

Kaseya User State Management

User Guide

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About Kaseya

Kaseya is a global provider of IT automation software for IT Solution Providers and Public and Private Sector IT organizations. Kaseya's IT Automation Framework allows IT Professionals to proactively monitor, manage and maintain distributed IT infrastructure remotely, easily and efficiently with one integrated Web based platform. Kaseya's technology is licensed on over three million machines worldwide.

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Chapter 1

User State

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User State Tab

The Kaseya User State Management (KUSM) add-on module provides backup, restore and migration of local user accounts, user settings, application settings, and system settings. This includes group-based policies for the definition and deployment of printers and mapped drives and system-wide policies for the definition and deployment of power management options.

In addition KUSM enables the definition and deployment of desktop standard packages. Desktop standard packages provide IT staff and MSPs a convenient way of maintaining consistency across an organization and enables the enforcement of corporate standards.

Staff and users invest a considerable amount of time customizing their user settings, application settings, and system settings, including browser bookmarks and custom-shortcuts on their system. Preserving customizations and settings during an OS or computer hardware upgrade is error prone and becomes unmanageable when migrating multiple machines at once. KUSM's user state migration allows automation of the entire process, saving staff and users valuable time.

Note: You can view Kaseya User State Management demos at http://www.kaseya.com/resources/demo.php

Functions	Description
Power (page 7)	Creates and maintains power policies and applies them to selected machine IDs.
Mapped Drives (page 10)	Creates and maintains mapped drives policies and applies them uniformly to selected machine IDs.
Printers (page 12)	Creates and maintains printer connection policies and applies them uniformly to selected machine IDs.
Define Package (page 14)	Creates a desktop standard package.
Deploy Package (page 16)	Installs a desktop standard package on selected machine IDs.
Backup (page 18)	Schedules a one-time or recurring backup of settings for all local user accounts on selected machine IDs.
Restore (page 20)	Schedules a restore of one or more local user accounts to a single target machine ID. Initially, you select the source machine you want to restore from.
Migrate (page 22)	Schedules a restore of user settings and one or more local user accounts to selected machine IDs.
Install/Remove (page 24)	Installs the User State Management client on selected machines.
Data Locations (page 25)	Specifies the directory to store managed settings files.
Logs (page 26)	Displays User State log data for a selected machine ID.

Configuring User State

The tasks User State can perform are organized into three general categories:

- Policy Defines and applies specialized user setting policies for power management, directory mappings and printers.
- Desktop Standard Defines and applies standard user settings.
- User Settings Backs up each user's individual user settings and local user accounts and either restores them or migrates them.

Installation and Module Configuration

Regardless of which category of task you want to perform, the same general installation and module configuration steps apply.

- 1. Install User State clients on both source and target machines using Install/Remove (page 24).
- 2. Define a data location to store user settings. Typically this is a network directory that both source and target machines can access with their credentials. Applies only to *individual* user settings using Backup (*page 18*), Restore (*page 20*) and Migrate (*page 22*). Policies and desktop standard user settings are stored on the KServer.

Note: In general, use domain administrator credentials when managing machines using User State. See Agent > Set Credential.

3. Optionally change the default maximum number of days to maintain User State log files using Max Log Age (*page 27*).

Configuring Policies

You can define and apply each of the three specialized User State policies separately.

- Power Management
 - 1. Before applying power policies to a machine, use the Power Status (*page 6*) page to compare existing power settings of machines to any of the power policies already defined. You can show this page to customers who are considering using the power management features in User State Management.
 - 2. Define power policies and apply them to target machines using the Power (*page 7*) page. A power policy is *not* defined by group ID, since the same power policies are applicable to multiple customers.
 - 3. Recheck the Power Status (*page 6*) page to display the conformance of machines to new or changed power policies. Optionally select the Assigned Power Policy item from the Conformance drop-down list to determine which machines do not conform to the power policy applied to the machine.
- Mapped Drives
 - Define mapped drive policies and apply them to target machines using the Mapped Drives (page 10) page. A mapped drive policy is defined by group ID, since mapped drives are typically unique to a customer site.
- Printers
 - Define printer policies and apply them to target machines using the Printers (page 12) page. A printer policy is defined by group ID, since printers are typically unique to a customer site.

Configuring Desktop Standard Packages

A desktop standard package is an install file created to apply user settings uniformly across multiple machines, typically within the same company. For example, a company may want a set of company-specific desktop icons and internet bookmarks always available on each user's machine.

- 1. Create a desktop standard package using the Define Package (*page 14*) page. Typically desktop standard packages are specific to a group, but you can optionally create a desktop standard package for <All Groups>.
- 2. Apply a desktop standard package to one or more target machines using Deploy Package (*page 16*).

Configuring User Settings

User Settings backs up each user's individual user settings and local user accounts and either restores them or migrates them.

- 1. Schedule a one-time or recurring backup of settings for all local user accounts on selected machine IDs using Backup (*page 18*).
- 2. Optionally restore one or more local user accounts to a single target machine ID using Restore (*page 20*), or...
- 3. Optionally migrate user settings for one or more local user accounts from a source machine to multiple target machines using Migrate (*page 22*). Optionally rename or add local user accounts on the target machine.

Power Status

User State > Power Status

• Similar information is provided by Reports > User State (page 30).

The Power Status page displays the conformance of machines to the the power policy (*page 7*) selected using the Conformance drop-down list. Machine counts are based on the machine ID/group ID filter and whether or not the User State client is installed on a machine.

Five gauges display the number of conforming, non-conforming, and non-supporting machines:

- Turn off Monitor Machines matching the selected power policy monitor settings.
- Turn off Hard Disk Machines matching the selected power policy hard drive settings.
- System Standby Machines matching the selected power policy system standby settings.
- System Hibernate Machines matching the selected power policy system hibernate settings.
- Power Conformance This fifth top gauge represents a rollup of the four subordinate gauges. This
 is the total number of machines that conform to all four power settings.

These gauges are updated when:

- The User State client is installed on a machine using Install/Remove (page 24). You can compare the power settings of machines at the time of the install to any of the power policies already defined to determine which machines do not conform to the selected power policy.
- A power policy is applied to a machine.
- The latest audit is performed on a machine, typically on a daily basis.

Assigned Power Policy

Select the Assigned Power Policy item from the Conformance drop-down list to determine which machines that conform/do not conform/do not support their assigned power policy. This can help you determine which machines are non-conforming, regardless of the power policy applied to the machine.

<N> machines do not conform <power setting>

Click the link beneath any of the five gauges to see a list of non-conforming machine IDs.

<N> machines unassigned or unmonitored

Click the link beneath this top gauge to see a list of unassigned or unmonitored machine IDs.

<N> machines do not support <power setting>

Click the link beneath any of the four lower gauges to see a list of machine IDs that do not support this specialized power setting.

Note: Certain machines may not support one or more power policy settings. Typical examples include virtual machines and terminal servers. Power policies settings, if applied to these machines, are skipped.

Power

User State > Power

The Power Policy page creates and maintains power policies and applies them to selected machine IDs. A power policy determines how a machine's power management options are configured. Power management options can be set for:

- The display screen
- The hard drive
- Shut down, hibernate and stand by time periods
- Low battery warnings

You can provide your customers a significant savings in power consumption and extend the battery life of laptops *automatically* by applying a Power Policy to all your managed machines. The same policy is applied to each user on a machine, whether they are logged in or not. A power policy is *not* defined by group ID, since the same power policies are applicable to multiple customers. A machine must have the KUSM client installed using User State > Install/Remove (*page 24*) to display on this page.

Note: Certain machines may not support one or more power policy settings. Typical examples include virtual machines and terminal servers. Power policies settings, if applied to these machines, are skipped. The Power Status (*page 6*) page identifies which machines do not support a specific power policy setting.

