Shavlik Protect

Migration Tool User's Guide

shavlik

_____

Copyright

Trademarks

Document Information and Print History

Document number: N/A

Date	Version	Description
January 2014	Initial release of this doc	Initial release of the **Shavlik Protect Migration Tool User's Guide**.
April 2014	Rev A	Update this document so it applies to both Shavlik Protect 9.0 and 9.1.
September 2015	Rev B	Updated for Shavlik Protect 9.2.

WELCOME

Purpose of this Guide

This document describes how to use the Migration Tool to migrate your existing Shavlik Protect console to a new machine. During the migration, the version and build number of Shavlik Protect that is on your target console must be the same as the version and build number that is on your existing console. For example, you can migrate from version 9.2.4988 to 9.2.4988 but not from 9.1.4511 to 9.2.4988. You can upgrade to a newer version after you migrate to a new machine.

Overview

The Migration Tool simplifies the migration process. The tool captures core and user data from your existing console and rewrites it into a new Shavlik Protect installation.

The most common reasons for migrating a Shavlik Protect console to a new machine are:

- Migrate off an operating system that is no longer supported by the latest version of Shavlik Protect
- Migrate off an operating system that has been marked for end-of-life (Windows XP, Windows Server 2003, etc.)
- Migrate from a 32-bit architecture to a 64-bit architecture
- Migrate to better, faster hardware

Requirements for Using the Migration Tool

In order to use the Migration Tool you must meet the following requirements:

- Your existing console must be at Shavlik Protect 9.0, Patch 1 or later
- (For Shavlik Protect 9.0, Patch 1 only) Both the existing console and the target console must contain this Microsoft .NET Framework 4.0 patch:

  http://support.microsoft.com/kb/2468871

- The Microsoft SQL Server version used by the new console must be equal to or later than the current version

  For example, you can move from SQL Server 2008 to SQL Server 2012 but you cannot move from SQL Server 2012 to SQL Server 2008.

- The target machine must be using one of the following 64-bit operating systems:

  o Windows Server 2012 Family R2, excluding Server Core

  o Windows Server 2012 Family, excluding Server Core

  o Windows Server 2008 Family R2 SP1 or later, excluding Server Core

  o Windows 8.1 or later, excluding Windows RT

  o Windows 7 SP1 or later, Professional, Enterprise, or Ultimate Edition

- You must have 20 GB or more free disk space to hold the backup archive files

  The backup archive file can be written to either the local hard drive or to a network drive.

- The Migration Tool requires a certain amount of temporary disk space during the backup process. If the hard drive on your existing Shavlik Protect console is nearly full, you may need to change the location of your System Temp folder. For information on how to do this, see the Shavlik Community Site: http://community.shavlik.com

Commonly Asked Questions

Q: What core components are migrated by the Migration Tool?

- Agent policies
- Background tasks
- Certificates
- Credentials
- Custom patch XML files
- Custom PowerShell scripts that have been imported into the database
- Database (local only)
- Distribution servers (remote only)
- Files referenced by the Machine Group **link to** file feature
- Groups (machine, patch, service packs)
- License activation in a non-proxied online environment
- Global and user settings defined on the **Tools > Options** dialog
- Patch store if contained on a local drive (up to 10 GB of data and data that is not more than 90 days old)
- Results (scan results, deployment results, etc.)
- Scheduled tasks for the Shavlik Scheduler (the Microsoft Scheduler is not supported by the Migration Tool)
- Templates
- Some user-specific options

    - **Notifications & Warnings:** Display the file size confirmation dialog before downloading

    - **Scans:** Default Patch Scan Template, Use only the browse list, Use replacement patches

    - **Deployment:** Default Deployment Template

Q: What is not migrated by the Migration Tool?

See the section titled *Post-Migration Tasks* for a detailed explanation on how to manually manage the items that are not migrated by the tool.

- An agent running on the local console
- Data rollup configuration
- Share information for a distribution server that resides on the local console
- Proxy configurations
- Patch store data beyond the 10 GB limit or older than 90 days
- ITScript run files (the files that contain output information related to the execution of a script)
- Scheduled deployments
- Any user-specific option not identified in the *What is migrated* list

Q: When should you perform the migration?

