op5 Monitor user manual

op5 Monitor user manual©
Version 6.1 Rev 2.0.0

op5 Monitor user manual
Version 6.1, Rev 1
Author: Professional Services

© 2012 op5 AB

op5, and the op5 logo are trademarks, servicemarks, registered servicemarks or registered trademarks of op5 AB.

All other trademarks, servicemarks, registered trademarks, and registered servicemarks mentioned herein may be the property of their respective owner(s). The information contained herein is provided AS IS with NO WARRANTY OF ANY KIND, INCLUDING THE WARRANTY OF DESIGN, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE.

op5 web site
www.op5.com

op5 support
www.op5.com/support

op5, and the op5 logo are trademarks, servicemarks,
registered servicemarks or registered trademarks of op5 AB

Contents

Introduction

About introduction **2**
Using this manual **3**
About op5 Monitor **4**

The GUI

Navigation **6**
In-line help 6
Login and logout 6
Main menu 7
Add custom quickbar link 8
Pop up graphs and comments 8
Changing behaviour of the pop ups 9
Mouse over host 9
Keyboard commands 10
Tactical overview **11**
Layout 11
Widgets 11
Multiple host and service commands **12**
Multiple host commands list 12
Multiple service commands list 12
Example 13
Quick Action Menu **14**
Host Actions 14
Service Actions 15
Listviews **16**
Columns 16
Column list 18
Custom columns 22
Filters **24**
Edit filter 24
Categories 24
Filter Groups 25
Rule 25
Examples 25
Example 1 25
Example 2 25
Example 3 26
Save filters 26
Remove filters 27
Searching **28**
Simple search 28

Advanced search ... 29
Advanced search examples ... 30
Notes search ... 31
Limiting the number of result objects ... 31
Search result ... 32
Multiple actions ... 32
Refresh time ... 33
Pausing the page refresh ... 33
Editing the refresh time ... 33
Widgets ... 35
Widget list ... 35
Widget parts ... 36
Renaming the widget header ... 37
Collapse and expand ... 38
Widget settings ... 38
Extended widget settings ... 38
Closing widgets 1 ... 40
Closing widgets 2 ... 40
Multiple instances ... 40
Moving widgets ... 41
Restoring to factory settings ... 42
Create you own widgets ... 42

Monitoring
Introduction ... 44
Hosts and services ... 45
A host in detail ... 45
Page links ... 46
Host header information ... 47
Host state information ... 48
Host commands ... 49
Comments ... 50
Filter Comments ... 50
A service in detail ... 51
Page links ... 52
Service header information ... 53
Service state information ... 54
Service commands ... 55
Comments ... 55
Parenting ... 56
Host and service groups ... 57
Using Host groups ... 57
Host group commands ... 57
Host group reporting ... 58
Using Service groups ... 58
Service group commands ... 59
Service group reporting ... 59
Problem handling ... 60
Hard and soft states ... 60

Alerts and notifications management ... 60
Unhandled problems view ... 61
Acknowledge problems ... 62
Acknowledging a problem in the GUI ... 62
Acknowledging a problem by sms ... 63
Removing an acknowledge ... 63
Removing multiple acknowledgements ... 64
Schedule downtime ... 64
Viewing scheduled downtime ... 65
Scheduling downtime ... 66
Remove a scheduled downtime ... 68
Schedule recurring downtime ... 68
Scheduling a recurring downtime ... 69
Viewing your recurring downtime schedules ... 69
Editing a recurring downtime ... 70
Deleting a recurring downtime ... 70
Business Process ... 71
Viewing Business Process ... 71
Graphs ... 73
Viewing graphs ... 73
Adding graphs for custom plugins ... 74
Graph basket ... 74
Hyper Map ... 76
Dokuwiki ... 77
Editing a wiki page ... 77
Formatting a wiki page ... 77
Agents ... 79

NagVis

Introduction ... 82
Configuration ... 83
Edit plain maps ... 84
NagVis maps ... 85
Manage backgrounds ... 85
Manage maps ... 87
Map object types ... 91
Icon objects ... 91
Line objects ... 93
Automap ... 97
Rotation pools ... 99

Geomap

Geomap ... 102
Map type ... 102
Locations ... 103
Adding a location ... 103
Links ... 104
Adding a link ... 105

Reporting

Reports **108**
SLA 108
Creating an SLA report 108
The SLA report 112
Editing the SLA report settings 113
Click **Show report** to save the new values. 113
Availability 113
Creating an availability report 113
The Availability report 117
Editing the availability report settings 118
Save reports 119
Saving a report 120
Schedule reports 120
Modifying scheduled reports 123
Deleting scheduled reports 123
..... 123
Events and logs **124**
Alert summary - Top alert producers 124
Creating a Top alert producers report 124
Top alert producers result 125
Saving an Alert summary report 125
Scheduling an Alert summary report 126
Trends 127
Creating a trend report 127
Event log 127
Viewing and filtering logs 127
Alert History 128
Viewing and filtering logs 128

Configuration

Introduction **132**
View config **133**
Viewing config 133
My account **134**
Pagination behavior 134
The way passive checks are displayed 134
What skin to use in the GUI 135
Keyboard commands used in the GUI 135
Changing my account settings 135
Change popup behavior 135
Status pages 135
Set URL target 135
Changing your password 136
Backup and Restore **137**
Backing up the configuration 137
Backup/Restore actions 137
Restoring a configuration backup 138

Introduction

About introduction

This chapter covers the following topics:

Subject	Page	Subsections
Using this manual	3	
About op5 Monitor	4	

Using this manual

This manual includes information on how to use and configure op5 Monitor and its components.

The manual is also written with the goal to give the reader help about how to use the different parts of op5 Monitor.

This manual is targeted for a technical audience. The manual covers how to use and configure op5 Monitor through its web interface. For configuration using direct console access or SSH, see the op5 System manual.

About op5 Monitor

op5 Monitor is a highly flexible monitoring system for monitoring of IT infrastructure. op5 Monitor is based on the widely known open source monitoring system Nagios.

op5 Monitor is used and configured in a web interface using any standard browser. The most common browsers Internet Explorer, Firefox and Opera have been tested.

The interface is protected by using both authentication (username and password) and by SSL which enables a secure manner for accessing the web interface using encryption.

The GUI

Navigation

The new generation GUI in op5 Monitor is built to be as simple as possible to use. Even if the GUI has a new look and feel in many ways it works the same as the old one. You will recognize most of the features from the CGIs.

In-line help

A manual is great but often you only need to get a fast answer about a special part of op5 Monitor.

To get information from the in-line help

1. Click the help icon

   This gives you a small frame containing the help text.
2. Click anywhere outside the help text to hide it.

Login and logout

To login to op5 Monitor

First of all you need to login before you can start using op5 Monitor. To login to the op5 Monitor GUI:

1. Point your browser to the portal page of your op5 Monitor server (https://yourserver/)
2. Click op5 Monitor:

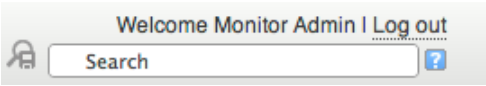
3 Enter login and password.

The default username is: monitor
The default password is: monitor

4 Click **Login**

To logout from op5 Monitor

To logout from op5 Monitor just click **Log out** in the upper right corner of the GUI.



Main menu

The navigation in op5 Monitor is simple and can be found in the top of the GUI. There are five main sections, seen from the left.

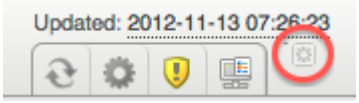
- Information
- Monitoring
- Reports
- Filters
- Configuration

There are also five quickbar buttons.

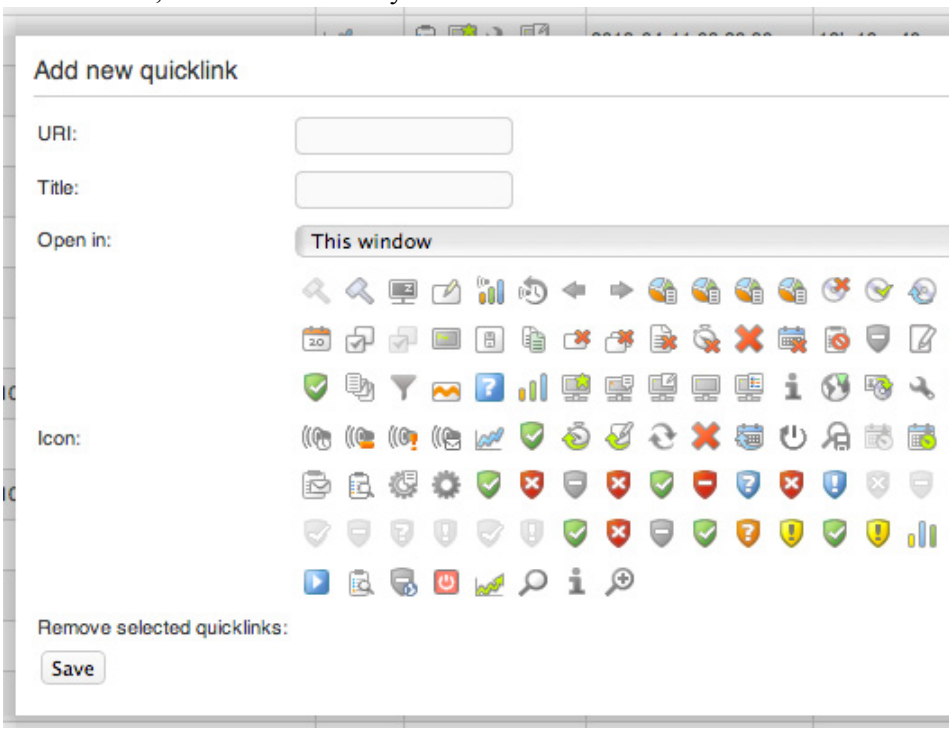
- Refresh
- Page settings
- Unhandled problems
- Tactical Overview
- Manage quickbar

Add custom quickbar link

To add a custom link to the quickbar menu select the small manage quickbar menu icon to right of the quickbar.



