



**Automate Admin**

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Version 1.0.0.0

# **Automate Admin**

# **Technical Manual** for the

**1.0.0.0 version**

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## Preface

Automate Admin is a program that automates certain tasks on a computer that the system administrator otherwise would have to perform manually. These tasks can be the installation and maintenance of the printer, backup and restoration of user data, setting user's work environment, etc ...

Automate Admin program is based on the concept that there are three types of computers.

A user of the system (Automate Admin client) can log on to certain computers within the Windows Domain. Type 1 computer is their computer, or a computer that the administrator sets up in the Automate Admin application, is considered a user's base computer (in the application it is called User's Computer). It is a computer where the user performs his daily tasks. All other computers that the user can log in within the Domain are considered temporary (in the program, this type of computer is in the application called Other Computers). They are considered as Type 2 computers that the user utilizes temporarily/as necessary/as required. The Type 3 of the computer in the Automate Admin program is the so-called New Computer. A New Computer is a temporary phase through which User's Computer passes. In the Automate Admin application, this phase occurs when administrator assigns a computer to a user for the first time, or if for some reason the user gets a new computer, and then the settings, data, printers, etc ... from the old User's Computer are transferred to the new User's Computer using the Automate Admin application.

With the assistance of Automate Admin program, the following functions can be configured for a user: backup, which network printers are administered, which applications open when user logs on, which shortcuts are placed on Desktop, etc ... In case the user needs to log on from a different computer (due to work specifics or because their machine is not available), with the Application help we can allow user to have almost all options as he would have on his computer. The only option he cannot have would be restoring his data to a temporary computer.

However, in the Automate Admin application, you can set the following option: when a user is logged on to a temporary computer, he can get a shortcut to his backup files on the Data Server. Data Server is a computer that, through the Automate Admin application, is defined as a computer for storing user's backup. When a user on a temporary computer changes files from a backup, they synchronize with the files on his computer. In this way, the administrative work is reduced in situations where the user is allowed to work on a temporary computer. When there is a need to assign a new computer to a user because the old one stopped working or because he receives a new one, the Automate Admin application can activate the procedure of assigning a new computer, where all the settings defined on the user's old computer (data, printers, etc...) will be transferred to his new computer.

## Basic settings

When the Automate Admin application is being installed, the first thing that need to be done is to define Automate Admin Data Server. In order for the application to function, there must be at least one Automate Admin Data Server. Data Server can be set on a workstation but it is preferable to be set on a Windows server. The server where Automate Admin Config Server is located can also be set up as Automate Admin Data Server. This option can suit smaller environments or environments where all users are physically located at the same location. Depending on the number of physical locations and the network speed between them, additional Automate Admin Data Servers can be configured in different locations. For example, if there is a remote site, the local Automate Admin Data Server can be configured for users of that location. This can be done for a faster backup and restore of user data and settings.

\*The Automate Admin Data Server must be assigned to the user even though we choose not to make a backup for it.

When the first Automate Admin Data Server is added, the first user of the Automate Admin application can be configured.

The minimum configuration of the user consists of assigning its user name and data server. In this configuration, if a user logs on to any computer in the domain, Automate Admin Logon Script will run, and if the user can access the Automate Admin Config Server and read its settings, it will report an message in the log "New computer name for the user has not been set", which means that the script will not perform anything until a New Computer name is set for the user in the Automate Admin application.

If you define this basic setup for user in the Automate Admin application and there is no message "New computer name for the user has not been set" in the log, this can mean one of two things:

First. You have set up an Automate Admin user for one windows user and you are tracking the logging of another windows user that may not be defined in the Automate Admin application.

If a user is not defined in the Automate Admin application, at the logon, Automate Admin logon script will exit execution.

Second, if a Windows user starts the Automate Admin logon script, and cannot access the Automate Admin config server to check if there is a configuration for him, script will record in his local log on the machine in the folder %LOCALAPPDATA%\Automate Admin\Logs\ the reason why he could not access the Config Server.

If the Windows user starts the Automate Admin logon script, checks that there is a configuration for him, and the Automate Admin program license has expired, it will record in the local log message that the user is not licensed.

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If the Windows user starts the Automate Admin logon script, checks that there is a configuration for him, the following situations may occur:

If the Automate Admin logon script is globally disabled: it will record the message “Script Is Not Globally Enabled” in the local log on the computer. This situation occurs if the Automate Admin administrator checks the Disable Automate Admin Logon Script option. This option disables the execution of scripts for all users of the Automate Admin program and should only be used if the Automate Admin administrator decides to stop execution of Automate Admin Logon Script for all Automate Admin users. This option is located in the Automate Admin application, and can be activated by right-clicking on the Config Server, Settings, and Disable Automate Admin Logon Script.