Soon after the completion of your regularly scheduled patch cycle to give yourself time to complete the migration.

Q: How long will it take to perform the migration?

- Simple configurations can be migrated in as little as 60 minutes
- Advanced configurations may require a few days of lead time to prepare for the migration and a few hours or days after the migration to perform system verification steps

Q: Who should perform the migration?

- Any administrator with a Shavlik Protect account can perform the core backup and restore. Account data for the administrator currently logged on to the console machine is included in the core backup.
- Each additional administrator with a Shavlik Protect user account must perform a separate User backup and restore.

  Note: You cannot restore multiple users under the same logged in account, and you cannot restore a user using a different account.

Q: I use a remote database, how is that affected?

The remote database will not be moved but the connections to the remote database will be restored during the core component restoration process. You will restore your user account data using the normal process.

Q: How long should I maintain my old console?

- If you are not using agents, you can retire your old console as soon as the migration to the new console is complete.

- If you are using agents, you should continue to run the old console in parallel until all of your agents have checked in with the new console. See the section titled *Before You Begin* for additional information.

Q: Why isn't Windows 8 a supported operating system on the target console but Windows 8.1 is supported?

It has to do with a limitation in the PowerShell version supported on Windows 8. The PowerShell limitation does not meet the minimum requirements for running Shavlik Protect 9.1. Windows 8.1 does not have the PowerShell limitation and meets the Shavlik Protect 9.1 minimum requirements.

Before You Begin

Read through this entire section before using the Migration Tool.

Target Console Machine Considerations

The machine you are migrating to must:

- Contain one of the five approved Windows operating systems listed in the *Requirements* section earlier in this document

- Have Shavlik Protect 9.0, Patch 1 or later installed

    The version of Shavlik Protect that is on your target console must be equal to or later than the version on your existing console. You do not need to activate or configure anything on the newly installed (target) Protect console. The migration tool will provide all of that information during the restore process.

- Not be an active console

    The restore process will overwrite any data that exists on the new Shavlik Protect console machine.

If You are Using Agents

Console Alias List

Important! Perform this step as far in advance of the migration as possible.

The Console Alias list on the existing console must be updated with the host name, IP address, FQDN, etc. of the new target console. This is done so your agents will know to use the new console for their check-ins when the existing console is turned off and becomes unavailable. Use the **Tools > Console alias editor** menu to update the alias list.

You should update the Console Alias list as far in advance of the migration as possible. This is so the agents will have time to check in with the existing console and retrieve the updated Console Alias list. A good rule of thumb is to update the Console Alias list several check-in periods prior to the actual migration.

Important! Any agents that do not check in with the old console and receive an updated alias list will be stranded when the old console is turned off.

Tip: You will avoid stranding any agents if you are using Shavlik Protect Cloud synchronization as a fallback failover destination. If for some reason the agents cannot locate the new console, if you have enabled the use of Shavlik Protect Cloud synchronization in the agent policy (see the Help system for details), the agents will have the ability to check in with the cloud.

Shavlik Protect Cloud Synchronization

If you are using Shavlik Protect Cloud synchronization, perform a full update by selecting **Tools > Operations > Protect Cloud Sync** and then clicking **Force full update now**. This will ensure that the agent policy data contained on the cloud service is up to date.

Upgrading to a More Current Version of SQL Server

If you want to upgrade to a more current version of SQL Server during this migration and you are using:

- **A local SQL Server Express Edition:** No actions are required (do not pre-install any version of SQL Server). The most current supported version of SQL Server Express Edition will be installed automatically when you install Shavlik Protect.

- **A local Full Edition of SQL Server:** Install the desired edition of SQL Server on the new console machine BEFORE you install Shavlik Protect. During the installation of Shavlik Protect you will point to the new local SQL Server instance.

- **SQL Server on a remote server:** To perform the upgrade:

  1. Install the desired edition of SQL Server on the remote server.

  2. Backup your current Shavlik Protect database and restore to the new SQL Server.

  3. Use the Database Setup Tool to point all instances of Shavlik Protect to the new instance.

     To access the Database Setup Tool: **Start > All Programs > Shavlik Protect > Database Setup Tool**.