Add the URI, name and icon for your custom link

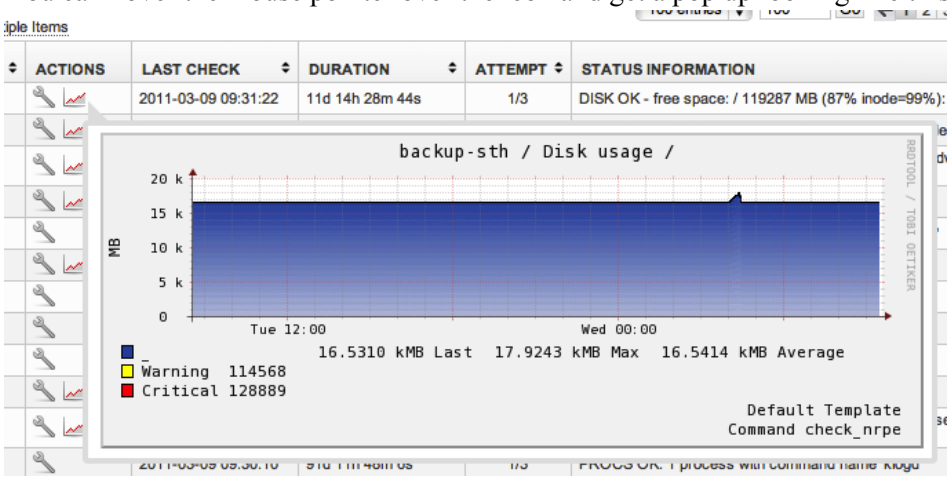


Pop up graphs and comments

In every view where you find the icons for

- graphs
- comments

You can hover the mouse pointer over the icon and get a pop up looking like this

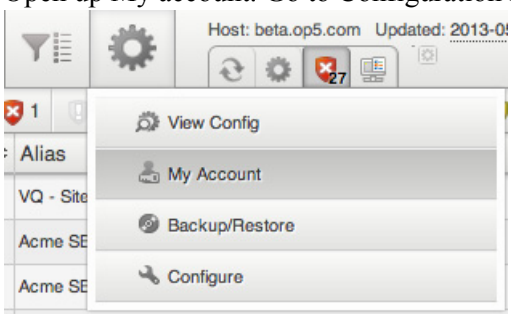


Changing behaviour of the pop ups

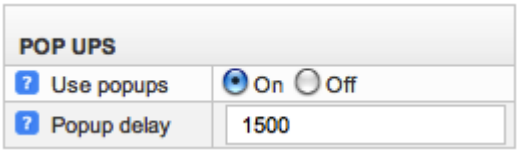
You might not want to have those pop ups every time you hover with the mouse over one of the graph or comment icons. Then you can change that behaviour in **My account**.

To change the behaviour of the pop ups

1 Open up My account. Go to Configuration menu and selecting My Account



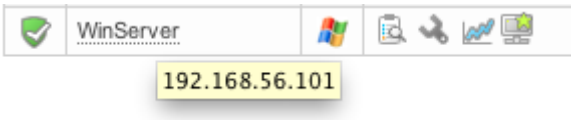
2 Set either a delay or turn the pop ups of completely. The delay time is in ms.



3 Click Save.

Mouse over host

To quickly show the host address of a host, hold the mouse over the hostname. A pop-up will appear with the host address.



Keyboard commands

The keyboard commands are shortcuts to some of the features in the op5 Monitor GUI. The following keyboard commands are available:

- search
- pause
- paging to the left
- paging to the right

Table 1 Default keyboards commands

Function	Default command	Description
Search	Alt+Shift+f	Set focus to the search field of the GUI.
Pause	Alt+Shift+p	Pause or activate the refresh of all the listviews in the GUI. Pause will be valid as long as you are navigating on "list views" only. Go to host or service extinfo, configure or any other non "list view" page and then the pause will be back to normal.
Paging to the left	Alt+Shift+left	Takes you to the left in a view that has more than one page.
Paging to the right	Alt+Shift+right	Takes you to the right in a view that has more than one page.

By default the keyboard commands are disabled. To enable the keyboard commands and change their settings take a look at *Keyboard commands used in the GUI* on page 135.

Tactical overview

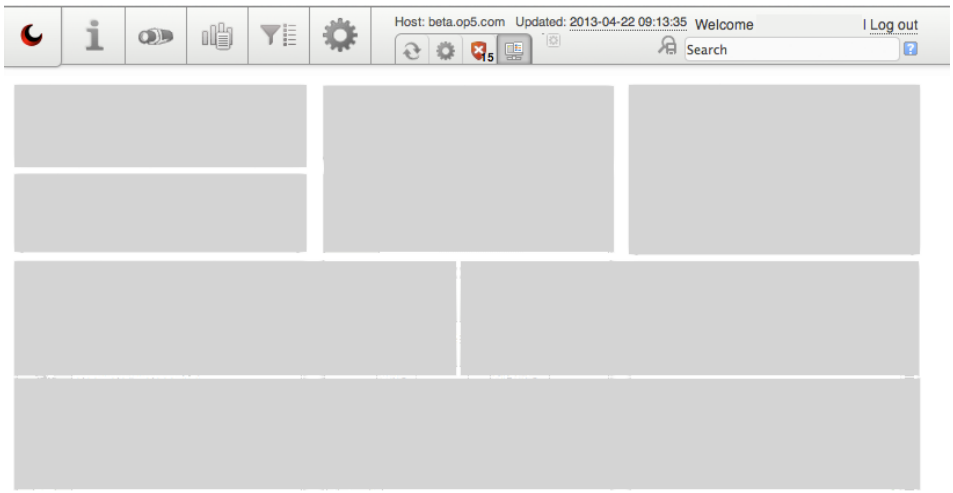
The Tactical Overview is a personal view where widgets can be placed to show different information.

Layout

The layout of the tactical overview is split in to three sections with different size of the widget width.

The first section is split into three columns, each column can contain one widget.

The second section contains two columns and the third is one column.



Widgets

Widgets are covered in *Widgets* on page 35

Multiple host and service commands

Multiple commands is used to apply a single command to one or more host or services at the same time.

In almost every view in the monitoring section you may perform commands on the objects displayed in the view. This is very useful if you, for instance, have a bigger problem with one or many services and you want to acknowledge all of them at once.

Multiple host commands list

- Schedule downtime
- Cancel Scheduled downtime
- Acknowledge
- Remove problem acknowledgement
- Disable host notifications
- Enable host notifications
- Disable notifications for all services
- Disable Active checks
- Enable Active checks
- Reschedule host check
- Add host comment
- Delete host

Multiple service commands list

- Schedule downtime
- Cancel Scheduled downtime
- Acknowledge
- Remove problem acknowledgement
- Disable service notifications
- Enable service notifications
- Disable Active checks
- Enable Active checks
- Reschedule service check
- Add service comment
- Delete Service(s)

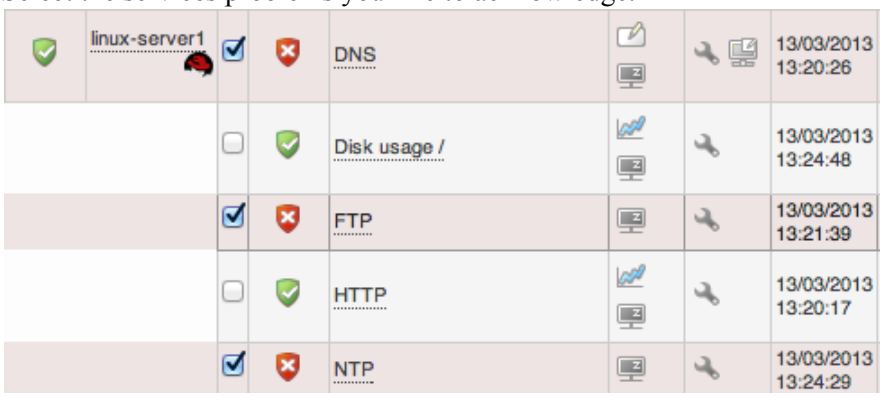
Example

In this example we will send acknowledgements to a larger number of services.

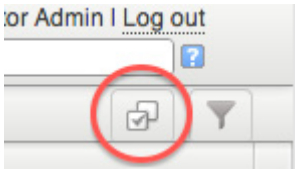
To execute multiple commands

1 Open up **Unhandled problems** filter under the filter menu.

2 Select the services problems you like to acknowledge.



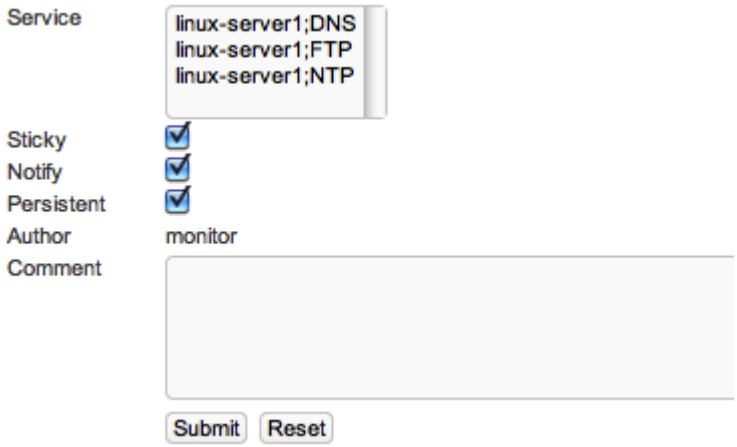
3 Click **Send Multi Action** below the search field



(It is located on top of the list.)

4 Chose **Acknowledge** in **Select Action** drop down list just below the list and click **Submit**.

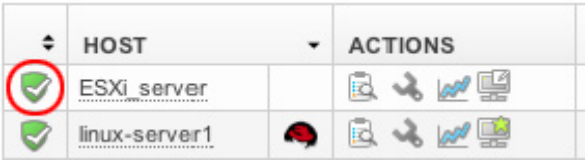
5 Type in a comment and click **Submit**.



