Patch Management

User Guide

Version R95

English

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Contents

Contents

Patch Management Overview

Use the **Patch Management** module to monitor, scan, install, and verify Microsoft patches on Windows managed machines. Patch management automates the process of keeping all your Windows machines up to date with the latest patches. You decide how and when updates are applied on a per machine basis. See the following overview topics:

Note: Because **Patch Management** only manages the patching of Windows machines, machine templates and Apple and Linux machines do not display on most **Patch Management** pages.

Functions	Description
Scan Machine *(page 9)*	Determine what patches are missing on managed machines.
Patch Status *(page 11)*	Display a summary view of installed, missing and denied patches for each managed machine.
Initial Update *(page 13)*	Perform *one-time* processing of *all* approved patches on managed machines.
Pre/Post Procedure *(page 15)*	Run procedures before and/or after patch Initial Update and Automatic Update.
Automatic Update *(page 17)*	Update missing approved patches on managed machines automatically on a *recurring* basis.
Machine History *(page 18)*	Display a detailed view of patch scan results for each managed machine.
Machine Update *(page 21)*	Schedule the installation of missing patches for an individual machine.
Patch Update *(page 23)*	Apply individual patches to multiple machines.
Rollback *(page 26)*	Uninstall patches from managed machines.
Cancel Updates *(page 27)*	Cancel pending patch installations.
Create Delete *(page 29)*	Create and delete machine patch policies.
Membership *(page 30)*	Assign machine IDs as members of one or more patch policies.
Approval by Policy *(page 31)*	Approve or deny patches by patch policy.
Approval by Patch *(page 34)*	Approve or deny patches by patch.
KB Override *(page 36)*	Override patch policy default approval status by Microsoft knowledge base article.
Windows Auto Update *(page 39)*	Remotely set the Windows Automatic Updates settings on selected machines.

Patch Management Module Minimum Requirements

Kaseya Server

- The Patch Management R95 module requires VSA R95.

Supported Operating Systems

- Patch Managementsupports all OSs supported by Windows Update, which includes:
  - Microsoft Windows Server 2012, 2012 R2, 2016, 2019
  - Microsoft Windows 8, 8.1, 10

Note: See general **System Requirements** *(http://help.kaseya.com/WebHelp/EN/VSA/9050000/reqs/index.asp#home.htm).*

Methods of Updating Patches

The VSA provides **five** methods of applying Microsoft patches to managed Windows machines:

- **Initial Update** is a *one-time* processing of all approved Microsoft patches applicable to a managed machine based on Patch Policy. **Initial Update** ignores the **Reboot Action** *(page 42)* policy and reboots the managed machine **without warning the user** as often as necessary until the machine has been brought up to the latest patch level. **Initial Update** should only be performed during non-business hours and is typically performed over a weekend on newly added machines.
- **Automatic Update** is the *preferred* method of updating managed machines on a *recurring* basis. Obeys both the **Patch Policy** and the **Reboot Action** policy.
- **Patch Update** - If you're using **Automatic Update**, then **Patch Update** is used on an exception basis to apply individual patches to multiple machines or for patches that originally failed on certain machines. Overrides the **Patch Policy** but obeys the **Reboot Action** policy.
- **Machine Update** - If you're using **Automatic Update**, then **Machine Update** is used on an exception basis to apply patches to individual machines. Overrides the **Patch Policy** but obeys the **Reboot Action** policy. **Machine Update** is often used to test a new patch prior to approving it for general release to all machines.
- **Patch Deploy** - You can also use a user defined procedure to install a Microsoft patch using Agent Procedures > Patch Deploy. Microsoft releases many hot fixes as patches for very specific issues that are not included in the Microsoft Update Catalog or in the Office Detection Tool, the two patch data sources the **Patch Management** module uses to manage patch updates. **Patch Deploy** enables

customers to create a patch installation procedure for these hot fixes, via this wizard, that can be used to schedule the installation on any desired machine.

> **Note:** You can install **non-Microsoft** applications using Agent Procedures > Application Deploy. When a pre-defined install solution cannot be used, use Agent Procedures > Packager to create a self-extracting file ready for automated distribution.

Configuring Patch Management

Analyzing Patch Status

You can determine the patch status of managed machines using the following pages:

- Determine what patches are missing on managed machines using **Scan Machine** *(page 9)*.
- Display a summary view of installed, missing and denied patches for each managed machine using **Patch Status** *(page 11)*.
- Display a detailed view of patch scan results for each managed machine using **Patch History** *(page 18)*.

Configuring Patch Management

Patch Management configuration options directly or indirectly affect the four Patch Management methods of installing patches as follows:

		Initial Update	Automatic Update	Patch Update	Machine Update
Create/Delete *(page 29)*	Create a patch policy.	●	●		
Membership *(page 30)*	Assign machine IDs to a patch policy.	●	●		
Approval by Policy *(page 31)*	Set patch approval policies.	●	●		
Approval by Patch *(page 34)*	Set patch approval policies.	●	●		
KB Override *(page 36)*	Overrides patch approval policies.	●	●		
Pre/Post Procedure *(page 15)*	Run procedures before or after **Initial Update** and **Automatic Update**.	●	●		
Reboot Action *(page 42)*	Change the reboot policy for machine IDs.		●	●	●
File Source *(page 45)*	Change the file source location machines use to download patches.	●	●	●	●
Command Line *(page 53)*	Change command line parameters for installing selected patches.	●	●	●	●
Patch Location *(page 55)*	Change the download URL for patches.	●	●	●	●
Patch Alert *(page 47)*	Configure alerts for patch-related events.	●	●	●	●
Office Source *(page 50)*	Create an alternate source location for Office patches. An **agent credential** *(http://help.kaseya.com/webhelp/EN/VSA/9050000/index.asp#3492.htm)* must be defined to use the **Office Source** page.	●	●	●	●

> **Note:** **Windows Auto Update** *(page 39)* enable or disables **Windows Auto Update** on managed machines regardless of whether patches are installed on machine IDs.

Patch Processing

When you schedule a patch the following occurs:

1. The agent on the managed machine is told to start the update process at the scheduled time.
2. The patch executable is downloaded to the managed machine from where ever the **File Source** *(page 45)* is set for that machine ID.
3. The patch file is executed on the managed machine using the parameters specified in **Command Line** *(page 53)*. You should never have to set these switches yourself, but just in case, this capability is there.
4. After all the patches have been installed the managed machine is rebooted. *When* reboots occur for a machine ID depends on the **Reboot Action** *(page 42)* assigned to that machine ID. Applies to **Machine Update** *(page 21)*, **Patch Update** *(page 23)* and **Automatic Update** *(page 17)*. Reboots in response to an **Initial Update** *(page 13)* always occur immediately and without warning the user.
5. The managed machine is rescanned automatically. It takes several minutes after the rescan is complete for this data to show up on the VSA. Wait several minutes before checking the patch state after a reboot.

> **Note:** If you schedule multiple patches for installation on the same machine, all the patches are installed at the same time. After all the patches have been installed the machine reboots once. This technique saves time and reboots.
>
> **Note:** Service packs are always installed separately. If you are installing a service pack with other patches you will see a reboot after the service pack install and then another single reboot after all the other patches are installed.

Superseded Patches

A superseded patch is a patch that doesn't have to be installed because a later patch is available. A typical example is a service pack, which bundles many other patches that have been released before the service pack. If you install the service pack, you don't have to install all the earlier patches.

Patch Management only reports patches superseded by a service pack. Superseded patches have a string appended to the title of the patch that indicates that it is superseded by Service Pack X. This string is displayed as dark red text with a yellow background to make it stand out.

Example: Superseded By: KB936929 Windows XP Service Pack 3 (KB936929)

The installation process installs superseded updates *only if* the service pack that supersedes these updates *is not* selected for installation. If the superseding service pack is selected for installation, the superseded updates *are not* downloaded or installed. A procedure log entry is added to indicate the update was skipped because it was superseded.

You can deny all superseded patches using the **Override Default Approval Status with Denied for superseded updates in this policy** checkbox in **Approval by Policy** *(page 31)*.

In addition:

- Patch titles in the Patch Management report include `Superseded By: Service Pack X`, when applicable.

- The patch filter on the patch approval pages now include the ability to filter on `superseded/not superseded`.
- Occasionally, the `Superseded By` warning displays as `Superseded By: Unspecified`. This is typically caused by a cross-operating system patch that is superseded by one or more service packs. This is likely to be seen on updates dealing with Media Player.

Update Classification

Microsoft updates are organized as follows:

Update Classification	Classification Type (Non-Vista / Vista)	Included in WSUSSCN2.CAB*
Security Updates	High Priority / Important Includes critical, important, moderate, low, and non-rated security updates.	Yes
Critical Updates	High Priority / Important	Yes
Update Rollups	High Priority / Important	Yes
Service Packs	Optional – Software / Recommended	Typically not
Updates	Optional – Software / Recommended	No
Feature Packs	Optional – Software / Recommended	No
Tools	Optional – Software / Recommended	No

In those cases where a machine does not have Internet connectivity at the time of a machine patch scan, Kaseya uses Microsoft's WSUSSCN2.CAB data file. Microsoft publishes this CAB file as needed. It contains a sub-set of the Microsoft Update Catalog. As seen in the table above, scan data for only the high priority updates and occasionally for service packs are included in the CAB file. The Kaseya Server automatically downloads the CAB file on a daily basis to make it available for those machines needing this type of scan. See Windows Automatic Update.

Note: Kaseya does not support the patch classifications of 'driver' or 'definition update'. Patches released with these classifications do not display in the VSA. See the Kaseya **knowledge base** *(https://helpdesk.kaseya.com/entries/36010308).*

Patch Failure

After the patch installation attempt completes—including the reboot if requested—the system re-scans the target machine. If a patch still shows missing after the re-scan, failure is reported. Patches can fail for several reasons:

- **Insufficient Disk Space** - Patches are downloaded, or copied from a file share, to the local machine's hard disk. Several patches, especially service packs, may require significant additional local disk space to completely install. Verify the target machine has plenty of disk space available.
- **Bad Patch File** - The phrase `Bad Patch File` in the **Comments** column indicates the patch file failed to execute for some reason. If you schedule multiple patches to install as a batch and even *one* of them fails, all the patches are marked as `Bad Patch File`. The system is reporting a procedure failure and can not distinguish which patch in the procedure caused the failure.
- **Corrupted Patch File** - The downloaded patch file is corrupt.

- **Missing Patch Location** - The phrase `Missing patch location` in the **Comments** column means the URL used to download patches from the Microsoft website is missing. You can manually enter the correct location using the **Patch Location** *(page 55)* page.
- **No Reboot** - Several patches require a system reboot before they take effect. If your **Reboot Action** *(page 42)* settings did not allow a reboot, the patch may be installed but will not be effective until after the reboot.
- **Command Line Failed** - If the command line parameters set in the **Command Line** *(page 53)* function are incorrect, the patch executable typically displays a dialog box on the managed machine stating there is a command line problem. This error causes patch installation to halt and the patch installation procedure to terminate. The patch file remains on the managed machine and `Install Failed` is displayed. Enter the correct command line parameters for the patch and try again.

  Note: Command line parameters for each patch apply globally and can only be changed by a master role user.

- **MS Office Command Line Failed** - The only command line parameter permitted for use with Microsoft Office (prior to Office 2007) related patches is `/Q`. Because MS Office (prior to Office 2007) patches may require the Office installation CD(s), the use of the `/Q` command line parameter might cause the patch install to fail. If an Office related patch fails, remove the `/Q` command line parameter and try again.

  Warning: The only switch permitted for use with Microsoft Office 2000, XP, and 2003 related patches (marked as Office) is `/Q`. If `/Q` is not specified, Microsoft Office 2000, XP, and 2003 switches will be reset to `/INSTALL-AS-USER`. Microsoft Office 2003 patches may also include the `/MSOCACHE` switch used to attempt a silent install if the MSOCache exists on the machine and the `/INSTALL-AS-USER` switch is set.

- **Patch Download Blocked** - The patch file was never delivered to the machine. The system downloads the patch directly from the internet to either the Kaseya Server, a file share, or directly to the managed machine, depending on the machine ID's **File Source** *(page 45)* settings. The machine ID's firewall may be blocking these downloads. A patch file delivered to the agent with a size of only 1k or 2k bytes is an indication of this problem.
- **User not logged in** - In some cases a user on the machine being patched must be logged in to respond to dialogs presented by the install during the patch. The patch procedure automatically detects whether a user is currently logged in and will not continue if a user is not logged in. Reschedule the installation of the patch when a user is available and logged in to the machine.
- **Credential does not have administrator rights** - If an **agent credential** *(http://help.kaseya.com/webhelp/EN/VSA/9050000/index.asp#3492.htm)* is defined for a machine ID, then **Patch Management** installs all new patches using this agent credential. Therefore, the agent credential set using the Agent > Manage Agents page should always be *a user with administrator rights.*
- **Manual install only** - Not a patch failure, but a requirement. Some patches and service packs require passwords or knowledge of a customized setup that the VSA can not know. The VSA does not automatically install patches having the following warnings:

  `Manual install only`

  `Patch only available from Windows Update web site`

  `No patch available; must be upgraded to latest version`

These updates must be installed manually on each machine.

