



SDM Software GPO Migrator

Version 2.2

User Guide

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Overview

SDM Software's GPO Migrator simplifies the process of cleaning up, consolidating and reorganizing your Group Policy environment. Finally, you have the ability to pick settings out of GPOs, GP Reporting Pak Snapshots, or Resultant Set of Policy (RSOP), and copy them to other GPOs as needed, with just a few clicks of the mouse.

GP Reporting Pak Snapshots, taken from our GPO Inventory & Analysis product, are copies of GPO setting values from a specific point in time, and can include multiple GPOs. Being able to migrate from Snapshots is useful for consolidating multiple GPOs worth of settings into a single GPO.

In addition, we added a **preview** feature for the ability to perform an RSOP collection against a selected domain-joined computer, and use the effective settings from that computer to migrate into a new or existing destination GPO. This is a powerful capability that allows you to essentially take a “golden” machine and use it as the basis for a new GPO.

Finally, the transforms feature allow you to take domain-specific information held within GPO settings, and transform them as you migrate to a new domain (or the same domain). For example, if you have domain-based groups defined within Restricted Groups policy, you can change the name of those domains/groups as you migrate those restricted groups settings. Transforms are only supported within a subset of policy areas (see the below section "Transformations" for limitations).

Installation & Activation

The GPO Migrator 2.1 requires that .Net Framework 4.7.2 be installed on the system where the product is installed. In addition, the Microsoft Group Policy Management Console (GPMC) is a required feature for installation.

NOTE: Migrator currently requires the system where it is installed be using the “en-us” (US English) language culture to function properly. Some setting migrations may fail if the proper culture is not set. You can determine the current culture of your system by issuing the following command in PowerShell:

[System.Globalization.CultureInfo]::CurrentUICulture.Name

Installation is supported on all current versions of Windows.

The machine where GPO Migrator is installed should be domain-joined as well. To install the product, simply run the **GPOMigrator2.1Setup.msi** installer and follow the prompts to complete the installation. The default installer includes a demo license for up to 5 migrations. The installer will create two shortcuts on the Windows Start Screen:

