navigation button displays the Authoring Overview pane, which displays a list of all installed and imported Management Packs and the objects defined by those Management Packs for System Center Essentials 2010.

When you click Authoring, you can view the following information:

 Management Pack templates.

 Distributed applications.

 Monitoring groups.

 A list of installed and imported Management Packs, and the classes defined by each Management Pack.

In the Authoring Overview pane, you can also perform the following tasks:

 Add a monitor to a Management Pack.

 Create Management Pack objects.

 Manage Management Packs objects.

 Manage distributed applications.

 Manage monitoring groups.

Use the Authoring pane in System Center Essentials 2010 to configure Management Pack objects, distributed applications, and groups.

In This Section

[Management Pack Templates and the Add Monitoring Wizard in Essentials](#z2a92131adbc9412b86065d980d66c8d5)

|  |
| --- |
| Provides information about how templates and the Add Monitoring Wizard are used to create and target custom Essentials 2010 object types. |

[Distributed Applications Node in Essentials](#z75d1452e53a64a4c81b0e3d86eb54212)

|  |
| --- |
| Provides information about Distributed Application Designer in Essentials 2010. |

[Groups in Essentials](#ze678ca8f86914eb586e357d43bbfa5a2)

|  |
| --- |
| Provides information about the logical collections of objects, or groups, in Essentials 2010. |

[Management Pack Objects in Essentials](#z337e8d1acb6d4de8b96ee493e41c7a69)

|  |
| --- |
| Provides information about Management Pack objects (attributes, monitors, object discoveries, rules, tasks, and views) in Essentials 2010. |

[Targeting in Essentials](#z3ff0d507fd7441de95a21f9c95ea40f3)

|  |
| --- |
| Provides important information about correctly targeting your monitors, rules, and views. |

[Overrides in Essentials](#z3909e213cf8d4f82aec922d0ed18bb9f)

|  |
| --- |
| Provides general information about using overrides to modify settings for monitors, rules, and so forth. |

[Web Application Editor in Essentials](#z94e6e09f78f949f291be546b0fc1f8b3)

|  |
| --- |
| Provides information about how synthetic transactions can be used to evaluate Web site performance. |

See Also

[Authoring Pane in Essentials](#z60a2cd9acd7b4a269c83a6cdda1ce13d)

Management Pack Templates and the Add Monitoring Wizard in Essentials

Management Pack templates and the Add Monitoring Wizard are used to create and target custom object types in System Center Essentials 2010, enabling you to extend the management capabilities of Essentials 2010.

When you create a custom object type with the Add Monitoring Wizard, the attributes, monitors, object discoveries, rules, tasks, and views necessary to start monitoring the applicable objects are automatically created and added with the object type to the specified Management Pack. These display in the Essentials console and are managed just as if they were originally provided with the Management Pack.

Essentials 2010 provides templates for similar object types to help make it easier to create custom objects with the Add Monitoring Wizard. This is comparable to the Microsoft Word templates that help make it easier to create similar Word document types. Essentials 2010 provides the following templates:

 OLE DB Data Source   This template generates synthetic transactions that monitor the availability of databases. The default view for this template is in the Synthetic Transaction folder of the Monitoring pane of the Essentials console.

 TCP Port   This template generates synthetic transactions that monitor the availability of services. The default view for this template is in the Synthetic Transaction folder of the Monitoring pane of the Essentials console.

 Web Application   This template generates monitors that verify the availability of Web-based applications. The default view for this template is in the Web Application folder of the Monitoring pane of the Essentials console.

 Windows Service   This template generates monitors and rules that verify the availability of a Windows service. The results of these monitors and rules are in alert and state views of the Monitoring pane of the Essentials console.

New templates can be added to the Management Group. For example, the ASP.NET Management Pack adds the ASP .NET Application and ASP.NET Web Service templates.

See Also

[Authoring Pane in Essentials](#z60a2cd9acd7b4a269c83a6cdda1ce13d)

[Management Pack Objects in Essentials](#z337e8d1acb6d4de8b96ee493e41c7a69)

[How To Work with Management Packs in Essentials](#zd01a1aedacdf42cfb674e37d65ba99bd)

[Monitoring in Essentials](#zfbaf18f5def648d7a8b8dcd63fc545e4)

Distributed Applications Node in Essentials

The Distributed Application Designer in System Center Essentials 2010 enables you to define the components that constitute your distributed application so that it can create the necessary monitors, rules, views, and reports to monitor the application.

Creating and then configuring a distributed application service includes the following steps:

1. In the Create New Distributed Application dialog box, you define the basic settings of the distributed application, including the name, description, template, and the Management Pack to which the monitoring objects for the distributed application are saved.

2. In the Distributed Application Designer, which becomes available when you complete the preceding step, you can identify and group the individual components included in your distributed application.

Available Templates

Distributed application templates are included in Management Packs. When Essentials 2010 first installs, the following templates are included as part of the Management Packs that install automatically:

 Line of Business Web Application template

 Messaging template

 Blank template

The purpose of a template is to select the object types, which your distributed application service contains. For example, the Messaging template automatically includes object types for a mail store, DNS components, and directory service components. Before choosing a template, ensure that it includes all of the object types that are in your distributed application. For example, the Line of Business Web Application template does not include the Operating System object type. If you want to monitor an operating system as part of your distributed application, you should not choose the Line of Business Web Application template, because no operating system objects will display in the Distributed Application Designer. If your distributed application contains object types that are not included in an available template, you should use the Blank template.

Distributed Application Designer Toolbar

The toolbar displays automatically in the Distributed Application Designer. The following table describes each button on the toolbar and its purpose.

|  |  |
| --- | --- |
| Button | Description |
| Save | Saves changes to the distributed application monitoring object. |
| Objects | Toggles the Objects pane between hidden and displaying. |
| Details | Toggles the Details pane between hidden and displaying. |
| Add Component | Opens the Create New Component Group dialog box. |
| Create Relationship | Toggles between on and off. When toggled to on, use your cursor to draw a relationship between components of your distributed application in the results pane. |
| Remove | Removes the selected object from the distributed application monitoring object. |
| Reset | Discards all changes made after the distributed application was last saved. |
| Properties | Opens the Component Group Properties dialog box for the selected object. You can add or remove components |
| Org Chart (Type) | Opens a drop-down list that allows you the change the layout of the objects in the results pane. |
| Relayout | Allows Distributed Application Designer to choose the layout of the components of the distributed application. Use this button after you have added a number of components and defined the relationships between them. Distributed Application Designer then attempts to find a suitable layout for the components. |
| Zoom in/Zoom out | Increases/decreases the display size of the objects in the results pane. |

Component Groups

A component group consists of objects that have a single purpose in your distributed application. Some component groups are created from the template chosen when your first created your distributed application monitoring object. You can add or remove object types from existing component groups in the properties of the component group, or you can create a new component group using the Add Component button on the toolbar.

Diagram Pane

The diagram pane displays the components groups of your distributed application.

Objects Pane

Use the Objects pane to define the objects on your network that are components in your distributed application. Each object type that is defined in the template you choose in the Create New Distributed Application page has a button on the bottom of the Objects pane. You can remove any of these object types by using Organize Object Types.