Troubleshooting Patch Installation Failures

When patch scan processing reports patch installations have failed, a `KBxxxxxx.log` (if available) and the `WindowsUpdate.log` are uploaded to the Kaseya Server. Additionally, for those patches that required an "Internet based install", a `ptchdlin.xml` file will be uploaded to the Kaseya Server. These files can be reviewed using Agent Procedures > getFile() for a specific machine and can help you

troubleshoot patch installation failures. Info Center > Reporting > Reports > Logs > Agent Procedure Log contains entries indicating these log files have been uploaded to the Kaseya Server for each machine.

Chapter 1

Manage Machines

In This Chapter

Scan Machine

Patch Management > Manage Machines > Scan Machine

The **Scan Machine** page schedules scans to search for missing patches on each managed machine. Scanning takes very little resources and can be safely scheduled to run at any time of day. The scanning operation does not impact users at all.

Note: Kaseya does not support the patch classifications of 'driver' or 'definition update'. Patches released with these classifications do not display in the VSA. See the Kaseya **knowledge base** *(https://helpdesk.kaseya.com/entries/36010308)*.

Scanning Frequency

System and network security depends on all your machines having the latest security patches applied. Microsoft typically releases patches on Tuesdays. Security and critical patches are typically released on the second Tuesday of the month (Patch Tuesday), and non-security and non-critical patches are typically released on the third and/or fourth Tuesdays of the month, but these schedules are not guaranteed. To ensure your machines are updated you should scan all managed machines for Microsoft updates on a weekly basis, keep in mind critical updates are normally released every second Tuesday of each month.

Scanning the Kaseya Server

To scan the Kaseya Server, you must install an agent on the Kaseya Server. Once installed, you can scan the Kaseya Server just like any other managed machine.

View Definitions

You can filter the display of machine IDs on any agent page using the following options in View Definitions.

- **Machines that have no patch scan results (unscanned)**
- **Last execution status for patch scan success / failed**
- **Patch scan schedule / not schedule**
- **Patch scan has / has not executed in the last <N> <periods>**

Remind me when machines need a patch scan scheduled

If checked, a warning message displays the number of machine IDs not currently scheduled. The

number of machine IDs reported depends on the Machine ID / Group ID filter and machine groups the user is authorized to see using System > Scope.

Schedule

Click **Schedule** to display the **Scheduler** window, which is used throughout the VSA to schedule a task. Schedule a task once or periodically. Each type of recurrence—Once, Hourly, Daily, Weekly, Monthly, Yearly—displays additional options appropriate for that type of recurrence. Periodic scheduling includes setting start and end dates for the recurrence. *Not all options are available for each task scheduled.* Options can include:

- **Schedule will be based on the timezone of the agent (rather than server)** - If checked, time settings set in the Scheduler dialog reference the local time on the agent machine to determine when to run this task. If blank, time settings reference server time, based on the server time option selected in System > Preferences. Defaults from the System > Default Settings page.
- **Distribution Window** - Reschedules the task to a randomly selected time no later than the number of periods specified, to spread network traffic and server loading. For example, if the scheduled time for a task is 3:00 AM, and the distribution window is 1 hour, then the task schedule will be changed to run at a random time between 3:00 AM and 4:00 AM.
- **Skip if offline** - If checked and the machine is offline, skip and run the next scheduled period and time. If blank and the machine is offline, run the task as soon as the machine is online again. Applies only to recurring schedules, a 'Once' schedule always executes the next time the agent is online.
- **Power up if offline** - Windows only. If checked, powers up the machine if offline. Requires Wake-On-network or vPro and another managed system on the same network.
- **Exclude the following time range** - **Applies only to the distribution window.** If checked, specifies a time range to exclude the scheduling of a task within the distribution window. Specifying a time range outside of the distribution window is ignored by the scheduler.

Note: This **Schedule** button may be hidden for a standard user. This button is enabled using the System > System Preferences > Enable Scheduling node on the User Roles - Access Rights tab.

Cancel

Click **Cancel** to cancel execution of this task on selected managed machines. Does not clear scans that have already started.

Run Now

Click **Run Now** to run this task on selected machine IDs immediately.

Set Default Scan Source

Sets the scan source of selected machines.

- **Online** - Scan for updates using the **Microsoft Update Catalog** *(page v)* on the internet, then the cab file second. This is the default scan type.
- **Offline** - Scans for updates using the offline scan source `wsusscn2.cab` file. This file is copied to the agent's working directory from the Kaseya Server at the time of the scan. The Kaseya Server updates its copy of the cab file, if necessary, twice a day.

A warning icon ⚠ displays next to any machine that fails to scan online using its default scan source. You can filter machines using the **Machines with patch scan source set to online but offline scan ran last** checkbox on the View Definitions page.

Note: Machines with a *legacy* scan source cannot be changed. When a patch scan runs, the OS/Service pack minimum requirement is checked: Win 2000 SP3 or later. If the minimum requirement is not met, a legacy scan is run instead of a WUA Patch Scan.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

- Agent is currently offline
- User Logged In and Agent is Active
- User Logged In and Agent is Inactive
- User Not Logged In and Agent is online
- User Not Logged In and Agent is Idle
- The agent has been suspended
- Agent has never checked in

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Last Scan

This timestamp shows when the last scan occurred. When this date changes, new scan data is available to view.

Skip if Machine Offline

If a checkmark displays and the machine is offline, skip and run the next scheduled period and time. If no checkmark displays, perform this task as soon as the machine connects after the scheduled time.

This timestamp shows the next scheduled scan. Overdue date/time stamps display as red text with yellow highlight.

Recurrence

If recurring, displays the interval to wait before running the task again.

Patch Status

Patch > Manage Machines > Patch Status

- Similar information is provided using Info Center > Reporting > Reports > Patch Management.

The **Patch Status** page provides a summary view of the patch status for each of your managed machines. You can quickly identify machines that are missing patches or are indicating errors. The total of all missing patches is the sum of the **Missing Approved**, **Missing Denied**, and **Missing Manual**.

Patch Test

Most patch problems are the result of configuration and/or permission issues. The test function exercises the entire patch deployment process without actually installing anything on the target machine or causing a reboot. If a machine ID's operating system does not support patching, the operating system is displayed. Each count in the paging area is hyperlinked. Clicking a count's hyperlink displays a list of all patches that make up that count.

- The system resets test results every time a machine ID's **File Source** *(page 45)* or **agent credential** *(http://help.kaseya.com/webhelp/EN/VSA/9050000/index.asp#3492.htm)* changes.

- Test cancels any pending patch installs *except* **Initial Updates** *(page 13)*.
- Machines being processed by **Initial Update** are *not* tested. The **Initial Update** status message and date/time is displayed instead of the column totals.

View Definitions

You can filter the display of machine IDs on any agent page using the following options in View Definitions.

- **Machines with Patch Test Result**
- **Machines missing greater than or equal to N patches**
- **Use Patch Policy**

Test

Click **Test** to verify patches can update selected machine IDs. Does not actually install any patches.

Cancel

Click **Cancel** to stop the test.

Auto Refresh Table

If checked, the paging area is automatically updated every five seconds. This checkbox is automatically selected and activated whenever **Test** is clicked.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

- Agent is currently offline
- User Logged In and Agent is Active
- User Logged In and Agent is Inactive
- User Not Logged In and Agent is online
- User Not Logged In and Agent is Idle
- The agent has been suspended
- Agent has never checked in

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Install Patches

The number of patches installed.

Missing Approved

The number of approved patches missing.

Missing Denied

The number of unapproved patches missing.

Missing Manual

The number of approved patches missing that must be installed manually. These patches cannot be

processed by **Automatic Update** *(page 17)*, **Initial Update** *(page 13)*, **Machine Update** *(page 21)*, or **Patch Update** *(page 23)*.

Pending Patches

The number of patches scheduled to be installed.

User Not Ready

The number of patches not installed because the patch requires:

- the user to be logged in, or
- the user to take action and the user declined or did not respond.

Failed Patches

The number of patches that attempted to install but failed.

Test Results

The status returned after clicking the **Test** button:

- Untested
- Pending
- Passed
- Failed

Reboot Now

Reboots machine immediately to complete a patch installation. The **Reboot Now** button is displayed if:

- the **Reboot Action** for machine is set to "Do not reboot after update" and *no* email address is entered, and
- patch install which requires a reboot has been completed, and machine has *not* yet been rebooted

Initial Update

Patch Management > Manage Machines > Initial Update

Initial Update is a *one-time* processing of all approved Microsoft patches applicable to a managed machine based on Patch Policy. **Initial Update** ignores the **Reboot Action** *(page 42)* policy and reboots the managed machine **without warning the user** as often as necessary until the machine has been brought up to the latest patch level. **Initial Update** should only be performed during non-business hours and is typically performed over a weekend on newly added machines. See **Methods of Updating Patches** *(page ii)*, **Configuring Patch Management** *(page iii)*, **Patch Processing** *(page iv)*, **Superseded Patches** *(page iv)*, **Update Classification** *(page v)* and **Patch Failure** *(page v)* for a general description of patch management.

Note: The agent for the Kaseya Server is not displayed on this page. **Initial Update** cannot be used on the Kaseya Server.

Patch Update Order

Service packs and patches are installed in the following order:

1. Windows Installer
2. OS related service packs
3. OS update rollups
4. OS critical updates

5. OS non-critical updates
6. OS security updates
7. Office service packs
8. Office update rollups
9. All remaining Office updates

> **Note:** Reboots are forced after each service pack and at the end of each patch group **without warning**. This is necessary to permit the re-scan and installation of the subsequent groups of patches.

Pre/Post Procedures

Agent procedures can be configured to be executed just before an **Initial Update** or **Automatic Update** begins and/or after completion. For example, you can run agent procedures to automate the preparation and setup of newly added machines before or after **Initial Update**. Use Patch Management > **Pre/Post Procedures** *(page 15)* to select and assign these agent procedures on a per-machine basis.

Schedule

Click **Schedule** to display the **Scheduler** window, which is used throughout the VSA to schedule a task. Schedule this task *once*. Options include:

- **Distribution Window** - Reschedules the task to a randomly selected time no later than the number of periods specified, to spread network traffic and server loading. For example, if the scheduled time for a task is 3:00 AM, and the distribution window is 1 hour, then the task schedule will be changed to run at a random time between 3:00 AM and 4:00 AM.
- **Skip if offline** - If checked and the machine is offline, skip and run the next scheduled period and time. If blank and the machine is offline, run the task as soon as the machine is online again. Applies only to recurring schedules, a 'Once' schedule always executes the next time the agent is online.
- **Power up if offline** - Windows only. If checked, powers up the machine if offline. Requires Wake-On-network or vPro and another managed system on the same network.
- **Exclude the following time range** - **Applies only to the distribution window.** If checked, specifies a time range to exclude the scheduling of a task within the distribution window. Specifying a time range outside of the distribution window is ignored by the scheduler.

> **Note:** This **Schedule** button may be hidden for a standard user. This button is enabled using the System > System Preferences > Enable Scheduling node on the User Roles - Access Rights tab.

Cancel

Click **Cancel** to cancel execution of this task on selected managed machines. Does not clear patch installs that have already started.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

- Agent is currently offline
- User Logged In and Agent is Active
- User Logged In and Agent is Inactive
- User Not Logged In and Agent is online
- User Not Logged In and Agent is Idle

The agent has been suspended

Agent has never checked in

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Note: Displays the following message if applicable: `Not a member of a Patch Policy - All missing patches will be installed!`

Scheduled

This timestamp shows the scheduled **Initial Update**.

Updated

If checked, an **Initial Update** has been performed successfully on the machine ID. The timestamp shows when the **Status** being reported was completed.

Status

During processing, the **Status** column displays the following types of messages, if applicable:

- Started
- Processing Windows Installer
- Processing operating system service packs
- Processing operating system update rollups
- Processing operating system critical updates
- Processing operating system non-critical updates
- Processing operating system security updates
- Processing Office service packs
- Processing Office update rollups
- Processing Office updates

When all processing has been completed, the **Status** column displays either:

- Completed - fully patched
- Completed - remaining patches require manual processing

If the latter status displays, select the appropriate machine ID in Patch Management > **Machine Update** *(page 21)* to determine why all patches were not applied. Some patches might require manual install or for the user to be logged in. In the case of patch failures, manually schedule failed patches to be reapplied. Due to occasional conflicts between patches resulting from not rebooting after each individual patch, simply reapplying the patches typically resolves the failures.

