P.V. SUPA
Process Improvement Applications

Supa Scheduler manual

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Introduction

Supa Scheduler is a tool to define commands that are sent to self service units, on specific times and days. Typical use would be to define machine startup times and shutdown times, so that the self service units are automatically turned off when the library is closed.

All commands are sent from Master controller. Thus, for the scheduler to work, one machine with Master controller must be up and running. Typically this would be a server in a centralized setup.

There may be more than one schedule in the database. This could be the case for example when a centralized system is used with multiple libraries; each library might have their own schedule. Or in larger libraries, different parts of the library might have different schedules. Any number of schedules can be set up, depending on the needs of the library.

Available commands

The following commands can be sent from the scheduler system:

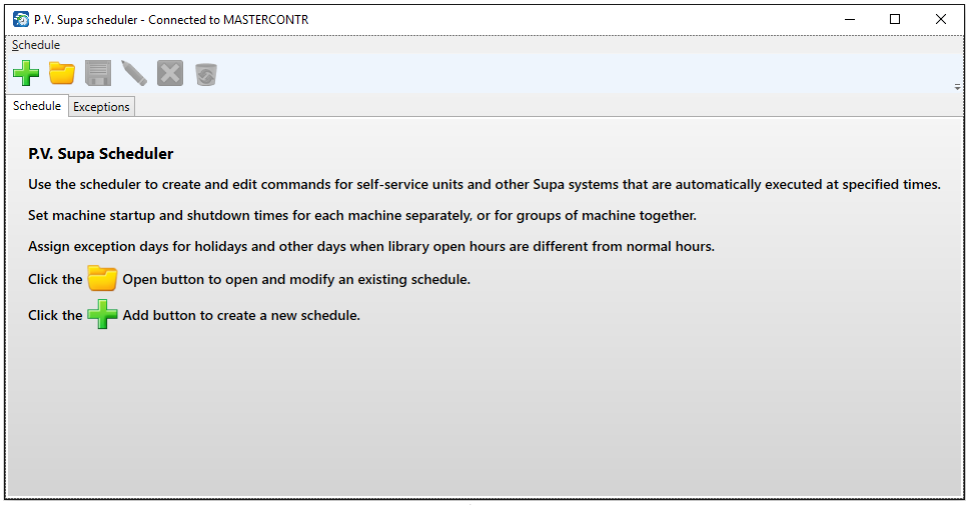
Start: This command starts a computer in a self service unit. It sends a Wake-On-Lan package through network, targeted at the Mac-address of the computer in the self service unit. Note that this requires that the Wake-On-Lan packages are allowed through the network, and that the machine is capable of waking on network packages and is configured to allow that. Computers shipped by P.V. Supa have this configuration set by default.

Shutdown: This command turns off the computer in a self service unit. This command requires software to listen to shutdown commands, to be running on the computer. This includes all Supa self service software, such as Librid 3, Libretto 2, Libcabinet and Libshelf. When any of these receives a shutdown command, it will handle shutdown correctly; end possible patron sessions or other processes currently running, close the software correctly and finally send a shutdown command to the computer.

This is always the preferred method for shutting down machines, instead of turning off the power or disconnecting a power cable.

Scheduler user interface

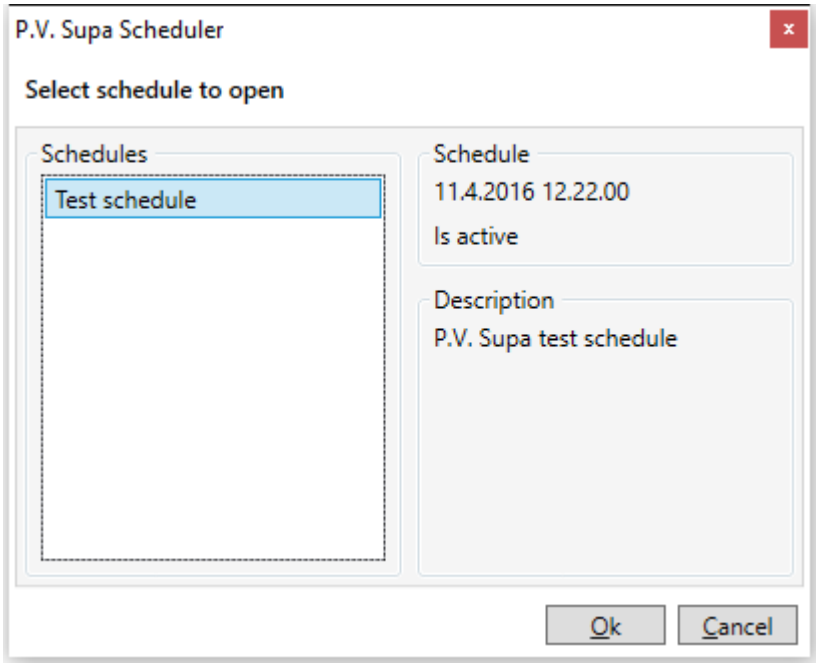
When opening the scheduler interface, you are presented with two options: create a new schedule, or open an existing one. All schedules are stored in the Supa database via Master controller; selecting to open an existing schedule will present a list of all available schedules in the database.