  4. Run the migration.

  Note: You can upgrade your remote SQL Server edition after the migration if you prefer but the recommendation is to do it before the migration.

Create a Backup of Your Database Before Using the Migration Tool

This is strictly a precaution but a smart one. If you are using an express edition of SQL Server, you can use the Database Maintenance tool within Shavlik Protect to create the backup. If you are using a full edition of SQL Server, you should use the SQL Server Maintenance Plan Wizard to setup your maintenance plans as this wizard is more robust and provides additional functionality.

Use the following link for information on using the wizard to implement your maintenance plan:

http://www.networkworld.com/subnets/microsoft/110107-ch8-sql-server.html?page=2

Record Your Current License Information

Select **Help > About Shavlik Protect** and record your current license key data and product capabilities. You will use this information after the migration is complete to verify that your license information was properly migrated.

If You Have Scheduled Patch Deployments

You should wait for the scheduled patch deployments to complete before you begin the migration. If a scheduled deployment does occur after you begin the migration, the new console will not receive the deployment results.

How to Access the Migration Tool

If You are On a Shavlik Protect 9.0, Patch 1 Console

Note: Before you begin, make sure the required Microsoft .NET Framework 4.0 patch (http://support.microsoft.com/kb/2468871) is installed on the console machine.

To download and install the Migration Tool:

1. Using a Web browser, go to: www.shavlik.com/downloads/.

2. Click the **Shavlik Protect Software Support Downloads** link.

3. Click the **Download Shavlik Console Migration Tool** link and save the **ProtectBackup.zip** file to your console's local hard drive.

4. Extract the contents of the **ProtectBackup.zip** file to a folder on your Shavlik Protect console.

5. Start Windows PowerShell.

   You can do this a few different ways:

   - Click **Start**, type **PowerShell**, and then click **Windows PowerShell**, or

   - At a command prompt, type **PowerShell**, or

   - You can also right-click the file named **Install-ProtectBackup.ps1** and select **Run with PowerShell**, but because this option does not allow you to set your execution policy before running the script, only use this option if you are certain your policy is already set to **RemoteSigned**. The other issue with this option is that the PowerShell command line dialog will be hidden when the Migration Tool is started and you may not notice if a PowerShell error occurs.

6. Set your execution policy by typing this command:

   ```
   Set-ExecutionPolicy RemoteSigned
   ```

7. Launch the Migration Tool by running the PowerShell script file named **Install-ProtectBackup.ps1** (must be Run as Administrator).

   You must specify the complete file path when running the PowerShell script. **Example:** If you extracted the script file to C:\Scripts, at the PowerShell prompt you would type:

   ```
   C:\Scripts\Install-ProtectBackup.ps1
   ```

   Note: All of the folders and files that you extracted from the **ProtectBackup.zip** file are required to successfully launch the Migration Tool. You cannot move the **Install-ProtectBackup.ps1** file to a different folder and run it without moving all of the supporting folders and files.

The Migration Tool is started. In addition, the *Migration Tool User's Guide* (this document) is opened in Microsoft Word, Notepad, or whatever program is used on your machine to view RTF files.

If You are On a Shavlik Protect 9.1 or Later Console

Select **Start > All Programs > Shavlik Protect > Migration Tool**. To view help information, press **F1** or click the Help icon ( ). You can also find the *Migration Tool Guide* (the guide you are reading now) online at:

http://www.shavlik.com/support/protect/documentation.

CREATING YOUR BACKUP FILES

You must first create a backup container for your core components. Account data for the user currently logged on is included in the core backup. A backup must also be performed for each additional user account. So, the backup process is:

1. Backup your core components.

2. Backup each additional user account.

   The backups of the additional user accounts can happen after you perform a restore of the core components, but if the other administrators are available, the recommendation is to have them log on and perform their user account backups immediately after the core backup.

Backing Up Your Core Components

This section provides step-by-step instructions for backing up the core components of your current Shavlik Protect console. See the *Commonly Asked Questions* section for the list of core components.

Note: Make sure that your local or network drive contains enough free space to store the backup archive file. To be safe you should have 20 GB or more free space.

1. Close Shavlik Protect.

2. Launch the Migration Tool.

   See the previous section for instructions on how to access and launch the Migration Tool.