Predefined Power Policies

The following predefined power policies are provided by User State and cannot be changed. They are based on predefined power schemes in Windows XP. You can assign them just as you would any user-defined power policy. You should be aware that selecting a predefined power policy affects processor performance on XP machines.

	Processor Perf	ormance Control Policy
Power Policy	AC power	DC power
Always On	None	None
Maximize Battery Life	Adaptive	Degrade
Home/Office Desktop	None	Adaptive
Portable/Laptop	Adaptive	Adaptive
Presentation	Adaptive	Degrade

Processor Performance Control Policies

Microprocessors employ different performance states:

High voltage/high frequency states for use when processor utilization is high.

Low voltage/low frequency states to conserve battery life.

To support these microprocessor performance states, Windows XP uses processor performance control policies. *The power policy determines the processor control policy on the target machine.*

Policy	Description
None	Highest performance state.
Adaptive	Performance state chosen according to demand.
Degrade	Lowest performance state + additional linear performance reduction as battery discharges.

Actions

This page provides you with the following actions:

- Schedule Display a popup window of the following schedule options:
 - Schedule Date/Time Select the date and time to schedule this task.
 - Recurrence Select whether to run this task once, hourly, daily monthly. If more than once, enter the number of times to run this task for the period selected.
 - Skip if offline Check to perform this task only at the scheduled time. If the machine is offline, skip and run the next scheduled period and time. Uncheck to perform this task as soon as the machine connects after the scheduled time.
 - Stagger by N minutes. You can distribute the load on your network by staggering this task. If you set this parameter to 5 minutes, then the scan on each machine ID is staggered by 5 minutes. For example, machine 1 runs at 10:00, machine 2 runs at 10:05, machine 3 runs at 10:10, ...
 - > Apply / Cancel Apply or cancel these schedule options.
- Apply Now Apply a selected policy to selected machine IDs.
- Cancel Cancel schedule options for selected machined IDs.
- Edit Add, edit or delete an existing power policy (page 9). When adding or editing a policy you can rename the policy. The policies you create apply to all groups. To create a new policy select <Create New Power Policy> from the policy drop-down list and click Edit. You can Share... the power policies you create with other administrators or administrator roles. Built-in power policies cannot be modified and are already shared with all administrators.

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.

Machine.Group ID

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

Power Policy

The policy assigned to this machine ID.

Last Apply Time

The last time this policy was applied to this machine ID.

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.

Next Apply Time

The next time this policy is scheduled to be applied. Displays as red text with yellow highlight if the time is past due.

Period

If recurring, displays the interval for the scheduled task to recur.

Power Policy

User State > Power > Edit

The Power Policy dialog box specifies power management options. Managed machines are assigned power management policies using the Power (*page 7*) page.

Policy Name

Enter a name or change the name of this power policy.

Power Scheme

Enter how long the computer should wait before performing the following actions, based on whether the computer is either Plugged In or Running on Batteries:

- Turn off monitor Typically, you turn off your monitor for a short period to conserve power.
- Turn off hard disk Typically, you turn off your hard disk for a short period to conserve power.
- System standby While on standby, your entire computer switches to a low-power state where devices, such as the monitor and hard disks, turn off and your computer uses less power. When you want to use the computer again, it comes out of standby quickly, and your desktop is restored exactly as you left it. Standby is particularly useful for conserving battery power in portable computers. Because Standby does not save your desktop state to disk, a power failure while on Standby can cause you to lose unsaved information.
- System hibernate Hibernate saves everything in memory on disk, turns off your monitor and hard disk, and then turns off your computer. When you restart your computer, your desktop is restored exactly as you left it. It takes longer to bring your computer out of hibernation than out of standby.

Low Battery Alarm

Specify the following:

- Activate low battery alarm when power level reaches <N> % If checked, an alarm is triggered if the
 power level reaches the specified percentage.
- Sound Alarm If checked, a sound occurs if the alarm is triggered.
- Display Message If checked, a message displays if the alarm is triggered.
- When alarm goes off, the computer will: Stand by, Hibernate, Shut down

• Force action even if a program stops responding - This ensures that a hung or crashed program doesn't prevent the system from reacting to the alarm.

Critical Battery Alarm

Specify the following:

- Activate low battery alarm when power level reaches <N> % If checked, an alarm is triggered if the
 power level reaches the specified percentage. Typically this Critical Battery Alarm setting is a
 smaller percentage then the Low Battery Alarm setting.
- Sound Alarm If checked, a sound occurs if the alarm is triggered.
- Display Message If checked, a message displays if the alarm is triggered.
- When alarm goes off, the computer will: Stand by, Hibernate, Shut down
- Force action even if a program stops responding This ensures that a hung or crashed program doesn't prevent the system from reacting to the alarm.

Advanced

Specify the following:

- Prompt for password when computer resumes from standby
- Enable Hibernation If checked, enables hibernation as a power option.

Power Button Behavior (for Vista Only)

- Closing lid of laptop computer will: Do nothing, Stand by, Hibernate
- Pressing power button on computer will: Do nothing, Stand by, Hibernate, Shutdown
- Pressing sleep button on computer will: Do nothing, Stand by, Hibernate, Shutdown

Mapped Drives

User State > Mapped Drives

The Mapped Drives page creates and maintains mapped drive policies and applies them uniformly to selected machine IDs. Each managed machine can be assigned the appropriate set of mapped drives *automatically*, depending on the policy applied. The same policy is applied to each user on a machine, whether they are logged in or not. Applying a uniform set of mapped drives across an organization reduces user confusion over where resources are located and frees up their time for more productive tasks. It also reduces IT support calls to implement these drive mappings manually.

Note: Ensure credentialed users on target machines have access rights to the network directories being mapped to. In general, use domain administrator credentials when managing machines using User State. See Agent > Set Credential.

A machine must have the KUSM client installed using User State > Install/Remove (*page 24*) to display on this page.

This page provides you with the following actions:

- Schedule Display a popup window of the following schedule options:
 - Schedule Date/Time Select the date and time to schedule this task.

- Recurrence Select whether to run this task once, hourly, daily monthly. If more than once, enter the number of times to run this task for the period selected.
- Skip if offline Check to perform this task only at the scheduled time. If the machine is offline, skip and run the next scheduled period and time. Uncheck to perform this task as soon as the machine connects after the scheduled time.
- Stagger by N minutes. You can distribute the load on your network by staggering this task. If you set this parameter to 5 minutes, then the scan on each machine ID is staggered by 5 minutes. For example, machine 1 runs at 10:00, machine 2 runs at 10:05, machine 3 runs at 10:10, ...
- > Apply / Cancel Apply or cancel these schedule options.
- Apply Now Apply a selected policy to selected machine IDs.
- Cancel Cancel schedule options for selected machined IDs.
- Edit Add, edit or delete an existing Mapped Drives Policy (page 12). When adding or editing a policy you can rename the policy. You must assign the policy to a specific group. To create a new policy select <Create New Mapped Drive Policy> from the policy drop-down list and click Edit.

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.

Machine.Group ID

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

Mapped Drive Policy

The policy assigned to this machine ID.

Last Apply Time

The last time this policy was applied to this machine ID.

Skip if Machine Offline

If a checkmark \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.

Next Apply Time

The next time this policy is scheduled to be applied. Displays as red text with yellow highlight if the time is past due.

Period

If recurring, displays the interval for the scheduled task to recur.

Mapped Drives Policy

User State > Mapped Drives > Edit

The Mapped Drives Policy dialog box specifies a set of mapped drives. Managed machines are assigned mapped drives policies using the Mapped Drives (*page 10*) page.