Pre/Post Procedure: Patch Management

Patch Management > Manage Machines > Pre/Post Procedure

Use the **Pre/Post Procedure** page to run procedures either before and/or after **Initial Update** *(page 13)* or **Automatic Update** *(page 17)*. For example, you can run procedures to automate the preparation and setup of newly added machines before or after **Initial Update**.

Note: Post procedures run even if there are patch installation failures.

To Run a Pre/Post Procedure

1. Select machine IDs or machine ID templates in the paging area.

2. Check one or more of the following checkboxes and select an agent procedure for each checkbox you check:
   - Run select agent procedure before Initial Update
   - Run select agent procedure after Initial Update
   - Run select agent procedure before Automatic Update
   - Run select agent procedure after Automatic Update
3. Click **Set**.

Skip Auto Update

The **Auto Pre-Agent Procedure** can be used to determine whether the **Automatic Update** should be executed or not. After executing the **Auto Pre-Agent Procedure**, a registry value is checked on the machine. If this registry value exists **Automatic Update** is skipped; otherwise, **Automatic Update** is executed. To invoke this feature, the **Auto Pre-Agent Procedure** must include a procedure step to set the registry value below:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Kaseya\Agent\SkipAutoUpdate
```

Note: Any data type and any data value may be set. The test is for existence only.

If this registry value exists, a procedure log entry is made to document that **Automatic Update** was skipped, and this registry key is deleted.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

- Agent is currently offline
- User Logged In and Agent is Active
- User Logged In and Agent is Inactive
- User Not Logged In and Agent is online
- User Not Logged In and Agent is Idle
- The agent has been suspended
- Agent has never checked in

Edit icon

Click the edit icon next to a machine ID to automatically set header parameters to those matching the selected machine ID.

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Init Pre-Agent Procedure / Init Post-Agent Procedure

This column lists the procedures set to run before and/or after an **Initial Update**.

Auto Pre-Agent Procedure / Auto Post-Agent Procedure

This column lists the procedures set to run before and/or after an **Automatic Update**.

Automatic Update

Patch Management > Manage Machines > Automatic Update

The **Automatic Update** page is the *preferred* method of updating managed machines with Microsoft patches on a *recurring* basis. **Automatic Update** obeys both the Patch Approval Policy and the **Reboot Action** *(page 42)* policy. Use **Initial Update** *(page 13)* if you are installing patches for the first time on a managed machine. See **Methods of Updating Patches** *(page ii)*, **Configuring Patch Management** *(page iii)*, **Patch Processing** *(page iv)*, **Superseded Patches** *(page iv)*, **Update Classification** *(page v)* and **Patch Failure** *(page v)* for a general description of patch management.

- Patches that require manual intervention are not included in **Automatic Updates**. These are shown in the **Missing Manual** column of the **Patch Status** *(page 11)* page and on the individual **Machine Update** *(page 21)* page.
- Patch installation only occurs when a new missing patch is found by **Scan Machine** *(page 9)*.
- **Automatic Update** is suspended for a machine while **Initial Update** is being processed. **Automatic Update** automatically resumes when **Initial Update** completes.
- A 'Patch Automatic Update Finished' log entry is added to the Agent Procedure Log when Automatic Update completes on a machine.

Schedule

Click **Schedule** to display the **Scheduler** window, which is used throughout the VSA to schedule a task. Schedule a task once or periodically. Each type of recurrence—Once, Hourly, Daily, Weekly, Monthly, Yearly—displays additional options appropriate for that type of recurrence. Periodic scheduling includes setting start and end dates for the recurrence. *Not all options are available for each task scheduled.* Options can include:

- **Schedule will be based on the timezone of the agent (rather than server)** - If checked, time settings set in the Scheduler dialog reference the local time on the agent machine to determine when to run this task. If blank, time settings reference server time, based on the server time option selected in System > Preferences. Defaults from the System > Default Settings page.
- **Distribution Window** - Reschedules the task to a randomly selected time no later than the number of periods specified, to spread network traffic and server loading. For example, if the scheduled time for a task is 3:00 AM, and the distribution window is 1 hour, then the task schedule will be changed to run at a random time between 3:00 AM and 4:00 AM.
- **Skip if offline** - If checked and the machine is offline, skip and run the next scheduled period and time. If blank and the machine is offline, run the task as soon as the machine is online again. Applies only to recurring schedules, a 'Once' schedule always executes the next time the agent is online.
- **Power up if offline** - Windows only. If checked, powers up the machine if offline. Requires Wake-On-network or vPro and another managed system on the same network.
- **Exclude the following time range** - **Applies only to the distribution window.** If checked, specifies a time range to exclude the scheduling of a task within the distribution window. Specifying a time range outside of the distribution window is ignored by the scheduler.

Note: This **Schedule** button may be hidden for a standard user. This button is enabled using the System > System Preferences > Enable Scheduling node on the User Roles - Access Rights tab.

Cancel

Click **Cancel** to cancel execution of this task on selected managed machines. Does not clear patch installs that have already started.

Suspend / Unsuspend

Suspends and unsuspends **Automatic Update** for selected machines. Applies only to **Automatic Update**. **Machine Updates** *(page 21)* and **Patch Updates** *(page 23)* will continue to be processed.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

- Agent is currently offline
- User Logged In and Agent is Active
- User Logged In and Agent is Inactive
- User Not Logged In and Agent is online
- User Not Logged In and Agent is Idle
- The agent has been suspended
- Agent has never checked in

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

> **Note:** Displays the following message if applicable: `Not a member of a Patch Policy - All missing patches will be installed!`

Skip if Machine Offline

If a checkmark displays and the machine is offline, skip and run the next scheduled period and time. If no checkmark displays, perform this task as soon as the machine connects after the scheduled time.

This timestamp shows the next scheduled scan. Overdue date/time stamps display as red text with yellow highlight.

Recurrence

If recurring, displays the interval to wait before running the task again.

Automatic Update Suspended

Displays a lock icon if **Automatic Update** has been suspended.

Machine History

Patch Management > Manage Machines > Machine History

- Similar information is provided using Info Center > Reporting > Reports > Patch Management and the Patch Status tab of the Machine Summary and Live Connect (Classic) pages.

The **Machine History** page displays the results from the most recent patch scan of managed machines. All **installed** and **missing** patches applicable to a managed machine are listed, regardless of whether the patch is approved or not.

- Click a machine ID link to display its patch history.
- Click the **KB Article** link to display a Details page about the patch. The Details page contains a link to display the knowledge base article.
- Patches classified as security updates have a security bulletin ID (`MSyy-xxx`). Clicking this link displays the security bulletin.

Superseded Patches

A patch may be superseded and not need to be installed. See **Superseded Patches** *(page iv)* for more information.

Product

The **Product** column helps identify the product category associated with a specific patch. If a patch is used across multiple operating system families (i.e., Windows XP, Windows Server 2003, Vista, etc.), the product category is `Common Windows Component`. Examples include Internet Explorer, Windows Media Player, MDAC, MSXML, etc.

Update Classification

See **Update Classification http://help.kaseya.com/webhelp/EN/kpatch/9050000/#3526.htm** for an explanation of Classification and Type.

Release Date

The date the patch was released.

(Status)

The following status messages can appear next to a patch:

- `Installed (date unknown)`
- `Installed (<datetime>)`
- `Missing`
- `Denied by Patch Approval`
- `Denied (Pending Patch Approval)`
- `Manual install to VSA database server only` - Applies to SQL Server patches on the database server where the Kaseya Server database is hosted
- `Manual install to KServer only` - Applies to Office or any "install-as-user" patches on the Kaseya Server
- `Patch Location Pending` - Applies to patches with an invalid patch location. See **Invalid Patch Location Notification** in System > Configure.
- `Missing Patch Location`
- `Ignore`

Chapter 2

Manage Updates

In This Chapter

Machine Update

Patch Management > Manage Updates > Machine Update

- Similar information is provided using Info Center > Reporting > Reports > Patch Management and the Patch Status tab of the Machine Summary and Live Connect (Classic) pages.

The **Machine Update** page manually installs Microsoft patches on individual machines. **Machine Update** overrides the Patch Approval Policy but obeys the **Reboot Action** *(page 42)* policy. If you're using **Automatic Update**, then **Machine Update** is used on an exception basis. **Machine Update** is often used to test a new patch prior to approving it for general release to all machines. See **Methods of Updating Patches** *(page ii)*, **Configuring Patch Management** *(page iii)*, **Patch Processing** *(page iv)*, **Superseded Patches** *(page iv)*, **Update Classification** *(page v)* and **Patch Failure** *(page v)* for a general description of patch management.

Using Machine Update

1. Click a machine ID to display all patches missing on that machine.
2. The **Product** column helps identify the product category associated with a specific patch. If a patch is used across multiple operating system families (i.e., Windows XP, Windows Server 2003, Vista, etc.), the product category is `Common Windows Component`. Examples include Internet Explorer, Windows Media Player, MDAC, MSXML, etc.

   Note: If a listed patch displays the phrase `User Action required to install update` the patch cannot be installed silently. The patch must be scheduled when a logged on user is available to answer the prompts required to complete the install. If a user does not respond to the prompts after a fixed time period the install is skipped and the phrase `User not ready to install` displays next to the patch.
3. Optionally click the **KB Article** link to display a Details page about the patch. The Details page contains a link to display the knowledge base article.
4. Optionally click a **Security Bulletin** link to review a security bulletin, if available. Patches classified as security updates have a security bulletin ID (`MSyy-xxx`).
5. Check the box next to patches you want installed on the selected machine ID.
6. Click the **Schedule** button to install patches using the install parameters.
7. Click the **Cancel** button to remove any pending patch installs. Does not clear patch installs that have already started. Patches that are currently being processed (status of Pending - Processing Now) cannot be canceled.
8. Click the **Set Ignore** button to prevent selected patches from being applied.

Superseded Patches

A patch may be superseded and not need to be installed. See **Superseded Patches** *(page iv)* for more information.

Schedule

Click this button to display the **Scheduler** window, which is used throughout the VSA to schedule a task. Schedule this task *once*. Options include:

- **Schedule will be based on the timezone of the agent (rather than server)** - If checked, time settings set in the Scheduler dialog reference the local time on the agent machine to determine when to run this task. If blank, time settings reference server time, based on the server time option selected in System > Preferences. Defaults from the System > Default Settings page.
- **Distribution Window** - Reschedules the task to a randomly selected time no later than the number of periods specified, to spread network traffic and server loading. For example, if the scheduled time for a task is 3:00 AM, and the distribution window is 1 hour, then the task schedule will be changed to run at a random time between 3:00 AM and 4:00 AM.
- **Skip if offline** - If checked and the machine is offline, skip and run the next scheduled period and time. If blank and the machine is offline, run the task as soon as the machine is online again. Applies only to recurring schedules, a 'Once' schedule always executes the next time the agent is online.
- **Power up if offline** - Windows only. If checked, powers up the machine if offline. Requires Wake-On-network or vPro and another managed system on the same network.
- **Exclude the following time range** - **Applies only to the distribution window.** If checked, specifies a time range to exclude the scheduling of a task within the distribution window. Specifying a time range outside of the distribution window is ignored by the scheduler.

Hide patches denied by Patch Approval

If checked, hides patches denied patch approval. Patches with the status `Pending Approval` are considered denied by **Machine Update**.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Update Classification

See **Update Classification http://help.kaseya.com/webhelp/EN/kpatch/9050000/#3526.htm** for an explanation of Classification and Type.

Release Date

The date the patch was released.

(Status)

The following status messages can appear next to a patch:

- `Pending (Processing Now)`
- `Pending (Scheduled to run at <date>)`
- `Install Failed` - See **Patch Failure** *(page v)*.
- `Awaiting Reboot`
- `User not logged in`
- `User not ready to install`
- `Install Failed - Missing Network Credential`
- `Install Failed - Invalid Network Credential or LAN Server Unavailable`
- `Install Failed - Invalid Credential`
- `Missing`

- `Denied by Patch Approval`
- `Denied (Pending Patch Approval)`
- `Manual install to database server only` - Applies to SQL Server patches on the database server where the Kaseya Server database is hosted
- `Manual install to KServer only` - Applies to Office or any "install-as-user" patches on the Kaseya Server
- `Patch Location Pending` - Applies to patches with an invalid patch location. See **Invalid Patch Location Notification** in System > Configure.
- `Missing Patch Location`
- `Ignore`

Patch Update

Patch Management > Manage Updates > Patch Update

The **Patch Update** page updates missing Microsoft patches on all machines displayed in the paging area. **Patch Update** overrides the **Patch Approval Policy** *(page 31)* but obeys the **Reboot Action** *(page 42)* policy. If you're using **Automatic Update**, then **Patch Update** is used on an exception basis to apply individual patches to multiple machines or to re-apply patches that originally failed on certain machines. See **Methods of Updating Patches** *(page ii)*, **Configuring Patch Management** *(page iii)*, **Patch Processing** *(page iv)*, **Superseded Patches** *(page iv)*, **Update Classification** *(page v)* and **Patch Failure** *(page v)* for a general description of patch management.