- Activate GPO Migrator License

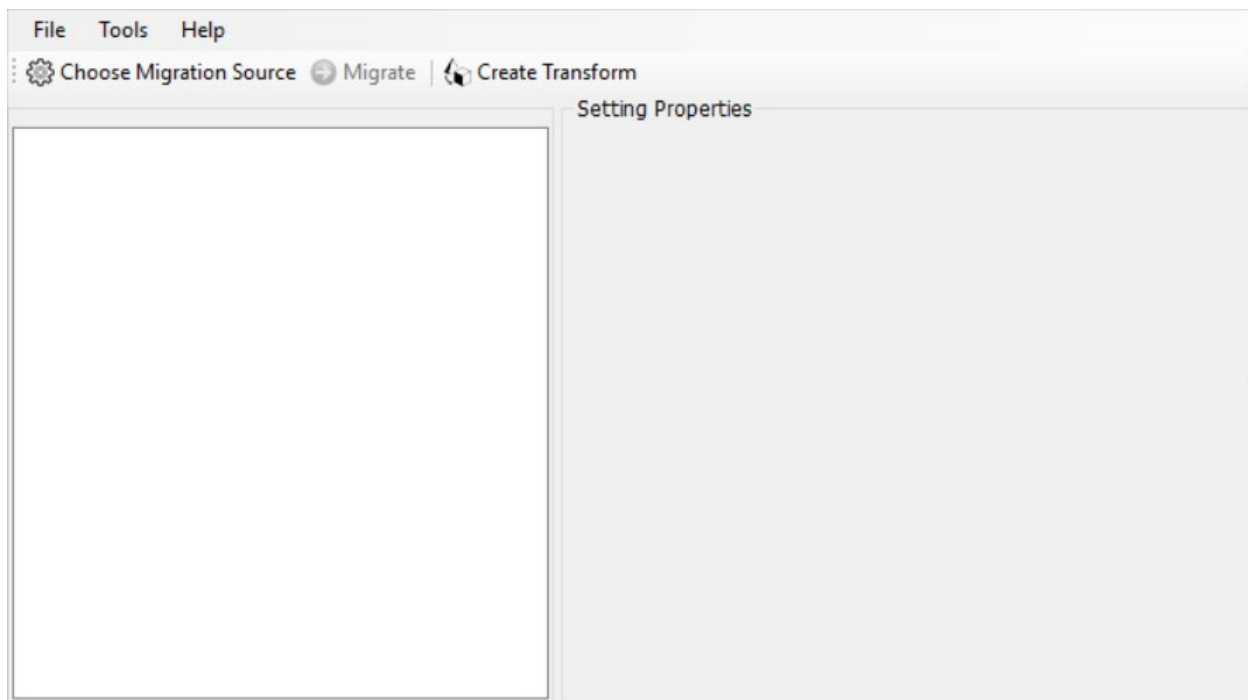
- GPO Migrator 2.1

Use the Activate shortcut to activate the product with further evaluation license or a customer license, available from sales@sdmsoftware.com. The license will come in the form of a .txt file. Open the .txt with a text editor (e.g. Notepad) and copy the contents of the license to the clipboard. Then, paste from the clipboard into the whitespace of the License Activator utility and press the Submit button to activate the new license.

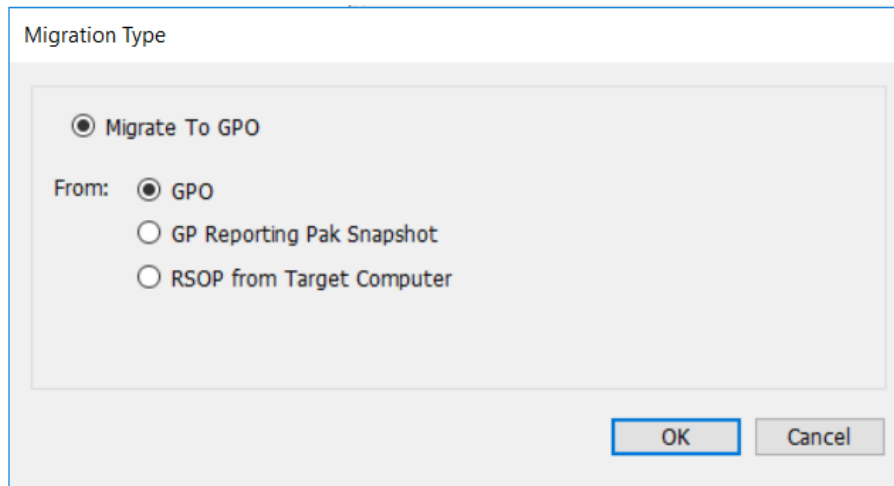
Use the GPO Migrator 2.1 shortcut to run the product itself. Note that the default installation location for the product is C:\Program Files\SDM Software\GPO Migrator 2.1 and the main executable that launches the Migrator is GPOMigrator.exe. Note that the GPO Migrator runs elevated so you will receive a UAC prompt to launch it if UAC is enabled on the machine where it's installed.

Getting Started

Once opened, a few simple steps are needed to set up a migration.



Step 1: Click the Choose Migration Options button. This presents a choice of whether to migrate settings from another GPO, a GP Reporting Pak Snapshot, or RSOP – to another GPO. Different policy areas are supported when migrating from a GPO or a Snapshot/RSOP. See the section Policy Areas Supported, below.



Step 2: Choose the Source GPO, GP Reporting Pak Snapshot, or RSOP. This is the GPO, Snapshot, or RSOP from which you want to migrate. You can change to a different domain to locate a source GPO by overwriting your existing domain in the Select Source GPO window and clicking Submit.