By default, only the object types that are components of your distributed application are defined in a template. After Distributed Application Designer starts, you need to click each object type button, find the objects that are components of your distributed application, and then add each object to the appropriate component group.

Details Pane

The Details pane contains information about the component group that is selected in diagram pane. From the Details pane, you can click links to the views that are defined as part of your distributed application monitoring object.

Groups in Essentials

In System Center Essentials 2010, groups are logical collections of objects, such as Windows-based computers, hard disks, or instances of Microsoft SQL Server. You create a group by using the Create Group Wizard, and you use one or more of the following criteria to establish membership for the group:

 A list of object names.

 A formula that dynamically populates the membership of the group, such as a formula that adds domain controller objects to the group.

 Other groups.

 A list of object names to exclude from the group.

In Essentials 2010, you use groups for the following purposes:

 Create views for specific groups of objects and approve members of an Essentials 2010 user role to see the views. For example, you can create a state view for the Messaging group and approve members of the Messaging Operators user role to see the Messaging view. For more information, see [Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae).

 Use overrides to disable or adjust the configuration of a monitor that is applied to a group of, or individual, managed objects.

See Also

[How to Create a Computer Group in Essentials](#zd1fde5c66dd1428386f1c92546f2db13)

[Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae)

Management Pack Objects in Essentials

Use the Management Packs Objects node, in the Authoring pane of the Essentials 2010 console, to create objects that help you define how you monitor objects in Essentials 2010. This node also displays the monitoring settings of imported Management Packs. You can view existing attributes, monitors, object discoveries, rules, tasks, and views by clicking the appropriate leaf object under the Management Pack Objects node. You can also create new attributes, monitors, rules, and tasks from each corresponding leaf object.

Note

You cannot create object discoveries or views from the Authoring pane. Object discoveries are created using the Discovery Wizard from the Administration pane, and views are created in the Monitoring pane.

The following table describes the objects listed in the leaf nodes of the Management Pack Objects node.

|  |  |  |
| --- | --- | --- |
| Monitoring Object | Description | |
| Attribute | Displays a list of attributes for each displayed object type. Attributes contain information that further defines an object in Essentials 2010. |
| Monitor | Displays a list of monitors sorted by object type. Monitors continually assess the condition of specified objects. As a result of this assessment, a monitor can also generate alerts and change the health state of that object. | |
| Object Discoveries | Displays a list of discovery objects currently in use. A discovery is used to dynamically find objects on your network that you want to monitor. | |
| Rule | Displays a list of rules sorted by object type. Rules collect data, such as event information, generated by managed objects. |
| Task | Lists the tasks that are available within your Management Group sorted by object type. Tasks are actions that run against a monitored object. |
| View | Displays a list of available views. Views display some particular aspect of monitoring settings. | |

See Also

[About Monitors in Essentials](#zd2d116f500254ea4af0b72f070806546)

[Authoring in Essentials](#z5bcf74dff98d44d69a798bff35680cc2)

[Attributes in Essentials](#zac8c63a94d9f48c88fb06202b1863153)

[Object Discoveries in Essentials](#zd9e07bf3b968483f9d048682b562342e)

[Rules in Essentials](#zb6d6a753d8fa47ae857e2c46e9bd6805)

[Tasks in Essentials](#zb21ed773c1274f599c133d7dcc58265f)

[Views in Essentials](#z17eb434e072d4a1ba8ec71d58def3fae)

Attributes in Essentials

In System Center Essentials 2010, you can create attributes to define a commonality within a group of objects that you want to monitor. After you create an attribute, you can create a group whose members are only objects that have the commonality described in your attribute.

For example, if you want to monitor a set of servers that all have a common registry value, you create an attribute based on that registry value. To find the servers that have that registry value, you create a group that has a dynamic inclusion rule for only those servers that have the newly created attribute and target the group only to the server object type. Essentials 2010 then checks the registry of each server to see whether that registry value exists. If it does, that server is added as a member of the group.

When you create an attribute, you must select an object type as a target for it. Essentials 2010 adds the new attribute to the existing list of attributes for that object type. If the target you select is from a sealed Management Pack, the object type also is sealed and the new attribute cannot be added. Instead, Essentials 2010 creates a new object type to which it adds the new attribute. By default, this new object type is named after the original object type with \_Extended appended to the original name. This new object type contains all the attributes of the original object type, in addition to the attribute you are creating.

You can view existing attributes in the Monitoring area of the Essentials console. If the attributes are defined within a sealed Management Pack, you can view the properties of the attribute but you cannot change them. The properties of an attribute include information about where the attribute information is stored, such as the registry or through WMI.

You can create a new attribute for any monitored object, and you can change most of the properties of an attribute that you create. However, the Attribute Type property, which identifies the source of the attribute information such as the registry, cannot be changed after an attribute is created.

See Also

[Management Packs Node in Essentials](#z0d10a80c5c7548dda15ff704c3786416)

[How To Work with Management Packs in Essentials](#zd01a1aedacdf42cfb674e37d65ba99bd)

[Management Pack Objects in Essentials](#z337e8d1acb6d4de8b96ee493e41c7a69)

[Targeting in Essentials](#z3ff0d507fd7441de95a21f9c95ea40f3)

About Monitors in Essentials

In System Center Essentials 2010, monitors can be used to assess various conditions that can occur in monitored objects. For example, a monitor can be used to assess the values of a performance counter, the existence of an event, the occurrence of data in a log file, the status of a Windows Service, or the occurrence of a Simple Network Management Protocol (SNMP) trap. The result of this assessment determines the health state of a target and the alerts that are generated. You can use three different types of monitors for these assessments: unit monitors, aggregate rollup monitors, or dependency rollup monitors.

Unit Monitor

Unit monitors, the fundamental monitoring components, are used to monitor specific counters, events, scripts, and services. Unit monitors can be rolled up to either dependency or aggregate rollup monitors. You have the option to set the monitor to generate an alert.

Aggregate Rollup Monitor

An aggregate rollup monitor reflects the state of unit, dependency rollup, or other aggregate rollup monitors targeted to an object. You typically use an aggregate rollup monitor to group multiple monitors into one monitor and then use that monitor to set the health state and generate an alert.

Each target in Essentials 2010 contains the following top-level aggregate rollup monitors that you can use to group monitors of similar type for reporting purposes:

 Availability

 Configuration

 Performance

 Security

Dependency Rollup Monitor

A dependency rollup monitor rolls up health states from targets linked by either a hosting or a membership relationship. Hosting and membership relationships for a given target are defined in most Management Packs. Like an aggregate rollup monitor, a dependency rollup monitor can be used to group other monitors to set the health state and generate alerts.

For example, consider a Microsoft SQL Server installation consisting of multiple databases. A hierarchy of targets starts with Windows Computer. The Windows Computer object hosts the SQL Server object. The SQL Server object hosts multiple databases. The health status of individual targets (for example, the SQL Server target) is monitored using a combination of aggregate rollup and unit monitors. Without a dependency rollup monitor, you would be unable to roll up the state of the SQL Server target up to the Windows Computer target.