Policy Name

Enter a name or change the name of this mapped drives policy.

(Group)

Enter the group ID this mapped drives policy applies to. Machine groups typically represent different customers or customer locations. Therefore mapped drives are usually unique for each machine group.

Drive Mappings

Add mapped drives to this policy.

- 1. Mapped Drive Path Enter the path of a shared network folder using UNC notation.
- 2. Mapped Drive Select the letter of the mapped drive.
- 3. Add Click the Add button.

Repeat this sequence to add multiple mapped drives to this policy.

- Edit Click Edit to change a mapped drive path and drive letter. Click Update to save your changes.
- Delete Click Delete to delete a mapped drive from this policy.

Printers

User State > Printers

The Printers page creates and maintains printer connection policies and applies them uniformly to selected machine IDs. Each managed machine can be assigned the appropriate set of printer connections *automatically*, depending on the policy applied. The same policy is applied to each user on a machine, whether they are logged in or not. Applying printer connections across an organization frees up user time for more productive tasks. It also reduces IT support calls to implement these printer connections manually. A machine must have the KUSM client installed using User State > Install/Remove (*page 24*) to display on this page.

Note: Ensure credentialed users on target machines have access rights to the printers specified. In general, use domain administrator credentials when managing machines using User State. See Agent > Set Credential.

Determining the Printer Network Location

When editing a Printers policy, you must specifying a UNC location for the network printer in the format \\Server\Share. To determine this printer network location:

1. Display Properties for a printer listed in your Printers and Faxes window.

- 2. Select the Ports tab.
- 3. The printer network location displays in the Port column with a checked checkbox next to it.

Actions

This page provides you with the following actions:

- Schedule Display a popup window of the following schedule options:
 - > Schedule Date/Time Select the date and time to schedule this task.
 - Recurrence Select whether to run this task once, hourly, daily monthly. If more than once, enter the number of times to run this task for the period selected.
 - Skip if offline Check to perform this task only at the scheduled time. If the machine is offline, skip and run the next scheduled period and time. Uncheck to perform this task as soon as the machine connects after the scheduled time.
 - Stagger by N minutes. You can distribute the load on your network by staggering this task. If you set this parameter to 5 minutes, then the scan on each machine ID is staggered by 5 minutes. For example, machine 1 runs at 10:00, machine 2 runs at 10:05, machine 3 runs at 10:10, ...
 - > Apply / Cancel Apply or cancel these schedule options.
- Apply Now Apply a selected policy to selected machine IDs.
- Cancel Cancel schedule options for selected machined IDs.
- Edit Add, edit or delete an existing Printers Policy (page 14). When adding or editing a policy you can rename the policy. You must assign the policy to a specific group. To create a new policy select <Create New Printer Policy> from the policy drop-down list and click Edit.

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.

Machine.Group ID

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

Printer Policy

The policy assigned to this machine ID.

Last Apply Time

The last time this policy was applied to this machine ID.

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.

Next Apply Time

The next time this policy is scheduled to be applied. Displays as red text with yellow highlight if the time is past due.

Period

If recurring, displays the interval for the scheduled task to recur.

Printers Policy

User State > Printers Policy > Edit

The Printers Policy dialog box specifies a set of printer network locations. Managed machines are assigned printer policies using the Printers (*page 12*) page.

Policy Name

Enter a name or change the name of this printers policy.

(Group)

Enter the group ID this printers policy applies to. Machine groups typically represent different customers or customer locations. Therefore printers are usually unique for each machine group.

Printers

Add printers to this policy.

1. Printer Network Location - Enter a port for a network printer.

Note: Reference the Properties > Ports tab > Port column of a defined Printer definition on your user's computer for a list of candidate printer network ports.

- 2. Make Default Printer If checked, this printer network location is set as the default printer.
- 3. Add Click the Add button.

Repeat this sequence to add multiple printer network locations to this policy.

- Edit Click Edit to change a printer network location. Click Update to save your changes.
- Delete Click Delete to delete a printer network location from this policy.

Define Package

User State > Define Package

The Define Package page creates a desktop standard package. A desktop standard package is an install file created to apply user settings uniformly across multiple machines, typically within the same company. For example, a company may want a set of company-specific desktop icons and internet bookmarks always available on each user's machine. A machine must have the KUSM client installed using User State > Install/Remove (*page 24*) to display on this page.

To create a desktop standard package, perform the following steps:

- 1. Desktop Standard Package Select an existing package or specify the creation of a new package.
- 2. Package Name For a new package enter a package name. You can enter a different name to rename an existing package.
- 3. Machine Group Select the machine group this package applies to. You can specify <All Groups> or a specific group. Since each group typically represents a different customer, packages are usually unique for each machine group. Only groups an administrator has access to are displayed.
- 4. Desktop Settings Filter Select either <Create New Desktop Settings Filter> or an existing Desktop Settings Filter (*page 16*) and Edit to specify the system settings and applications settings to include in the package. You must also specify a local user account in this step that qexists on the source machine specified in Step 5 below. Click Delete to delete an existing desktop settings filter. You can Share... the desktop settings filter you create with other administrators or administrator roles.
- Use Settings From Select the source machine to copy the details of each system setting or application setting selected from.

Note: This source machine must have a local user account that matches the local user account you specified for the selected Desktop Settings Filter (page 16) in Step 4.

6. Create Package Now - Click this button to create the package.

Share...

Click Share to share a desktop standard package with individual administrators or administrator roles.

Check-in status

These icons indicate the agent check-in status of each managed machine:

- Agent has checked in
- Agent has checked in and user is logged on. Tool tip lists the logon name.
- Agent has not recently checked in
- Agent has never checked in
- Online but waiting for first audit to complete
- The agent is online but remote control is disabled
- The agent has been suspended

Desktop Standard Package Name

Lists available standard packages.

Master Machine.ID

Lists the source machine ID detailed settings are copied from to create this package.

Settings Filter Name

Lists the Desktop Settings Filter used to create this package.

Last Modified

Displays the the datestamp for the last time the package was modified. Displays pending if the package is being updated.

Desktop Settings Filter

User State > Define Package > Edit

The Desktop Settings Filter dialog box specifies a set of system settings, application settings and a local user account. The desktop settings filter is applied to a source machine to create a desktop standard package using Define Package (*page 14*). The same desktop settings filter can be applied to multiple source machines to create multiple desktop standard packages.

Note: If a target machine doesn't use a particular setting, the setting is ignored during deployment.

Filter Name

Enter a name or change the name of this desktop settings filter.

Share...

Click Share... to share this desktop settings filter with other administrators or administrator roles.

Users

Specify the source machine user - For domain users, use the qualified DOMAIN\UserName format.

Settings are always defined by specific user on a specific machine. The System Settings and Application Settings you select in the Desktop Settings Filter—for the local user account you specify—is saved as part of the desktop standard package.

Note: The local user account you specify must exist on the source machine you specify. *The source machine is selected in Step 5 in the* Define Package (*page 14*) *parent window.*

System Settings

Check each system setting you want to include in the package.

Application Settings

Check each application you want to include in the package.

Deploy Package

User State > Deploy Package

The Deploy Package page installs a desktop standard package on selected machine IDs. A desktop standard package is an install file created to apply user settings uniformly across multiple machines, typically within the same company. For example, a company may want a set of company-specific desktop icons and internet bookmarks always available on each user's machine. A machine must

have the KUSM client installed using User State > Install/Remove (page 24) to display on this page.