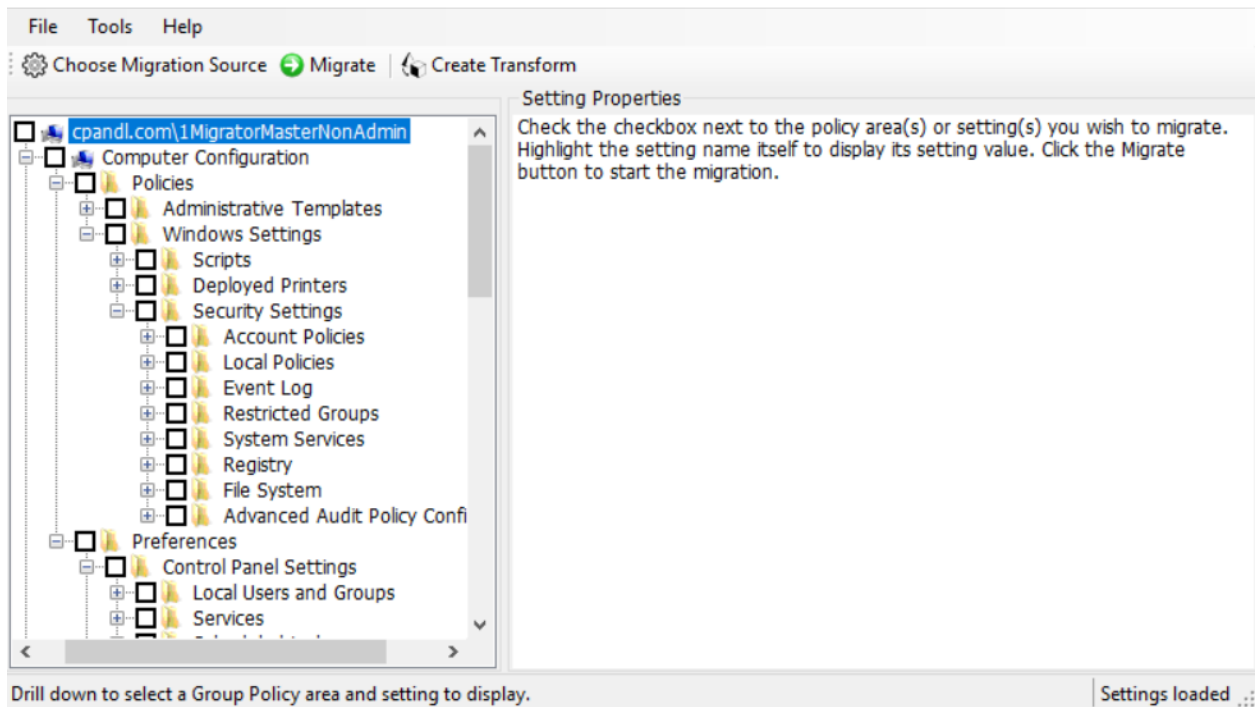
NOTE: A trust is required between the domain you are running GPO Migrator from, and the domain of the source and destination GPOs. In addition, you will need read and write permissions on the source and destination GPOs, or domains, if you are creating a new GPO in the destination.

To select a GP Reporting Pak Snapshot file, simply locate the .snap file once the Choose Snapshot Report File window displays, after selecting "GP Reporting Pak Snapshot" in the Migration Type window above.

NOTE: If a Snapshot ONLY contains unsupported settings as below, trying to select it as the source will give the error, "Unable to Read Snapshot File". If the Snapshot contains other supported settings, it will load as the source and migrate the supported settings but won't load the unsupported settings, so there will be no Fail status indicating that they did not migrate.

To use the preview RSOP feature, choose the "RSOP from Target Computer" option and when prompted, provide the fully qualified domain name (e.g. myhost.mycompany.com) and the fully qualified domain name of a domain controller in the same domain as the computer (e.g. dc1.mycompany.com).

If a live source GPO is selected, the display looks like this:



As you drill into policy nodes where settings exist, you will see the actual setting enumerated on the left-hand tree, and its properties, as Migrator sees them, on the right-hand Settings Properties view. Note that properties as shown in Migrator may not correspond to what you are used to seeing in GP Editor. This is expected as Migrator is translating those properties into the raw settings values that it expects to migrate.