3. Select **Backup**.

4. Select **Core** mode.

   This specifies that all of Shavlik Protect's core components will be saved to a backup archive file. In addition, the data for the user currently logged on to the console machine will be saved to the archive file.

5. (Optional) If you want to change the default location and name for the **Backup archive file name**, click the browse button and choose a new location.

   You can also type directly in the **Backup archive file name** box to specify a new location and/or name. The file must contain the .bak extension.

6. Secure the backup file by typing and confirming a passphrase.

   The passphrase will be used during the restore process. The data is stored in a secure container and can only be accessed by providing the correct passphrase.

7. Click **Backup core settings**.

   The Migration Tool will show status messages as it backs up the core components.

8. Wait for the confirmation message that indicates the backup was successful, and then proceed to the next section for instructions on backing up your user data.

Backing Up Your User Data

The recommendation is to backup all your remaining user accounts immediately following your core backup. If one or more administrators are not available, however, they can backup and restore their user accounts at a later date. Keep in mind, however, that your existing console cannot be turned off until all user accounts are backed up. In addition, if a Shavlik Protect administrator does not backup their account and restore it on the new console before their regularly scheduled tasks are executed, those tasks will be executed on the old console rather than the new console. To avoid these issues, all Shavlik Protect user accounts should be backed up and restored in a timely manner.

1. If needed, launch the Migration Tool.

   See the previous section for instructions on how to access and launch the Migration Tool.

2. Select **Backup**.

3. Select **User** mode.

   Will back up all Shavlik Protect data associated with the user currently logged on to the console machine.

4. Type a location and name for the user's backup archive file.

   Make sure to specify a name that uniquely identifies the user. You can also use the browse button to specify the location and file name.

5. Secure the backup file by typing and confirming a passphrase.

   The passphrase will be used during the restore process.

6. Click **Backup settings**.

The Migration Tool will show status messages as it backs up the user data. A confirmation message will indicate when the user backup is complete.

Repeat this section for each user account. Close the Migration Tool when you are finished.

RESTORING YOUR CONSOLE ON A NEW MACHINE

The restore process is:

1. Restore your core components on the new console and begin running verification tests.

2. Restore all remaining user accounts on the new console.

Restoring Core Components

Important! The restore process will overwrite any data that exists on the new Shavlik Protect console machine.

1. (Applies only to Shavlik Protect 9.0, Patch 1 consoles) Make sure the required Microsoft .NET Framework 4.0 patch (http://support.microsoft.com/kb/2468871) is installed on the new console machine.

2. Log on to the new console machine using the same user account that was used to create the core backup file.

3. Install Shavlik Protect on your new machine.

   The version of Shavlik Protect that you install must be equal to or later than the version on your old console machine .You do not need to activate your license on the new console or perform any configuration steps; this will be done when you perform the restore.

4. Close Shavlik Protect.

5. (Conditional) If your organization uses a proxy server, make sure the proxy configuration is correct on the new console machine before you restore the core components.

6. (Optional) Move the core backup file from your old console machine to your new console machine.

   This is done to improve speed, performance and stability during the restoration process. The backup file can, however, reside on an accessible location on your network.

7. Install and start the Migration Tool on the new console machine.

   See the section titled *How to Access the Migration Tool*.

8. Restore the core components.

   a. Select **Restore**.

   b. Select **Core**.

   c. Specify the core backup file.

   d. Click **Restore core settings**.

  e. Watch the progress messages and wait for the completion message to appear.

  f. Check the **Restore Results** file for any error messages.

9. Start Shavlik Protect.

An informational dialog may appear that reminds you to add the fully qualified name of the new machine to the console alias list. See the *Verfication Checklist* section for more details.

10. On the old console, stop the Shavlik Protect Console Service.

Restoring User Account Data

Note: You cannot restore user data until after you have completed the core migration.

1. Log on to the new console machine using the same user account that was used to create the user backup file.

2. (Optional) Move the user backup file from your old console machine to your new console machine.

This is done to improve speed, performance and stability during the restoration process. The backup file can, however, reside on an accessible location on your network.

3. Install and start the Migration Tool on the new console machine.

See the section titled *How to Access the Migration Tool*.