This page provides you with the following actions:

- Schedule Display a popup window of the following schedule options:
 - Schedule Date/Time Select the date and time to schedule this task.
 - Recurrence Select whether to run this task once, hourly, daily monthly. If more than once, enter the number of times to run this task for the period selected.
 - Skip if offline Check to perform this task only at the scheduled time. If the machine is offline, skip and run the next scheduled period and time. Uncheck to perform this task as soon as the machine connects after the scheduled time.
 - Stagger by N minutes. You can distribute the load on your network by staggering this task. If you set this parameter to 5 minutes, then the scan on each machine ID is staggered by 5 minutes. For example, machine 1 runs at 10:00, machine 2 runs at 10:05, machine 3 runs at 10:10, ...
- Apply / Cancel Apply or cancel these schedule options.
- Apply Now Apply a selected package to selected machine IDs.
- Cancel Cancel schedule options for selected machined IDs.
- Desktop Standard Package Select a desktop standard package to apply to selected machine IDs.

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:

- Agent has checked in
- Agent has checked in and user is logged on. Tool tip lists the logon name.
- Agent has not recently checked in
- Agent has never checked in
- Online but waiting for first audit to complete
- The agent is online but remote control is disabled
- The agent has been suspended

Machine.Group ID

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

Desktop Standard Package

The desktop standard package of user settings applied to this machine ID.

Last Apply Time

The last time this package was applied to this machine ID.

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.

Next Apply Time

The next time this package is scheduled to be applied. Displays as red text with yellow highlight if the time is past due.

Period

If recurring, displays the interval for the scheduled task to recur.

Backup

User State > Backup

The Backup page schedules a one-time or recurring backup of settings for all local user accounts on selected machine IDs. User state settings and local user accounts can be restored to the same machine using User State > Restore (*page 20*) or migrated to a different machine using User State > Migrate (*page 22*). A machine must have the KUSM client installed using User State > Install/Remove (*page 24*) to display on this page.

This page provides you with the following actions:

- Show/Hide Scheduler Show or hide the following schedule options:
 - Date/Time Enter the year, month, day, hour, and minute to schedule this task.
 - Run every N periods Check the box to make this task a recurring task. Enter the number of times to run this task each time period.
 - Stagger by N mins. You can distribute the load on your network by staggering this task. If you set this parameter to 5 minutes, then the scan on each machine ID is staggered by 5 minutes. For example, machine 1 runs at 10:00, machine 2 runs at 10:05, machine 3 runs at 10:10, ...
 - Skip if the machine is offline Check to perform this task only at the scheduled time. If the machine is offline, skip and reschedule for the next day at the same time. Uncheck to perform this task as soon as the machine connects after the scheduled time.
 - Save Schedule Apply schedule options to selected machine IDs. A user settings filter must be selected.
- Backup Now Backup user settings and local user accounts of selected machine IDs immediately using the selected user settings filter.
- Remove Schedule Removes the schedule from selected machine IDs.
- Edit/Delete Add, edit or delete an existing User Settings Filter (page 20). When adding or editing a
 user settings filter you can rename the user settings filter. You can also share the user settings
 filter with individual administrators or administrator roles. To create a new user settings filter

select <Create New User Settings Filter> from the drop-down list and click Edit. You can Share... the user settings filter you create with other administrators or administrator roles.

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:

- Agent has checked in
- Agent has checked in and user is logged on. Tool tip lists the logon name.
- Agent has not recently checked in
- Agent has never checked in
- Online but waiting for first audit to complete
- The agent is online but remote control is disabled
- The agent has been suspended

Machine.Group ID

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

User Settings Filter

The user settings filter assigned to this machine ID.

Last Store Time

The last time this template was applied to this machine ID.

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.

Next Store Time

The next time this machine ID is scheduled to have its user settings and local user accounts stored. Displays as red text with yellow highlight if the time is past due.

Period

If recurring, displays the interval for the scheduled task to recur.

User Settings Filter

User State > Backup > Edit

The User Settings Filter dialog box specifies a set of system settings and application settings. The user settings filter is applied to a managed machine to create a backup of all selected settings for all local user accounts on that machine.

Note: When restoring you have the option selecting which local user accounts to restore and which settings to restore. If a target machine doesn't use a particular setting, the setting is ignored during restore.

Note: Local user accounts are stored as domain\user. When migrating local user accounts to a new machine, the local user accounts can be remapped to a new domain.

Filter Name

Enter a name or change the name of this user settings filter.

Share...

Click Share... to share this user settings filter with other administrators or administrator roles.

System Settings

Check each system setting you want to include in the backup.

Application Settings

Check each application setting you want to include in the backup.

Restore

```
User State > Restore
```

The Restore page schedules a restore of one or more local user accounts to a single target machine ID. Initially, you select the source machine you want to restore from.

To display on this page:

- Both source and target machines must have the KUSM client installed using User State > Install/Remove (page 24)..
- A source machine must have previously stored its settings and local user account information using User State > Backup (page 18).

Once the source machine is selected, you are provided with the following actions:

- Show/Hide Scheduler Show or hide the following schedule options:
 - Date/Time Enter the year, month, day, hour, and minute to schedule this task.
 - Stagger by N mins. You can distribute the load on your network by staggering this task. If you set this parameter to 5 minutes, then the scan on each machine ID is staggered by 5 minutes. For example, machine 1 runs at 10:00, machine 2 runs at 10:05, machine 3 runs at 10:10, ...

- Skip if the machine is offline Check to perform this task only at the scheduled time. If the machine is offline, skip and reschedule for the next day at the same time. Uncheck to perform this task as soon as the machine connects after the scheduled time.
- Restore Now Restore a selected machine ID immediately.
- Remove Schedule Remove a scheduled restore from a selected machine ID.
- Save Schedule Apply schedule options to a selected machine ID.
- Select a different source machine Change the machine you want to restore.
- Edit Settings to Apply Edit the Stored Settings (page 22) for local user accounts, system settings or application settings to be restored. These changes apply only to the current restore, not to the source backup files.

Check-in status

These icons indicate the agent check-in status of each managed machine:

- Agent has checked in
- Agent has checked in and user is logged on. Tool tip lists the logon name.
- Agent has not recently checked in
- 👻 Agent has never checked in
- Online but waiting for first audit to complete
- The agent is online but remote control is disabled
- The agent has been suspended

Machine ID.Group ID

The target machine ID.group ID that user settings and local user accounts are being restored to. Click the Select a different source machine link to select a different machine ID.group ID to restore from.

Source Machine

The source machine this machine ID is being restored from.

Source User Settings Filter

The user settings filter being used to restore this machine ID. Click Edit Settings to Apply to change local user accounts, system settings and application settings being restored. These changes apply only to the current restore, not to the source backup files.

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.

Next Restore Time

The next time this template is scheduled to be applied. Displays as red text with yellow highlight if the time is past due.

Stored Settings - Restore

User State > Restore > Edit

The Stored Settings dialog box for Restore (*page 20*) specifies a set of system settings, application settings and local user accounts. The stored settings are used to restore selected settings for selected local user accounts on a specified machine. By default the selected machine is the same machine used to create the stored settings, but a different machine can be selected.

Users

Restore settings for all users that were stored - All local user accounts and all selected settings for these local user accounts will be restored on the target machine.

Restore settings for the following users - Select local user accounts to restore. All *selected* local user accounts and all selected settings for these local user accounts will be restored on the target machine.

System Settings

Check each system setting you want to restore on the target machine.

Application Settings

Check each application setting you want to restore on the target machine.

Migrate

User State > Migrate

The Migrate page schedules a restore of user settings and one or more local user accounts to selected machine IDs. *For each target machine*, you select the source machine you want to restore from.

To display on this page:

- Both source and target machines must have the KUSM client installed using User State > Install/Remove (page 24)..
- A source machine must have previously stored its settings and local user account information using User State > Backup (page 18).