If a Snapshot or RSOP is selected as the source, it will look like the below image. The Snapshot in the image contains two GPOs: Default Domain Controller Policy and Default Domain Policy. In general, GP Reporting Pak Snapshots can contain settings from multiple GPOs and from multiple policy areas. If a Snapshot contains settings from a policy area that is currently not supported by GPO Migrator (see list of supported policy areas below), they will not be displayed in the product. In fact, you will sometimes see a GPO listed in a snapshot, with no settings listed underneath it. That indicates that GPO contains no supported settings for migration, even though the Snapshot itself may contain settings.

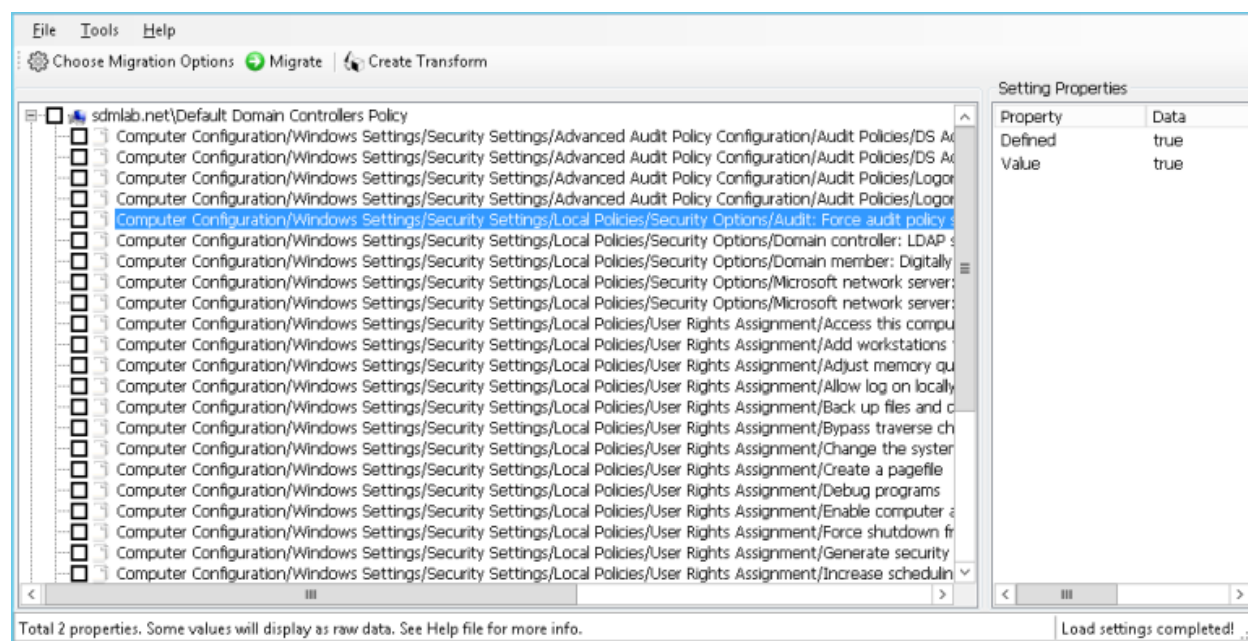
Note that if multiple GPOs within a snapshot contain the same setting, the “last-writer wins”, meaning that the last setting migrated to the destination GPO will be the one that is present in that GPO.

Once you check a box at any level level of the tree, you might notice the screen freezes and the 3 blue dots appear, indicating something is in process. This is normal and is the Migrator enumerating all settings within the GPO prior to migration. This can take a few seconds in the case of GPOs with many settings.

An example of a highlighted setting in a Snapshot's GPO displaying properties is below.

Note: In order for values to display correctly, the Snapshot file must be created on a machine with the same version of Windows as the machine on which GPO Migrator is installed. GPO Migrator resolves GPO settings the same way that native Windows Group Policy tools would, depending upon the policy area. This is especially true for Administrative Template settings and their underlying ADMX files. For example, if you created Administrative Template settings in a GPO on a Windows 11 machine, then those settings may not be visible on a Windows 10 machine running Migrator. The underlying ADMX files that were present when the GPOs were created, would need to be available and parse-able by Windows 10, for example.