See Also

[Self-Tuning Threshold Monitors in Essentials](#zcc02f791d86b46328365edd3f8fa0592)

[Static Threshold Unit Monitors in Essentials](#z25d0acd8d5d8425c92d225b762d16020)

Self-Tuning Threshold Monitors in Essentials

In System Center Essentials 2010, a self-tuning threshold monitor uses a learning process to determine the normal values for a specified performance counter object and sets the threshold levels based on the learned values. You can use the Create a Unit Monitor Wizard to create a self-tuning threshold monitor, which you can open by clicking Create a monitor in the Actions pane of the Authoring area, and then selecting Windows Performance Counter under Select the type of monitor to create.

Note

Self-tuning monitors cannot be used with multiple instance performance counters. Essentials 2010 cannot learn any counter that is configured with the All instances option selected.

Self-tuning monitors require a learning period, during which time Essentials 2010 automatically establishes a baseline that represents the regular and expected activity of a computer. The established baseline accurately reflects your organization's use of the IT infrastructure by taking into account patterns and variations in usage—for example, increased processor utilization on Monday mornings at 9:00 A.M.

After the initial learning period, Essentials 2010 continually logs subsequent activity of the computer and compares it to the baseline. The state of the monitor changes only when the performance counter exceeds the boundaries of the baseline. Using a performance baseline monitor can result in more accurate reporting of counters that vary during a business cycle.

Self-tuning monitors are divided into the following categories:

 Two-state monitor   Given a baseline, there is an area above the baseline (A), an area below the baseline (B), and the area within the baseline (W). A two-state monitor can be used to define alerts between any two of the three areas, A-W, W-B, or A-B.

 Three-state monitor   Given a baseline, there is an area above the baseline (A), an area below the baseline (B), and the area within the baseline (W). A healthy state is always defined as being in the area within the baseline. An error state can be defined for either the area above (A) or the area below (B). A warning state is defined for the remaining area that was not defined as error.

See Also

[Authoring in Essentials](#z5bcf74dff98d44d69a798bff35680cc2)

[Management Pack Objects in Essentials](#z337e8d1acb6d4de8b96ee493e41c7a69)

[Static Threshold Unit Monitors in Essentials](#z25d0acd8d5d8425c92d225b762d16020)

Static Threshold Unit Monitors in Essentials

In System Center Essentials 2010, static threshold unit monitors measure a performance counter object relative to a user-defined static value, at specific intervals. When the value of the performance object being measured exceeds the defined threshold, the state of the monitor changes.

You can use the Create a Unit Monitor Wizard to create a static unit threshold monitor. You can open the wizard by clicking Create a monitor in the Actions pane of the Authoring area and then selecting Windows Performance Counter under Select the type of monitor to create.

In Essentials 2010, two types of static thresholds are available:

 Single threshold

 Double threshold

Single Threshold Monitor

A single threshold monitor has one limit. When the performance counter goes either above or below that limit, the state of the monitor changes. The state change can be configured to be success, warning, or error.

An example of what a single threshold monitor does is that it monitors remaining free disk space. For example, suppose you want to monitor free disk space. Using a single threshold monitor, you might set a threshold of 1 GB so that when your free disk space falls below 1 GB, a warning or error state is set.

Essentials 2010 supports the following types of threshold unit monitors:

 Simple threshold   A simple threshold monitor measures the value of a performance object against a fixed limit. If the value of the performance object goes above or below the fixed limit, the state of the monitor changes. On one side of the threshold, the state of the monitor is success; on the other side, the state is either warning or error.

 Average threshold   An average threshold monitor measures the value of a performance object against a fixed limit. In addition, an average threshold monitor examines n number of samples and takes the average value of those samples to determine whether the threshold has been exceeded. This type of threshold monitor always examines the most recent n number of samples.

 Consecutive samples over threshold   The consecutive-samples-over-threshold monitor is useful when sudden increases in a performance counter generate false alarms. A consecutive-samples-over-threshold monitor changes the state of the monitor only if the performance counter exceeds a threshold for n number of consecutive samples. With this type of monitor, you can configure the threshold to be greater than, greater than or equal to, less than, or less than or equal to a specified value.

 Delta threshold   A delta threshold monitor measures the rate of change in n number of samples. The rate of change can be expressed as an absolute value (for example, a change of 10 GB over the last five samples) or as a percentage (for example, a change of 5 percent over the last five samples).

Double Threshold Monitor

A double threshold monitor examines two limits. When a performance counter value crosses the first limit, the state of the monitor changes. If the value continues to climb or decline and crosses the second limit, the state changes a second time.

For example, assume the first threshold is set at 1.5 GB and the second one is set at 1 GB. If the amount of free disk space is above 1.5 GB, the state of the monitor is success (green). If free disk space goes below 1.5 GB, the state of the monitor changes to warning (yellow); if free disk space goes below 1 GB, the state changes to error (red).

See Also

[Authoring in Essentials](#z5bcf74dff98d44d69a798bff35680cc2)

[Management Pack Objects in Essentials](#z337e8d1acb6d4de8b96ee493e41c7a69)

[Static Threshold Unit Monitors in Essentials](#z25d0acd8d5d8425c92d225b762d16020)

Object Discoveries in Essentials

The Object Discoveries node, listed under the Management Pack Objects node in the Authoring pane, displays a list of all object discoveries in System Center Essentials 2010. You can right-click any of the object discoveries listed in the results pane to view its properties or to override it.

In Essentials 2010, object discoveries are used to find the specific objects on a network that need to be monitored. Because Management Pack developers do not know the specific objects that are in your network environment, they define only the type of objects that their Management Pack monitors. However, the developer also includes discovery objects so that, after the Management Pack is imported, the object discoveries find the specific objects on your network that are of the types monitored by the Management Pack.

The object discoveries can use the registry, WMI, scripts, OLE DB, LDAP, or even custom managed code to find objects on a network. If an object discovery finds objects on your network that you do not want to monitor, you can limit the object discoveries scope by using overrides.

See Also

[Authoring in Essentials](#z5bcf74dff98d44d69a798bff35680cc2)

[Management Pack Objects in Essentials](#z337e8d1acb6d4de8b96ee493e41c7a69)

[Overrides in Essentials](#z3909e213cf8d4f82aec922d0ed18bb9f)

Rules in Essentials

You can use rules in System Center Essentials 2010 to collect data, such as events, generated by managed objects. Rules can be used instead of monitors to generate alerts when the data collected from managed objects does not indicate the health state of the managed objects

An example of a rule's functionality is the collection of a specific event from the application log of Windows-based computers. The collected event is stored in the Essentials 2010 database, where it can be analyzed in views and reports.

Rules can also be overridden. For information about overriding a rule, see [Overrides in Essentials](#z3909e213cf8d4f82aec922d0ed18bb9f).

Rule Types in Essentials 2010

The different types of rules and data sources for rules in Essentials 2010 include the following:

 Alert-generating rules using one of the following event-based data sources

 Generic CSV (separated) text log

 Generic text log

 NT event log

 SNMP trap

 Syslog

 WMI event

 Collection rules using one of the following event-based data sources

 Generic CSV (separated) text log

 Generic text log

 NT event logs

 SNMP event

 SNMP trap

 Syslog

 WMI event

 Collection rules using one of the following performance-based data sources

 SNMP performance

 WMI performance

 Windows performance

 Collection rules using one of the following probe-based data sources

 Script event

 Script performance

 Scheduled Tasks using one of the following sources

 Execute a command

 Execute a script

 The type of rule used for managing objects depends on the desired action, data source, and targeted objects of the rule. For example:

 Collection rules gather data.