Patches Displayed

The display of patches on this page are based on:

- The Machine ID/Group ID filter.
- The patches reported using **Scan Machine** *(page 9)*. Managed machines should be scanned daily.
- The patches of machines using **Automatic Update** *(page 17)*. If the **Hide machines set for Automatic Update** box is checked, these patches are *not* listed here. These patches are automatically applied at the **Automatic Update** scheduled time for each machine.
- If the **Hide patches denied by Patch Approval** box is checked, patches that are denied or pending approval are not listed here.
- The patches of machines being processed by **Initial Update** *(page 13)*. These patches are excluded from this page until **Initial Update** completes.

Duplicate Entries

Microsoft may use a common knowledge base article for one or more patches, causing patches to appear to be listed more than once. **Patch Update** displays patches sorted by **Update Classification** or **Product** first and knowledge base article number second. Check the **Product** name or click the **KB Article** link to distinguish patches associated with a common knowledge base article.

Superseded Patches

A patch may be superseded and not need to be installed. See **Superseded Patches** *(page iv)* for more information.

Using Patch Update

1. Optionally click the **KB Article** link to display a Details page about the patch. The Details page contains a link to display the knowledge base article.
2. Patches classified as security updates have a security bulletin ID (`MSyy-xxx`). Optionally click the **Security Bulletin** link to review the security bulletin, if available.

3. Optionally click the box next to a **KB Article** to schedule that patch on all managed machines missing that patch.
4. Optionally click the **Machines...** button to schedule a patch on individual machines or to set machines to ignore a patch. The **Ignore** setting applies to the selected patch on the selected machines. If **Ignore** is set, the patch is considered `Denied`. Patches marked as **Ignore** on the selected machines cannot be installed by any of the installation methods. To be installed, the **Ignore** setting must be cleared.

> **Note:** A warning icon indicates the patch status for one or more machines should be checked before installing this patch. Click the **Machines** button and review the **Status** column for each machine missing this patch.

5. Click the **Schedule** button to install the patches using the install parameters.
6. Click the **Cancel** button to remove any pending patch installs. Does not clear patch installs that have already started.

> **Note:** If a listed patch displays the phrase `User Action required to install` update the patch cannot be installed silently. The patch must be scheduled when a logged on user is available to answer the prompts required to complete the install. If a user does not respond to a prompt after 5 minutes the install is skipped and the phrase `User not ready to install` displays next to the patch.

Hide machines set for Automatic Update

If checked, hides patches missing from machine IDs set to **Automatic Update** *(page 17)*.

Hide patches denied by Approval Policy

If checked, hides patches denied by Patch Approval Policy.

Patch Group By

Display patch groups by **Classification** or **Product**.

Schedule

Click this button to display the **Scheduler** window, which is used throughout the VSA to schedule a task. Schedule this task *once*. Options include:

- **Schedule will be based on the timezone of the agent (rather than server)** - If checked, time settings set in the Scheduler dialog reference the local time on the agent machine to determine when to run this task. If blank, time settings reference server time, based on the server time option selected in System > Preferences. Defaults from the System > Default Settings page.
- **Distribution Window** - Reschedules the task to a randomly selected time no later than the number of periods specified, to spread network traffic and server loading. For example, if the scheduled time for a task is 3:00 AM, and the distribution window is 1 hour, then the task schedule will be changed to run at a random time between 3:00 AM and 4:00 AM.
- **Skip if offline** - If checked and the machine is offline, skip and run the next scheduled period and time. If blank and the machine is offline, run the task as soon as the machine is online again. Applies only to recurring schedules, a 'Once' schedule always executes the next time the agent is online.
- **Power up if offline** - Windows only. If checked, powers up the machine if offline. Requires Wake-On-network or vPro and another managed system on the same network.
- **Exclude the following time range** - **Applies only to the distribution window.** If checked, specifies a time range to exclude the scheduling of a task within the distribution window. Specifying a time range outside of the distribution window is ignored by the scheduler.

Cancel

Click **Cancel** to cancel execution of this task on selected managed machines.

> **Note:** Patches that are currently being processed (status of Pending - Processing Now) cannot be canceled.

Show Details

Click the **Show Details** checkbox to display the expanded title and installation warnings, if any, of each patch.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Status Warning Icon

A warning icon  indicates the patch status for one or more machines should be checked before installing this patch. Click the **Machines** button and review the **Status** column for each machine missing this patch.

Machines...

Click **Machines...** to list all machines missing this patch. On the details page, the following status messages can appear next to a patch:

- `Pending (Processing Now)`
- `Pending (Scheduled to run at <date>)`
- `Install Failed` - See **Patch Failure** *(page v)*.
- `Awaiting Reboot`
- `User not logged in`
- `User not ready to install`
- `Install Failed - Missing Network Credential`
- `Install Failed - Invalid Network Credential or LAN Server Unavailable`
- `Install Failed - Invalid Credential`
- `Missing`
- `Denied by Patch Approval`
- `Denied (Pending Patch Approval)`
- `Manual install to database server only` - Applies to SQL Server patches on the database server where the Kaseya Server database is hosted
- `Manual install to KServer only` - Applies to Office or any "install-as-user" patches on the Kaseya Server
- `Patch Location Pending` - Applies to patches with an invalid patch location. See **Invalid Patch Location Notification** in System > Configure.
- `Missing Patch Location`
- `Ignore`

KB Article

The knowledge base article describing the patch. Click the **KB Article** link to display a Details page about the patch. The Details page contains a link to display the knowledge base article.

Security Bulletin

Patches classified as security updates have a security bulletin ID (`MSyy-xxx`). Clicking this link displays the security bulletin.

Missing

The number of machines missing this patch.

Auto

Displays only if the **Hide machines set for Automatic Update** box is *not* checked. The number of machines scheduled to install this patch by **Automatic Update**.

Ignore

The number of machine set to ignore a patch using the **Machines** button. The **Ignore** setting applies to the selected patch on the selected machines. If **Ignore** is set, the patch is considered `Denied`. Patches marked as **Ignore** on the selected machines cannot be installed by any of the installation methods. To be installed, the **Ignore** setting must be cleared.

Product

The **Product** column helps identify the product category associated with a specific patch. If a patch is used across multiple operating system families (i.e., Windows XP, Windows Server 2003, Vista, etc.), the product category is `Common Windows Component`. Examples include Internet Explorer, Windows Media Player, MDAC, MSXML, etc.

Update Classification

See **Update Classification** *(page v)* for an explanation of **Classification** and **Type**.

Release Date

The date the patch was released.

Rollback

Patch Management > Manage Updates > Rollback

The **Rollback** page removes patches after they have been installed on a system. Not all patches may be uninstalled. The system only lists patches supporting the rollback feature.

> **Warning: Removing Windows software in the wrong order** *(http://support.microsoft.com/kb/823836/)* may cause the operating system to stop functioning.

To Remove a Patch from a Managed Machine

1. Click the machine ID that you want to remove a patch from.
2. Check the box to the left of the patch you want to uninstall.
3. Click the **Rollback** button.

Rollback

- Click this button to display the **Scheduler** window, which is used throughout the VSA to schedule a task. Schedule this task *once*. Options include:
  - **Distribution Window** - Reschedules the task to a randomly selected time no later than the number of periods specified, to spread network traffic and server loading. For example, if the scheduled time for a task is 3:00 AM, and the distribution window is 1 hour, then the task schedule will be changed to run at a random time between 3:00 AM and 4:00 AM.
  - **Skip if offline** - If checked and the machine is offline, skip and run the next scheduled period and time. If blank and the machine is offline, run the task as soon as the machine is online again. Applies only to recurring schedules, a 'Once' schedule always executes the next time the agent is online.

- **Power up if offline** - Windows only. If checked, powers up the machine if offline. Requires Wake-On-network or vPro and another managed system on the same network.
- **Exclude the following time range** - **Applies only to the distribution window.** If checked, specifies a time range to exclude the scheduling of a task within the distribution window. Specifying a time range outside of the distribution window is ignored by the scheduler.

Cancel

Click **Cancel** to clear a scheduled rollback. Does not clear rollbacks that have already started.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

(Patch)

Patches are grouped by update classification first and knowledge base article number second.

KB Article

The knowledge base article describing the patch. Click the **KB Article** link to display a Details page about the patch. The Details page contains a link to display the knowledge base article.

Security Bulletin

The security bulletin associated with a patch. Patches classified as security updates have a security bulletin ID (`MSyy-xxx`). Click the **Security Bulletin** link to review the security bulletin, if available.

(Product)

The **Product** column helps identify the product category associated with a specific patch. If a patch is used across multiple operating system families (i.e., Windows XP, Windows Server 2003, Vista, etc.), the product category is `Common Windows Component`. Examples include Internet Explorer, Windows Media Player, MDAC, MSXML, etc.

(Install Date)

Includes the date the patch was installed, if available.

Cancel Updates

Patch Management > Manage Updates > Cancel Updates

The **Cancel Updates** page clears *all manually scheduled* patch installations on selected machine IDs. Does not clear patch installations that have already started.

The **Cancel Updates** page can also *terminate* currently running patch installation processes. A **Terminate** button displays next to the machine name when a patch installation is being processed. Termination deletes existing patch installation procedures for the selected machine, and the installation process ends after the currently running procedure completes.

> **Note:** Remove patches from managed machines using **Rollback** *(page 26)*.
>
> **Note:** Use the **Initial Updates** *(page 13)* page to cancel a scheduled **Initial Update** or to cancel an **Initial Update** that is currently being processed.
>
> **Note:** Use the **Automatic Update** *(page 17)* page to cancel a scheduled **Automatic Update**.

Cancel

Click **Cancel** to clear all scheduled patch installations scheduled by either **Machine Update** or by **Patch**

Update on selected machine IDs. Does not clear patch installations that have already started.

View By

View patches sorted by `machine` or by `patch` first.

Show patch list

If **View By** `machine` is selected and **Show patch list** is checked, all *scheduled patch IDs* for each machine ID are listed. If **Show patch list** is blank, the *total number of scheduled patches* are listed for each machine ID.

Show machine list

If **View By** `patch` is selected and **Show machine list** is checked, all *scheduled patch IDs* for each machine ID are listed. If **Show machine list** is blank, the *total number of scheduled patches* are listed for each machine ID.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

- Agent is currently offline
- User Logged In and Agent is Active
- User Logged In and Agent is Inactive
- User Not Logged In and Agent is online
- User Not Logged In and Agent is Idle
- The agent has been suspended
- Agent has never checked in

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

KB Article

The knowledge base article describing the patch. Click the **KB Article** link to display a Details page about the patch. The Details page contains a link to display the knowledge base article.

Chapter 3

Patch Policy

In This Chapter

Create/Delete: Patch Policy

Patch Management > Patch Policy > Create/Delete

The **Create/Delete** page creates or deletes patch policies. Patch policies contain all active patches for the purpose of approving or denying patches. An active patch is defined as a patch that has been reported by a patch scan by at least one machine in the VSA. Any machine can be made a member of one or more patch policies.

For example, you can create a patch policy named `servers` and assign all your servers to be members of this patch policy and another patch policy named `workstations` and assign all your workstations to be members of this policy. This way, you can configure patch approvals differently for servers and workstations.

- The patches of machines that are not a member of any patch policy are treated as if they were *automatically approved*.
- When a new patch policy is created the default approval status is *pending approval* for all patch categories.
- The default approval status for each category of patches and for each product can be individually set.
- If a machine is a member of multiple patch policies and those policies have conflicting approval statuses, the most restrictive approval status is used.
- **Initial Update** *(page 13)* and **Automatic Update** *(page 17)* require patches be approved before these patches are installed.
- **Approval by Policy** *(page 31)* approves or denies patch by *policy*.
- **Approval by Patch** *(page 34)* approves or denies patches by *patch* and sets the approval status for that patch in all patch policies.
- **KB Override** *(page 36)* overrides the default approval status by *KB Article* for all patch policies and sets the approval status for patches associated with the KB Article in all patch policies.
- **Patch Update** *(page 23)* and **Machine Update** *(page 21)* can install denied patches.
- Non-`Master` role users can only see patch policies they have created or patch policies that have machine IDs the user is authorized to see based on their scope.

Create

Click **Create** to define a new patch policy, after entering a new machine patch policy name in the edit field.

Delete

Click **Delete** to delete selected patch policies.

Enter name for a new patch policy

Enter the name for a new patch policy.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Edit Icon