Quick Action Menu

For quick access to some host and service commands you can access the Quick action menu.

The menu can be accessed thrugh right clicking on the status icon in front of a host or service.



This menu will only appear if you are 'Authorized for system commands' under Access Rights in the configuration.

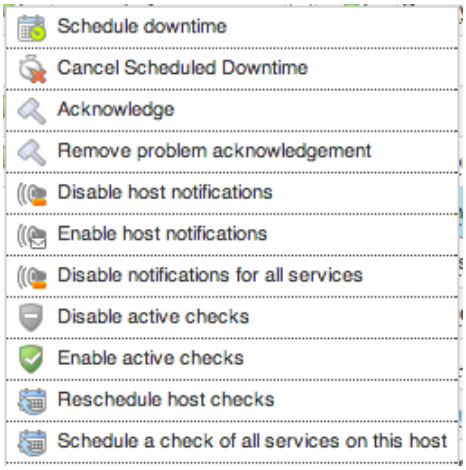
Information about the different actions can be found in the Monitoring chapter, *Introduction* on page 44

Host Actions

The actions that are available on a host are:

The actions accessible from the host quick access menu are:

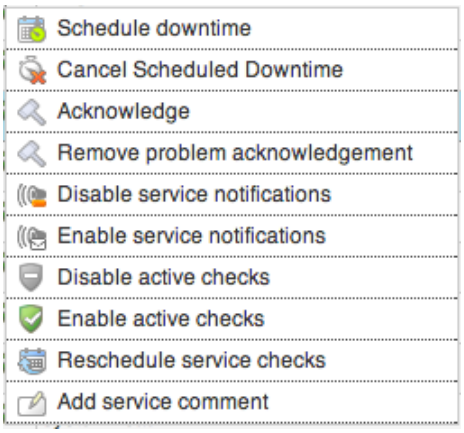
- Schedule Downtime
- Cancel Schedule downtime
- Acknowledge
- Remove problem acknowledgement
- Disable host notifications
- Enable host notifications
- Disable notifications for all services
- Disable active checks
- Enable active checks
- Reschedule host check
- Schedule a check for all services on this host
- Add host comment



Service Actions

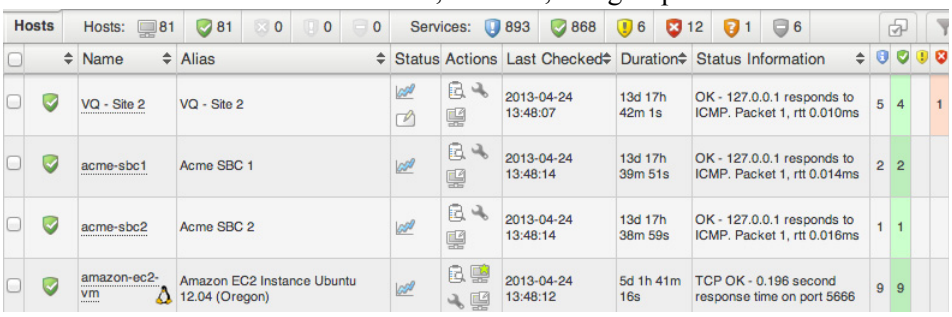
The actions that are available on a service are:

- Schedule Downtime
- Cancel Schedule downtime
- Acknowledge
- Remove problem acknowledgement
- Disable/Enable service notifications
- Disable/Enable active checks
- Reschedule service check
- Add service comment



Listviews

Listviews are all views that lists host, services, hostgroups etc.



The contents of the lists is defiend by filters, see *Filters* on page 24.

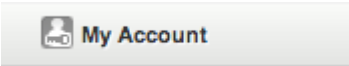
The listview is divided into two parts. One is the top banner that includes a summary of the content in the listview and the other one is the content itself.

The following views, or tables, uses listviews

- Hosts
- Services
- Hostgroups
- Servicegroups
- Comments
- Downtimes
- Contacts
- Notifications
- Saved filters

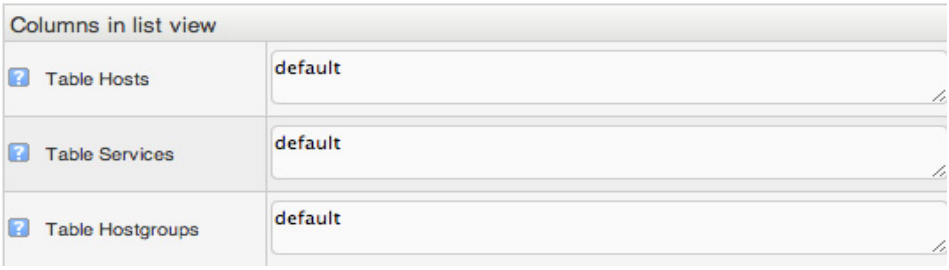
Columns

The different columns in the content can be set under **My Account** in the **Configuration** menu.



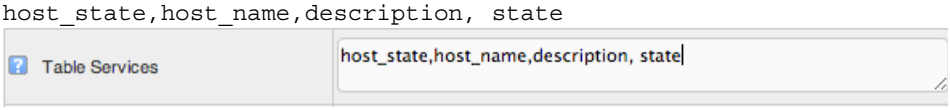
The different tables can have its own set of columns.

To change what columns to show in a table change `default` to a list of the columns that you want to see.



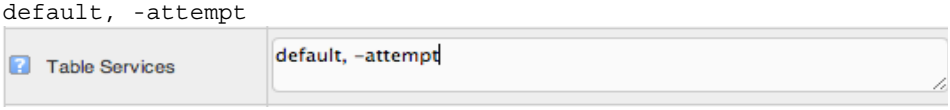
For example if you would like to view only Status, Host name, Service name and the state in the service-view, you need to enter:

```
host_state,host_name,description, state
```



It is also possible to hide one column by using a "-" before the column that you would like to remove from the table. If you want to hide the attempts column enter:

```
default, -attempt
```



Column list

Hosts

Column	Description
select	The select checkbox for the host-object
state	The state of the host. UP, DOWN, UNREACHABLE or PENDING.
name	The hostname
alias	The alias of the host
status	The column where comments, graphs and notification status is shown
action	Links to configuration, extra host notes etc.
last_check	The date and time when the host was last checked
duration	Time for how long the host has been in it's current state
status_information	The output from the last check command
services_num_all	Total number of services on the host
services_num_warning	Total number of services on the host in state WARNING
services_num_critical	Total number of services on the host in state CRITICAL
services_num_unknown	Total number of services on the host in state UNKNOWN
services_num_pending	Total number of services on the host in state PENDING

Services

Column	Description
host_state	The state of the host on which the service is located
host_name	The name of the host on which the service is located
select	The select checkbox for the service-object
state	The state of the service. OK, WARNING, CRITICAL, UNKNOWN or PENDING
description	The description (name) of the service-check

Column	Description
status	The column where comments, graphs and notification status is shown
action	Links to configuration, extra service notes etc.
last_check	The date and time when the service was last checked
duration	Time for how long the service has been in its current state
attempt	The number of attempts needed before a notification is sent out.
status_information	The output from the last check command

Host groups

Column	Description
name	The name of the hostgroup
actions	Links to hostgroup commands
host_status_summary	Shows the total number of hosts and its states in the hostgroup
service_status_summary	Shows the total number of services in the hostgroup and their states

Service groups

Column	Description
name	The name of the servicegroup
actions	Links to servicegroup commands
service_status_summary	Shows the total number of services in the servicegroup and it states

Comments

Column	Description
select	Select checkbox for the comment
id	ID of the comment
object_type	Show the object type for the comment. Host or Service
host_state	The state of the host on which the comment is located
host_name	The name of the host on which the comment is located
service_state	The state of the service on which the comment is located
service_description	The name of the service on which the comment is located
entry_time	The submisson date and time of the comment
author	Shows the author of the comment
comment	The comment it self.
persistent	Shows if the comment is persistent or not
expires	The time and date when the comment expires
actions	The action for the comment, delete comment

Downtimes

Column	Description
select	Select checkbox for the scheduled downtime entry
id	ID of the scheduled downtime entry
object_type	Show the object type affected by the scheduled downtime. Host or Service
host_state	The current state of the host on which the scheduled downtime is located
host_name	The name of the host on which the scheduled downtime is located
service_state	The current state of the service on which the scheduled downtime is located
service_description	The name of the service on which the scheduled downtime is located
entry_time	When the scheduled downtime was created
author	Shows by whom the scheduled downtime was created.
comment	The comment of the scheduled downtime.
start_time	Date and time for when the objects enters the scheduled downtime
end_time	Date and time for when the objects exits the scheduled downtime
actions	The action for the comment, delete comment
type	Shows if the scheduled downtime is fixed or flexible
duration	Shows how long the object will be in scheduled downtime if flexible schedule is used.
triggered_by	Shows if the scheduled downtime is triggered by another event.
actions	The action for the scheduled downtime. Remove is the only action available for scheduled downtime.

Contacts

Column	Description
name	The contacts name
alias	The contacts alias

Notifications

Column	Description
state	The state (OK, WARNING, DOWN etc.) of the object in the notification
host_name	The hosts name in the notification
service_description	The name of the service in the notification. Only valid for service notification
time	The date and time of the notification
contact	To which contact the notification was sent
notification_command	Shows which notification command that was used for the notification
status_information	The check command output from the check

Saved filters

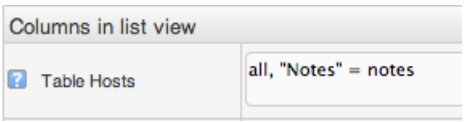
Column	Description
icon	Shows the designated icon for the filter
scope	Shows if the filter is a global filter or a personal filter
name	The name of the filter
owner	Shows who created the filter
actions	Action for the filter, only delete is available

Custom columns

It is possible to create a custom column if the column isn't available from the standard columns.