 Performance rules use numeric data.

 SNMP rules commonly target SNMP Network Devices.

Obtain and Create Rules in Essentials 2010

Rules are imported from management packs or can be created with the Create Rule Wizard, to customize Essentials 2010 for an organization. The wizard helps simplify the process of creating and targeting rules.

See Also

[Authoring in Essentials](#z5bcf74dff98d44d69a798bff35680cc2)

[How To Work with Management Packs in Essentials](#zd01a1aedacdf42cfb674e37d65ba99bd)

[Overrides in Essentials](#z3909e213cf8d4f82aec922d0ed18bb9f)

Tasks in Essentials

In System Center Essentials 2010, you can run predefined tasks that are included in your imported Management Packs or you can create your own tasks. Tasks are accessible under the Management Pack Objects node in the Authoring area of the Essentials 2010 console. When you create a task, you can choose to create an agent task or a console task. Agent tasks can run remotely on an agent or an Essentials management server, while console tasks can run only on the local computer. In Essentials 2010, you can have a batch file or script run as a task remotely or locally, but if the task is generated by an alert or an event, it can only be run locally.

Following is a list of the task types that you can create.

Command line

|  |
| --- |
| Runs a batch file or starts an application on an agent or Essentials management server. This task can be run locally or remotely. |

Run a script

|  |
| --- |
| Runs a script on an agent or Essentials management server. |

Alert command line

|  |
| --- |
| Runs a task automatically when a specified alert or alerts are generated. Specify the alert by using the Parameters drop-down list in the Command Line wizard page of the Create Task Wizard. This task can only be run locally. |

Event command line

|  |
| --- |
| Runs a task automatically when a specified event or events are generated. Specify the event by using the Parameters drop-down list in the Command Line wizard page of the Create Task Wizard. This task can only be run locally. |

See Also

[Authoring in Essentials](#z5bcf74dff98d44d69a798bff35680cc2)

[Management Pack Objects in Essentials](#z337e8d1acb6d4de8b96ee493e41c7a69)

Views in Essentials

In System Center Essentials 2010, the Views node is located under the Management Pack Objects node of the Authoring pane. Views are groups of managed objects that have a commonality, which is defined in the view properties. When you select a view, a query is sent to the Essentials 2010 database and the results of the query are displayed in the results pane.

Default Views

Several views are created by default when Essentials 2010 is installed. For more information about these views, see [Global Views in Essentials](#z406f677deb2f46248eb38d4e9115c970). Management Packs also contain views. When a Management Pack is imported, a folder is created in the Monitoring pane. This folder contains the views that are defined in the Management Pack. You cannot change these views, and you cannot add new views to the Management Pack folder. However, you can create a folder in the Monitoring pane and create views that display in your folder.

Customizing Views

While views display both in the Monitoring and in the Authoring panes of the Essentials 2010 console, they are created in the Monitoring pane. The Authoring pane displays a list of views under the Management Pack Objects node. You can sort this list based on properties of the views. Although you cannot change the properties of a view that is saved to a sealed Management Pack, you can change the display options of a view by using the Personalize View option that displays when any view is right-clicked in the Monitoring pane. After you personalize a view, the changes display each successive time you open the view in the Monitoring pane.

View Types

There are several view types, each displaying a different aspect of monitoring data. Each view type has a different icon. When you click New View in the Monitoring pane, the following list of view types displays along with the view type's icon:

Alert View

|  |
| --- |
| Displays alerts that meet your specific criteria, such as alert severity, resolution state, or alerts that are assigned to you. |

Event View

|  |
| --- |
| Queries the event logs and displays events that are based on criteria specified in the event view properties. |

State View

|  |
| --- |
| Displays relationships between components, computers, and computer groups. |

Performance View

|  |
| --- |
| Customizes how you want to view performance data collected from performance objects and counters. This includes the ability to view historical and current operational data together. |

Diagram View

|  |
| --- |
| Displays a graphical view of a set of managed objects and how they relate to one another. |

Task Status View

|  |
| --- |
| Displays tasks that meet criteria specified in the properties, such as only those tasks that apply to certain object types. |

Web Page View

|  |
| --- |
| Displays a Web page in a separate window in the Essentials 2010 console. |

Dashboard View

|  |
| --- |
| Allows you to arrange and view any data that Essentials 2010 is gathering, such as designing a view that shows two different view types side by side in one window. |

See Also

[Authoring in Essentials](#z5bcf74dff98d44d69a798bff35680cc2)

[Monitoring Pane in Essentials](#z3d3b6b5182cd4b4dbca83c11d8bd8caa)

[Global Views in Essentials](#z406f677deb2f46248eb38d4e9115c970)

[How to Create a Diagram View in Essentials](#z42252d830ded4621b704855b80fb7d8b)

[How to Create a State View in Essentials](#z5a28dd234a2e48c79313fc5bf293674b)

Targeting in Essentials

The key to controlling the amount of data that is collected by System Center Essentials 2010 is learning to correctly target your monitors and rules using classes and then using groups and overrides to narrow the focus of the monitor, rule, or view.

Target Monitors, Rules, and Views

When you create a rule, monitor, or view, you must define a target for it. Essentials 2010 uses object types as targets. You should always target a monitor or rule to the object that most specifically describes the objects that you want to monitor. In other words, target your monitor, rule, or view at the lowest level possible.

Groups and Overrides

After you target your monitor, rule, or view to an object type, you can narrow the scope of the monitoring data that is collected by using groups and overrides. Ideally, you need to create a group that contains only the objects that you want monitored by the monitor or rule.

If the group of objects that you want to monitor is not fixed, you can create a dynamic inclusion rule that identifies group members in the Create Group Wizard. To create a group that uses a dynamic inclusion rule, you should identify a common attribute for the objects that you want to monitor. Then you can build a formula (based on any attribute of an object type) that identifies this attribute in the Create Group Wizard. If no attribute is available, you can create an additional attribute by using the Create Attribute Wizard before you create the group.

For example, suppose that you have 10 Web servers and 5 of them are running a proprietary application that you want to monitor. Because the application on the Web servers is proprietary, no attribute exists that identifies this application. The following are the steps that solve this issue:

1. Create a custom attribute that is based on the entry in the registry that indicates this application is installed on a Web server.

2. Create a group whose membership is determined by your new attribute.

3. Create the monitor or rule that you want, and target it at the Web Server class.

4. Disable the monitor or rule.

5. Use overrides to enable the monitor or rule only for the group you created.

See Also

[About Monitors in Essentials](#zd2d116f500254ea4af0b72f070806546)

[Groups in Essentials](#ze678ca8f86914eb586e357d43bbfa5a2)

[How to Create a Computer Group in Essentials](#zd1fde5c66dd1428386f1c92546f2db13)

[How to Manage Monitoring Data Using Scope, Search, and Find in Essentials](#z312f208ac3744e52a67dc45a5e663f42)

[Overrides in Essentials](#z3909e213cf8d4f82aec922d0ed18bb9f)

[Rules in Essentials](#zb6d6a753d8fa47ae857e2c46e9bd6805)

Overrides in Essentials

A Management Pack in System Center Essentials 2010 begins monitoring as soon as it is imported into a managed network environment. To accomplish this, a Management Pack contains default settings and thresholds that are set by the vendor of the Management Pack. These settings represent the vendor's definition of a healthy state for its product. You can use overrides to adjust these default settings and customize them for your network.