Some values in the Setting Properties window may display as raw data. For example, a value of "1" might display when the corresponding GPMC value is "Success." This only affects the display of the value in the Setting Properties window in Migrator, and the value will be migrated correctly. If you have a question about whether a Setting property is showing the correct value as it relates to what you see in GP Editor, contact SDM Software Support to clarify.



Step 4: Click the Migrate button. This displays a window where you choose your destination GPO. You are able to change the domain by typing a new DNS domain name in, either for where to save your new GPO, or after clicking Browse when selecting an existing GPO. To change to a different domain to locate an existing GPO, after selecting "Select Existing GPO," click Browse, overwrite your existing domain in

the Select Existing GPO window and click Submit. Note that a trust is required between the domain from which you are running GPO Migrator, and the domain of the source and destination GPOs.



If you choose to migrate to an existing GPO, you have options to

- Backup GPO prior to migration – Makes a GPMC backup of the original destination GPO to the path you specify, before any changes are made from the migration.
- Overwrite Existing Settings with New - Any configured setting in the destination GPO becomes the source GPO's configured setting. If a Snapshot contains more than one GPO with different values for the same setting, the value will become that of the last GPO that is processed by the program to overwrite the destination GPO's setting.

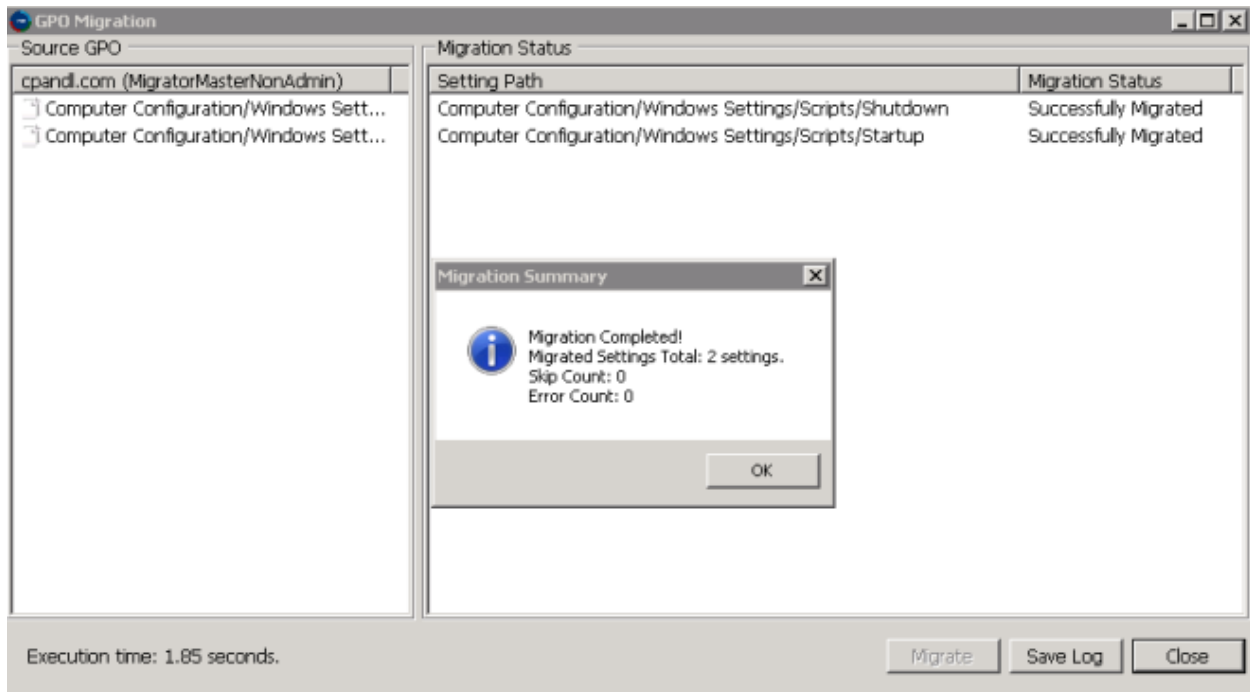
NOTE: For Policies\Windows Settings\Deployed Printers\Printer Connections GPO migration will not recognize if there is more than one printer with the same name but different server. That is, "Name" refers to printer name only, and does not include server name. So if there is a printer called \\server1\Laser and another in the same GPO called \\server2\Laser, GPO to GPO migration sees that as the same name and will not add server2 if destination GPO doesn't have it.