If the user is disabled in the Automate Admin application: If the administrator of the Automate Admin application has a disabled user in the application, user’s Automate Admin logon script will stop executing its Actions, and the local log of the computer will contain a message “User Is Disabled In Automate Admin Application”. This option is located in the Automate Admin application, Double-click on the user name, and inside Properties section check the Disable option.

If the user has launched an Automate Admin script on an operating system that is not supported by the Automate Admin program, the Automate Admin logon script will record a message “Windows Version Is Not Supported” in the local log on the computer, and then exit the script. The Automate Admin program works with versions of the Windows operating system from Windows 7 and above.

If the Automate Admin logon script passes all these checks, the last check before applying the user’s configuration is to verify that the User’s computer is assigned to the user in Application. If this is not done, the Computer Name and the New Computer Name fields in the Automate Admin application would be empty. The Automate Admin logon script will write message “New Computer Name For User Is Not Set” on the Automate Admin config server in the user’s New Computer Log, and in the local log on the computer.

\* if the logon script does not pass the check, it will record a message in the local log. After that, it will wait 10 minutes and it will try to complete the check again.

Assigning computer to the user in the Application:

The New Computer option in the Automate Admin application serves to assign the user to “their” computer. When New Computer is assigned to the user in the Automate Admin application, at the next logon on that computer the Automate Admin logon script will execute the New Computer option. In the simplest scenario where nothing else in the Automate Admin configuration for user is set, the only change that will be done is that New Computer Name becomes Computer Name for the user in Application. After this action, all other computers that the user logs on will be treated as “Other Computers” in the Application. When this is done, the message “New Computer Name For User Is Not Set” will stop to occur in the log.

\* Initially, when configuring user in the application, the computer name for user may be unknown. In this case, some non-existent computer name can be entered in the New Computer text box. The next time a user logs in, the message “New Computer Name For User Is Not Set” will not be displayed and recorded in the log, but then all the computers to which the user logs in the Application will be treated as “Other Computers”.

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As long as the user is logged on to the computer, the script will check if a configuration change has occurred on the Config Server. If there is a change in the type of computer that the user is logged in when checking the configuration, the script will begin to run this type of computer. For example, if the script registers that the computer on which it is running is no longer a User's Computer, it will begin to run the Other Computers configuration. If the script registers that the computer on which it is running becomes a New Computer, it will execute the New Computer option.

When the script determines which type of computer is running, it will log into Logged In Users on the Config Server. After that, any information to be recorded, script will save to the local log, The Script Log on the Config Server and User's log on the Config Server.

## **Config Check**

Checking if there is a change in the user configuration on Config Server is done with each log on to the computer, and then on a time interval specified in the Config server Settings and on every startup of the backup.

The check can be done for a maximum of 5 minutes and the minimum is 12 hours. The check interval cannot be less than 1h and longer than 12. The number of checks per interval must not be less than 1 and greater than 12. These settings are in the Application, right-click on Config Sever, Settings...

## **Actions**

The actions can be performed by every user log on to computer and with each config check.

Actions are executed in order, but whether the next action will wait for the previous one to end before it starts does not happen in all cases. If it's Context Menu Action, the following action does not wait for it to finish. If Shell Action is executed, the following action will wait for it to end only if the Shell Action option Wait Until Command Finishes is checked in the Properties of the action. This behavior is conditioned by the commands returning the script exit status when they are finished. However, executing some commands, such as opening Microsoft Word, would return the status only when Word exits, which means that waiting on such a command to exit is not recommended, the next one has to start immediately after it.

The actions can be configured to run only when the User logs on, or to have both actions performed at the logging on and on the next config check. If it happens that the Config Server is not accessible when the User logs on, when it does, actions that are configured as Logon Only will not be performed.

\* The time when the user logged in is taken as the base for calculating when the next config check is due with the addition of the config check interval. When a user logs off and logs on again, the time for config check is calculated again. The time for config check is calculated again if the computer wakes up from hibernation.

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\*Action Groups are used to group action defined in Application and contain actions to be performed for users of the Application on their computers.

## **Shell Actions**

Shell Action is a command defined in the Application which is intended to execute on user computers as if it was launched from Command Prompt.