Imported Management Packs have monitors, attributes, object discoveries, and rules that are targeted at types of objects, also known as classes, on your network. Often these object types are broad in scope. Because overrides can apply to a group of managed objects, you can use overrides and groups to hone the data collection of these monitors, attributes, object discoveries, and rules to collect only the information that you need. For more information about this, see [Targeting in Essentials](#z3ff0d507fd7441de95a21f9c95ea40f3).

You can view which overrides affect a managed object by viewing the override summary of the object. You must have at least Advanced Operator user rights to create and edit overrides.

See Also

[Monitoring in Essentials](#zfbaf18f5def648d7a8b8dcd63fc545e4)

[Targeting in Essentials](#z3ff0d507fd7441de95a21f9c95ea40f3)

Web Application Editor in Essentials

Use the Web Application Editor in System Center Essentials 2010 to capture navigation through one or more Web sites. In the Web Application Editor, you can interactively record a sequence of actions on a Web site or you can manually create a set of requests that monitor the Web site. This sequence of requests creates a synthetic transaction (sometimes known as a robotic transaction, or robot) that can be played back at regular intervals to provide information about how your Web site is performing. Note that these transactions are actual transactions. For example, if you have one transaction that transfers money from one bank account to another, you might want to create a second transaction that transfers the money back to the original account.

The capture Web site navigation feature intercepts traffic between Internet Explorer and the Web site and captures all HTTP request data, such as headers and body text. This feature also sets defaults for monitoring criteria to match the captured data. For instance, if during capture a Web server reports status code 404 for a request, the MP Configuration Wizard defaults to expecting a 404 status code for that request. These defaults can be changed by editing the object.

It is generally easy to create requests by capturing them using the recording feature. However, in some instances you might want to customize requests with additional tags or properties or add additional requests that you manually create. For example, you might want to manually add tags to identify the transaction as an Essentials 2010 transaction instead of a user transaction.

Backup and Restore of System Center Essentials

Hardware or software issues can interrupt System Center Essentials 2010 functionality, which can prevent you from using some features in Essentials 2010.

If there is a failure, a recent data backup can help reduce interruption to the business activities. Therefore, the overall maintenance plan for Essentials 2010 should include regular backups.

This section describes what you need to back up and how to plan and perform these backups.

In This Section

[Backup Strategies](#zbc9555c3a8c1439b8ad5bb0105323b3f)

[What and How to Back Up in System Center Essentials](#z4fe8c081bb234eeabfb9b64f159cf40b)

[Restore Scenarios](#zecfa9222a95346898cb9be87c22e7f60)

Backup Strategies

This topic describes strategies you can use to establish appropriate backup guidelines. The strategies are:

 Complete database backups

 Incremental database backups

 Transition log backups

 A backup schedule

Complete and Incremental Database Backups

You must ensure that database backups are as recent and complete as possible. This section provides information to help you decide how to incorporate both complete and incremental database backups into the overall databases backup plan.

Complete Database Backups

A complete database backup captures the entire database, including all entries in the transaction log, and excluding any unallocated extents in the files. Pages are read directly from disk to increase the speed of the operation.

During a restore operation, you can re-create a database from its backup by restoring the database’s backup. The restore process overwrites the existing database or creates the database if it does not exist. The restored database will match the state of the database at the time the backup completed, minus any uncommitted transactions. Uncommitted transactions are rolled back when the database is restored.

A complete database backup uses more storage space per backup than transaction log and incremental database backups. Consequently, complete database backups take longer and therefore are typically created less frequently than incremental database or transaction log backups.

Incremental Database Backups

An incremental (differential) database backup records only the data that has changed since the last incremental database backup. You can make frequent incremental backups of a database because incremental database backups are smaller and faster than complete database backups. Making frequent incremental backups decreases your risk of losing data.

During a restore operation, you can use incremental database backups to restore the database to the point at which the incremental database backup was completed.

Transaction Log Backups

The transaction log is a serial record of all the transactions that have been performed against the database since the transaction log was last backed up.

During a restore operation, you can use transaction log backups to restore the database to a specific point in time (for example, prior to entering unwanted data), or to the point of failure. When restoring a transaction log backup, Microsoft SQL Server rolls forward all changes recorded in the transaction log. When SQL Server reaches the end of the transaction log, the state of the database is exactly as it was at the time the backup operation started. If the database is recovered, SQL Server then rolls back all transactions that were incomplete when the backup operation started.

Note

The OperationsManagerDW database uses a simple recovery model which truncates all transactions after completion. This means that backing up the log file is insufficient, and you must perform a complete database file backup.

Recommended Backup Schedule

You can determine how often and when to run backups, but as a rule, perform database backups according to your company’s backup policy. The table below suggests a schedule for regular backups of your Essentials 2010 components and related items. This suggested schedule is specific to your Essentials 2010 environment and is meant to complement other regularly scheduled backups in your environment.

You should schedule back up jobs at a time that does not conflict with the schedule of the Essentials 2010 grooming tasks. When the Essentials 2010 grooming jobs run, they both read from and write to the database. Backing up the database at the same time might cause failures in either the backup or the grooming job, or both.

At a minimum, perform an incremental backup of the SystemCenterEssentials database daily and a complete backup of the OperationsManagerDW database weekly. The master and msdb databases should be backed up any time a change occurs that affects either database, but you should back them up at least monthly.

|  |  |  |
| --- | --- | --- |
| Component to Back Up | Full Backup | Incremental Backup |
| SystemCenterEssentials | Daily | Not applicable |
| OperationsManagerDW | Monthly | Weekly |
| ReportServer | On a recurring basis, with the frequency depending on how often reports change in your organization, and every time after significant changes to report definitions (additions, changes, and deletions). | Same as full backup |
| SUSDB | According to WSUS recommendations. | According to WSUS recommendations. |
| Master database (Master) | Every time after installing and configuring the database components and after making significant changes to logons or other security changes. | Per IT policies |
| Msdb database (Msdbdata) | After the initial installation and configuration of the Essentials database components. | After changing the scheduled SQL Server agent jobs that Essentials 2010 uses. |
| Custom Management Packs (.xml files) | Monthly or after making significant changes to management packs. | Not applicable |

What and How to Back Up in System Center Essentials

To be prepared for a potential restore operation, you need to properly back up data from Essentials 2010, Operations Manager, Microsoft SQL Server, and Windows Server Update Services (WSUS), as described in the following sections.

Essentials 2010 Data Backup

Back up the following Essentials 2010 data:

 The management server encryption key

 Certificates

 WSUS Publishers Self-signed certificate (referred to as the WSUS code signing certificate) in a PFX format from the Certification Local Computer/WSUS store.

 Two Essentials 2010 certificate files from the InstallDir/Certificates folder.