Click the edit icon to the left of a patch policy to rename it.

Policy Name

Lists all machine patch policies defined for the entire system.

Member Count

Lists the number of machines that are members of each patch policy.

Membership: Patch Policy

Patch Management > Patch Policy > Membership

The **Membership** page assigns machine IDs to one or more patch policies. Patch policies contain all active patches for the purpose of approving or denying patches. An active patch is defined as a patch that has been reported by a patch scan by at least one machine in the VSA. Any machine can be made a member of one or more patch policies.

For example, you can create a patch policy named `servers` and assign all your servers to be members of this patch policy and another patch policy named `workstations` and assign all your workstations to be members of this policy. This way, you can configure patch approvals differently for servers and workstations.

- The patches of machines that are not a member of any patch policy are treated as if they were *automatically approved*.
- When a new patch policy is created the default approval status is *pending approval* for all patch categories.
- The default approval status for each category of patches and for each product can be individually set.
- If a machine is a member of multiple patch policies and those policies have conflicting approval statuses, the most restrictive approval status is used.
- **Initial Update** *(page 13)* and **Automatic Update** *(page 17)* require patches be approved before these patches are installed.
- **Approval by Policy** *(page 31)* approves or denies patch by *policy*.
- **Approval by Patch** *(page 34)* approves or denies patches by *patch* and sets the approval status for that patch in all patch policies.
- **KB Override** *(page 36)* overrides the default approval status by *KB Article* for all patch policies and sets the approval status for patches associated with the KB Article in all patch policies.
- **Patch Update** *(page 23)* and **Machine Update** *(page 21)* can install denied patches.
- Non-`Master` role users can only see patch policies they have created or patch policies that have machine IDs the user is authorized to see based on their scope.

View Definitions

You can filter the display of machine IDs on any agent page using the following options in View Definitions.

- **Show/Hide members of patch policy**
- **Use Patch Policy**

Assign machines to a patch policy

Click one or more patch policy names to mark them for adding or removing from selected machine IDs.

Add

Click **Add** to add selected machine IDs to selected patch policies.

Remove

Click **Remove** to remove selected machine IDs from selected patch policies.

Always show all Patch Policies to All Users

If checked, always show all patch policies to all users. This allows all non-master role users to deploy patch policies, even if they did not create the patch policies and don't have machines yet that use them. If blank, only master role users can see all patch policies. If blank, non-master role users can only see patch policies assigned to machines within their scope or to unassigned patch policies they created. This option only displays for master role users.

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Policy Membership

Displays a comma separated list of patch policies that each machine ID is a member of.

Approval by Policy

Patch Management > Patch Policy > Approval by Policy

The **Approval by Policy** page approves or denies the installation of Microsoft patches on managed machines by *patch policy*. Patches pending approval are considered denied until they are approved. This gives you the chance to test and verify a patch in your environment before the patch automatically pushes out. See **Methods of Updating Patches** *(page ii)*, **Configuring Patch Management** *(page iii)*, **Patch Processing** *(page iv)*, **Superseded Patches** *(page iv)*, **Update Classification** *(page v)* and **Patch Failure** *(page v)* for a general description of patch management.

Setting Patch Approval Policies

Patch policies contain all active patches for the purpose of approving or denying patches. An active patch is defined as a patch that has been reported by a patch scan by at least one machine in the VSA. Any machine can be made a member of one or more patch policies.

For example, you can create a patch policy named `servers` and assign all your servers to be members of this patch policy and another patch policy named `workstations` and assign all your workstations to be members of this policy. This way, you can configure patch approvals differently for servers and workstations.

- The patches of machines that are not a member of any patch policy are treated as if they were *automatically approved*.
- When a new patch policy is created the default approval status is *pending approval* for all patch categories.

- The default approval status for each category of patches and for each product can be individually set.
- If a machine is a member of multiple patch policies and those policies have conflicting approval statuses, the most restrictive approval status is used.
- **Initial Update** *(page 13)* and **Automatic Update** *(page 17)* require patches be approved before these patches are installed.
- **Approval by Policy** *(page 31)* approves or denies patch by *policy*.
- **Approval by Patch** *(page 34)* approves or denies patches by *patch* and sets the approval status for that patch in all patch policies.
- **KB Override** *(page 36)* overrides the default approval status by *KB Article* for all patch policies and sets the approval status for patches associated with the KB Article in all patch policies.
- **Patch Update** *(page 23)* and **Machine Update** *(page 21)* can install denied patches.
- Non-`Master` role users can only see patch policies they have created or patch policies that have machine IDs the user is authorized to see based on their scope.

Superseded Patches

A patch may be superseded and not need to be installed. See **Superseded Patches** *(page iv)* for more information.

Policy

Select a patch policy by name from the drop-down list.

> **Note:** See Standard Solution Package > **Patch / Update Management** *(http://help.kaseya.com/webhelp/EN/SSP/9050000/index.asp#11169.htm)* > Patch Approval/Denial Policies for more information about standard "ZZ" patch policies.

Save As...

Click **Save As...** to save the currently selected patch policy to a new policy with identical settings. All patch approval/denial statuses are copied as are the default approval statuses for the policy. Machine membership is *not* copied to the new policy.

Copy Approval Statuses to Policy <Policy> / Copy Now

Select a policy to copy approval statuses *to*, from the currently selected policy. Then click **Copy Now**. This enables you to perform patch testing against a group of test machines using a test policy. Once testing has been completed and the patches have been approved or denied, use the copy feature to copy only the approved or denied statuses from the test policy to a production policy.

Policy View / Group By

Display patch groups by classification or product.

Patch Approval Policy Status

This table displays the approval status of patches by update classification or product group. **Approved**, **Denied**, **Pending Approval**, and **Totals** statistics are provided for each update classification or product group.

Select a **Default Approval Status** for any category for this patch policy. Newly identified patches for this patch policy are automatically set to this default value. Choices include:

- - Approved
- - Denied
- - Pending Approval

Note: If the same patch is assigned two different **Default Approval Status** settings—one by update classification *and* the other by product group—then the more restrictive of the two defaults has precedence: Denied over Pending Approval over Approved.

Click any link in this table to display a **Patch Approval Policy Details** page listing individual patches and their approval status. The list is filtered by the type of link clicked:

- **Classification** or **Product**
- **Approved**
- **Denied**
- **Pending Approval**
- **Totals**

In the **Patch Approval Policy Details** page you can:

- Approve or deny approval of patches individually.
- Click the **KB Article** link to display a Details page about the patch. The Details page contains a link to display the knowledge base article.

  Note: Microsoft may use a common knowledge base article for one or more patches, causing patches to appear to be listed more than once. Check the **Product** name or click the **KB Article** link to distinguish patches associated with a common knowledge base article.

- Click the **Security Bulletin** link to review the security bulletin, if available. Patches classified as security updates have a security bulletin ID (`MSyy-xxx`).
- The **Product** column helps identify the product category associated with a specific patch. If a patch is used across multiple operating system families (i.e., Windows XP, Windows Server 2003, Vista, etc.), the product category is `Common Windows Component`. Examples include Internet Explorer, Windows Media Player, MDAC, MSXML, etc.
- See **Update Classification** *(page v)* for an explanation of **Classification** and **Type**.
- Click the **Show Details** checkbox to display the expanded title, patch status notes and installation warnings, if any, of each patch.
- Click **Filter...** to restrict the amount of data displayed. You can specify a different advanced filter for each column of data displayed. See **Advanced Filtering** *(http://help.kaseya.com/webhelp/EN/VSA/9050000/index.asp#254.htm)*.
- Optionally add a note, up to 500 characters, using **Patch Status Notes**. The note is added when the **Approve** or **Deny** buttons are selected. If the text box is empty when the **Approval** or **Deny** buttons are selected, the note is removed for selected patches.

Override Default Approval Status with Denied for "Manual Install Only" updates in this policy

If checked, all existing and future `Manual Install Only` updates are set to denied for this policy.

Override Default Approval Status with Denied for "Windows Update Web Site" updates in this policy

If checked, all existing and future `Windows Update Web Site` updates are set to denied for this policy.

Override Default Approval Status with Denied for superseded updates in this policy

If checked, all existing and future superseded patches are set to denied for this policy.

Note: Checking an override checkbox has a *one-time effect* on *existing* patches for that category of patches. If you approve an *existing* patch belonging to an override category *after* checking its override checkbox, the patch will remain approved regardless of any override setting. Future patches will continue to default to denied.

Set New Patch Product Default Approval Status in this policy

Selects the initial *default approval status* for **new** Microsoft products identified during patch scans. These new products display when the **Policy View / Group By** drop-down list is set to `Product`.

Approval by Patch

Patch Management > Patch Policy > Approval by Patch

The **Approval by Patch** page approves or denies the installation of Microsoft patches on managed machines by *patch* for *all* patch policies. Changes affect patches installed by all users. This saves you the trouble of approving pending patches separately for each patch policy. See **Methods of Updating Patches** *(page ii)*, **Configuring Patch Management** *(page iii)*, **Patch Processing** *(page iv)*, **Superseded Patches** *(page iv)*, **Update Classification** *(page v)* and **Patch Failure** *(page v)* for a general description of patch management.

Setting Patch Approval Policies

Patch policies contain all active patches for the purpose of approving or denying patches. An active patch is defined as a patch that has been reported by a patch scan by at least one machine in the VSA. Any machine can be made a member of one or more patch policies.

For example, you can create a patch policy named `servers` and assign all your servers to be members of this patch policy and another patch policy named `workstations` and assign all your workstations to be members of this policy. This way, you can configure patch approvals differently for servers and workstations.

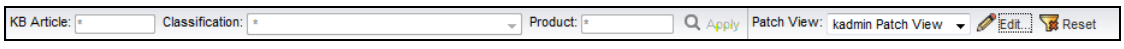
- The patches of machines that are not a member of any patch policy are treated as if they were *automatically approved*.
- When a new patch policy is created the default approval status is *pending approval* for all patch categories.
- The default approval status for each category of patches and for each product can be individually set.
- If a machine is a member of multiple patch policies and those policies have conflicting approval statuses, the most restrictive approval status is used.
- **Initial Update** *(page 13)* and **Automatic Update** *(page 17)* require patches be approved before these patches are installed.
- **Approval by Policy** *(page 31)* approves or denies patch by *policy*.
- **Approval by Patch** *(page 34)* approves or denies patches by *patch* and sets the approval status for that patch in all patch policies.
- **KB Override** *(page 36)* overrides the default approval status by *KB Article* for all patch policies and sets the approval status for patches associated with the KB Article in all patch policies.
- **Patch Update** *(page 23)* and **Machine Update** *(page 21)* can install denied patches.
- Non-`Master` role users can only see patch policies they have created or patch policies that have machine IDs the user is authorized to see based on their scope.

Superseded Patches

A patch may be superseded and not need to be installed. See **Superseded Patches** *(page iv)* for more information.

Patch Data Filter Bar

You can filter the data displayed by specifying values in each field of the **Patch Filter Data Bar** at the top of the page.



Enter or select values in the **KB Article**, **Classification** or **Products** fields. You can also click the **Edit...**

button to filter by additional fields and save the filtering selections you make as a view. Supports advanced filtering logic. Saved views can be shared using the **Make Public (others can view)** checkbox when editing the view.

Patch Status Notes

Optionally add a note, up to 500 characters, using **Patch Status Notes**. The note is added when the **Approve** or **Deny** buttons are selected. If the text box is empty when the **Approval** or **Deny** buttons are selected, the note is removed for selected patches.

Approve

Click **Approve** to approve selected patches for all patch policies.

Deny

Click **Deny** to deny selected patches for all patch policies.

Show Details

Check **Show Details** to display multiple rows of information for all patches. This includes the title of a patch, the number of patch policies that have been approved, denied, or are pending approval for a patch, patch status notes, and installation warnings, if any.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

KB Article

Click the **KB Article** link to display a Details page about the patch. The Details page contains a link to display the knowledge base article.

> **Note:** Microsoft may use a common knowledge base article for one or more patches, causing patches to appear to be listed more than once. Check the **Product** name or click the **KB Article** link to distinguish patches associated with a common knowledge base article.

Security Bulletin

Click the **Security Bulletin** link to review the security bulletin, if available. Patches classified as security updates have a security bulletin ID (`MSyy-xxx`).

Product