Scheduler main window before schedule has been opened

Opening an existing schedule

When opening an existing schedule, you are presented with a list of all schedules available in the database:

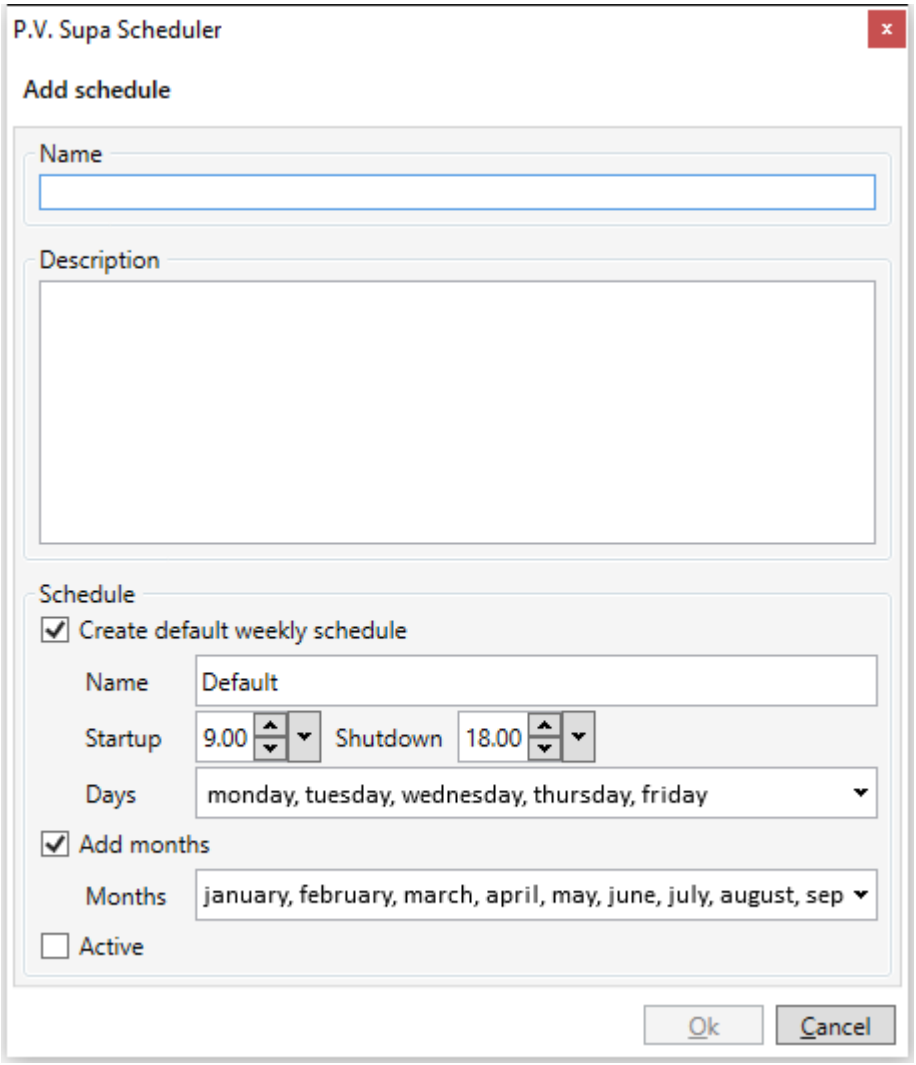


Opening an existing schedule

Depending on the system, there may be multiple schedules available, or just one.

