

SSH Device Manager user guide

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Operation

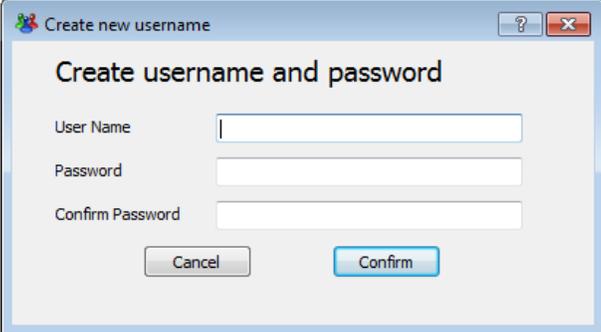
The program uses a local database to manage many devices. The program keeps a list of devices, groups, scripts and jobs. When a time comes to run a job, the job is being run on every device that assigned to the same group to which the job is assigned.

At first a connection script is being executed that is assigned to a device, and then the script that was assigned to a job is being executed. The output of the session is saved in the executions folder in program directory. When the job is being complete, a new time is being saved by adding a value in Repeat in to time in Execution time.

During execution logs are being saved in the log directory. Output of execution of scripts is saved in the scripts directory.

First activation

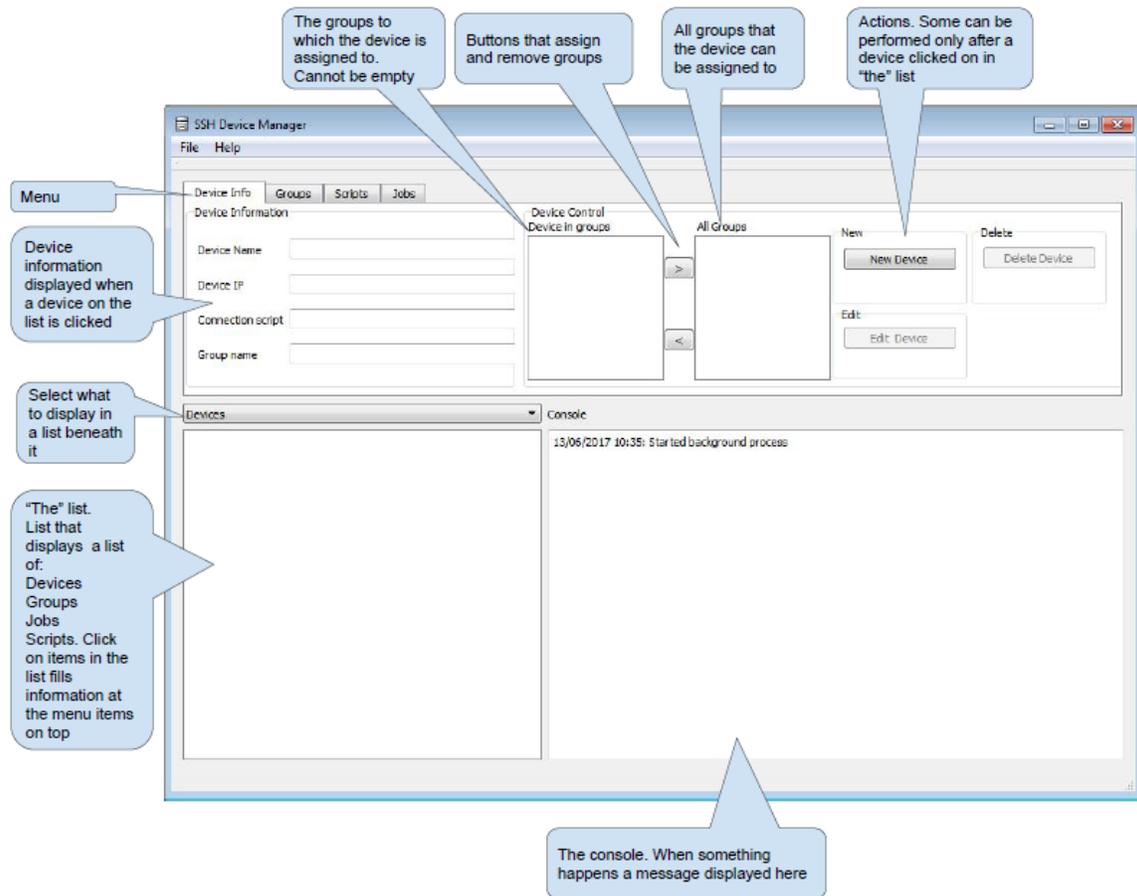
After installing, when the program is activated at the first time, a user is asked to enter user name and password