 If applicable, the certificate in a PFX format user for service provider or workgroup agent management.

 Registry keys under HKLM\Software\Microsoft\SystemCenterEssentials

Operations Manager Data to Back Up

Back up the following Operations Manager data:

 The Operations Manager database

 The Operations Manager data warehouse (OperationsManagerDW)

SQL Server Data to Back Up

Back up the following SQL Server data:

 SQL Server Reporting Services databases (ReportServer$ESSENTIALS and ReportServer$ESSENTIALSTempDB)

 SQL Server master and MSDB system databases

For information about how to back up SQL Server data, see the SQL Server 2008 documentation.

WSUS Data to Back Up

Back up the following WSUS data:

 The WSUS database, named SUSDB.

 The folder that contains the update files. If Essentials 2010 is configured to store the update content files locally, then you can find the location of the local folder from the following registry key:

HKLM\Software\Microsoft\Update Services\Server\Setup\ContentDir

For information about how to back up WSUS data, see “Backing Up Windows Server Update Services” on the Microsoft TechNet Web site at <http://go.microsoft.com/fwlink/?LinkId=128971>.

Active Directory Data to Back Up

Back up the following Active Directory data:

 Group Policy objects

 Accounts information

For information about how to back up data from Active Directory, see the Active Directory Help.

How to Back Up the Databases

The System Center Essentials databases contain critical data required for daily operations. It is critical that you back up these databases, including the respective log files, and that a recent back up is available if there is a failure.

Plan to back up all of the following databases:

 Operations Manager databases: OperationsManager and OperationsManagerDW

 SQL Server Reporting Services databases: ReportServer and ReportServerTempDB

 SQL Server system databases: Master and MSDB

 WSUS database: SUSDB

For information about how to back up the WSUS database and other WSUS data, see the Backing Up Windows Server Update Services topic on the Microsoft TechNet Web site at <http://go.microsoft.com/fwlink/?LinkId=128971>.

Locate the Data that Needs to be Backed Up

Use the following procedures to locate the data that needs to be backed up.

To locate the database instances containing Essentials 2010 data

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| --- |
| 1. The SQL Server 2008 instance hosting the Essentials 2010 operational databases can be found from the following registry location on the Essentials 2010 management server:  HKLM\Software\Microsoft\Microsoft Operations Manager\3.0\Setup\DatabaseName  2. The SQL Server 2008 instance containing the WSUS database can be found from the following registry location on the Essentials 2010 management server:  HKLM\Software\Microsoft\Update Services\Server\Setup\SqlServerName |

To locate the data and log files of a database

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| --- |
| 1. Open SQL Server 2008 Management Studio and connect to the instance hosting the desired database.  2. Click the Databases node, and select the database to be backed up.  3. Right-click the database name, and then click Properties.  4. In the Database Properties dialog box, click Files in the navigation pane on the left.  5. The locations of the data files and log files are specified in the Path column of file properties.  Note  If the WSUS database is hosted under the Windows Embedded SQL Server instance, the registry key HKLM\Software\Microsoft\Update Services\Server\Setup\SqlServerName points to the embedded SQL Server instance that is represented by %computername%\MICROSOFT##SSEE. In this case, database and log files are stored under %systemdrive%\WSUS\MSSQL$WSUS folder, unless you specified a different folder during WSUS setup. If you specified a different folder when you originally installed WSUS, data and log files are stored under that folder. |

Backing Up the Databases

Use the following procedure to schedule database backups using SQL Server Management Studio. Use this procedure to back up the SystemCenterEssentials and the OperationsManagerDW databases.

To schedule a database backup to a file

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| --- |
| 1. Start SQL Server Management Studio.  2. In the Connect to Server dialog box, select the appropriate values in the Server type drop-down list, in the Server name box, and in the Authentication box.  3. Click Connect.  4. In Object Explorer, expand Databases.  5. Right-click the database that you want to back up, click Tasks, and then click Back Up.  6. In the Back Up Database dialog box, type the name of the backup set in the Name box, and then under Destination, click Add.  7. In the Select Backup Destination dialog box, type a path and a file name in the Destination on disk box, and then click OK.  Important  The destination location must have enough available free disk space to store the backup files based upon the frequency of your backup schedule.  8. In the Script list, click Script Action to Job.  9. If you want to change job parameters, in the New Job dialog box, under Select a page, click Steps, and then click Edit.  10. Under Select a page, click Schedules, and then click New.  11. In the New Job Schedule dialog box, type in the job name in the Name box, specify the job schedule, and then click OK.  Note  If you want to configure alerts or notifications, you can click Alerts or Notifications under Select a page.  12. Click OK twice. |

How to Back Up the Encryption Key

In System Center Essentials 2010, the Essentials management server is the central point of configuration management and the overall health monitoring of the entire managed environment. The Essentials management server encryption key holds all the Run As account information defined in the management group. To successfully restore a failed Essentials management server, you must use that key to reattach the databases and access the Run As accounts that have been encrypted with this key. If you need to restore the Essentials management server without this backup, you would need to re-enter all of your Run As accounts.

To back up or to restore the encryption key, you must use the SecureStorageBackup tool. You can launch the tool from the desktop, or from the Essentials 2010 installation folder. Depending on how you launch the tool, it starts the Encryption Key Backup or Restore Wizard, or runs in command line mode. By default, the Encryption Key Backup or Restore Wizard runs at the final stage of Setup, allowing you to back up the key during deployment.

When backing up the encryption key, always ensure that you provide a backup location that is easily accessible, in case you later need to retrieve the key.

Use the Encryption Key Backup or Restore Wizard

When you launch the tool from the System Center Essentials 2010 program group, or when you run SecureStorageBackup.exe from the Essentials 2010 installation folder without parameters, the tool starts the Encryption Key Backup or Restore Wizard.

To use the Encryption Key Backup or Restore Wizard to back up the encryption key

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| --- |
| 1. Log on to the computer hosting the Essentials management server with an account that is a member of the Administrators group.  2. Click Start, select Programs, click System Center Essentials 2010, and then click Secure Storage Backup Wizard.  3. In the Encryption Key Backup or Restore Wizard, on the Backup or Restore? page, select the Backup the Encryption Key option.  4. Complete the wizard. |

Use the SecureStorageBackup Tool in Command Line Mode

When you run SecureStorageBackup.exe from the Essentials 2010 installation folder with valid parameters, the tool runs in command line mode. You can run SecureStorageBackup.exe with the '/?' switch to get help for the tool.

To start the SecureStorageBackup tool in a command line mode to back up the management server encryption key

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| --- |
| 1. Log on to the computer hosting the Essentials management server with an account that is a member of the Administrators group.  2. On the Windows desktop, click Start, and then click Run.  3. In the Run dialog box, type cmd and then click OK.  4. At the command prompt, type:  cd <Installation Folder>  SecureStorageBackup Backup <Backup File>  5. At the Please enter the password to use for storage/retrieval prompt, type a password that is at least eight characters long, and then press ENTER.  6. At the Please re-enter your password prompt, type the same password, and then press ENTER. |

See Also

[Backup and Restore of System Center Essentials](#z9b426e2ac9694829850d378a8ccf0b85)

How to Back Up Certificates

System Center Essentials 2010 uses several certificates that must be backed up in case there is a failure and you need to restore functionality. Back up the following certificates:

 WSUS Publishers Self-signed.