The **Product** column helps identify the product category associated with a specific patch. If a patch is used across multiple operating system families (i.e., Windows XP, Windows Server 2003, Vista, etc.), the product category is `Common Windows Component`. Examples include Internet Explorer, Windows Media Player, MDAC, MSXML, etc.

Classification / Type

See **Update Classification** *(page v)* for an explanation of **Classification** and **Type**.

Approval Status

The approval status for this patch in *all* policies. Displays `Mixed` if even 1 policy differs from all other policies. Clicking the **Approval Status** link displays a page displaying the approval status assigned to this patch by each policy.

Published

The date the patch was released.

Language

The language the patch applies to.

KB Override

Patch Management > Patch Policy > KB Override

The **KB Override** page sets overrides of the *default* approval status of patches set using **Approval by Policy** *(page 31)* by *KB Article* for *all* patch policies. It also sets the approval status for *existing* patches by KB Article for all patch policies. Changes affect patches in *all* patch policies installed by *all* users. **KB Override only applies if a Patch Policy is assigned to an endpoint**. See **Methods of Updating Patches** *(page ii)*, **Configuring Patch Management** *(page iii)*, **Patch Processing** *(page iv)*, **Superseded Patches** *(page iv)*, **Update Classification** *(page v)* and **Patch Failure** *(page v)* for a general description of patch management.

For example, KB890830, "The Microsoft Windows Malicious Software Removal Tool" is released monthly. If you decide to approve all patches associated with this KB Article using KB Override, then not only are existing patches approved but all *new* patches associated with this KB article are automatically approved each month the new patch is released.

Setting Patch Approval Policies

Patch policies contain all active patches for the purpose of approving or denying patches. An active patch is defined as a patch that has been reported by a patch scan by at least one machine in the VSA. Any machine can be made a member of one or more patch policies.

For example, you can create a patch policy named `servers` and assign all your servers to be members of this patch policy and another patch policy named `workstations` and assign all your workstations to be members of this policy. This way, you can configure patch approvals differently for servers and workstations.

- The patches of machines that are not a member of any patch policy are treated as if they were *automatically approved*.
- When a new patch policy is created the default approval status is *pending approval* for all patch categories.
- The default approval status for each category of patches and for each product can be individually set.
- If a machine is a member of multiple patch policies and those policies have conflicting approval statuses, the most restrictive approval status is used.
- **Initial Update** *(page 13)* and **Automatic Update** *(page 17)* require patches be approved before these patches are installed.
- **Approval by Policy** *(page 31)* approves or denies patch by *policy*.
- **Approval by Patch** *(page 34)* approves or denies patches by *patch* and sets the approval status for that patch in all patch policies.
- **KB Override** *(page 36)* overrides the default approval status by *KB Article* for all patch policies and sets the approval status for patches associated with the KB Article in all patch policies.
- **Patch Update** *(page 23)* and **Machine Update** *(page 21)* can install denied patches.
- Non-`Master` role users can only see patch policies they have created or patch policies that have machine IDs the user is authorized to see based on their scope.

KB Article

Enter the KB Article number to approve or deny. Do not include the KB prefix.

> **Note:** See **Approval by Policy** *(page 31)* or **Approval by Patch** *(page 34)* for a listing of all available KB Articles.

Override Notes

Enter a note to remind VSA users why the override was set.

Approve

Click **Approve** to approve patches associated with this KB Article. Multiple patches can be associated with a KB Article.

Deny

Click **Deny** to deny patches associated with this KB Article. Multiple patches can be associated with a KB Article.

KB Article

Click the **KB Article** link to display the KB article.

Override Status

`Approved` or `Denied`. Applies to all patches associated with this KB Article.

Admin

The user who approved or denied patches associated with this KB Article.

Changed

The date and time the user approved or denied patched associated with this KB Article.

Notes

Reminds VSA users why the override was set.

Chapter 4

Configure

In This Chapter

Windows Auto Update

Patch > Configure > Windows Auto Update

Note: A known issue with Windows 10 concerns Patch Management > Windows Automatic Update. Disabling the Windows Automatic Update option in Windows 10 Home edition is not supported as Microsoft does not allow users to disable automatic updates in this version of their operating system. For other editions of Windows 10--Education, Enterprise, and Pro--disabling Windows Automatic Update using the VSA > Patch Management > Windows Auto Update page does not "appear" to be in effect from the machine user's point of view. Moreover, the machine user can override the disabled setting by clicking 'Check for updates', which results in the updates being downloaded and installed, instead of being prevented from doing so.

The **Windows Auto Update** page determines whether **Windows Automatic Updates** on managed machines is disabled, left for the user to control, or configured.

Window Automatic Updates

Windows Automatic Updates is a Microsoft tool that automatically delivers updates to a computer. Windows Automatic Updates is supported in the following operating systems: Windows 2003, Windows XP, Windows 2000 SP3 or later, and all operating systems released after these. Patch Management > **Windows Auto Update** *(page 39)* can enable or disable this feature on managed machines. While Windows Millennium Edition (Me) has an Automatic Updates capability, it cannot be managed as the above operating systems can.

Beginning with Windows 10 1607 (Anniversary Update), Microsoft no longer permits Windows Automatic Update to be disabled, which means that, in some cases, the Software Management and Patch Management modules in VSA cannot prevent updates from being deployed.

We understand how important this functionality is for your business, and we're working diligently with Microsoft to make a case for having it restored. Absent Microsoft's cooperation, we are investigating ways to re-deliver that control to you.

VSA's Software Management module enables you to disable Automatic Update in all operating systems that support it, including most versions of Windows and all versions of macOS. Further, it enables you to proactively deploy updates more aggressively than Windows Update and to deploy and patch 3rd-party software.

We will keep you updated as new developments emerge.

> Statement from Microsoft:
>
> Automatic Update was set up on all the latest Windows build and version to ensure that your computers are up to date to keep it running efficiently. If you prefer to disable the automatic update, we recommend that you submit your suggestion to our Feedback Hub. Your feedback helps us continually improve your experience with our product. To submit your suggestion, follow these steps:
>
> Type Feedback Hub in Cortana search.
>
> Click + Add new feedback.
>
> Select a Problem and share any details you think are relevant.
>
> Choose an appropriate Category and Subcategory.
>
> Click Submit.

If you have other questions, feel free to reach out to us.

Windows Automatic Update Cannot Use Template Accounts

Windows Automatic Updates is one feature that cannot be preconfigured in a machine ID template. This is because Windows Automatic Updates is only supported on Windows 2000 SP3/SP4, Windows XP, Windows Server 2003, and later operating systems. Since a machine ID template cannot specify an operating system, a setting for this feature cannot be stored in the machine ID template. Also, a machine's current settings must be known before they can be overridden. The current settings are obtained when a **Scan Machine** *(page 9)* is performed.

Note: A checkbox does not display for any machine that either has an operating system **that does not support Windows Automatic Updates** or for which an initial **Scan Machine** has not been completed.

View Definitions

You can filter the display of machine IDs on any agent page using the **Machines with Patch Automatic Update configuration** option in View Definitions.

Apply

Click **Apply** to apply parameters to selected machine IDs.

Disable

Select **Disable** to disable Windows Automatic Updates on selected machine IDs and let **Patch Management** control patching of the managed machine. Overrides the existing user settings and disables the controls in Windows Automatic Updates so the user *cannot* change any of the settings. Users can still patch their systems manually.

User Control

Let machine users enable or disable Windows Automatic Updates for selected machine IDs.

Configure

Forces the configuration of Windows Automatic Updates on selected machine IDs to the following settings. Overrides the existing user settings and disables the controls in Windows Automatic Updates so the user *cannot* change any of the settings. Users can still patch their systems manually.

- **Notify user for download and installation** - Notifies the user when new patches are available but does not download or install them.
- **Automatically download and notify user for installation** - Automatically downloads updates for the user but lets the user choose when to install them.

- **Automatically download and schedule installation** - Automatically downloads updates and installs the updates at the scheduled time.
- **Automatic updates required, but user can configure** - Requires automatic update but lets the user to configure.

Schedule every day / <day of week> at <time of day>

Applies only if **Automatically download and schedule installation** is selected. Perform this task every day or once a week at the specified time of day.

Force auto-reboot if user is logged on

Optionally check the box next to **Force auto-reboot if user is logged on**. By default, **Windows Auto Update** does *not* force a reboot. **Reboot Action** *(page 42)* settings do not apply to **Windows Auto Update**.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

- Agent is currently offline
- User Logged In and Agent is Active
- User Logged In and Agent is Inactive
- User Not Logged In and Agent is online
- User Not Logged In and Agent is Idle
- The agent has been suspended
- Agent has never checked in

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Machine Updated

Displays the status of configuring Windows Automatic Updates on selected machine IDs using this page.

- Pending - Windows Automatic Updates is being configured on the selected machine ID.
- Timestamp - The date and time Windows Automatic Updates was configured on the selected machine ID.

Windows Automatic Update Configuration

The Windows Automatic Update configuration assigned to each selected machine ID.

Note: If the **Windows Automatic Update Configuration** column displays `Automatic Update not initialized on machine`, the user must select the Windows Automatic Updates icon in the system tray to run the Windows Automatic Updates Setup wizard to setup Windows Automatic Updates. This is sometimes required on older operating systems.

Reboot Action

Patch Management > Configure > Reboot Action

The **Reboot Action** page defines how reboots are performed after a patch install. Patch installs do not take effect until after a machine is rebooted. The **Reboot Action** policy applies to **Machine Update** *(page 21)*, **Patch Update** *(page 23)* and **Automatic Update** *(page 17)*. It does *not* apply to **Initial Update** *(page 13)*. See **Methods of Updating Patches** *(page ii)*, **Configuring Patch Management** *(page iii)*, **Patch Processing** *(page iv)*, **Superseded Patches** *(page iv)*, **Update Classification** *(page v)* and **Patch Failure** *(page v)* for a general description of patch management.

Warning: It is strongly recommended that the **Reboot Action** for agents installed on the Kaseya Server and the database server used by the Kaseya Server be set to `Do not reboot after update`. Automatic rebooting of the Kaseya Server or database server can have adverse effects on other Kaseya Server processes!

Note: The Reboot time will always be based on KServer time, even if the patch schedule is based on agent time.

Patch Process

The patch installation procedure runs at the scheduled time and performs the following steps:

- Downloads, or copies from a file share, all the patch files to a local drive, typically the same drive the agent is installed on.
- Executes each patch file, one at a time.
- Performs a reboot of the machine, as specified by this page.

Note: If you schedule multiple patches for installation on the same machine, all the patches are installed at the same time. After all the patches have been installed the machine reboots once. This technique saves time and reboots.

Note: Service packs are always installed separately. If you are installing a service pack with other patches you will see a reboot after the service pack install and then another single reboot after all the other patches are installed.

View Definitions

You can filter the display of machine IDs on any agent page using the following options in View Definitions.

- **Show machines that have/have not rebooted in the last N periods**
- **Machines with Reboot Pending for patch installations**

Apply

Click **Apply** to apply parameters to selected machine IDs.

Reboot immediately after update.

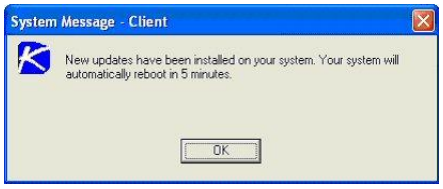
Reboots the computer immediately after the install completes.

Reboot <day of week> at <time of day> after install.

After the patch install completes, the computer is rebooted at the selected day of week and time of day. Use these settings to install patches during the day when users are logged in, then force a reboot in the middle of the night. Selecting **every day** reboots the machine at the next specified time of day following the patch installation.

Warn user that machine will reboot in <N> minutes (without asking permission).

When the patch install completes, the message below pops open warning the user and giving them a specified number of minutes to finish up what they are doing and save their work. If no one is currently logged in, the system reboots immediately.

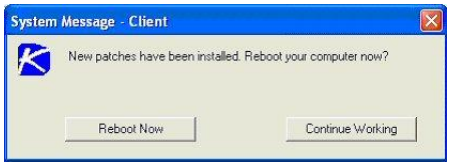


Skip reboot if user logged in.

If the user is logged in, the reboot is skipped after the patch install completes. Use this setting to avoid interrupting your users. This is the default setting.

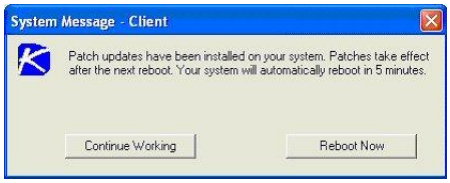
If user logged in ask to reboot every <N> minutes until the reboot occurs. Reboot if user not logged in.

This setting displays the message below, asking the user if it is OK to reboot now. If no one is at the computer or they answer no, the same message appears every N minutes repeatedly, until the system has been rebooted. If no one is currently logged in, the system reboots immediately.



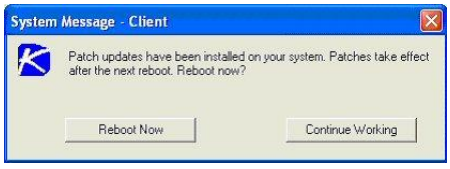
If user logged in ask permission. Reboot if no response in <N> minutes. Reboot if user not logged in.

This setting displays the message below, asking the user if it is OK to reboot now. If no one is at the computer, it reboots automatically after N minutes **without saving** any open documents. If no one is currently logged in, the system reboots immediately.