Creating a new schedule

After pressing the Add new schedule button, you are presented with a window to enter the basic information for a new schedule:



Name is what will be shown in list of available schedules when opening from database. You should always give a good name to a schedule, to avoid possible mistakes.

Description is free text where you can enter more information about the schedule. For example, you could write the name of the person responsible for maintaining the schedule, intended use of the schedule, to which libraries or departments this schedule is meant for and so on.

Selecting the **Create default weekly schedule** will automatically create startup and shutdown commands for the selected days (select weekdays from the drop-down list). These can then be modified to suit the different days correctly. It is recommended to use this option as it simplifies the creation of a schedule.

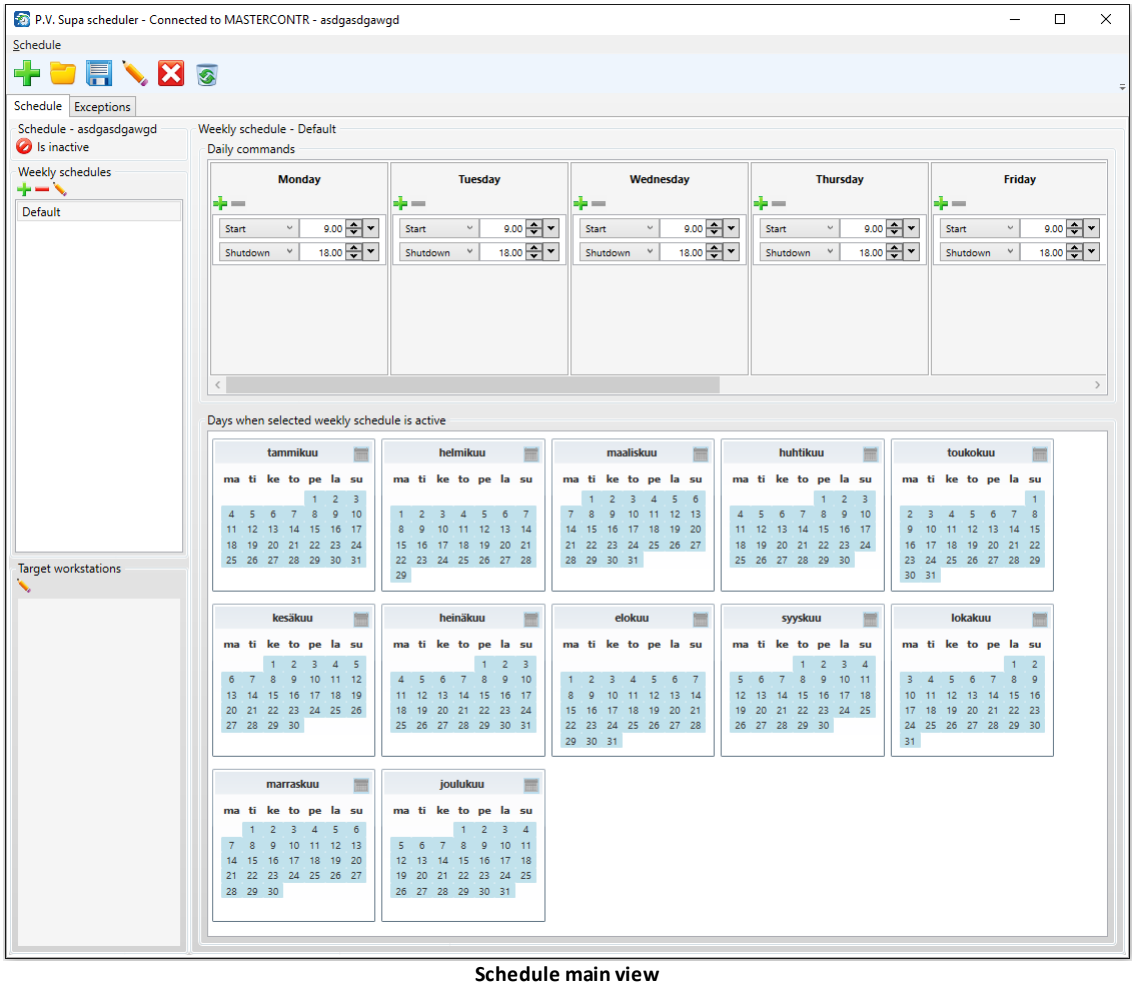
Selecting **Add months** will pre-select the schedule to be used in the months, selected from the

drop-down list. The schedule must be selected for days when it is used; this can be done while editing the schedule, but this option will automatically make the new schedule active over given months. This information can be easily edited when working on the schedule.