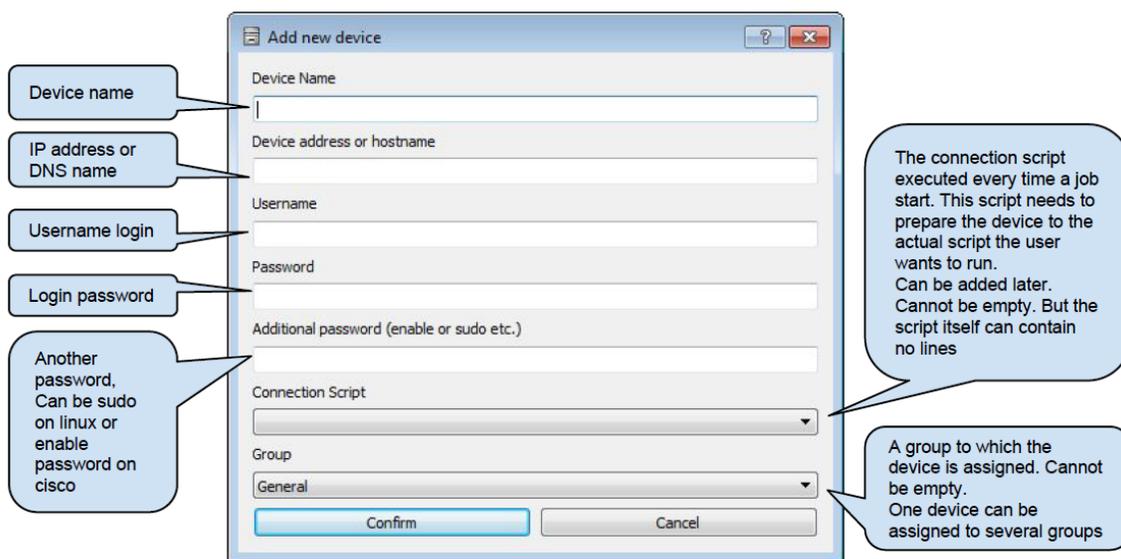
The image shows a Windows-style dialog box titled "Create new username". The dialog has a title bar with a question mark icon and a close button. The main content area is titled "Create username and password" and contains three input fields: "User Name", "Password", and "Confirm Password". Below the input fields are two buttons: "Cancel" and "Confirm".

These details will be used to encrypt the password and the enable password of each device.

Adding a device



To add a device, just click on "New Device" button.

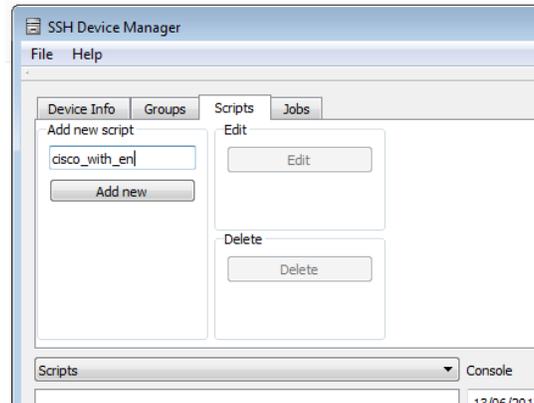


Add the device. Connection script can be left empty, but it has to added later.

The password are encrypted using AES256 encryption protocol. The username and password are used immediately at login to the device. The additional password can be used later using a script.

Adding a script

Previously a device was added without a connection script. Now a connection script needs to be added for this device. Go to the scripts tab and write a name for the script and click on Add new.