If user logged in ask permission. Do nothing if no response in <N> minutes. Reboot if user not logged in.

This setting displays the message below, asking the user if it is OK to reboot now. If no one is at the computer, the reboot is skipped. If no one is logged in, reboot immediately.



Do not reboot after update

Does not reboot. Typically used if the machine is a server and you need to control the reboot. You can be notified via email when a new patch has been installed by checking **When reboot required, send email to** and filling in an email address. You can also format the email message by clicking the **Format Email** button. If no email address is entered, the **Reboot Now** button will be displayed on Patch > Manage Machines > **Patch Status** *(page 11)* page when machine is ready to reboot. This option only displays for

master role users.

The following types of patch reboot emails can formatted:

- Patch Reboot

> **Note:** Changing the email alarm format changes the format for all **Patch Reboot** emails.

The following variables can be included in your formatted email alerts and in procedures.

Within an Email	Description
<at>	alert time
<db-view.column>	Include a view.column from the database. For example, to include the computer name of the machine generating the alert in an email, use <db-vMachine.ComputerName>
<gr>	group ID
<id>	machine ID

Run select agent procedure before machine is rebooted

If checked, the selected agent procedure is run just *before* the machine is rebooted.

Run select agent procedure after machine is rebooted

If checked, the selected agent procedure is run just *after* the machine is rebooted.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

- Agent is currently offline
- User Logged In and Agent is Active
- User Logged In and Agent is Inactive
- User Not Logged In and Agent is online
- User Not Logged In and Agent is Idle
- The agent has been suspended
- Agent has never checked in

Edit icon

Click the edit icon next to a machine ID to automatically set header parameters to those matching the selected machine ID.

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Reboot Action

The type of reboot action assigned to each machine ID.

File Source

Patch Management > Configure > File Source

The **File Source** page defines where each machine gets patch executable files from, prior to installation, and where these patch executables are copied to the local machine. File source locations include:

- The internet
- The Kaseya Server
- A file share

Related information:

- Selecting the **File share located on** option below affects where **Backup** and Endpoint Security is installed from.
- Patch download links with a `cab` extension are always downloaded directly from the internet regardless of the **File Source** setting.
- You can filter the display of machine IDs on any agent page using the **Machines with Patch File Source configuration** option in View Definitions.
- By default **Patch Management** uses the **Use Fast Transfer option** on the System > **Default Settings** *(http://help.kaseya.com/webhelp/EN/VSA/9050000/index.asp#9332.htm)* page.

Actions

- **Apply** - Applies the selected patch source option to selected machine IDs.
- **Clear Cache** - Clears all downloaded patches stored on the Kaseya Server.

Options

- **Copy packages to working directory on local drive with most free space** - Patches are downloaded, or copied from a file share, to the managed machine's hard disk. Several patches, especially service packs, may require significant additional local disk space to completely install. Check this box to download patches to the working directory, but use the drive on the managed machine with the most free disk space. Uncheck this box to always use the drive specified in **Working Directory** for the machine ID.
- **Delete package after install (from working directory)** - The install package is typically deleted after the install to free up disk space. Uncheck this box to leave the package behind for debugging purposes. If the install fails and you need to verify the **Command Line** *(page 53)* switches, do not delete the package so you have something to test with. The package is stored in the **Working Directory** on the drive specified in the previous option.
- **Download from Internet if machine is unable to connect to the file server / LAN Cache**
- **Download from Internet** - Each managed machine downloads the patch executable file directly from the internet at the URL specified in **Patch Location** *(page 55)*.
- **Pulled from system server** - First the Kaseya Server checks to see if it already has a copy of the patch file. If not, the new patch executable is downloaded automatically and stored on the Kaseya Server, then used for all subsequent distributions to managed machines. When a patch needs to be installed on a managed machine, this patch file is pushed to that machine from the Kaseya Server.

  > **Note:** The location for patch files stored on the Kaseya Server is `<Kaseya installation directory>\WebPages\ManagedFiles\VSAPatchFiles\`

- **Pulled from file server using UNC path** - This method is recommended if you support many machines on the same LAN. Patch files are downloaded to a local directory on a selected machine ID. The local directory on the machine ID is configured to be shared with other machine IDs on the same LAN. All other machine IDs on the same LAN use a UNC path to the shared folder located on the first machine ID.

1. Identify an *agent machine* that will act as the *file server machine* for other machines on the same LAN.
2. Create a share on the *file server machine* and specify the credential that will allow other machines on the same LAN to access it. This is done manually, outside of the **File Source** page.
3. Set an **agent credential** *(http://help.kaseya.com/webhelp/EN/VSA/9050000/index.asp#3492.htm)* for the *file server machine* with the shared directory using Agent > Manage Agents. All other machines on the same LAN will use the credential set for the *file server machine* to access the shared folder.
4. Enter a UNC path to the share in the **Pulled from file server using UNC path** field. For example, `\\computername\sharedname\dir\`.

In the next three steps you tell the VSA which machine ID is acting as the *file server machine* and where the shared directory is located using local file format notation.

5. Use the **Machine Group Filter** drop-down list to select a group ID.
6. Select a machine ID from the **File share located on** drop-down list.
7. Enter a shared local directory in the **in local directory** field.

> **Note:** The value in the **in local directory** field must be in full path format, such as `c:\shareddir\dir`.

When a file is downloaded, the Kaseya Server first checks to see if the patch file is already in the file share. If not, the *file server machine* automatically loads the patch file either directly from the internet or gets it from the Kaseya Server.

8. **File Server automatically gets patch files from** - Select one of the following options:
   - ✓ **the Internet** - Use this setting when the *file server machine* has full internet access.
   - ✓ **the system server** - Use this setting when the *file server machine* is blocked from getting internet access.
9. **Download from Internet if machine is unable to connect to the file server** - Optionally check this box to download from the internet. This is especially useful for laptops that are disconnected from the company network but have internet access.

- **Pulled from LAN Cache** - Uses the Agent > LAN Cache and Agent > Assign LAN Cache pages to manage file sourcing for patch executable files.

Table Columns

- **Select All/Unselect All** - Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.
- **(Check-in Status)** - These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.
  - Online but waiting for first audit to complete
  - Agent online
  - Agent online and user currently logged on.
  - Agent online and user currently logged on, but user not active for 10 minutes
  - Agent is currently offline
  - Agent has never checked in
  - Agent is online but remote control has been disabled
  - The agent has been suspended
  - An agent icon adorned with a red clock badge is a temporary agent.
- **(Edit Icon)** - Click the edit icon next to a machine ID to automatically set header parameters to those matching the selected machine ID.
- **Machine.Group ID** - A unique machine ID / group ID / organization ID name for a machine in the VSA.

- **Patch Source** - Lists the patch source selected for each machine ID. A **Clear Cache** button displays in this column if the **Pulled from file server using UNC path** option is selected for a machine ID. Clicking this **Clear Cache** button clears patches from the specified file server UNC path. The **Clear Cache** button is *not* machine specific. All patches stored on that file server for the specified path will be deleted.

Patch Alert

Patch Management > Configure > Patch Alert
Monitor > Agent Monitoring > Alerts

- Select `Patch Alert` from the Select Alert Function drop-down list.

The **Alerts - Patch Alert** page alerts for patch management events on managed machines.

- A new patch is available for the selected machine ID.
- A patch installation failed on the selected machine ID.
- The agent credential is invalid or missing for the selected machine ID.
- Windows Auto Update changed.

To Create a Patch Alert

1. Check any of these checkboxes to perform their corresponding actions when an alert condition is encountered:
   - Create **A**larm
   - Create **T**icket
   - Run **S**cript
   - **E**mail Recipients
2. Set additional email parameters.
3. Set additional patch alert specific parameters.
4. Check the machine IDs to apply the alert to.
5. Click the **Apply** button.

To Cancel a Patch Alert

1. Select the machine ID checkbox.
2. Click the **Clear** button.
   The alert information listed next to the machine ID is removed.

Passing Alert Information to Emails and Procedures

The following types of patch alert emails can be sent and formatted:

- **1 - New Patch Available**
- **2 - Patch Install Failed**
- **3 - Patch Approval Policies Updated**
- **4 - Agent Credential Invalid**
- **5 - Windows Auto Update Configuration Changed**

Note: Changing the email alarm format changes the format for all **Patch Alert** emails.

The following variables can be included in your formatted email alerts and are passed to agent procedures assigned to the alert. A ● in a numbered column indicates a variable can be used with the alert type corresponding to that number.

Within an Email	Within a Procedure	Description	1	2	3	4	5
<at>	#at#	alert time	●	●	●	●	●
<au>	#au#	auto update change					●
<bl>	#bl#	new bulletin list			●		
<db-view.column>	not available	Include a view.column from the database. For example, to include the computer name of the machine generating the alert in an email, use <db-vMachine.ComputerName>	●	●	●	●	●
<fi>	#fi#	failed bulletin ID		●			
<gr>	#gr#	group ID	●	●		●	●
<ic>	#ic#	invalid credential type				●	
<id>	#id#	machine ID	●	●		●	●
<pl>	#pl#	new patch list	●				
	#subject#	subject text of the email message, if an email was sent in response to an alert	●	●	●	●	●
	#body#	body text of the email message, if an email was sent in response to an alert	●	●	●	●	●

Create Alarm

If checked and an alert condition is encountered, an alarm is created. Alarms are displayed in Monitor > Dashboard List, Monitor > Alarm Summary and Info Center > Reporting > Reports > Logs > Alarm Log.

Create Ticket

If checked and an alert condition is encountered, a ticket is created.

Run Script

If checked and an alert condition is encountered, an agent procedure is run. You must click the **select agent procedure** link to choose an agent procedure to run. You can optionally direct the agent procedure to run on a specified range of machine IDs by clicking **this machine ID** link. These specified machine IDs do not have to match the machine ID that encountered the alert condition.

Email Recipients

If checked and an alert condition is encountered, an email is sent to the specified email addresses.

- The email address of the currently logged on user displays in the **Email Recipients** field. It defaults from System > Preferences.
- Click **Format Email** to display the **Format Alert Email** popup window. This window enables you to format the display of emails generated by the system when an alert condition is encountered. This option only displays for master role users.
- If the **Add to current list** radio option is selected, when **Apply** is clicked alert settings are applied and the specified email addresses are added without removing previously assigned email addresses.
- If the **Replace list** radio option is selected, when **Apply** is clicked alert settings are applied and the specified email addresses replace the existing email addresses assigned.
- If **Remove** is clicked, all email addresses are removed **without modifying any alert parameters**.

- Email is sent directly from the Kaseya Server to the email address specified in the alert. Set the **From Address** using System > Outbound Email.

Apply

Click **Apply** to apply parameters to selected machine IDs. Confirm the information has been applied correctly in the machine ID list.

Clear

Click **Clear** to remove all parameter settings from selected machine IDs.

Patch Alert Parameters

The system can trigger an alert for the following alert conditions for a selected machine ID:

- **New patch is available**
- **Patch install fails**
- **Agent credential is invalid or missing**

> **Note:** An agent **credential** *(http://help.kaseya.com/webhelp/EN/VSA/9050000/index.asp#3492.htm)* is not required to install patches **unless** the machine's **File Source** *(page 45)* is configured as `Pulled from file server using UNC path`. If an agent credential is assigned, it will be validated as a local machine credential without regard to the **File Source** configuration. If this validation fails, the alert will be raised. If the machine's **File Source** is configured as `Pulled from file server using UNC path`, a credential is required. If it is missing, the alert will be raised. If it is not missing, it will be validated as a local machine credential and as a network credential. If either of these validations fails, the alert will be raised.

- **Windows Auto Update changed**

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

- Agent is currently offline
- User Logged In and Agent is Active
- User Logged In and Agent is Inactive
- User Not Logged In and Agent is online
- User Not Logged In and Agent is Idle
- The agent has been suspended
- Agent has never checked in

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Approval Policy Updated

Displays as the first row of data. This is a system alert and not associated with any machines. An alert is generated when a new patch is added to all patch policies. An NN-- in the **ATSE** column indicates you cannot set an alert or a ticket for this row. You can specify an email recipient. You can also run an agent procedure on a specified machine. See **Approval by Policy** *(page 31)*.

ATSE

The ATSE response code assigned to machine IDs:

- A = Create **A**larm
- T = Create **T**icket
- S = Run Procedure
- E = **E**mail Recipients

Email Address

A comma separated list of email addresses where notifications are sent.

New Patch

If checked, an alarm is triggered when a new patch is available for this machine ID.

Install Failed

If checked, an alarm is triggered when a patch installation has failed for this machine ID.

Invalid Credential

If checked, an alarm is triggered when the credential is invalid for this machine ID.

Win AU Changed