The format is "<label>" = <data> where <data> is the source of the data, for example if you would like to create a column that show the note of a host set in the configuration:

```
"Notes" = notes
```

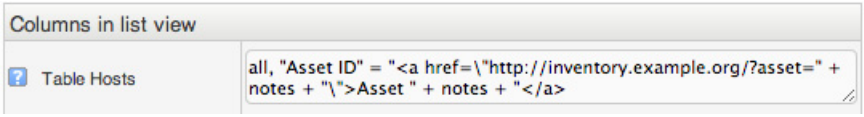


It is also possible to fetch. For example the host notes on a service as well, by using the `host.notes` label.

Links in custom columns

It is also possible to add HTML code into the column. Let's say that you have a note with an ID that corresponds to the system in your CMS database and you would like to create a link directly to that object.

```
"Asset ID" = "<a href=\"http://inventory.example.org/?asset=" +
notes + "\">Asset " + notes + "</a>"
```



Custom variables

To show a custom variable in a column use the format custom_variable.<VARIABLE_NAME>. The custom variable should be used without the underscore prefix.
Using the same example as above, but this time we have the ID in a custom variable called **ASSETID**

```
"Asset ID" = "<a href=\"http://inventory.example.org/?asset=" +
custom_variables.ASSETID + "\">Asset " + custom_variables.ASSETID
+ "</a>"
```

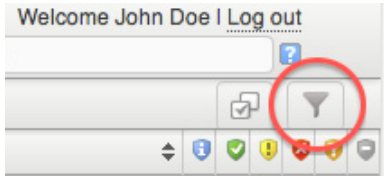
Filters

Filters can be used to filter out content in op5 Monitor. They can be based on names, states, comments or other information.

Filters can be applied on listviews. All listview content is based on filters, so for example when viewing a host and its services the view is based on a filter that can be manipulated.

Edit filter

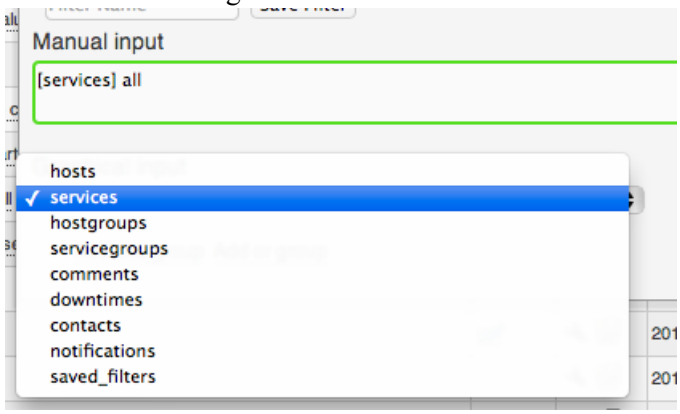
To edit a filter, click on the filter icon in the listview



You can either edit the filter manually or graphically. When editing a filter graphically the manual string is automatically shown. We will focus on the graphical design of filters.

Categories

There are nine categories to choose from that will affect the layout of the listview.



- Host
- Service
- Host Group
- Service Group
- Comments
- Downtimes
- Contacts
- Notifications

- Saved Filters

Filter Groups

A filter group is a logical “AND” or “OR” operator. There is also a negate group.

In each filter group there can be several rules and sub-groups.

Rule

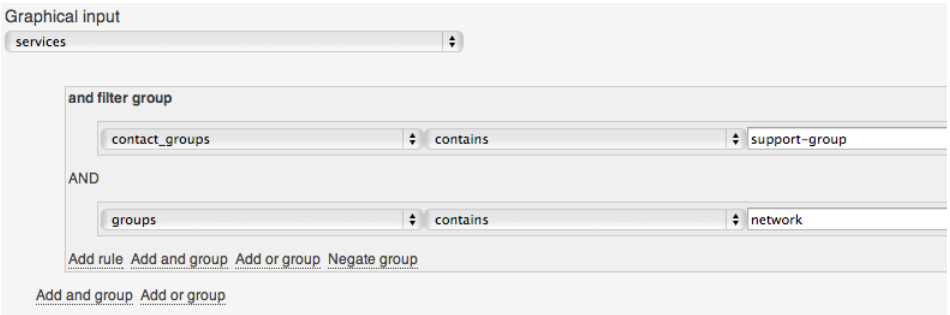
A rule contains an actual search field. Different types of categories have different types of rules. A rule can, for example, be host.name or service.group.

Examples

Example 1

Here we will list all services that are notifying to contact-group “support-group” and is a member of the hostgroup “network”.

Manual Input: `[services] contact_groups >= "support-group" and groups >= "network"`



Example 2

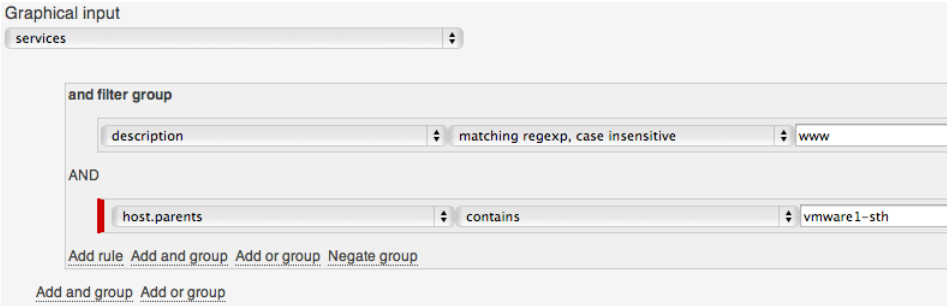
In this example we will list all services that uses the check command “check_tcp”

Manual Input: `[services] check_command ~~ "check_tcp"`

Example 3

Here we would like to list all services that contains the description “www” and is not located on the vmware host “vmware1-sth”. (For this to work parent/child relationships must have been set)

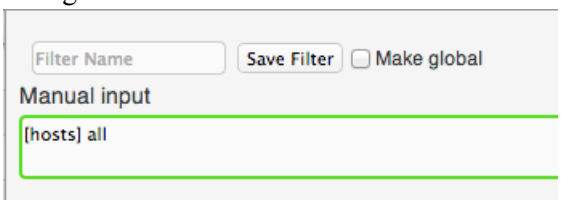
Manual input: `[services] description ~~ "www" and not (host.parents >= "vmware1-sth")`



Note: Note that we use the **negate** (not) option on the host.parents rule.

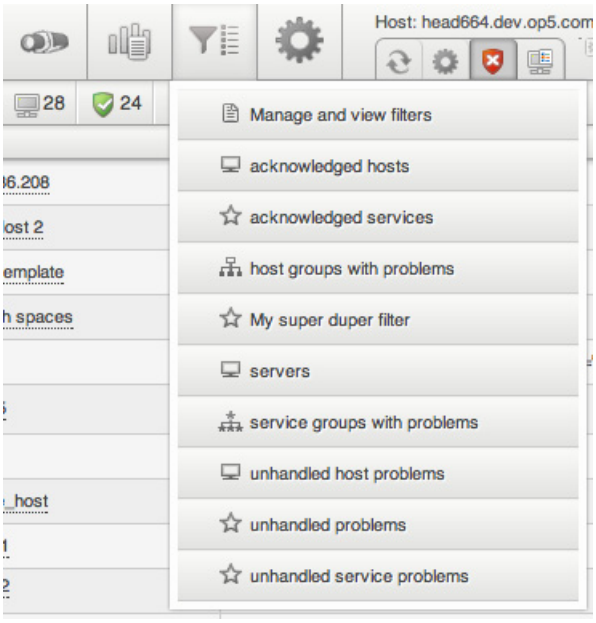
Save filters

To save a filter, you need to enter a name and click on **save filter** in the filter dialog.



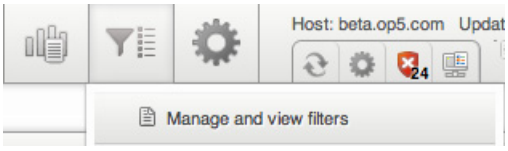
To make the filter global, accessible for everyone, select **Make global** before you save the filter.

Save filters are accessible from the filter menu.

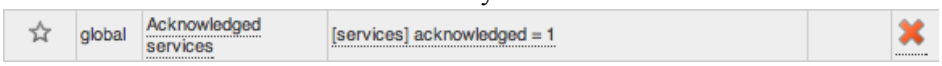


Remove filters

Remove a saved filter by selecting **Manage and view filters** from the filters menu.



Use the delete icon behind the filter that you would like to remove.



Searching

op5 Monitor has got a search functionality that makes it easy to find:

- Hosts
- Services
- Host groups
- Service groups
- Notes
- Status information

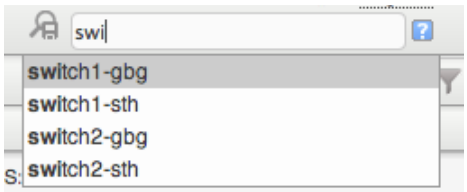
Note: The search is case insensitive.
The result is limited to maximum 10 result rows per object type.

In the upper right corner of the GUI you find the search input field:

Simple search

To perform a simple search

1. Enter the search string in the input field shown in *Searching* on page 28 and press Enter.
2. While you are typing your search string op5 Monitor will show you a list of hosts matching the string.



3. If you click on a host in the drop down list you will be redirected to the **Service Status Details For Host** page for the host you clicked on. The same happens if the search found only one object matching your search string.

op5 Monitor will search for hosts, services, service groups, host groups and notes matching the search string you entered.

The table below shows a list of in what parts of the object types is used in the search.

Object type	Variable
Host	host_name host_alias host_address display_name
Service	service_description display_name
Host group	hostgroup_name alias
Service group	servicegroup_name alias
Notes	Host notes Service notes
Status Information	

Advanced search

To make your search more specific you should use the advanced search features.