Once the source machine is selected, you are provided with the following actions:

- Show/Hide Scheduler Show or hide the following schedule options:
 - > Date/Time Enter the year, month, day, hour, and minute to schedule this task.
 - Stagger by N mins. You can distribute the load on your network by staggering this task. If you set this parameter to 5 minutes, then the scan on each machine ID is staggered by 5 minutes. For example, machine 1 runs at 10:00, machine 2 runs at 10:05, machine 3 runs at 10:10, ...
 - Skip if the machine is offline Check to perform this task only at the scheduled time. If the machine is offline, skip and reschedule for the next day at the same time. Uncheck to perform this task as soon as the machine connects after the scheduled time.
 - > Save Schedule Apply schedule options to selected machine IDs.
- Migrate Now Migrate a selected machine ID immediately.

Remove Schedule - Remove a scheduled migration from a selected 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.

These icons indicate the agent check-in status of each managed machine:

- Agent has checked in
- Agent has checked in and user is logged on. Tool tip lists the logon name.
- Agent is currently offline
- Agent has never checked in
- Online but waiting for first audit to complete
- The agent is online but remote control is disabled
- The agent has been suspended

Machine.Group ID

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

Source Machine

Click the Select Source Machine link to select the source machine ID to migrate from.

Source Settings

The user settings filter used to backup user settings on the source machine. Click the Source Settings (*page 24*) link to change the local user accounts, system settings and application settings being migrated. These changes apply only to the current migration, not to the source backup files.

By default all local user accounts are selected for migration. You can also Add Destination Users. Use this feature to rename an existing local user account as you migrate. After you've specified a new user, select the new user as a Destination User for an existing local user account.

Skip if Machine Offline

If a checkmark \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.

Next Restore Time

The next time this template is scheduled to be applied. Displays as red text with yellow highlight if the time is past due.

Stored Settings - Migrate

User State > Migrate > Source Settings link

The Stored Settings dialog box specifies a set of system settings, application settings and local user accounts. The stored settings are used to restore selected settings for selected local user accounts on one or more machines. The assumption is the target machine is a different machine than the source machine, but you can use Migrate to restore settings to the same machine. You can optionally change the names of local user accounts as you migrate them. You can also add additional local user accounts. Local user accounts are stored as domain\user. When migrating local user accounts to a new machine, the local user accounts can be remapped to a new domain.

Users

Source User / Destination User - Check all the local user accounts you want to migrate. Optionally change the name each local user account on the target machine. All selected settings for these local user accounts will be restored on the target machine.

Add Destination Users - Add local user accounts on the target machine. Enter a username and password and confirm the password. All selected settings for these additional local user accounts will be restored on the target machine.

System Settings

Check each system setting you want to restore on the target machine.

Application Settings

Check each application setting you want to restore on the target machine.

Install/Remove

User State > Install / Remove

The Install / Remove page installs the User State Management client on selected machines. The client and associated support files are typically installed to C:\Program Files\Kaseya\Agent\User State Management.

Note: User State Management licenses are managed using System > License Manager.

This page provides you with the following actions:

- Show/Hide Scheduler Shows or hides the following schedule options:
 - Date/Time Enter the year, month, day, hour, and minute to schedule this task.
 - Stagger by N mins. You can distribute the load on your network by staggering this task. If you set this parameter to 5 minutes, then the scan on each machine ID is staggered by 5 minutes. For example, machine 1 runs at 10:00, machine 2 runs at 10:05, machine 3 runs at 10:10, ...
 - Skip if the machine is offline Check to perform this task only at the scheduled time. If the machine is offline, skip and reschedule for the next day at the same time. Uncheck to perform this task as soon as the machine connects after the scheduled time.
 - Save Schedule Applies schedule options to selected machined IDs.

- Install Now Installs the KUSM client on selected machine IDs.
- Cancel Install Cancels pending installs or uninstalls on selected machine IDs.
- Uninstall Now Uninstall the KUSM client on selected machine IDs.
- Verify Now Verifies the KUSM client is installed properly on selected machine IDs.

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:

- Agent has checked in
- Agent has checked in and user is logged on. Tool tip lists the logon name.
- Agent has not recently checked in
- Agent has never checked in
- Online but waiting for first audit to complete
- The agent is online but remote control is disabled
- The agent has been suspended

Machine.Group ID

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

Installed

If checked, a KUSM client is installed on this machine ID.

Latest 4.0.0 / Version

The header displays the latest version number of the client software. The column displays the version of KUSM client software installed on the machine ID. Displays Install Pending if the client software is scheduled to be installed on the machine ID.

Verified

Displays a timestamp if the installation of the KUSM client on the machine ID has been verified.

Data Locations

User State > Data Locations

The Data Locations page specifies the directory to store managed settings files. Applies only to

User State

individual user settings using Backup (*page 18*), Restore (*page 20*) and Migrate (*page 22*). Policies and desktop standard user settings are stored on the KServer. A machine must have the KUSM client installed using User State > Install/Remove (*page 24*) to display on this page.

Note: In general, use domain administrator credentials when managing machines using User State. See Agent > Set Credential.

Set

Click Set to specify the path where managed setting files are stored.

Clear

Click Clear to remove the path where managed setting files are stored.

Path for files

Enter the path where managed setting files are stored.

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.

Machine.Group ID

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

Managed Settings Path

Lists the managed settings path assigned to a machine ID.

Logs

User State > Logs

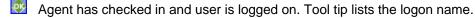
The Logs page displays User State Management log data for a selected machine ID. The log includes the date and time of the task, the success or failure of the task, the task name and specific log data, if applicable. Click the Task Name link to display details about the task performed. A machine must have the KUSM client installed using User State > Install/Remove (*page 24*) to display on this page.

Check-in status

These icons indicate the agent check-in status of each managed machine:



Agent has checked in



- Agent has not recently checked in
- Agent has never checked in

- Online but waiting for first audit to complete
- The agent is online but remote control is disabled
- The agent has been suspended

Max Log Age

User State > Max Log Age

The Max Log Age page specifies the number of days to retain log data for user state management. Entries older than the specified maximum are automatically deleted.

A log is created for each machine every time a user state management operation runs. The log contains the date and time, result, and description of the task performed.

The list of machine IDs you can select depends on the Machine ID / Group ID filter.

A machine must have the KUSM client installed using User State > Install/Remove (*page 24*) to display on this page.

Set

Click Set to assign a maximum number of log days to selected machine IDs.

<N> Days

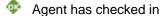
Enter the maximum number of log days for backups.

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:



- Agent has checked in and user is logged on. Tool tip lists the logon name.
- Agent has not recently checked in
- Agent has never checked in
- Online but waiting for first audit to complete
- The agent is online but remote control is disabled
- The agent has been suspended

Machine.Group ID

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

Max Age

The maximum number of log days assigned to each machine ID.

Chapter 2

User State Reports

In This Chapter

User State
Power Savings

User State

Reports > User State

• Similar information is provided using User State > Power Status (page 6).

The User State page generates reports for the following types of user state data maintained by the VSA.

Note: This report displays only if you have purchased the User State addon module.

Select the subtopics to include in the User State report:

- Include User Type List all user groups that each user on the machine is a member of.
- Include Mapped Drives List the drive mappings for each user.
- Include Printers List printer mappings for each user.
- Include Share points List all the directories shares for the machine.
- Include machines with no data Show entries in the report for all machines, including those that have not had user state information collected.

Running the Report

- 1. Select the data you want to display in the report.
- 2. Enter the title of the report.
- 3. Either run the report or export the report to HTML, Word or Excel output.

Share Report / Private Report

These two options only display for master administrators. Reports are always private for standard administrators. As a master administrator select Shared or Private to assign access to a report. By default, Private access is selected. Private reports can only be viewed and run by the administrator that created the report. Shared reports can be viewed and run by all administrators. Saved reports are

identified as either private 😴 or shared 🔊 in the left-hand navigation pane.