If checked, an alarm is triggered if the group policy for **Windows Automatic Update** on the managed machine is changed from the setting specified by Patch Management > **Windows Auto Update** *(page 39)*. A log entry in the machine's **Configuration Changes** log is made regardless of this alert setting.

Office Source

Patch Management > Configure > Office Source

The **Office Source** page sets *alternate* source locations for installing Office and Office component applications. The source location can be changed from the default CD-ROM, which is the typical installation source, to a network share or a directory on a local hard drive. By changing the installation source to a network share or a local directory, those patches that require the Office installation source for installation can get access **without prompting the user for the installation media**. This alternate source location can be configured to be read-only. It must contain an exact copy of the installation media contents including all hidden files and/or directories.

An Office source for a managed machine is only available after you have run **Scan Machine** *(page 9)* at least once for the managed machine. Machine IDs are displayed on this page only if they:

- Currently match the Machine ID / Group ID filter.
- Have Office or Office component applications installed for Office 2000, XP, or 2003.

> **Note:** Office 2007 is not displayed on this page. Office 2007 installs a full set of source installation files on a machine, so an alternate source location is not required.

Multiple Entries

Multiple entries may be displayed for a machine because the machine contains one or more Office component applications, such as FrontPage or Project, that were installed separately from their own installation source and were not part of the Office installation.

Credential Required

Managed machines must have an **agent credential** *(http://help.kaseya.com/webhelp/EN/VSA/9050000/index.asp#3492.htm)* to use the Office Source page. The agent

must have a credential to use the alternate Office source location.

Validation

The specified location is validated to be sure that the location is accessible from the machine and that the installation source in the specified location contains the correct edition and version of Office or the Office component application. Only after the validation succeeds is the machine's registry modified to use the specified location.

Installing Office Products

Some patches—particularly Office service packs—still display progress dialogs even though the silent installation switch (`/Q`) is included using Patch Management > **Command Line** *(page 53)*. These progress dialogs do not require any user intervention.

Some patches and service packs display a modal dialog indicating the update has completed, again even though the silent installation switch (`/Q`) is used. This requires the user to click on the OK button to dismiss the dialog. Until this happens, the patch installation procedure appears to be hung and will not complete until this dialog is dismissed!

Some Office service packs fail for no apparent reason. Checking the machine's application event log reveals that another Office component service pack failed. This has been observed with Office 2003 service pack 2 requiring the availablility of FrontPage 2003 service pack 2. When the Office source location for the FrontPage 2003 is configured, the Office 2003 service pack 2 finally successfully installs.

Filter on Office Product

Because each managed machine may be listed multiple times—once for each Office product or Office component application installed—you can filter the Office products/components displayed. This ensures selecting the same product code for multiple machines when setting the installation source location.

Apply

Click **Apply** to apply the Office source location specified in **Location of Office installation source** to selected machine IDs.

Location of Office installation source

Add the network share as a UNC path (i.e., `\\machinename\sharename`) or a local directory as a fully qualified path (i.e., `C:\OfficeCD\Office2003Pro`) in the installation source text box. When specifying a UNC path to a share accessed by an agent machine—for example `\\machinename\share`—ensure the share's permissions allow read/write access using the **agent credential** *(http://help.kaseya.com/webhelp/EN/VSA/9050000/index.asp#3492.htm)* specified for that agent machine in Agent > Manage Agents.

Reset

Click **Reset** to restore selected machine IDs back to their original installation source, typically the CD-ROM.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

- Agent is currently offline
- User Logged In and Agent is Active

- User Logged In and Agent is Inactive
- User Not Logged In and Agent is online
- User Not Logged In and Agent is Idle
- The agent has been suspended
- Agent has never checked in

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Status

Displays one of the following:

- Missing Credential
- Update Procedure Failed
- Validation Procedure Failed
- Original Source
- Pending Validation
- Updating Machine
- Incorrect Edition
- Processing Error
- Restoring Original
- Office Source Updated

Office Product

Displays the name of the Office product.

Office Source

Displays the current installation source location for this Office product on this machine ID.

Product Code

Displays the Office product code.

Chapter 5

Patch Parameters

In This Chapter

Command Line

Patch Management > Patch Parameters > Command Line

- This page only displays for master role users.
- Changes to the switches effect all users.

The **Command Line** page defines the command line switches used to silently install a specified patch. Occasionally a patch is released that does not use normal switch settings or the patch database has not been updated with the new switches. If you find a patch does not successfully install with its assigned switch settings, you can change them with this page. Locate patch switches by clicking the **KB Article** link and reading through the knowledge base article.

Suppress Automatic Reboot

Usually you want to load a patch without requiring any user interaction at all. The system supports batch installs of multiple patches at the same time and reboots once at the end of all patch installations. Therefore, use switch settings to suppress automatic reboot wherever possible.

Switch Settings

Typical patch file switch settings for **silent, unattended installs without reboot**:

- `/quiet /norestart` - This is the standard setting for most patches in recent years.
- `/u /q /z` - Typical switch settings used to silently install older patches that do not use the Windows Installer technology.
- `/m /q /z` - Typical switch settings to silently install older patches released for Windows NT4.
- `/q:a /r:n` - Internet Explorer and other application switch settings to install in quiet user mode (`/q:a`) and not automatically reset (`/r:n`) when the install completes.
- Other switch settings found with Microsoft patch installations include:
  - `/?` - Display the list of installation switches.
  - `/u` - Use Unattended mode.
  - `/m` - Unattended mode in older patches.
  - `/f` - Force other programs to quit when the computer shuts down.
  - `/n` - Do not back up files for removal.
  - `/o` - Overwrite OEM files without prompting.
  - `/z` - Do not restart when the installation is complete.
  - `/q` - Use quiet mode (no user interaction).
  - `/l` - List the installed hotfixes.
  - `/x` - Extract files without running Setup.

Microsoft Office command line switches

The only switch permitted for use with Microsoft Office 2000 and Office XP related patches is `/Q`. If `/Q` is not specified, Microsoft Office 2000 and Microsoft Office XP switches will be automatically reset to `/INSTALL-AS-USER`. Microsoft Office 2003 patches may also include the `/MSOCACHE` switch used to attempt a silent install if the MSOCache exists on the machine. These settings are enforced by the application.

> **Note:** The `/MSOCACHE` switch only applies to Office 2003. When the patch database is updated, this switch is automatically added to all Office 2003 patches where a user has never modified a particular patch's command line switches. It is not automatically added to Office 2003 service packs. When this switch is used, the system determines if the MSOCache exists on the target machine. If the MSOCache does exist and this switch is used, the system automatically uses the run silently switch (`/Q`) thereby relying on the MSOCache rather than requiring the actual installation media. If the MSOCache does not exist on the target machine, the existing switch is used. If a patch installation fails that uses the `/MSOCACHE` switch, it typically means that the MSOCache could not be used by the patch. In this case, you must clear out all command line switches for this patch and set the `/INSTALL-AS-USER` switch. Re-running the patch installation should now succeed. Unfortunately, this requires user intervention and also probably requires the Office 2003 installation media.

Server-side command line switches

Special server-side command line switches can be combined with patch specific switches:

- `/INSTALL-AS-USER` - Tells the system to only install this patch as a user. Some rare patches do not install successfully unless someone is logged onto the machine. Add this switch if you find a patch is failing to install if no one is logged in.

  > **Warning:** This setting conflicts with the **Skip reboot if user logged in** setting found in **Reboot Action** *(page 42)*. `/INSTALL-AS-USER` requires that a user be logged in to install.

- `/DELAY-AFTER=xxx` - After the install wait `xxx` seconds before performing the reboot step. The reboot step starts after the install package completes. Some rare installers spawn additional programs that must also complete before rebooting. Add this switch to give other processes time to complete after the main installer is done.

Patch Data Filter Bar

You can filter the data displayed by specifying values in each field of the **Patch Filter Data Bar** at the top of the page.

Enter or select values in the **KB Article**, **Classification** or **Products** fields. You can also click the **Edit...** button to filter by additional fields and save the filtering selections you make as a view. Supports advanced filtering logic. Saved views can be shared using the **Make Public (others can view)** checkbox when editing the view.

Filter patches by

Based on the patch category selected, this page displays all patches and service packs for all machines, both missing and installed, that match the current Machine ID/Group ID filter.

New Switches

Enter the command line switches you want to apply to selected patches.

Apply

Click **Apply** to apply the specified command line switches to selected patches.

Reset

Click **Reset** to reset the command lines of selected patches back to their default settings.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

KB Article

The knowledge base article describing the patch. Click the **KB Article** link to display a Details page about the patch. The Details page contains a link to display the knowledge base article.

Patch Name

The patch install filename.

Security Bulletin

Click the **Security Bulletin** link to review the security bulletin, if available. Patches classified as security updates have a security bulletin ID (`MSyy-xxx`).

Product

The **Product** column helps identify the product category associated with a specific patch. If a patch is used across multiple operating system families (i.e., Windows XP, Windows Server 2003, Vista, etc.), the product category is `Common Windows Component`. Examples include Internet Explorer, Windows Media Player, MDAC, MSXML, etc.

Office?

If an Office product, the version displays.

Switches

The command line switches used to install this patch.

Patch Location

Patch Management > Patch Parameters > Patch Location

- This page only displays for master role users.
- Changes effect patches installed by all users.

The **Patch Location** page defines the URL from which each patch is downloaded. Only patches *missing* from machine IDs that currently match the Machine ID / Group ID filter are displayed here. You should consult this page if, when attempting to install a patch, you are notified of a `Path Missing`.

The Kaseya Server maintains a list of each patch and the URL it should be downloaded from. In most cases the download URLs provided for patches are correct. `Path Missing` errors may occur for the following reasons:

- Each language may require a separate URL to download from.
- The URL may change for one or more patches.
- The Kaseya Server's record for the URL may be entered incorrectly or be corrupted.

In such cases, users can change the download path associated with a patch. Manually entered URLs are shown in dark red.

To find the URL to a missing path

1. Click the **KB Article** listed for the missing path.
2. Read through the knowledge base article and locate the download URL for the patch.

> **Note:** There may be several products referenced by the same **KB Article**. For instance, each Windows operating system is a different product. Also, patches can be different for specific service packs of the operating system.

3. Click on the download link for your patch. If a *different patch is available for each language*, you will be prompted to select a language.
4. Select the appropriate language for the download, if applicable.
5. Click the **Download** link or button and download the patch file.
6. On your web browser, click the **History** icon to view your URL history.
7. Locate the file you just downloaded from your history list. Typically, the file will be in the `download.microsoft.com` domain.
8. Right- click the filename you just downloaded and select **Copy** from the menu. This copies the entire URL into your clipboard.
9. Return to the **Patch Location** page and:
    a. Paste the URL into the **New Location** edit box.
    b. Select the radio button to the left of the **KB Article** for which you are entering a new patch location.
    c. Click the **Apply** button.

Patch Data Filter Bar

You can filter the data displayed by specifying values in each field of the **Patch Filter Data Bar** at the top of the page.

Enter or select values in the **KB Article**, **Classification** or **Products** fields. You can also click the **Edit...** button to filter by additional fields and save the filtering selections you make as a view. Supports advanced filtering logic. Saved views can be shared using the **Make Public (others can view)** checkbox when editing the view.

New Location

Enter a new URL.

Apply

Click **Apply** to apply the URL listed in the **New Location** field to the selected patch.

Remove

Click **Remove** to delete the download URL associated with a patch ID.

> **Warning:** Removing a path disables patching managed machines using this patch until the correct path is entered.

KB Article

The knowledge base article describing the patch. Click the **KB Article** link to display a Details page about the patch. The Details page contains a link to display the knowledge base article.

Security Bulletin

Click the **Security Bulletin** link to review the security bulletin, if available. Patches classified as security updates have a security bulletin ID (`MSyy-xxx`).

Product

The **Product** column helps identify the product category associated with a specific patch. If a patch is used across multiple operating system families (i.e., Windows XP, Windows Server 2003, Vista, etc.),

the product category is `Common Windows Component`. Examples include Internet Explorer, Windows Media Player, MDAC, MSXML, etc.

Language

The language associated with the patch location.

Index