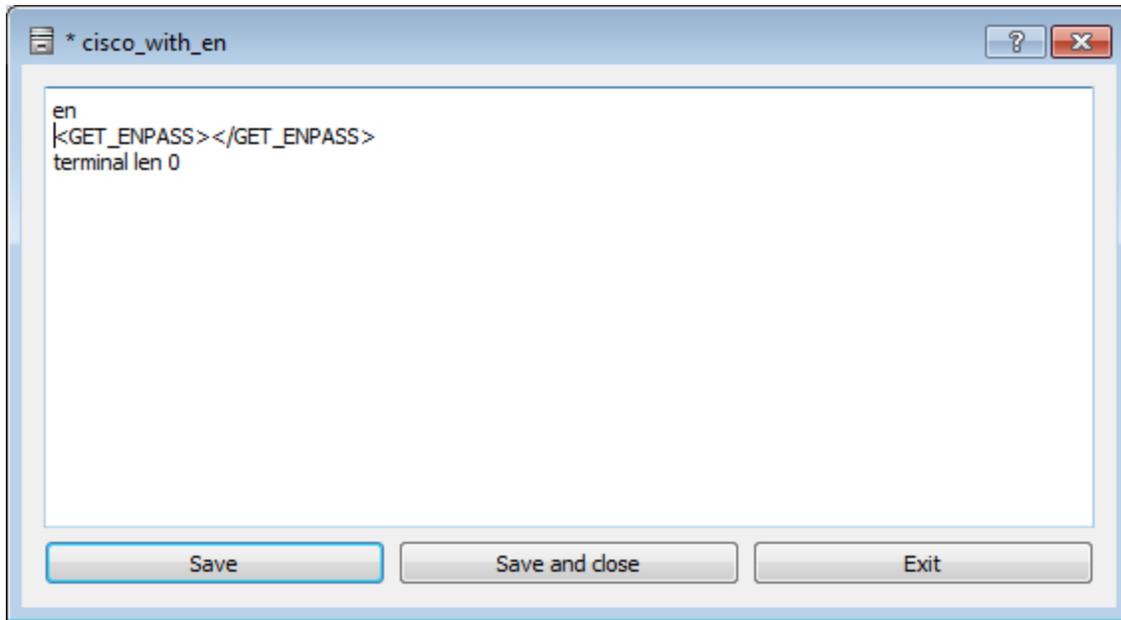


At the script editor enter:

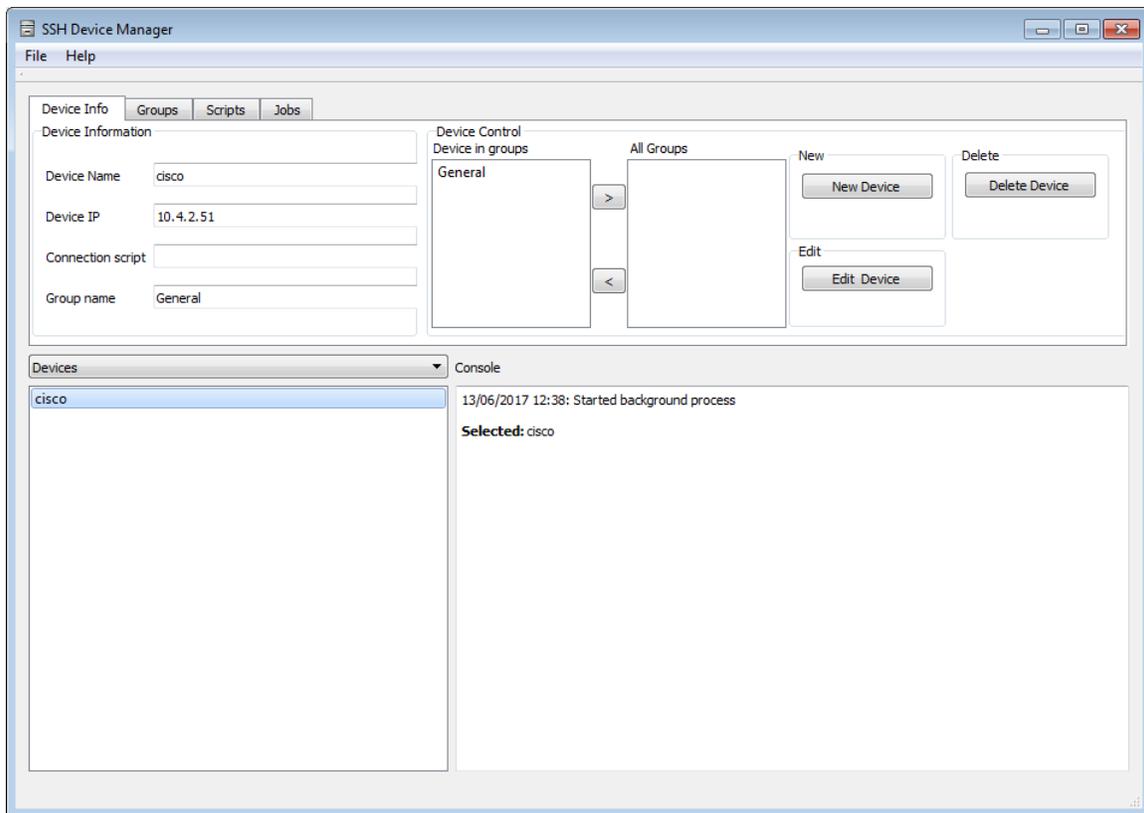
```
en
<GET_ENPASS></GET_ENPASS>
terminal len 0
```

These are the command that will be sent to a device after the SSH session established. First the command “en”, a short for enable will be sent. After the command the keywords `<GET_ENPASS></GET_ENPASS>` will instruct the program to get the additional password from the device configuration and send it to the device. Additional keywords can be used at the scripts and they are listed at appendix A.