Save

Click Save to save the current settings.

Save As...

Click Save as... to save the current report under a new name.

Rename...

Click Rename... to rename the report.

Delete...

Click Delete... to delete the report.

Enter title displayed on report header

Enter the title that displays at the top of the report.

Update

Reports are saved with the Machine ID / Group ID filter settings that were current at the time the report was first saved or last updated. *These saved or updated filter settings are used when a report is run, regardless of the current machine ID/group ID filter settings.* Once a report has been saved, the Update button displays just below the field used to enter the title of the report. Click Update to apply the latest machine ID / group ID filter settings to a saved report. The machine ID / group ID filter settings of a saved report can be overridden using Schedule Reports.

Run...

Click Run... to run the report using the report options previously selected.

Save the report as HTML, Word or Excel

Click Export... to display the report as HTML, Word or Excel output. If you do not have Excel or Word loaded on your local machine, the page displays as plain HTML.

Remove header from the exported report

If checked, the title, report date and machine filter information do not display at the top of the exported output.

Power Savings

Reports > Power Savings

The Power Savings page generates a report that shows an estimate of how much money can be saved, or has been saved, using a particular power policy.

Note: This report displays only if you have purchased the User State addon module.

Step 1

Select the power setting states you want to compare.

- Compare most recent power audit data with:
 - Baseline Power Policy Shows power savings by comparing the baseline power policy to the latest audit for each machine. The baseline power policy represents what was in place before User State was installed on the machine.
 - Last Deployed Power Policy Shows power savings by comparing the last deployed power policy to the latest audit for each machine. This value should be the same as the most recent power audit data, unless some of the users have changed their settings since the last time a power policy was applied.

Note: A power audit is performed on a machine whenever a power policy is applied to the machine and is also performed by the latest audit, typically on a daily basis.

- Compare machine baseline audit information with:
 - Select a defined power policy to see how much you can save by switching over to the selected power policy.

Step 2

Set the values that the power savings estimate is based on:

- Average PC Watts Enter the number of watts an average PC in the system uses.
- Average Monitor Watts Enter the number of watts an average monitor in the system uses.
- Cost of kilowatt-hour (kWh) Enter the cost per kilowatt-hour (kWh).
- Currency Symbol Enter the currency symbol associated with the cost entered in the Cost of kilowatt-hour (kWh) field. This currency symbol displays in the report.
- Advanced Settings Make changes to the following advanced settings or leave them set to their default values:
 - PC Watts When Stand By Enter the number of watts an average PC uses while it is in standby mode.
 - > Hard Drive Watts Enter the number of watts a hard drive uses.
 - > Workstation Hours Per Day Enter the number of hours per day a workstation is in use.
 - ➤ Workstation Days Per Week Enter the number of days per week the workstation is in use.
 - > Server Hours Per Day Enter the number of hours per day a server is in use.

Note: Any OS that has the word Server in its name is treated as a server for the purposes of this report.

- Server Days Per Week Enter the number of days per week a server is in use.
- % of Machines Powered Down at end of Day Enter the number of machines that are physically turned off at the end of the day.
- Include Monitors for Servers If checked, the calculation assumes each server has a monitor attached and the power settings for the monitors are included.
- Workstation Days Idle Per Year (Holidays, Vacations, etc) Enter the number of days per year the average workstation is not in use, in addition to weekends.
- Show Settings per User If checked, the report shows the savings for each user on each machine.
- Select Machine Data Based on:
 - ✓ Most Savings If selected, the calculation uses the single user on a machine that provides the highest estimated power savings, as though no other user ever used that machine. This represents the best possible power savings for that machine.
 - ✓ Average User If selected, the calculation uses an average of the estimated power savings of all users on a machine, as though each user was logged on to that machine an equal amount of time. This generates an equal or smaller power savings estimate than the Most Savings option.

Step 3

Report Period - Enter the reporting period for the report: Year, Month, From Baseline Collection Time.

Step 4

Enter the title of the report.

Step 5

Either Run... the report or Export... the report to HTML, Word or Excel output.

Share Report / Private Report

These two options only display for master administrators. Reports are always private for standard administrators. As a master administrator select Shared or Private to assign access to a report. By default, Private access is selected. Private reports can only be viewed and run by the administrator that created the report. Shared reports can be viewed and run by all administrators. Saved reports are

identified as either private 😴 or shared 🔊 in the left-hand navigation pane.

Save

Click Save to save the current settings.

Save As...

Click Save as... to save the current report under a new name.

Rename...

Click Rename... to rename the report.

Delete...

Click Delete... to delete the report.

Enter title displayed on report header

Enter the title that displays at the top of the report.

Update

Reports are saved with the Machine ID / Group ID filter settings that were current at the time the report was first saved or last updated. *These saved or updated filter settings are used when a report is run, regardless of the current machine ID/group ID filter settings.* Once a report has been saved, the Update button displays just below the field used to enter the title of the report. Click Update to apply the latest machine ID / group ID filter settings to a saved report. The machine ID / group ID filter settings of a saved report can be overridden using Schedule Reports.

Run...

Click Run... to run the report using the report options previously selected.

Save the report as HTML, Word or Excel

Click Export... to display the report as HTML, Word or Excel output. If you do not have Excel or Word loaded on your local machine, the page displays as plain HTML.

Remove header from the exported report

If checked, the title, report date and machine filter information do not display at the top of the exported output.

Chapter 3

Creating Settings Packages

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Writing Your Own Settings Packages

Kaseya's User State Management solution is made up of two parts: an engine for capturing user states, and a large set of settings packages that define what state to move. There is a settings package for power management settings, another for Word settings, another for mouse settings, and so on. Each of these settings packages tells the engine what to capture, and lets the engine take care of the details of how to do it.

Setting packages use a declarative language to specify what settings they contain. This language is an XML dialect, and is easy to edit using whatever text editor you favor.

A basic settings package looks like this:

```
<Package Category="Examples" Name="Pinball"
Type="Application" Platforms="Windows" Version="1">
    <Description>
       Migrates the music setting in the Pinball game.
    </Description>
    <Find>
        <Name>pinball.exe</Name>
        <Location Type="file" File="%programfiles%\Windows NT\Pinball\PINBALL.EXE" />
    </Find>
    <Component>
        <Setting Name="Music" Type="boolean">
              <Location Type="registry" DataType="dword">
                 HKCU\Software\Microsoft\Plus!\Pinball\Music
            </Location>
        </Setting>
    </Component>
</Package>
```

Finding the Settings

In order for you to migrate anything, you need to know where the settings are stored. Here are a few of the tools we us to accomplish this and how we use them.

- Regedit This is a great tool because it's shipped with the OS, so there's nothing to install. It lets
 you explore the registry and see how exactly the application modifies the values there. You can
 export registry keys that you're interested in, make the appropriate changes, and then compare
 the exported file to the current values. Note that many applications only write changes to the
 registry when they're shutting down.
- RegMon When you want to monitor a single setting in the registry, try Microsoft's RegMon. This
 allows you to see live registry events as they happen, but it can be very noisy. Use filters—the
 little funnel at the top—to cut down on the volume of information.
- FileMon What RegMon does for the registry, FileMon does for files. It has a lot of the same issues with noise, so you should use a very similar filtering technique: only show access from the application you're working with.

Variables

There are myriad ways to install and configure the user states of an OS, so you should use variables for common directories. This makes your settings package more robust in changing environments: if Microsoft changes where something is stored—which Vista, for example, did for a number of things—the variable will properly locate the appropriate directory.