- Leave Existing Settings in Place - If a setting is configured in the destination GPO, it will be left as is; if a setting is not configured in the destination GPO but is configured in the source GPO, the setting will be migrated. Note that the Migration Summary will only say a setting is skipped if the setting is configured in the source and destination GPOs.

NOTE: GP Preferences settings ignore Overwrite instructions and will always be written to the destination GPO. This is because it is possible to have multiple identical GP Preferences settings

whose only difference might be item-level targeting. As a result, GP Preferences ignores the Overwrite/Leave-in-Place option.

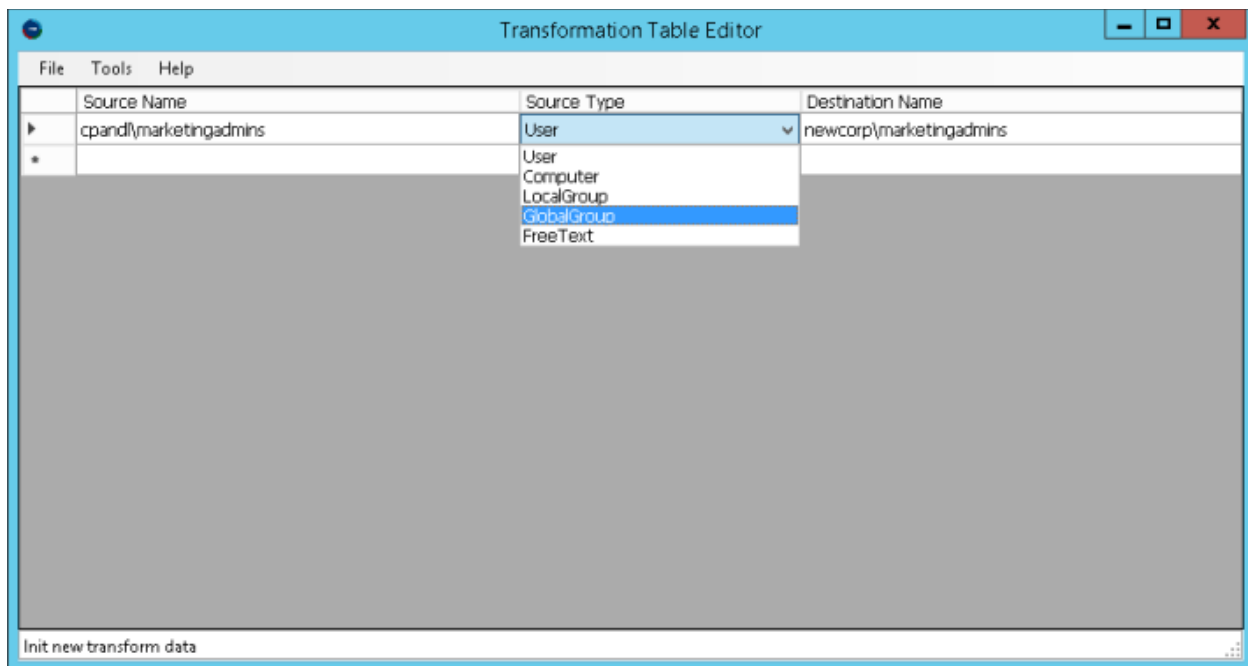
Step 4: Click the Migrate button. A status of all settings being migrated displays: Successfully Migrated, Skipped, or Failed. If there are any Failed migration settings, it would be useful to click the Save Log button so that SDM Software support can help track down any problems.



Click Ok to the Migration Summary, and click Close on the Migration Status window.

Transformations

Click the Create Transform button to open the Transformation Table Editor, shown below.