 Two Essentials certificate files (WSUSCodeSigningCert.cer and WSUSSSLCert.cer) from the InstallDir/Certificates folder. Copy the certificate files to a safe and accessible location.

 If applicable, the certificate that is used for service provider, or for workgroup agent management. Back up the PFX file to a safe and accessible location.

Use the procedure below to back up the encryption key.

To back up the WSUS Publishers Self-signed certificate

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| --- |
| 1. Start a Microsoft Management Console (MMC) session by clicking Start, Run, typing mmc, and then clicking OK.  2. Add the Certificates snap-in to the MMC console as follows:  a. Click File, and then click Add/Remove Snap-in.  b. In the Add/Remove Snap-in dialog box, click Add.  c. In the Add Standalone Snap-in dialog box, in the Snap-in list, double-click Certificates.  d. On the Certificates snap-in page, click Computer account, and then click Next.  e. On the Select Computer page, select Local computer, and then click Finish.  f. Close the Add Standalone Snap-in dialog box, and close the Add/Remove Snap-in dialog box.  3. In the Console Root window, expand Certificates (Local Computer).  4. Right-click the WSUS Publishers Self-signed certificate, select All Tasks, and then click Export.  5. Run the Certificate Export Wizard to export the WSUS Publishers Self-signed certificate.  a. On the Export Private Key page, select the Yes, export the private key option.  b. On the Export File Format page, select the Personal Information Exchange (.PFX) file format.  c. Complete the wizard. |

See Also

[Backup and Restore of System Center Essentials](#z9b426e2ac9694829850d378a8ccf0b85)

Restore Scenarios

To restore System Center Essentials 2010 data and functionality, use one of the following restore procedures that is appropriate for the type of Essentials 2010 deployment.

In This Section

[How to Restore in a Single-Server Deployment](#zcfebc1014d9b44bea9701d4223a8a951)

[How to Restore in a Remote Database Server Deployment](#z86eb3fc5fb46433da5cd0350f21c65d1)

How to Restore in a Single-Server Deployment

Use the following procedure to restore System Center Essentials 2010 in a single management server deployment.

To restore Essentials 2010 data

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| 1. Repair the failing Essentials management server, or designate a new server for that role. In either case, follow these guidelines:   The new Essentials management server must be configured with the original Essentials management server name.   The new Essentials management server must be in the same original domain. If it was not possible to properly uninstall Essentials 2010 after the failure, then you must delete the computer container for the Essentials management server prior to re-joining the server to the domain.   If Active Directory has also been failing, then it must be restored. Ensure that the System Center Essentials All Computers Policy and the System Center Essentials managed computers policy ([SCESERVER]\_MG) exist.  2. If you have a backup of the update content files folder, copy those files into a location that the Essentials management server can access.  3. Install Essentials 2010 on the new Essentials management server:  a. Select a database instance with the same name as the previous Essentials 2010 database instance.  b. Specify the same action account that was used before.  c. Specify the location of the existing update content files folder during Essentials 2010 setup.  Note  For example, if the update content files are stored at the %SYSTEMDRIVE%\SYSTEM CENTER ESSENTIALS\WsusContent folder, then you need to specify the Update content location as %SYSTEMDRIVE%\SYSTEM CENTER ESSENTIALS during Essentials 2010 setup.  d. Complete Essentials 2010 setup.  4. On the Essentials management server, stop the following services:   OpsMgr Health Service   OpsMgr Config Service   OpsMgr SDK Service   Update Services  5. Detach the newly created databases from the selected SQL Server 2008 database instance as follows:  a. Launch SQL Server Management Studio.  b. Right-click the Essentials 2010 database name, and select Tasks > Detach to detach the Essentials 2010 database.  c. Repeat step b for the WSUS and the Essentials 2010 Data Warehouse databases.  d. Right-click the Databases node, and then click Attach.  e. Click Add, and then select the .mdf and .ldf files of the previous Essentials database from your backup.  f. Repeat steps d and e for the WSUS and Essentials 2010 Data Warehouse databases.  6. Set ENABLE\_BROKER for the SystemCenterEssentials database if needed. See the Set ENABLE\_BROKER section below to determine if this step is needed, and for information about how to perform it.  7. Run the SecureStorageBackup tool from the Essentials 2010 installation folder, and use the Encryption Key Backup or Restore Wizard to restore the management server encryption key. For information about how to restore the encryption key, see [How to Restore the Encryption Key](#zfe558b38bb984435901cafe404502ab2).  8. Restart the following services:   OpsMgr Health Service   OpsMgr Config Service   OpsMgr SDK Service   Update Services  9. Restore the WSUS Code Signing Certificate as follows:  a. Start a Microsoft Management Console (MMC) session by clicking Start, clicking Run, typing mmc, and then clicking OK.  b. Add the Certificates snap-in to the MMC console as follows:  a. Click File, and then click Add/Remove Snap-in.  b. In the Add/Remove Snap-in dialog box, click Add.  c. In the Add Standalone Snap-in dialog box, in the Snap-in list, double-click Certificates.  d. On the Certificates snap-in page, click Computer account, and then click Next.  e. In the Select Computer page, select Local computer, and then click Finish.  f. Close the Add Standalone Snap-in dialog box, and then click OK the Add/Remove Snap-in dialog box.  g. In the Console Root window, expand Certificates (Local Computer).  h. Run the Certificate Import Wizard to import the <Essentials InstallDir>/Certificates/WSUSCodeSigningCert.cer (the WSUS code signing certificate file) to the Local Computer Trusted Publisher store, the Trusted Root Certification Authorities, and the Third-Party Root Certification Authorities stores.  i. Use the WSUSCertificateRestore.exe tool to restore the WSUS Code Signing Certificate’s PFX file to the Essentials management server. In a command prompt, go to the <Essentials installation>\Tools folder, and type:  WSUSCertificateRestore [PFXCertificateFile] [PFXPassword]  j. Ensure that the WSUSCodeSigningCert.cer certificate file is in the <Essentials Installation>/Certificates folder.  10. If the domain based policies System Center Essentials All Computers Policy and the Essentials 2010 managed computers policy ([SCESERVER]\_MG) were previously used, and are no longer available in Active Directory, then start the Essentials console, and run the Configure System Center Essentials Wizard to re-create them.  11. Run the Certificate Import Wizard to import the <Essentials InstallDir>/Certificates/WSUSSSLCert.cer certificate file to the Local Computer Trusted Root Certification Authorities store.  12. If using local policy or if the domain based policy is still available, attach the WSUSSSLCert.cer to the WSUS Administration website in IIS. Ensure that the WSUSSSLCert.cer certificate file is in the <Essentials Installation> /Certificates folder.  For more information, see the IIS Help topic on TechNet [Installing Server Certificates (IIS 6.0)](http://go.microsoft.com/fwlink/?LinkId=128970).  13. This step is necessary only if you selected the Local Policy option for configuring Essentials management servers and managed computers in the Configure System Center Essentials Wizard. Select the Repair option for all managed computers as follows:  a. In the Essentials console, click the Administration button.  b. In the Administration pane, expand Device Management.  c. Click Agent Managed.  d. Right-click all managed computers, and click Repair.  14. If any computers were added after the date of the database snapshot, then you can restore them as follows:  a. In the Essentials console, select Administration.  b. In the Administration pane, select Settings.  c. In the Settings pane, expand the Server group, and double-click Security.  d. In the Server Settings–Security dialog box, select the Review new manual agent installation in pending management view option, and then click OK.  e. You can view and re-approve these agents in the Administration pane when you expand Device Management, and Pending Management. |

Set ENABLE\_BROKER

Before you can run tasks and use the Discovery Wizard to install agents, you need to set the ENABLE\_BROKER value.