All variables are used with the Windows-style surrounding percents: %MyVariable%. These are not case-sensitive.

Variable Name	Description
User Information	
%appdata%,	The user-specific AppData directory.
%applicationdata%	
%cookies%	The user's Internet Explorer Cookies directory.
%desktop%	The user-specific Desktop directory.
%favorites%	The user's favorites are stored in this directory.
%history%	The user's Internet Explorer browser history directory.
%internetcache%	The Internet Explorer cache directory.
<pre>%localapplicationdata%</pre>	The user-specific Local AppData directory. These settings are not moved in a roaming profile.
%mymusic%	The user's My Music directory.
%mypictures%	The user's My Pictures directory.
%personal%	The user's My Documents directory.
%profile%, %userprofile%	The user's Profile or Home directory.
%programs%	The user's Start Menu programs directory.
%quicklaunch%	The user's Quick Launch programs directory.
%recent%	The user's recent items directory.
%sendto%	The user's Send To programs directory.
%startmenu%	The user-specific Start Menu items directory.
%startup%	The user-specific Startup items directory.
<pre>%tempdirectory%</pre>	The user-specific Temp directory.
%templates%	The user's template directory.
%username%	The user's login name (not their full name).
Common Files	
%commonapplicationdata%	The All User's AppData directory.
%commondesktop%	The All User's Desktop directory.
%commondocuments%	The All User's Document directory.
%commonprogramfiles%	The All User's Common Files directory.
%commonstartmenu%	The All User's Start Menu items directory.
%fonts%	Where the system keeps its fonts.
%profiles%	Where the system keeps user directories.
%programfiles%	Where the system keeps its programs.
%0S%	Where the OS is installed.
%system%	Where the system files are installed.
%windir%	Where Windows is installed.
Computer Information	
%computername%	The name of this computer. Must be qualified on a domain.

Where to Put Your Files

Once your package is ready, put it on your KServer in %KSERVER_ROOT%\WebPages\ManagedFiles\VSAHiddenFiles\KUSM\ClientApp\Setting sPackages. You may have to create that folder.

Permissions

The settings package must be read-accessible by users with administrator access. It is generally easiest to give the Everyone group read access.

<Package/>

The <Package/> element is the root level of the package. It identifies the package that is being defined and where it displays in the package selection user interface.

Attributes	Description	Possible Values	Required?
Category	Part of the settings package identifier. Use the category to note which packages are your custom packages.	Any text. This should identify your company or organization, so that future settings packages provided by Kaseya will not conflict with your custom settings packages. For instance, use Category="MIT" or Category="MIT- Physics".	Yes
DisplayCateg ory	The category under which this package is displayed in the package selection user interface.	Any text. Unlike Category, does not have to identify your company or organization, but can, if appropriate.	Yes
Name	The name this package displays in the package selection user interface.	Any text	Yes
Туре	Which part of the package selection user interface this package displays in.	Application OF System	Yes
Platforms	A pipe-separated list of platforms that this package applies to.	Windows	Yes
Version	Identifies which version of the package this is.	Any number	Yes

Children	Minimum	Maximum
<description></description> (page 39)	1	1
<find></find> (page 40)	1	Any
<process></process> (page 42)	0	Any
<component></component> (page 42)	1	1

<Description/>

This <Description/> element is used by in the package selection user interface to provide an extended description of this package. Not currently used, but may be in the future.

Attributes	Description	Possible Values	Required?	
None				

Children	Minimum	Maximum
Text that will be shown in the package-selection interface. Shou	ld N/A	N/A
describe what the package moves, and any caveats.		

<Find>

The <Find> element describes how to determine if this package is applicable. If any of the <Find/> blocks can locate the executable, then this package will be used.

Satisfaction

A <Find/> block is said to be satisfied if it has found the appropriate executable. The <Find/> block is always looking for a file on a disk with the name given by its child <Name/> element. The <Find/> element uses the <Location/> tags to determine where the executable is located. Each one looks for a string value, which is then checked to see if it points to an appropriately-named file. If a <Location/> finds a path to a real file but the file's name does not match the <Name/> element, the <Find/> block is not satisfied. The block is satisfied only if the <Location/> finds a path and that path points to a properly named file matching the <Name/> element.

Multiple EXE Names

If the application to be migrated can have different names (e.g. one for 32-bit systems, another for 64-bit systems), you should specify multiple <Find/> blocks, one for each name:

```
<Find>

<Name>Crunch64.exe</Name>

<Location Type="file" File="%programfiles%\Crunch\Crunch64.exe" />

<Location Type="registry" SubType="value">

HKCU\Software\Crunch\NativeLocation

</Location>

</Find>

<Find>

<Location Type="file" File="%programfiles%\Crunch\Crunch32.exe" />

<Location Type="registry" SubType="value">

HKCU\Software\Crunch\NativeLocation

</Location>

</Find>
```

Order of Evaluation

<Find/> blocks are evaluated in document order. The first one is evaluated first, the second second, and so on. As soon as any block is satisfied, evaluation ceases; the subsequent blocks are ignored. As such, if it is important which executable is found, you should put the more desirable ones at the top of the list.

No Find Needed

Sometimes you are writing a package for something that you know will always be present, for example, a system component or built-in application. In such cases, you can omit the <Find/> blocks entirely. The engine treats this as automatic satisfaction and migrates the settings package.

Attributes	Description	Possible Values	Required?
None			

Children	Minimum	Maximum
<name></name> (page 41)	1	1
<location></location> (page 41)	1	Any

<Find><Name/></Find>

The <Find><Name/></Find> element defines what should be looked for in the <Location/> tags. For every location that finds a value, the engine converts that value to a path and looks for a file with this name at that path. See Satisfaction (*page 40*).

Attributes	Description	Possible Values	Required?
None			

Children	Minimum	Maximum
Text that specifies the file to look for. See Satisfaction (page 40).	N/A	N/A

<Find><Location/></Find>

The <Find><Location/></Find> element points to a location that, if it exists, satisfies the parent <Find/> block. No matter what Type of location used, the engine uses the value as a path and looks for a file with the name provided by the <Name/> tag. See Satisfaction (*page 40*).

Finding Files

A file location is the easiest way to locate the executable, but also the most brittle. Most installers can put their files into arbitrary locations, so this is generally not the best solution. Note that all variables (*page 37*) are available here.

```
<Location Type="file"
File="%programfiles%\Adobe\Illustrator 10\Illustrator.exe" />
```

Finding in the Registry

The second easiest way to locate the executable is to find the path to it in the registry, where most installers store a reference. This will take care of the case where the installer can put the files in arbitrary locations.

```
<Location Type="registry" SubType="value">
HKLM\Software\Microsoft\Windows\CurrentVersion\App Paths\Acrobat.exe
```

Creating Settings Packages

</Location>

Attributes	Description	Possible Values	Required?
Туре	Specifies what type of location this is, and how the engine should attempt to look there.	file, registry	Yes
SubType	Specifies what part of the location to use.	value	No
File	For Type="file", identifies the file that, if it exists, will be used to satisfy the parent <find></find> block.	A path to a file	No

Children	Minimum	Maximum
Text: When Type="registry", the text is the registry path to the key to examine.	N/A	N/A

<Process/>

The <Process/> element tells the engine to stop a process during migration. Necessary if that process locks files that need to be migrated.

Attributes	Description	Possible Values	Required?
Stop	If true, stops this process before the migration, if it is open.	true or false. If not present, assumes false	No

Children	Minimum	Maximum
Text: the name of the process to interact with. For example, iexplore.exe	N/A	N/A

<Component/>

The <Component/> element groups together all <Setting/> tags that are migrated by this package. Almost every package has a single <Component/> that houses all of its <Setting/> tags.