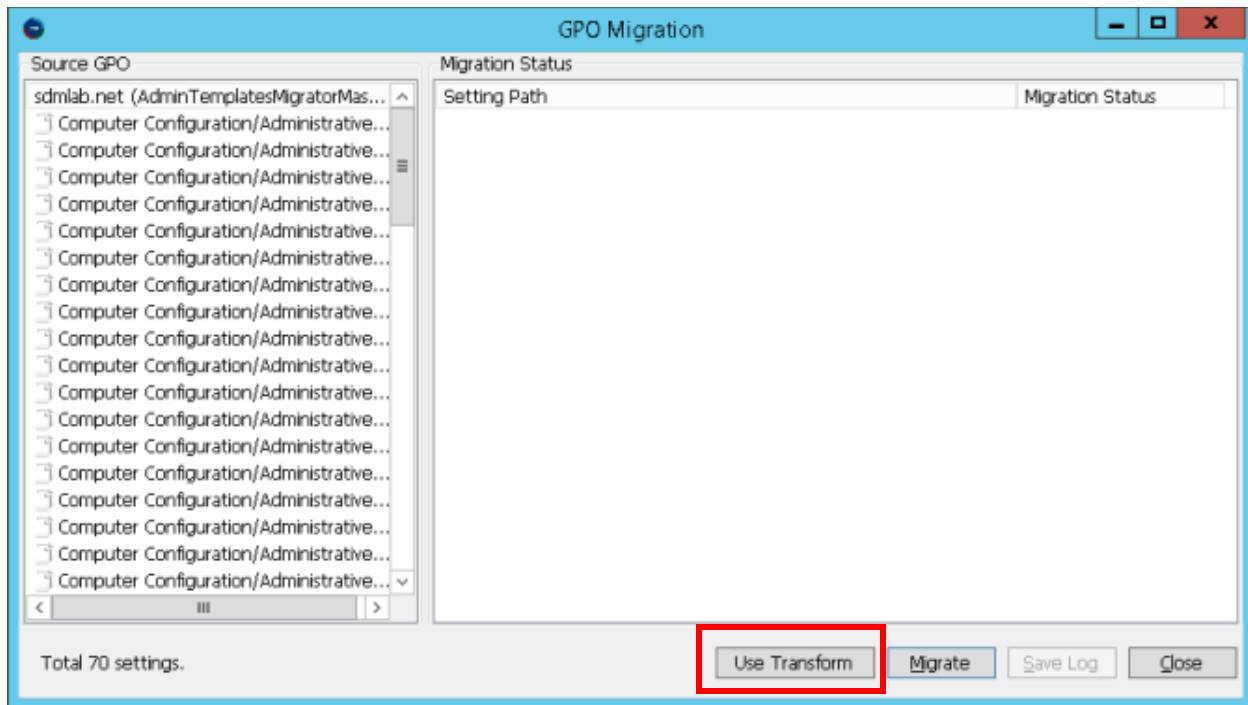
Select the Source Type from the dropdown.

Enter the information you would like to be changed from your source GPO to your Destination GPO. Transformations are supported for a subset of policy areas, as shown in the table below:

Supported Policy Areas for Transformations	
Policy Area	Supported Transformation Types
Restricted Groups Policy	LocalGroup, GlobalGroup
User Rights Assignment Policy	LocalGroup, GlobalGroup
GP Preferences Local Groups	LocalGroup, GlobalGroup
Administrative Templates	FreeText
GP Preferences- Item Level Targeting: Security Groups	LocalGroup, GlobalGroup
GP Preferences- Item Level Targeting: User	User
GP Preferences- Item Level Targeting: Computer	Computer

Note that while transformation values that you specify are not case-sensitive, they do need to take the proper form as they appear in the policy. For example, for Restricted Groups, User Rights, GP Preferences Local Groups and Item Level Targeting: Security Groups, you must enter source group name in the format of <domain>\<group name>, or "mycompany\Marketing Users."

Save your transformation data using the File, Save menu option. You will use that file later once you have clicked the Choose Migration Options button and have selected your source and destination GPOs. When you get to the window below, click the Use Transform button, select the file containing your transformation data, then click Migrate.



Policy Areas Supported

GPO Migrator doesn't currently support migration of every possible policy area in Windows Group Policy. The lists below indicate which policy areas are currently supported in the product for a given migration scenario.