The following table describes the search parameters that can be used in the search function:

Short parameter	Long parameter	Description
h:	host:	Search for hosts
s:	service:	Search for services
hg:	hostgroup:	Search for host groups
sg:	servicegroup:	Search for service groups
si:	statusinformation:	Search for Status information using the output from the latest service / host check.
AND		The AND operator is used to filter records based on more than one condition

Short parameter	Long parameter	Description
OR		The OR operator is used to filter records based on more than one condition

Note: Remember to not use any space between the **:** and the search string

Advanced search examples

Example 1 *Search for hosts containing a certain string in the host name.*

If you want to search for hosts only containing "server" in the host name just enter the following in the search field:

`h:server`

or

`host:server`

Press enter to perform the search.

Example 2 *Perform a search combining both hosts and services in the query.*

In this example we want to find all services called either `ping` or `http` running on hosts called something like `win` or `linux`.

The query would then be:

`h:win OR linux AND s:ping OR http`

Example 3 *Search for Status Information*

To search for hosts and services having a certain string in their status output you shall write a query like this:

si:Connection refused

By using the si: search term you will search the output from the latest check.

Example 4 *Show all hosts or services*

You may also get a list of all services and all hosts from the search function.

To get a list showing all services and host you should write the search query like this:

s:% OR h:%

Example 5 *Show all hosts, services, host groups and service groups*

To get a complete list of all hosts, services, host groups and service groups you only need to write a query like this:

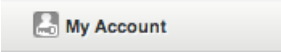
%

This will give you a result with all object types grouped in one page.

Notes search

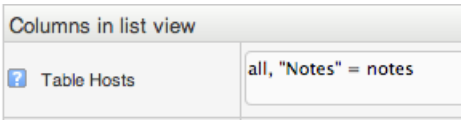
To search for notes the notes column must be added to the listview.

Go to **My Account** under the Configuration menu.



Add the following to the table for hosts and/or services.

```
"Notes" = notes
```



It is also possible to fetch. For example the host notes on a service as well, by using the `host.notes` label.

Limiting the number of result objects

The default search result will is limited to 100 rows. This can be changed in the search query.

To change the limitation you only need to add limit with the number of lines to your query like this:

```
limit=10
```

The line above will give you max 10 rows in the search result.

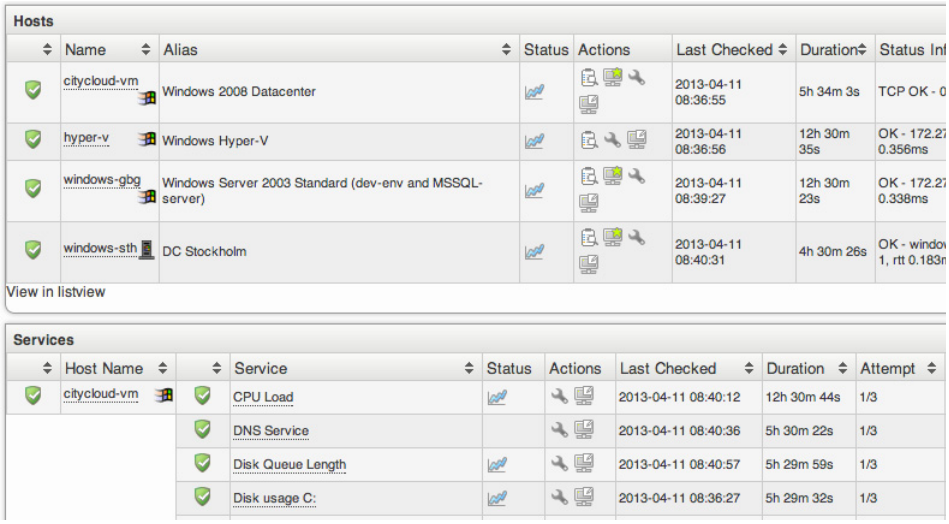
To return all rows set:

```
limit=0
```

Search result

No matter if you use the simple or the advanced way to do your search you will end up with the same type of result list.

As you can see in the search result example below the search will be shown with one part for each type of object.

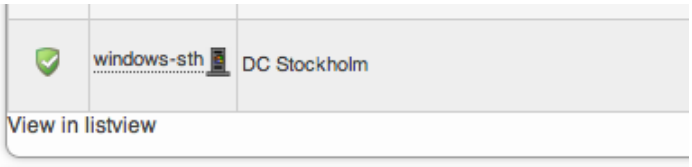


Just like in the normal views you can sort all columns in the search result.

Multiple actions

To do multiple actions from the search result the search result must first be viewed in listview.

To view the result in listview click on “View in listview” below each category.



Refresh time

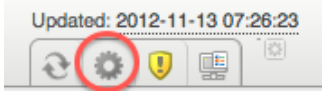
Every view is automatically refreshed after a certain time.

The default Global refresh time for listviews is 90 seconds.

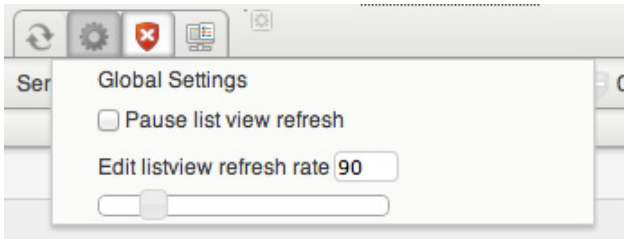
Pausing the page refresh

To pause the page refresh

1 Click **Settings** in the quickbar of the menu:



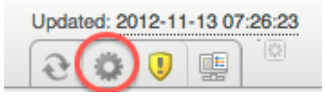
2 Check the **Pause list view refresh** check box and the Global refresh time is paused. Pause will be valid as long as you are navigating on "list views" only. Go to host or service extinfo, configure or any other non "list view" page and then the pause is back to normal.



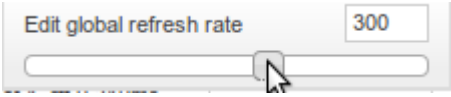
Editing the refresh time

To edit the Global refresh time

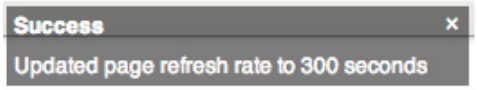
1 Click on the **Settings** icon in the quickbar menu:



2 Pull the slider to increase or decrease the refresh time.



Once you have edited the Global refresh time a little notice will show up in the GUI. It tells you that the new Global refresh time is saved and looks like the picture below.

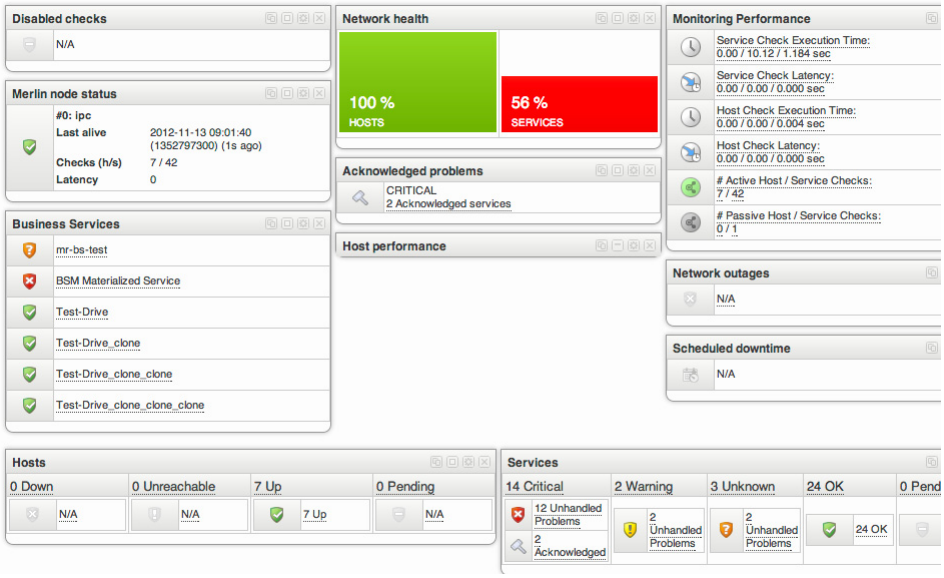


Refresh will be valid as long as you are navigating on "list views" only. Go to host or service extinfo, configure or any other non "list view" page and then the refresh is back to default

Widgets

Widgets are used to give the user a ability to personalize the **Tactical Overview** display status data to their needs.

The first thing you will see when you login to op5 Monitor is the **Tactical overview** and it looks like this:



In the Tactical Overview you may:

- move around the widgets to different places
- close the widgets
- set individual refresh time for each widget
- collapse and expand all individual widgets.
- create another instance of the widget
- scale the widgets over multiple columns

Note: All changes you make with the widgets are saved per user.

Widget list

op5 Monitor comes with a number of available widgets used to display data in Tactical Overview:

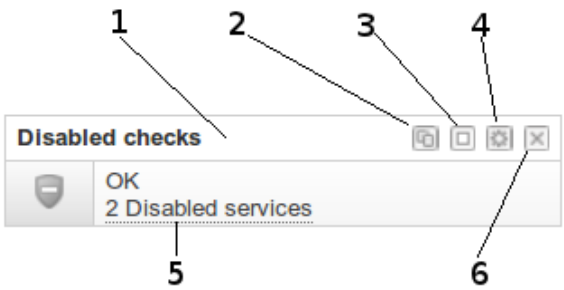
- Unacknowledged Service Problems
- Scheduled Downtime
- Acknowledged Service Problems
- Nagvis

- Disabled Checks
- Services
- Host Performance
- Merlin Node Status
- Acknowledged Problems
- Monitoring Performance
- Hosts
- Network Health
- Monitoring Features
- Unhandled Problems
- Business Processes
- Network Outages
- Geomap

Beside this wide range of widgets you can find additional widgets on www.op5.org, or create a own widget that fits your needs. This is described in“op5 Monitor Administrators Manual”.

Widget parts

Below you see an example of what a widget can look like:



The following table describes the parts of a widget shown in the picture above.