And click Save and close button.



Go back to the Devices Info tab, click on the device in the list and click on Edit Device button



At the device edit window select the script and click on Confirm button

The screenshot shows a dialog box titled "Add new device". It has a standard window title bar with a question mark and a close button. The dialog contains several input fields and dropdown menus:

- Device Name:** A text box containing the value "cisco".
- Device address or hostname:** An empty text box.
- Username:** A text box containing the value "cisco".
- Password:** A text box with five black dots representing a masked password.
- Additional password (enable or sudo etc.):** A text box with five black dots representing a masked password.
- Connection Script:** A dropdown menu with "cisco_with_en" selected. Below the dropdown, the word "Group" is visible.
- General:** A dropdown menu with "General" selected.
- Buttons:** Two buttons at the bottom: "Confirm" and "Cancel".

Adding a group

A groups meant to separate between running the same job on different types of devices. For example if an organization has Cisco and Juniper switches, it is best to create two groups, one named "cisco" and another named "juniper" and assign cisco and juniper devices to the relevant groups.

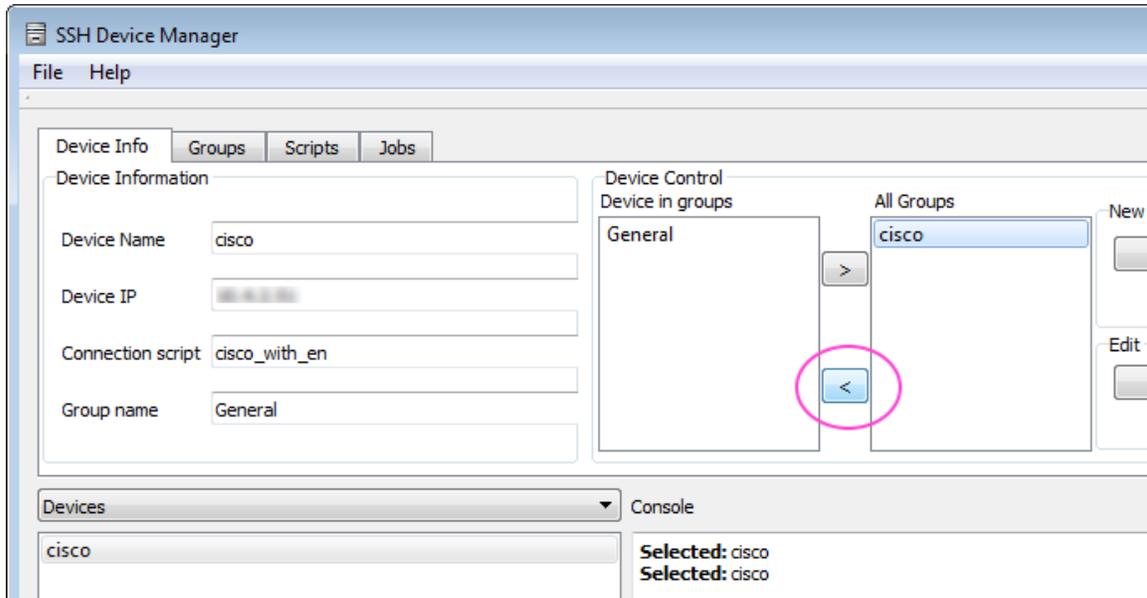
To create a group, go to Groups tab, write a new group name in the text field and click Add new

The screenshot shows the "SSH Device Manager" application window. The "Groups" tab is selected, and the interface is divided into several sections:

- Device Info | Groups | Scripts | Jobs:** A tabbed navigation bar at the top of the main content area.
- Group Name:** An empty text input field.
- Delete Group:** A section containing a "Delete" button.
- New Group:** A section containing a text input field with the value "cisco" and an "Add new" button below it.

Assign or remove a device from a group

Go to Device tab, click on a device, then click on the group in “All Groups” list and then on the “<” button.



To remove the device from the group click on the “>” button.

Create a “show run” script for cisco router.