The **Active** mark is used to make a schedule active. If a schedule is not active, it will not be used - no commands will be sent. Only active schedules will send commands. This option is disabled by default, making it possible to work on a schedule and save it, without it starting to send commands right away. You can work on a schedule safely, and once it is complete, you can then mark it active and save it, and it will then begin to work within Master controller, sending commands to machines.

Working on a schedule

When a schedule is opened or created, it will be presented in the main window:



Schedule main view

On the top left is the tool bar. Use these buttons to save the schedule, edit the basic information or discard or close the schedule.

Below that are two tabs: **Schedule** and **Exceptions**. Schedule is the main, repeating schedule, which is mostly used. Exceptions contains specific days when different commands are sent. These

would be for example holidays, like christmas or easter, when the library is open different hours than normally. Exceptions are intended to be used on specific, single days. If the library opening hours are different over a longer period of time, like weeks, use the *Weekly schedules* feature explained below.

Below the tabs is a button and description to indicate whether the schedule is **active** or not. Click on the icon to toggle; the schedule will still need to be saved before it is in fact changed in the server.

Again below that on the left is a list of **weekly schedules** within this schedule. This allows separate weekly cycles; for example during the summer months, the opening hours might be different from the rest of the year but still regular enough to not be considered exceptions. The calendar on the right will show the days when each weekly schedule is active; note, that even though the schedule is defined as weekly schedule, it does not have to be in effect full weeks, it can be only some days; for example it could only be in effect during weekends in the summer.

Last part on the left is a list of **target workstations** to which this schedule is connected. These are the machines (computer names) connected to the same master controller as the schedule. Click on the edit icon to see a list of computers available, and select any and all to which this schedule is connected to. All selected computers will receive the commands as defined by this schedule.

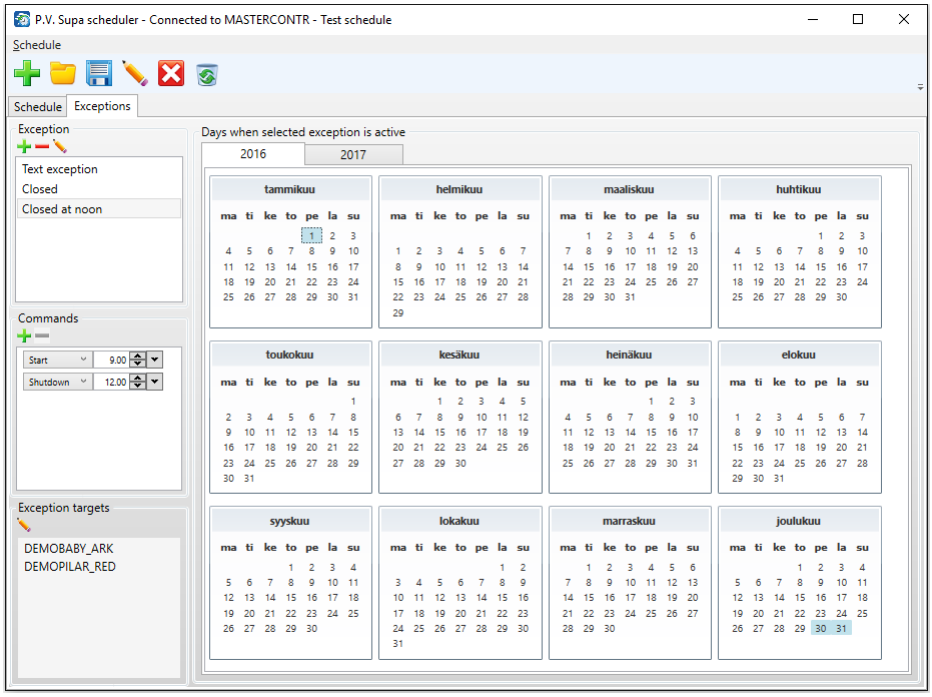
The top part of the main area is the **daily commands**. These are the commands to be sent, and the times at which they are sent. You can add more commands, for example the computers could be started in the morning, closed for a few hours in the middle of the day and the started again later. Make sure to define all commands logically for each day you wish to automate; if you select this schedule for weekends but have not defined any commands to be sent during saturday or sunday, nothing will happen.