Nr	Description
1	Widget header
2	Copy Widget
3	Collapse and Expand icon
4	Widget settings icon

Nr	Description
5	Widget content
6	Hide widget

Renaming the widget header

The widget header displays the name of the widget.

To change the name in the widget header

1. Double click on the name in the widget header.
2. Type the new name in the text field.

3. Click **OK** to save the new name.

Collapse and expand

If you want to hide the content of a widget but still keep it on the **Tactical overview** page just click on the **Collapse icon**.

To show the widget again

Click on the **Expand icon**.

Widget settings

In this version of op5 Monitor the only setting you can change on a widget is refresh time

To set the refresh time on an individual widget follow the instructions below:

1 Click **Widget settings icon**

2 Move the slider to increase or decrease the refresh time.

Extended widget settings

As described in "*Multiple instances* on page 40" it is possible to create multiple copies of a widget.

This can be useful with some of the widgets we ship with op5 Monitor such as "Unacknowledged Service problems". This widget displays the content of "Unhandled Problems" as default, but can be configured to use filters to display status information from servicegroups, and it is also possible to filter on the following statuses:

- Warning
- Critical
- Unknown
- Hard
- Backlog

Besides the standard Status filters: "Warning, Critical, Unknown", Hard and Backlog are present.

With "Hard" you can select to only filter on HARD status and discard all SOFT states. This is the default setting when op5 Monitor sends notifications.

Backlog is a little more complicated. This setting can be useful if **Tactical overview** is displayed on a screen as a NOC-dashboard to monitor the status of hosts and services.

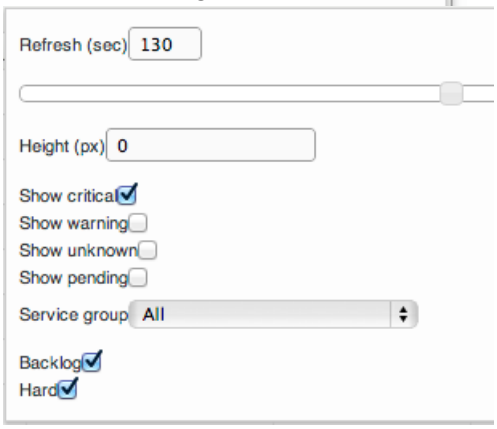
When the Backlog setting is used the widget will display all the problems that have been reported since your last login, even if these problems has been resolved.

To remove a problem when the backlog setting is activated you must either acknowledge the problem, or click the “X” button to remove it form the list.

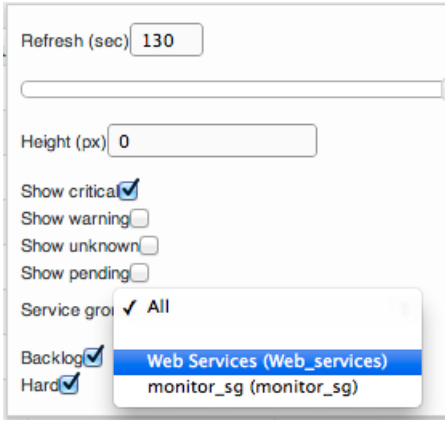
Note: The backlog setting is global and affects all users

In the following example we will choose to display all the critical problems in HARD-state from the servicegroup “Web Services”:

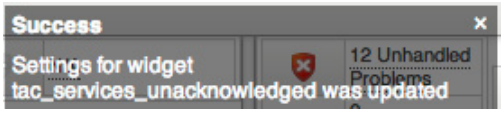
1 Click settings button and select a servicegroup:



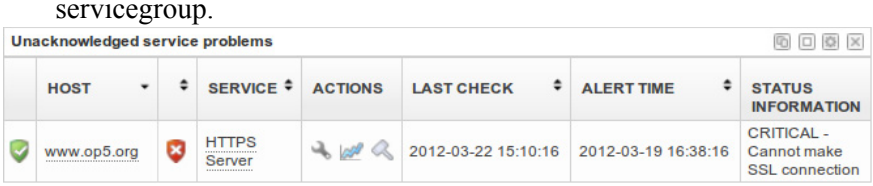
2 Select the servicegroup you want to monitor with the widget:



3 When you have applied your settings a notification will be displayed in the top right corner showing that the settings are saved.



4 The widget displays the current CRITICAL services for the selected servicegroup.



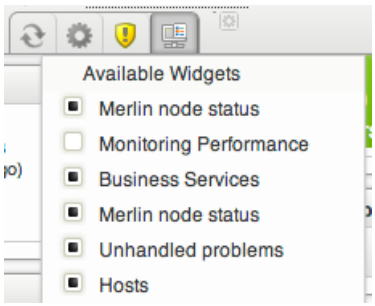
Closing widgets 1

You may close one or more widgets from the Tactical overview.

Just click on the **Close widget icon** to close the widget completely from the Tactical overview.

Closing widgets 2

Another way to close the widgets from the Tactical overview is to click on the **Page settings icon**.



And then you just uncheck the widget you want to hide from the list.

Note: The widget will only be visually removed from the Tactical overview. It will not be removed from the software. See *Moving widgets* on page 41 about how to show the widget again.

Multiple instances

It is possible to create multiple instances of a widgets. This can be useful to display different datasources in widgets, such as status of a servicegroup or critical unacknowledged problems.

To create another instance of a widget: Click the copy button on a widget .

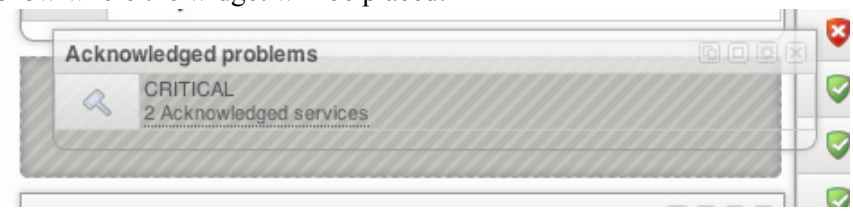
This will create an identical copy of the widget.

Moving widgets

You may move around the widgets shown in the Tactical overview as you like.

To move a widget from one section an other

1. Grab, by clicking on the top bar and holding down the mouse button, the widget and move it to the section you like to place it in.
2. When you hover a section where you can drop the widget, a gray area will show where the widget will be placed:



Restoring to factory settings

To restore the Tactical overview to factory (default) settings

1 Click **Widget settings icon**.

2 Click on the **Restore to factory settings** button and all widgets will

- been placed back to their original places
- got their default refresh time set
- been made visible again
- been expanded.

Create you own widgets

You may build your own widgets but this is not a subject for this user manual.

You can read more about how to build your own widget in the op5 Monitor Administrator manual.

Monitoring

Introduction

The monitoring section in the web menu is related to problem management and status of your network.

This is here you will spend most of your time when using op5 Monitor. In the monitoring section you can

- view host and service problems
- view performance graphs
- execute service and host commands
- show objects on maps
- handling schedule downtime.

This chapter will give you information about the most common parts of the monitoring part of op5 Monitor.

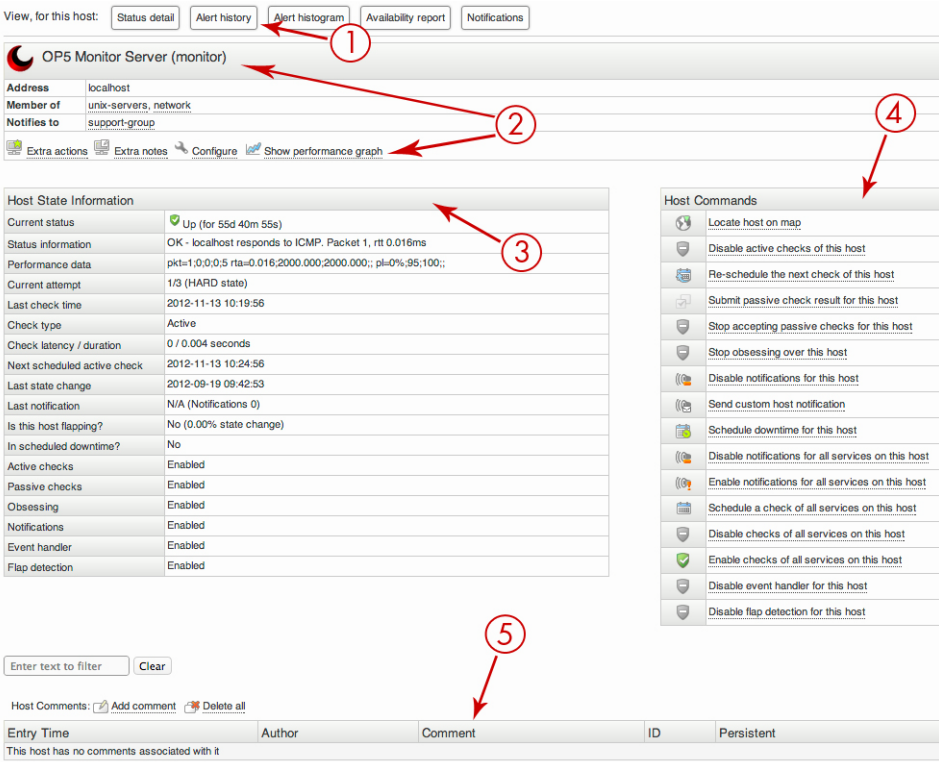
Hosts and services

Hosts and services are the objects that are monitored by op5 Monitor.

A host in detail

A host can be any kind of network device, virtual device and other objects that you might reach from the op5 Montor server.

Let us take a look at the Host information view and see what parts it is built upon. In the coming sections we will go through each part and learn how they can be used..

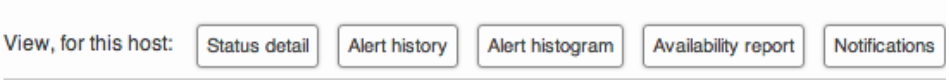


The table below describes each part of the Host information view briefly.