The Shell Action runs as if it is open from the Command Prompt on the user's computer. The working directory of the running Command Prompt is the directory from which the script was started. In order to test whether the command from Shell action runs well on the computer, it is necessary to open the Command Prompt and execute the cmd / c command.

## **Force Folder Content Actions**

Force Folder Content is a Command defined inside the Application that forces content of a particular folder onto user computers.

\*The action can be set only for folders that are one level below the Common Folder on the Config Server. This is to simplify the administration of Forced folders within the Common Folder.

## **Force Registry Value Actions**

Force Registry Value is a Command defined inside the Application that forces a particular Registry Value onto user computers.

## **Context Menu Actions**

Context Menu Action is a Command defined inside the Application that executes on user computers as if it was started from context menu of executable.

\*Purpose of Context Menu Actions is intended for .exe files but it can work with any extension.

## **Print Management**

Print Management in Automate Admin Application can be implemented through the configuration of Network Printers and Printer Groups.

The idea for the Print Management is to define all of the printers that will be automatically administered within the organization. The Application can only manage Network Printers. Printers connected to a computer via Standard TCP/IP Port are considered as Network Printers by the Application.

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\*In order for the Print Management Action to work it relies on Print\_Admin\_Scripts from local computer. Print\_Admin\_Scripts are located in %SystemRoot%\System32\Printing\_Admin\_Scripts\en-US

The printers that are added to the Actions list will be set to the user as they are defined in the database. When one of the printers is removed from the list, it will not be deleted from the target computer because another user may be using it. So the script only adds and manages the printers on the computers but does not remove them from it.

When performed on User's Computer, there is a default action that will record which user's printer is a default printer. When a user logs on to an Other Computer, if a Set the same default printer used by the User's computer Action is enabled, the script will configure such printer on Other Computer to be a default printer if such exists on the computer.

\* Configuring a Default printer on the Other Computer is only done during/with user's log on.

\* The default printer from User's Computer will be set as default printer on the New Computer if this action is enabled and printer exists on the New Computer.

A particular Printer for a user is managed only once per Config Check. It does not matter how many times Printer appears in added Printer Groups.

In general, Actions containing printers takes more time to execute. It is recommended that they be the last to start.

## **Printer Driver Installation Rules**

Manage Driver From This Location option:

If this option is checked, the script will check this path for printer's driver.

If this option is checked for driver to be installed, the user must be an administrator on the computer or the Print Admin user must be configured in The Application.

The driver installed with this option must be digitally signed or a confirmation window will pop up during the installation, which can confuse the end user.

The script will search all subfolders within the path to find the driver, so it is advisable to enter the path as precisely as possible.

The script cannot manage printer driver on the computer if Point And Print Printer has been installed. The script will log a message that the driver can't be updated until that printer is deleted.

When the driver is installed from the network path and its name is the same as driver name that is already in the Driver Store, a new driver will be added to the Driver Store with the same name. If the .ini file from which driver is installed contains a driver for another model, it will also be entered in the Driver Store during installation.



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If two printers on the same computer use the same driver, and in the application it is set to one to install the driver from the Driver Store and to the other to install driver from the path, the newer driver will be selected.

If there are two drivers with the same name and version in the Driver Store, the script will install the first driver from the list.

If it is preferable for the same drivers for the two printers on the computer to have a different name, then one of them should be renamed inside .ini file before installation.

If the printer driver does not exist on the path or in the Driver Store, script will not start the printer installation.

Driver Name option:

This field is the Driver Name of the printer that can be seen when the printer properties are opened on the computer in Devices and Printers.

If the Manage Driver From This Location option is not checked, the script will search for the driver by name in Windows Driver Store.

Driver installing from Windows Driver Storage does not require administrator rights for the installation.

The name of the driver is case-sensitive and should look like the name of the driver in the Windows Driver Store or like the driver's name inside the driver .ini file.

## **Backup Action**

Backup Action determines what will be backed up on the User's computer.

Backup runs with user's credentials, which means that the user can only backup data for which they have the access rights.

The backup only works when the user is logged on to the computer. If the user was not logged on to the computer at the time specified for backup, the backup will be done the next time they log in.

If a user logged off the computer during backup, the backup will end the next time they log in.

If a backup has not been done for a particular day this could mean that the user was not logged in.

If it is recorded in the log that backup started, then the day passed and there is no record that backup is finished it means that the user was logged out during the backup and the backup is incomplete. Backup will be completed on the next user login.

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If the file is deleted or modified on the computer between two backups, the deleted or modified file can be found in the Archive on the Data Server.

The modified and deleted files are deleted from The Arhive if they are older than 28 days!