And finally, the calendar part defining **days when selected weekly schedule is active**. Mark the days when this schedule is active; use the icon after the name of each month to select / unselect a whole month at once, or select individual days with the mouse. Click and hold the mouse, and then drag to select longer periods at one time.

Remember to save the schedule after making changes. Also remember to be careful with the Active flag; do not mark a schedule as active unless it is fully defined, otherwise unexpected behaviour might occurr.

Exceptions

To define exceptions to a schedule, use the **Exceptions** tab of the main window:



Working on excceptions

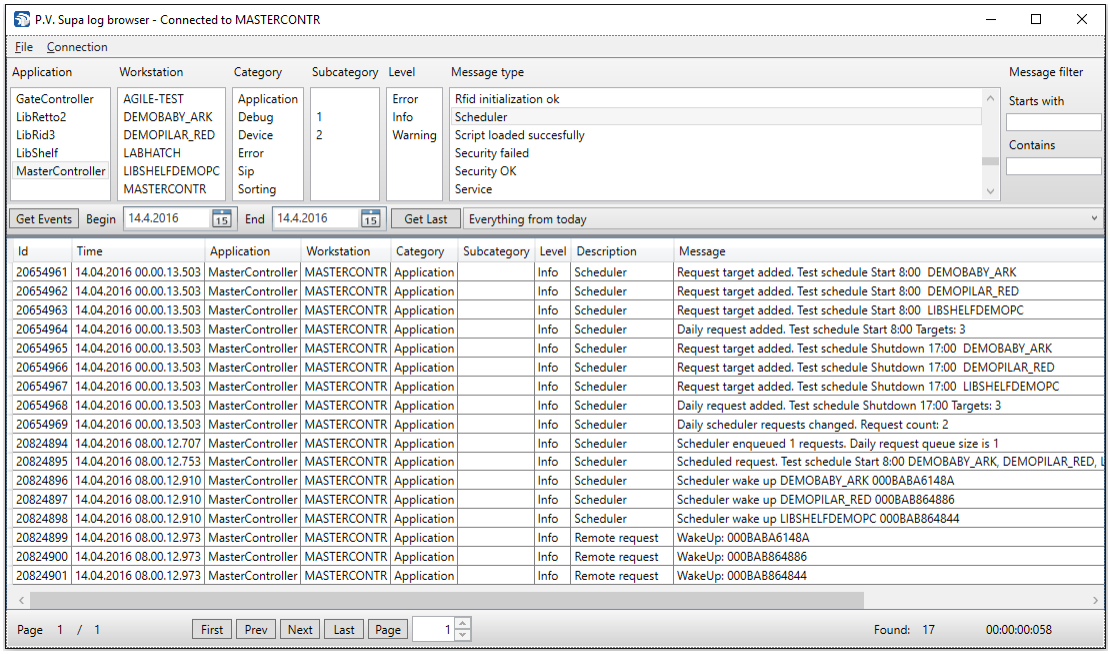
There can be any number of exceptions; each exception is defined as a set of commands to send on a given day. In the picture above, there are two exceptions defined, Closed and Closed at noon. Of these the Closed exception contains no commands - any day to which that exception is selected, will mean that no commands are sent from this schedule to the machines to which is is connected. The Closed at noon exception has a start command at 9 in the morning and a shutdown command at 12 - any day to which this exception is selected (january 1st and december 30-31 in the picture above), the machines to which this exception is selected will receive these commands instead of the normal schedule commands.

Remember to select the machines to which the exception is to be used, and also to define the commands.

You can define exceptions to the current year and the next year in advance. The year tabs (2016 and 2017 in the picture above) will reflect these two years automatically.

Troubleshooting

Information about command sent on schedule will be logged by Master controller in the main Supa database. Use the *Log browser* tool to find these logs. Select **MasterController** as the application and **Message type**s *Remote request* and *scheduler*. This will produce output as follows:



Master controller log entries for scheduler

From the log, all commands sent can be easily seen, as well as changes to schedules. Selecting for example *Client status* for the message types will show the other end of the commands, the self service machine end.

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