Nr	Part	Description
1	Page links	Quick links to other information about the host • Status detail list all services on this host. • Alert history show the alert log if the host. • Alert histogram show a graphical view, or trend, of the problems on the host. • Availability report of the host. • Notifications shows all notifications that has been sent out about this host.
2	Host information header	Displays brief information about the host and its surroundings like • Host name and address. • Parent host. • Extra actions and notes. • Links to configure and graphs. • Host notifications.
3	Host state information	Here you can see status information for the host like • Current status. • Current attempt. • Last state changes and notification. • What is enabled or not on this host.
4	Host commands	Here you can perform different commands for the host and/or all services on that host.
5	Comments	Manually added comments and comments from the system are shown here.

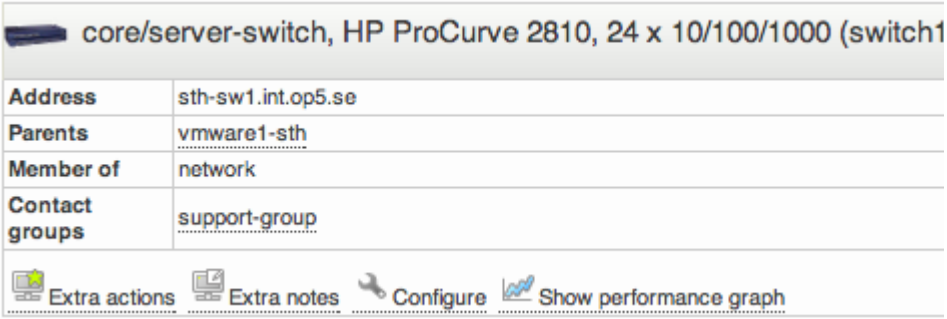
Page links

The page links gives you a couple of short cuts to more information about this host and its services.



Host header information

Here you will get a short summary of the host.



The host header information contains

- the host address.
- the parent host.
- what host groups it's member of.
- what group will get the notifications.
- links to extra service actions, service notes and the performance graphs.
- a link to the object in the configuration GUI.

Host state information

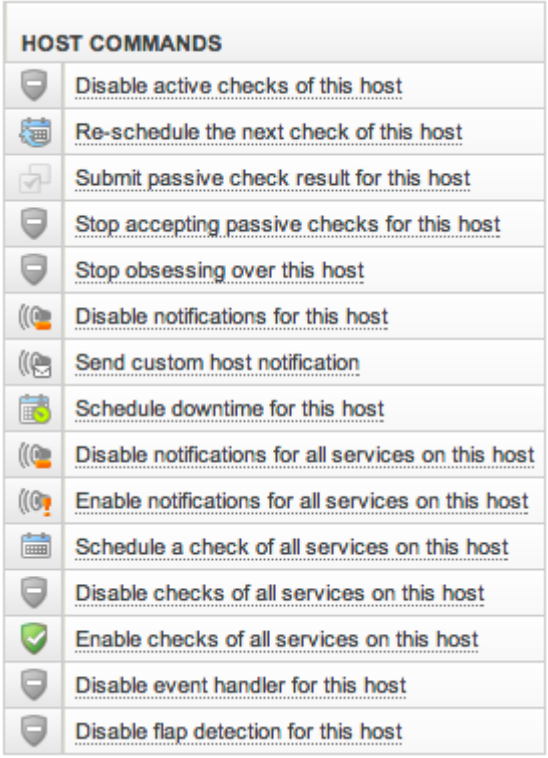
In this view you get all kind of status information about the host. This is the most detailed view you can get over a host.

HOST STATE INFORMATION	
Current status	Up (for 56d 23h 28m 35s)
Status information	OK - 127.0.0.1 responds to ICMP. Packet 1, rtt 0.010ms
Performance data	pkt=1;0;0;0;5 rta=0.010;2000.000;2000.000;; pl=0%;95;100;;
Current attempt	1/3 (HARD state)
Last check time	2012-11-13 12:12:53
Check type	Active
Check latency / duration	0.03 / 0.029 seconds
Next scheduled active check	2012-11-13 12:18:03
Last state change	2012-09-17 12:47:45
Last notification	N/A (Notifications 0)
Is this host flapping?	No (0.00% state change)
In scheduled downtime?	No
Last update	N/A (0d 0h 0m 0s ago)
Active checks	Enabled
Passive checks	Enabled
Obsessing	Enabled
Notifications	Enabled
Event handler	Enabled
Flap detection	Enabled

Host commands

The host commands part gives you a various commands to handle the host. Here you can

- locate the host in a status map
- disable and enable active and passive checks
- disable and enable notifications
- schedule downtime
- disable and enable event handlers.



Comments

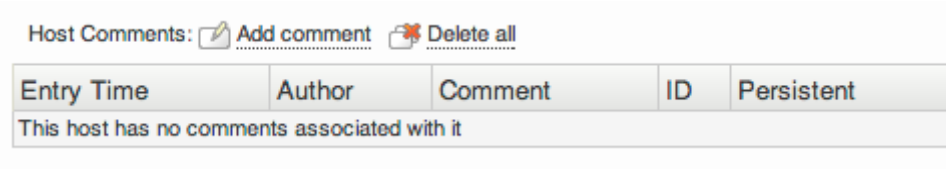
There are two types of comments:

- automatically added
- manually added

Automatically added comments can be

- acknowledged comments
- scheduled downtime comments

As a manually added comment you can type in almost anything you like.



Comments are designed to be short texts. If you like to add documentation, longer descriptions and so on you should consider using the do *Dokuwiki* on page 77 that is included in op5 Monitor.

Filter Comments

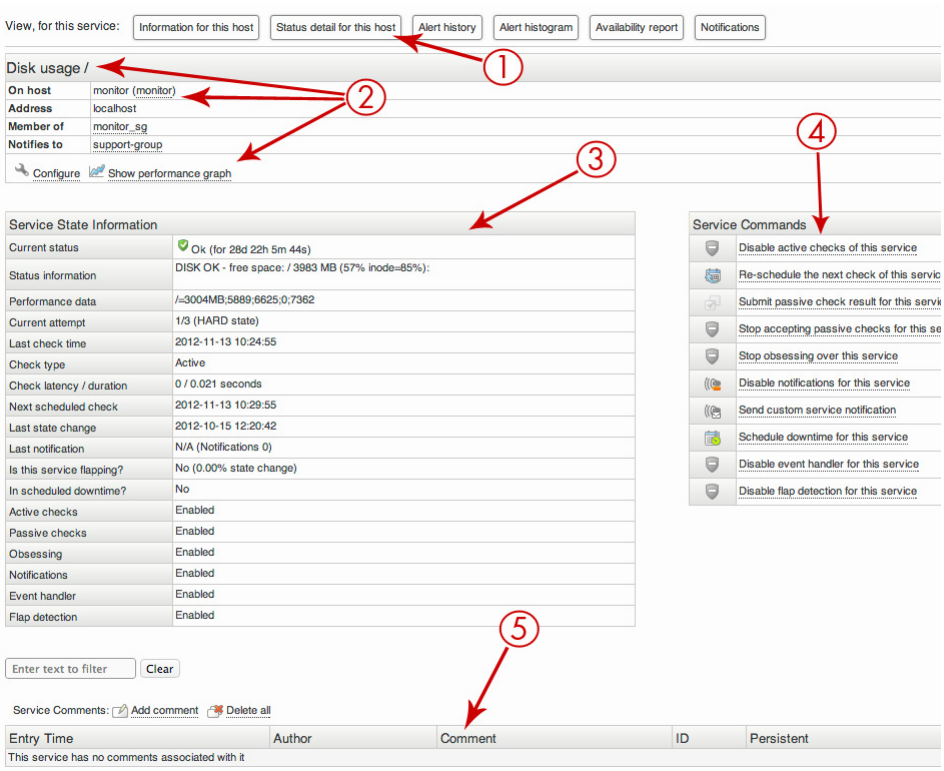
To filter comments use the filter text field above the comments. This will filter the comments in real time. To clear the filter click on the **Clear** button.

A service in detail

A service is practically anything that can be measured, must be connected to a host.

Let us take a look at the Service information view and see what parts it is built upon. In the coming sections we will go through each part and learn how they can be used.

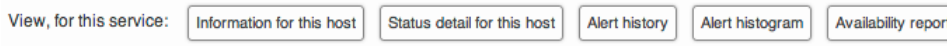
The picture below shows the Service information view.



Nr	Part	Description
1	Page links	Quick links to other information about the service and the host it is connected to. • Information the host. • Status details for the host. • Status detail list all services on this host. • Alert history show the alert log if the service. • Alert histogram show a graphical view, or trend, of the problems on the service. • Availability report of the service. • Notifications shows all notifications that has been sent out about this service.
2	Service information header	Displays brief information about the service, host and its surroundings like • Host name and address. • What service groups the service belongs to. • Extra actions and notes. • Links to configure and graphs.
3	Service state information	Here you can see status information for the service like • Current status. • Current attempt. • Last state changes and notification. • What is enabled or not on this service.
4	Service commands	Here you can perform different commands for the service.
5	Comments	These are comments you put there either by adding a scheduled downtime or just a comment of it own.

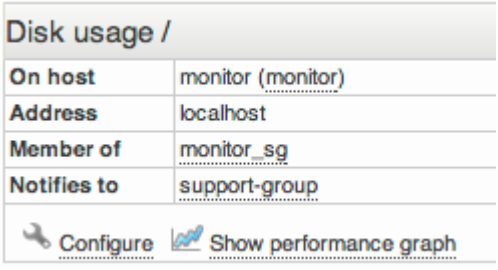
Page links

The page links gives you a couple of short cuts to more information about this service and the host it is connected to.



Service header information

Here you will get a short summary of the service.



Disk usage /	
On host	monitor (monitor)
Address	localhost
Member of	monitor_sg
Notifies to	support-group

Configure Show performance graph

Here you may see things like

- What host it belongs to.
- The service groups it is a member of.
- What contact groups that will get the notifications.
- Service notes.
- Links to extra service actions, service notes and performance graphs.
- Alink to the object in the configuration GUI.