Computer Configuration

- Policies\Administrative Templates
- Policies\Windows Settings\Scripts(Startup\Shutdown)
- Policies\Windows Settings\Deployed Printers/Printer Connections
- Policies\Windows Settings\Security Settings\Account Policies
- Policies\Windows Settings\Security Settings\Local Policies
- Policies\Windows Settings\Security Settings\Event Log
- Policies\Windows Settings\Security Settings\Restricted Groups
- Policies\Windows Settings\Security Settings\System Services (Not supported when migrating from GP Reporting Pak Snapshots or Resultant Set of Policy (RsoP))
- Policies\Windows Settings\Security Settings\Registry Security (Not supported when migrating from GP Reporting Pak Snapshots or Resultant Set of Policy (RsoP))
- Policies\Windows Settings\Security Settings\File Security (Not supported when migrating from GP Reporting Pak Snapshots or Resultant Set of Policy (RsoP))
- Policies\Windows Settings\Security Settings\Advanced Audit Policy Configuration
- Preferences\Windows Settings\Shortcuts
- Preferences\Windows Settings\Environment

- Preferences\Windows Settings\Registry (Registry Collections and Registry Wizard items not supported)
- Preferences\Windows Settings\Files
- Preferences\Windows Settings\Network Shares
- Preferences\Windows Settings\Ini Files
- Preferences\Control Panel Settings\Local Users and Groups
- Preferences\Control Panel Settings\Services
- Preferences\Control Panel Settings\Scheduled Tasks (Only Pre-Windows 7/Vista Scheduled Tasks supported; Not supported when migrating from Resultant Set of Policy (RsoP))
- Preferences\Control Panel Settings\Immediate Tasks (Only Windows XP Immediate Tasks Supported; Not supported when migrating from Resultant Set of Policy (RsoP))
- Preferences Control Panel Settings\Power Options
- Preferences\Control Panel Settings\Data Sources
- Preferences\Control Panel Settings\Network Options (DUN connection settings not supported)
- Preferences\Control Panel Settings\Printers
- Preferences\Control Panel Settings\Devices

User Configuration

- Policies\Administrative Templates
- Policies\Windows Settings\Scripts (Logon\Logoff)
- Policies\ Windows Settings\Folder Redirection
- Policies\Windows Settings\Deployed Printers/PrinterConnections
- Preferences\Windows Settings\Drive Maps
- Preferences\Windows Settings\Printers
- Preferences\Windows Settings\Shortcuts
- Preferences\Windows Settings\Environment
- Preferences\Windows Settings\Registry (Registry Collections and Registry Wizard items not supported)
- Preferences\Windows Settings\Files
- Preferences\Windows Settings\Ini Files
- Preferences\Control Panel Settings\Local Users and Groups
- Preferences\Control Panel Settings\Scheduled Tasks (Only Pre-Windows 7/Vista Scheduled Tasks supported; Not supported when migrating from Resultant Set of Policy (RsoP))
- Preferences\Control Panel Settings\Immediate Tasks (Only Windows XP Immediate Tasks Supported; Not supported when migrating from Resultant Set of Policy (RsoP))
- Preferences Control Panel Settings\Power Options
- Preferences\Control Panel Settings\Devices
- Preferences\Control Panel Settings\Data Sources
- Preferences\Control Panel Settings\Network Options (DUN connection settings not supported)
- Preferences\Control Panel Settings\Printers

Troubleshooting

GPO Migrator migrates GPO settings on a per-setting basis. That means that if you are migrating multiple settings from a source GPO, snapshot or RSOP, it is possible that individual settings could fail to migrate, but the migration will complete. In these cases, it's useful to capture logs from the product to provide SDM Software Support. The Save Log button on the migration screen is one type of log that the product collects. This will provide you with high level success or failure status on each setting migrated.

In addition, the product stores application trace logs, for use by SDM Software Support, on the file system where Migrator is installed. Specifically these logs can be found in %appdata%\SDM Software\GPO Migrator\Logs. When reporting an issue, please capture the logs found in the Logs folder for use by SDM Software Support.