Same as in chapter “Adding a script”, create a new script called “cisco_show_run”. Add the following lines to it:

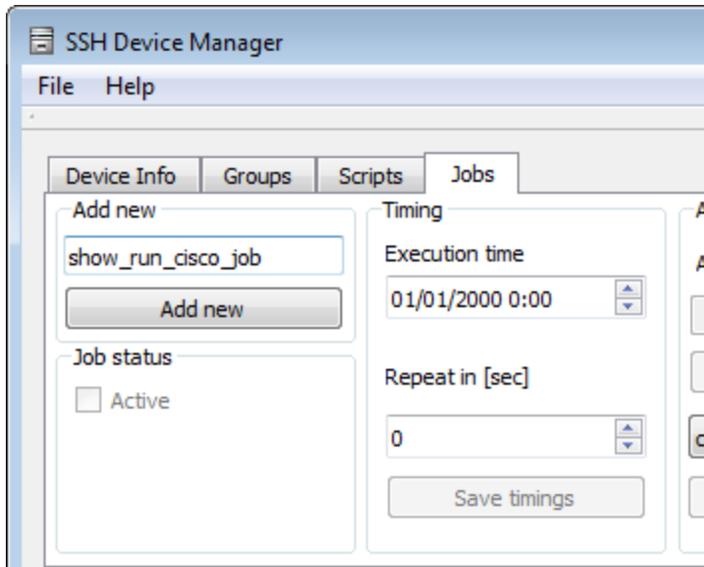
```
show run
<PAUSE>2000</PAUSE>
```

The “show run” is the command that is being sent to cisco. This command will display all cisco configuration. The expected output from the cisco router start immediately after the router receives this command. And because it the entire configuration, there is a lot of lines there. Therefore the keyword <PAUSE>2000</PAUSE> is used that makes the program wait 2 seconds before continuing to the next command. This is enough time to receive all configuration from the router.

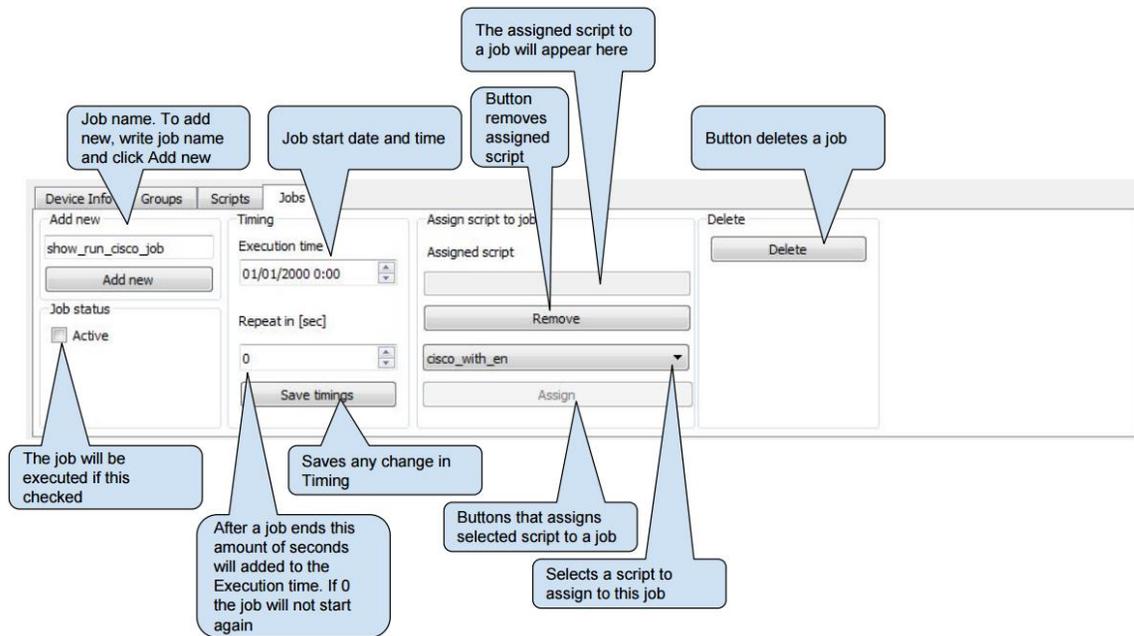
It is recommended to pause the program every time a big output is expected from a device.

Creating a job

To create a job, got to Jobs tab, write a job name in the text field and click on Add new.