4. Select **Restore**.

5. Select **User**.

6. Specify a user backup file.

7. Click **Restore user settings**.

8. Watch the progress messages and wait for the completion message to appear.

9. Repeat this process for all Shavlik Protect administrator accounts.

POST-MIGRATION TASKS

In order to complete the migration, you must perform the following tasks on the new Shavlik Protect console. The sooner you perform these tasks the sooner you can permanently retire your old console. You want to retire your old console as soon as possible to eliminate duplicate and time-consuming tasks from being performed by both consoles.

Manually Migrating Items Not Moved by the Tool

- If you are in a proxy environment or a disconnected environment:

  The Shavlik Protect license is not automatically activated in these environments. To activate your license, from the Shavlik Protect menu select **Help > Enter/refresh license key**.

- If you had an agent running on the local console:

  This agent will not be migrated and must be reinstalled after the migration.

- If you are using custom patch XML files:

  Custom patch XML files must be moved manually because they are saved to a location that cannot be referenced by the Migration Tool

- If you are using a data rollup configuration and you just migrated to:

  Shavlik Protect 9.0 and 9.1

    o **Rollup (central) console:** After the migration, you must export a new data rollup file and then import the new file on each remote console.

    o **Remote console:** After the migration, you must import the new data rollup file.

  Shavlik Protect 9.2

    o **Rollup (central) console:** After the migration, go to **Tools > Operations > Data Rollup** and confirm that **Accept and import results from a rollup sender** is enabled.

    o **Remote console:** After the migration, go to **Tools > Operations > Data Rollup**, confirm the rollup server information and then click **Register**.

- If you are using a distribution server that resides on the local console:

  The distribution server configuration and the files contained on the distribution server will be moved. The folder representing the distribution server, however, must still be defined as a shared folder, the Windows permissions to access the shared folder must be updated, and the path to the folder must be updated in the distribution server configuration on the new console.

- If you were using customized user-specific options:

  Go to **Tools > Options** and reset any custom setting that was not migrated.

Verification Checklist

Perform the tasks in this checklist to verify that your new Shavlik Protect console is operating properly.

☐ Select **Help > Refresh files** and make sure no errors occur.

☐ Select **Help > About Shavlik Protect** and verify that your license key data is valid and that the correct product capabilities are enabled.

☐ Run a scan and a patch deployment to verify that your credentials can access the machines in your machine groups.

☐ Download a patch and verify that the download is successful.

☐ If you are configured to use the Database Maintenance feature, select **Tools > Operations > Database Maintenance** and click **Run now** to verify that the feature is working properly.

☐ If you are using agents, check that they have all checked in with the new console. You can do this from Machine View by using the **Has an Agent Policy** filter and then sorting by the **Last Agent Check In** column. All check-in dates should be after the date you modified the Console Alias list on the old console.

☐ If you have enabled the use of Shavlik Protect Cloud synchronization in an agent policy you must register the new console and force a full update. To do this, select **Tools > Operations > Protect Cloud Sync** and click **This console is registered** (the text on the button in this case is misleading because it is referring to the old console). When the registration is complete, click **Force full update now**.

☐ If you are using the distribution server synchronization feature, verify that it succeeds the first time it is scheduled to execute.

☐ If you have multiple consoles and are using data rollup, check that the rollup succeeds on the proper schedule.

☐ If you have scheduled tasks such as patch scans or patch deployments, watch closely the first time through to make sure the tasks are successfully completed.

☐ Use the **Tools > Console alias editor** menu to remove the old console's information from the Console Alias list. Also, if the new console is on a domain-joined machine, you will need to add the fully qualified name of the new machine to the alias list.

When and How to Retire Your Old Console

You can retire your old console when the migration is complete and all of your agents are successfully checking in with the new console. The recommended steps are:

1. Verify that the Shavlik Protect Console Service is stopped on the old console.

    This will effectively disable the old console and route all traffic to the new console.

2. Go through one or more maintenance cycles.

    Do this to verify that everything is working properly on the new console.

3. Retire the old console.

    How exactly you retire the console is up to you and your organization's policies. You might simply power off the machine, or you might perform a backup and then uninstall Shavlik Protect.