After moving the SystemCenterEssentials database, the status of the SQL Broker Availability Monitor might be set to ‘critical’ or to 'SQL Broker is disabled'. You can check the state of the SQL Broker Availability Monitor by running the following SQL query:

SELECT is\_broker\_enabled FROM sys.databases WHERE name='SystemCenterEssentials'

Where ‘SystemCenterEssentials’ is the default database name, replace this name as appropriate.

If the query result is ‘0’, then the SQL Broker is disabled and you must re-enable it using the following procedure.

To set ENABLE\_BROKER

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| 1. Open SQL Server Management Studio.  2. In the Connect to Server dialog box, select the appropriate values in the Server type list, in the Server name list, in the Authentication list, and then click Connect.  3. Click New Query.  4. In the query window, enter the following query:  ALTER DATABASE SystemCenterEssentials SET SINGLE\_USER WITH ROLLBACK IMMEDIATE  5. Click Execute.  6. Enter the following query:  ALTER DATABASE SystemCenterEssentials SET ENABLE\_BROKER  7. Click Execute.  8. Close SQL Server Management Studio.  Note  Closing SQL Server Management Studio closes the connection to the database in single user mode. Depending on your configuration, you may have to manually kill any process that is connected to the database before completing the ALTER query below.  9. Open SQL Server Management Studio.  10. In the Connect to Server dialog box, select the appropriate values in the Server type list, in the Server name list, in the Authentication list, and then click Connect.  11. Click New Query.  12. In the query window, enter the following query:  ALTER DATABASE SystemCenterEssentials SET MULTI\_USER  13. Click Execute. |

You can verify the setting for ENABLE\_BROKER is set to 1 by using this SQL query: SELECT is\_broker\_enabled FROM sys.databases WHERE name='SystemCenterEssentials'.

Note

Before you can use discovery, you must restart the following services: OpsMgr SDK Service, OpsMgr Config Service, and OpsMgr Health Service. You may also need to restart the following services: SQL Server and SQL Server Agent.

How to Restore in a Remote Database Server Deployment

In a remote database server deployment – there are several possible failure scenarios. The remote database server, the management server, or both servers can fail. According to your failure scenario, use the appropriate scenario and corresponding procedure below to restore data and functionality.

If Active Directory is failing, then it must be restored first. Ensure that the System Center Essentials All Computers policy and the System Center Essentials Managed Computers (SCESERVER\_MG) security group both exist.

A Failure of the Remote Database Server

In a remote database deployment, the remote database server is failing while the Essentials management server continues to function properly.

To restore the remote database server in a remote-database deployment

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| 1. Rebuild the remote database server.  2. Reinstall SQL Server on the database server.  3. Stop the following services on the Essentials management server:  a. OpsMgr Health Service  b. OpsMgr Config Service  c. OpsMgr SDK Service  d. Update Services  4. Restore the SystemCenterEssentials, OperationsManagerDW, and the SUSDB database backups on the remote database server.  For more information about how to restore the SUSDB database, see the Backing Up Windows Server Update Services topic on the Microsoft TechNet Web site at <http://go.microsoft.com/fwlink/?LinkId=128971>.  5. Restart the services on the Essentials management server. |

A Failure of the Essentials Management Server

In a remote database deployment, the Essentials management server is failing while the remote database server continues to function properly. In this failure scenario, you can back up the databases just before you start restoring the failing Essentials management server. This reduces the data loss that might result from the failure.

To restore the Essentials management server in a remote-database deployment

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| 1. On the remote database server, back up the SystemCenterEssentials, OperationsManagerDW, and the SUSDB databases.  For more information about how to back up the SUSDB database, see the Backing Up Windows Server Update Services topic on the Microsoft TechNet Web site at <http://go.microsoft.com/fwlink/?LinkId=128971>.  2. Delete the SystemCenterEssentials, OperationsManagerDW, and the SUSDB databases.  3. Follow the Essentials management server restore procedure in a single-server deployment. |

A Failure of Both the Essentials Management Server and the Remote Database Server

In a remote database deployment, both the Essentials management server and the remote database server are failing.

To restore both servers in a remote-database deployment

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| 1. Rebuild the remote database server.  2. Reinstall SQL Server on the database server.  3. Follow the [How to Restore in a Single-Server Deployment](#zcfebc1014d9b44bea9701d4223a8a951) procedure. |

How to Restore the Encryption Key

In System Center Essentials 2010, the Essentials management server encryption key holds all the Run As account information defined in the management group. To successfully restore a failed Essentials management server, you must use that key to reattach the databases and to access the Run As accounts that have been encrypted with this key. If you need to restore the Essentials management server without this backup, you would need to re-enter all of your Run As accounts.

To back up or restore the encryption key, you must use the SecureStorageBackup tool. You can launch the tool from the desktop, or from the Essentials 2010 installation folder. Depending on how you launch the tool, it starts the Encryption Key Backup or Restore Wizard, or runs in command-line mode.

Use the Encryption Key Backup or Restore Wizard

When you launch the tool from the System Center Essentials 2010 program group, or when you run SecureStorageBackup.exe from the Essentials 2010 installation folder without parameters, the tool starts the Encryption Key Backup or Restore Wizard.

To use the Encryption Key Backup or Restore Wizard to restore the encryption key

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| 1. Log on to the computer hosting the Essentials management server with an account that is a member of the Administrators group.  2. Click Start, point to Programs, click System Center Essentials 20109, and then click Secure Storage Backup Wizard.  3. In the Encryption Key Backup or Restore Wizard, on the Backup or Restore? page, select the Restore the Encryption Key option.  4. Complete the wizard. |

Use the SecureStorageBackup Tool in Command-Line Mode

When you run SecureStorageBackup.exe from the Essentials 2010 installation folder with valid parameters, the tool runs in command-line mode. You can run SecureStorageBackup.exe with the '/?' switch to get help for the tool.

To start the SecureStorageBackup tool in a command-line mode to restore the Essentials management server encryption key

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| 1. Log on to the computer hosting the management server with an account that is a member of the Administrators group.  2. On the Windows desktop, click Start, and then click Run.  3. In the Run dialog box, type cmd and then click OK.  4. At a command prompt, type:  cd <Installation Folder>  SecureStorageBackup Restore <Backup File>  5. At the Please enter the password to use for storage/retrieval prompt, type a password that is at least eight characters long, and then press ENTER.  6. At the Please re-enter your password prompt, type the same password, and then press ENTER. |

See Also

[Backup and Restore of System Center Essentials](#z9b426e2ac9694829850d378a8ccf0b85)