A job will be created and added to list. Now click on a job in the list and configure job parameters:

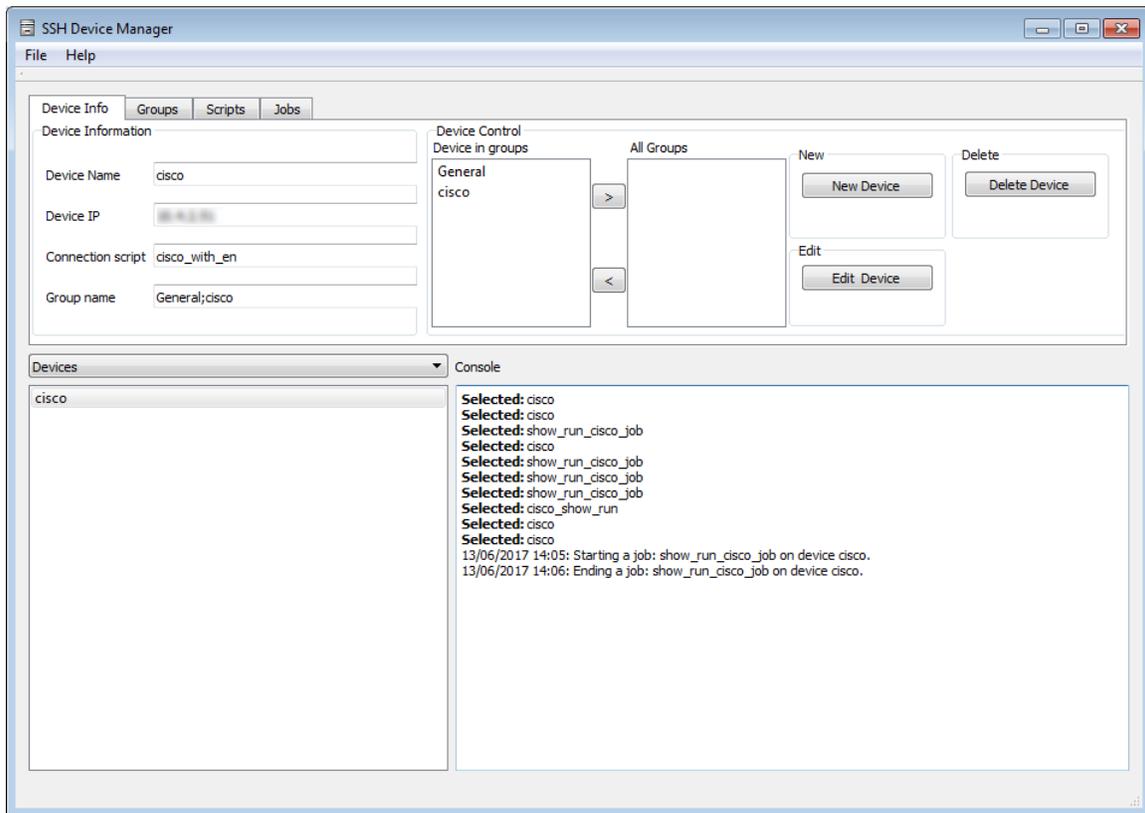


To make sure the job will be executed:

1. At the jobs tab:
 - a. Select execution time and date for the future,
 - b. Assign a script to the job,
 - c. Mark the active checkbox.
2. At the groups tab:
 - a. Assign a job to group
3. At the Device Info tab:

- a. Make sure there are devices in the group

When the job is complete, a message will appear in the console



In addition, in the application directory/executions, will appear a file in format of

device name_date.txt

Logs

Logs are save in the application directory/logs.

Appendix A: Script keywords

All keywords are case sensitive

Keyword	Operation
<GET_ENPASS></GET_ENPASS>	Replaces the keyword with additional password that stated during device configuration
<GET_PASS></GET_PASS>	Replaces the keyword with user password that stated during device configuration
<GET_USER></GET_USER>	Replaces the keyword with user name that stated during device configuration
<PAUSE>X</PAUSE>	Waits for X milliseconds. X must be a number.

Appendix B: Licensing

In short, the program is free for personal but all type of organizations must pay. The full license is attached as "License.pdf" file to the program and can be found in the application directory after installation. By installing this program the user is agreeing to the terms and condition in this license.

If an organization would like to evaluate this program, the organization can do this upon receiving authorization email with a pdf document signed by the creator of this program. This document will define a specific time period during which the organization is allowed to evaluate this program. After this evaluation period the organization must pay for this program or uninstall it.

For any questions about sales, offers and anything else, please contact Yulia:

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