Attributes	Description	Possible Values	Required?	
None				

Children	Minimum	Maximum
<setting></setting> (page 43)	0	Any
<settingslist></settingslist> (page	0	Any

<Setting/>

The <Setting/> element describes a setting that is migrated by this package.

Mapping

All strings are mapped from source to destination. If the Program Files directory changes between machines, the engine notices and corrects the paths that point to it. Similarly, if the user's Documents folder moves, the paths are updated before being applied.

Registry Path Aliases

Many of the settings are stored in the registry and referenced by their registry path. The following aliases are recognized by the engine and make the settings package easier to read. All the examples use them.

Alias	References
HKCU	HKEY_CURRENT_USER
HKLM	HKEY_LOCAL_MACHINE
HKCR	HKEY_CLASSES_ROOT
HKU	HKEY_USERS
HKCC	HKEY_CURRENT_CONFIG
HKDD	HKEY_DYN_DATA
HKPD	HKEY_PERFORMANCE_DATA

Settings Within Settings

It can be useful to group settings together so that the settings package is easier to read:

```
<Setting Name="Security">

<Setting Name="EnablePGP">

<Location Type="registry" SubType="value">

HCKU\Software\Crunch\EnablePGP

</Location>

</Setting>

<Setting Name="RequirePassword">

<Location Type="registry" SubType="value">

HCKU\Software\Crunch\PasswordRequired

</Location>

</Setting>

</Setting>
```

Note that this is just a logical group within the settings package. It does not have to correspond to how those settings are stored. Any number of settings can be grouped at any depth.

The names of these settings are also slightly different. The nested settings have qualified names which are their parent's qualified name, a forward slash, and then their own name. That would make these settings qualified names Security/EnablePGP and Security/RequirePassword.

Migrating a Key Tree with registry/subkey

Most of the time, you just want to move an entire registry key, all its values, all its subkeys, and all their values. You can do that with Type="registry" SubType="subkey".

```
<Setting Name="CrunchSettings">
<Location Type="registry" SubType="subkey">
HKCU\Software\Crunch
```

</Location> </Setting>

All strings are automatically mapped for you, and all data types are determined automatically. In certain cases, if the registry contains paths to files that you wish to migrate, those must be handled separately using filepath. Try the registry/subkey method first. Resort to other registry SubTypes only if needed.

Migrating a Registry Value with registry/value

A registry value can be migrated by giving its path:

```
<Setting Name="ReticulateSplines">
<Location Type="registry" SubType="value">
HKCU\Software\Crunch\ReticulateSplines
</Location>
</Setting>
```

Migrating Whether Or Not A Registry Value Exists with registry/valueexistence

Sometimes an application doesn't store any information in a registry value, but checks for its existence. This can be migrated as follows:

<Setting Name="IsRegistered">

```
<Location Type="registry" SubType="valueexistence">
     HKCU\Software\Crunch\Registered
     </Location>
</Setting>
```

Migrating a File with file

Migrating a file with a fixed position is simple:

```
<Setting Name="DataFile">
<Location Type="file" File="C:\Path\To\File.dat" />
</Setting>
Whenever possible, use variables (page 37):
```

```
<Setting Name="DataFile">
<Location Type="file" File="%ProgramFiles%\Crunch\File.dat" />
</Setting>
```

Migrating a File Whose Path Is In the Registry with filepath

When a setting is actually a path to a file, you often want to store not only the path, but the file as well. In this case, add a Type="filepath" attribute to the <Setting/>, and the engine will move the file for you. The registry value is mapped and migrated, and the file is migrated and applied into the appropriately-mapped location.

```
<Setting Name="DataFile" Type="filepath">
<Location Type="registry" SubType="value">
HKCU\Software\Crunch\DataFilePath
</Location>
</Setting>
```

Attributes	Description	Possible Values	Required?
Name	The name of the setting. For nested settings, the qualified name is the parent's qualified name, a forward slash, then this attribute's value.	Text using only the characters a-z, A-Z, 0-9, dot, dash, and underscore. No spaces are allowed.	Yes
Туре	Should this setting be treated differently than a straight string? If the value has some additional meaning, the Type can identify	filepath or nothing	No

	that meaning.		
OSVersion	Only migrate this on the specified OSs. For multiple OSs, separate them with pipes: for example, Windows95 Windows2000. Note that some of the values do this for you-the ones that start with Any.	Windows2000 or WindowsXP or WindowsVista. AnyWindows Will match any of those.	No

Children	Minimum	Maximum
<location></location> (page 45)	0	Any
<default></default> (page 45)	0	1
<setting></setting>	0	Any
<settingslist></settingslist> (page	0	Any
46)		

<Setting><Location/></Setting>

The <Location/> element describes where on a disk a setting is stored, and how.

Attributes	Description	Possible Values	Required?
Туре	Specifies what type of location this is, and how the engine should attempt to look there.	file, registry	Yes
SubType	Specifies what part of the location to use.	See above	No
File	For Type="file", identifies the file to migrate.	A path to a file	No
FileOverwrite	If we're applying a file and a file with the same name already exists, should we overwrite?	On apply, always overwrites the existing file with the stored file every time; ifnewer does so only if the stored file is newer than the copy on the destination machine; never never overwrites an existing file, but places a stored file if no file exists on the destination machine.	No

Children	Minimum	Maximum
Text: depending on the ${\tt Type},$ the text value is used as a path	N/A	N/A

<Setting><Default/></Setting>

If nothing is found at the <Location/> specified, the engine uses the value contained in the <Default/> tag instead. An application on the source machine may use an internal default instead of an externally defined default. This can create a problem when moving settings to the target machine, because the internal default's value is not accessible and cannot be migrated, and so the

target machine's externally defined value is not overwritten. The <Default/> tag, by duplicating the internal default, ensures the externally defined setting on the target machine is overwritten with a value, even if the source machine hasn't provided an external value for copying to the target machine.

```
<Setting Name="TimeoutInMilliseconds">
<Location Type="registry" SubType="value">
HKCU\Software\Crunch\Timeout
</Location>
<Default>100</Default>
</Setting>
```

Attributes	Description	Possible Values	Required?
None			

Children	Minimum	Maximum
Text: the value to use. Will be translated into the type declared on the parent <setting></setting> .	N/A	N/A

<SettingsList/>

A <SettingsList/> enumerates over the various sub-parts of a <Location/> and migrates them all. This allows you to migrate lists of arbitrary length, or groups whose names are unknown when you are writing the package. In most cases, this is better handled with a registry/subkey location, but a <SettingsList/> is necessary if you need to use the values involved—for storing the files they point at, for instance.

Within the <SettingsList/>, two special variables are available. The first shares its name with the <SettingsList/> tag—%UserDefinedFunctions% in the example below. In this case it refers to the *name* of each value in the key specified. The second variable—not shown in the example below—has the same name as the first variable, but with a _value suffix, for example, %UserDefinedFunctions_value%. Variables with a _value suffix refer to whatever is *stored* under that name. Here, that's the data associated with each key.

Example

To store an arbitrary list of files stored in the registry as file paths, we need to use a <SettingsList/>:

```
<SettingsList Name="UserDefinedFunctions" Type="value">

<Location Type="registry" SubType="subkey">

HKCU\Software\Crunch\User Defined Functions

</Location>

<Setting Name="UDF" Type="filepath">

<Location Type="registry" SubType="value">

HKCU\Software\Crunch\User Defined Functions\%UserDefinedFunctions%

</Location>

</Setting>

</SettingsList>
```

Attributes	Description	Possible Values	Required?
Туре	What are we enumerating over?	key or value	Yes

Children	Minimum	Maximum
<location></location> (page 45)	1	Any
<setting></setting> (page 43)	0	Any

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