Service state information

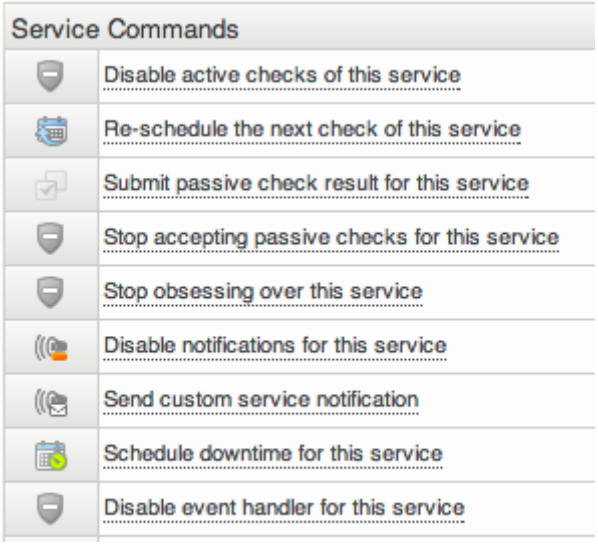
In this view you get all kind of status information about the host. This is the most detailed view you can get over a service.

Service State Information	
Current status	Ok (for 29d 44m 19s)
Status information	DISK OK - free space: / 3979 MB (56% inode=85%):
Performance data	/=3008MB;5889;6625;0;7362
Current attempt	1/3 (HARD state)
Last check time	2012-11-13 13:04:55
Check type	Active
Check latency / duration	N/A / 0.026 seconds
Next scheduled check	2012-11-13 13:09:55
Last state change	2012-10-15 12:20:42
Last notification	N/A (Notifications: 0)
Is this service flapping?	No (0.00% state change)
In scheduled downtime?	No
Active checks	Enabled
Passive checks	Enabled
Obsessing	Enabled
Notifications	Enabled
Event handler	Enabled
Flap detection	Enabled

Service commands

The service commands part gives you a various commands to handle the service. Here you can

- Disable and enable active and passive checks
- Reschedule the service check
- Disable and enable notifications
- Schedule downtime
- Disable and enable event handlers.



Comments

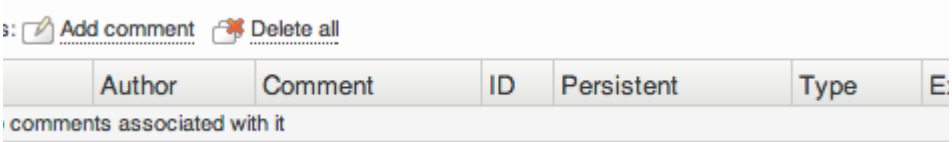
There are two types of comments:

- Automatically added
- Manually added

Automatically added comments can be

- acknowledged comments
- scheduled downtime comments

As a manually added comment you can type in almost anything you like.



Comments are designed to be short texts. If you like to add documentation, longer descriptions and so on you should consider using the do *Dokuwiki* on page 77 that is included in op5 Monitor.

Parenting

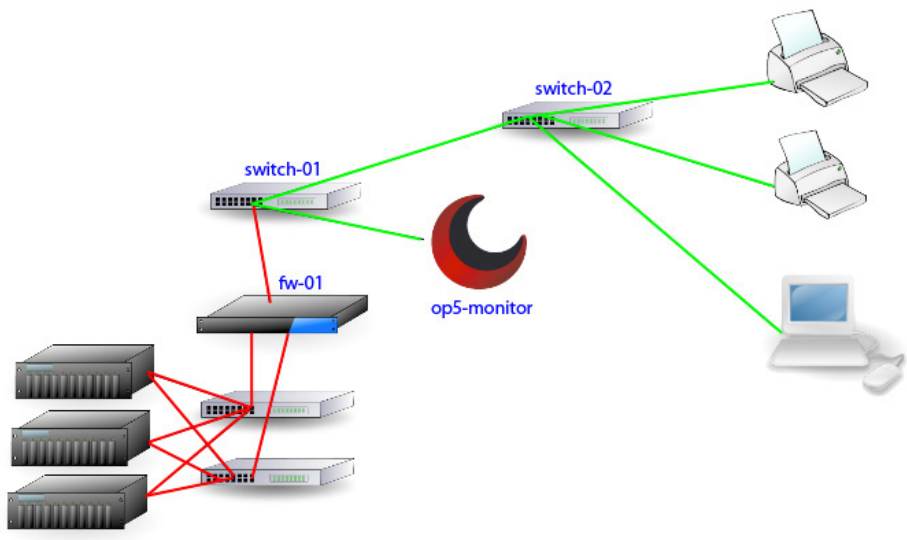
Parenting in op5 Monitor is used to determine whether a host is down or unreachable.

A host is...

- down if the host is the first one it can not reach in the “tree”
- unreachable if the host is after the host described above.

Example 1 *This example describes how the parenting works in practice*

The picture below shows how a network looks like from the monitor servers point of view.



As you can se everything starts with the op5-monitor server. If fw-01 is down, as shown in the picture above, all child hosts of fw-01 is considered as unreachable.

The example above shows that you can use parenting to exclude a lot of unnecessary alerts and notifications. This because you can tell op5 Monitor not to send any notifications on host unreachable. That means you will only get notification about fw-01 in this case, not the hosts “below” fw-01.

Host and service groups

Using Host groups

A host is normally placed in one or more host groups. A host group can contains any kind of hosts in any way you want to. You can use host groups to:

- group hosts from the same geographic area in the same host group.
- put the same type of hosts in the same host group.
- place all hosts in a special service in the same group.
- place a customer's host in a host group of its own.

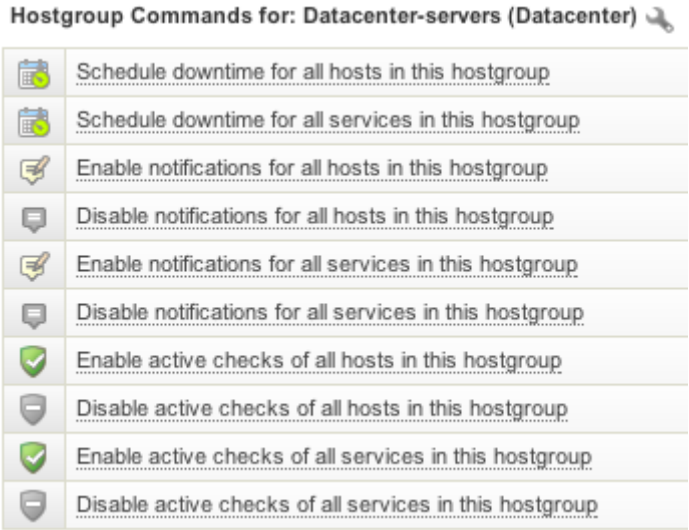
Beside just being a way of sorting hosts in you can use host groups to decide what user is supposed to be able to see what hosts. More about that in *Access rights* on page 118.

Using host groups makes it easy to find hosts that got something in common. Let us say you have a whole bunch of Citrix servers you can show just these servers in a listview.

Host group commands

By clicking on the "View extended information" icon on a host group you will get

a menu to control the host group.



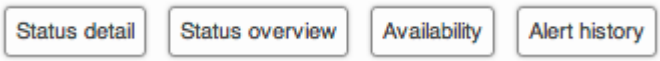
From this menu you can:

- Schedule downtime for all host and/or services in the host group.

- Enable and disable notifications for all hosts and/or services in the host group.
- Enable and disable active checks for all hosts and/or services in the host group.
- Go directly to the configuration for this host group.

Host group reporting

From the host group command menu (see above) there are also a couple of reporting tools



- From this menu you can view Availability reports and Alert history for the host group.

Using Service groups

One of the most useful things with service groups is to group them by what useful service they are giving the users.

Example 2 *A service group example*

Let us say you have a mail service for you customers. This mail service needs the following components to be working as it should:

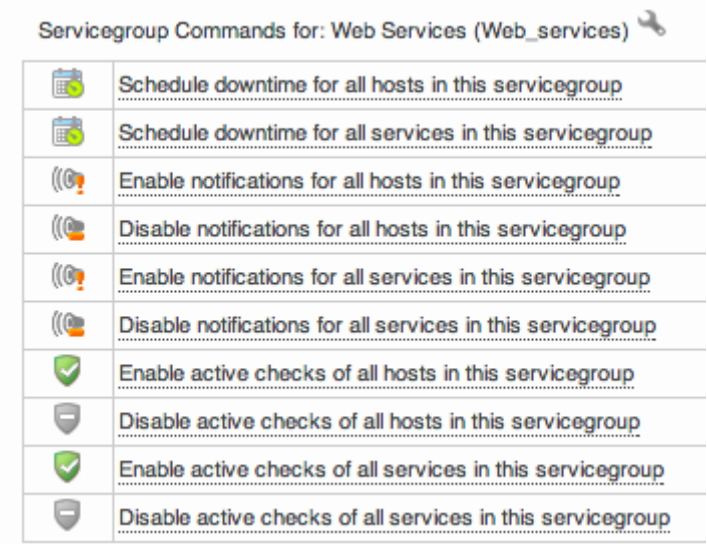
- DNS
- MTA
- IMAP-/POP-server
- Webmail
- Storage

On the hosts listed above there are services that must be working otherwise your customer will not be able to user the email service you shall deliver to them.

Place all the important services in one service group and you can then easily see if an alert and/or notification says anything about the email service in the example.

Service group commands

By clicking on a service group name (the name within parentheses) in any of the service group views you will get a menu to control the service group.

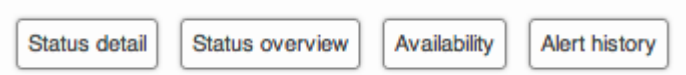


From this menu you can:

- Schedule downtime for all host and/or services in the service group.
- Enable and disable notifications for all hosts and/or services in the service group.
- Enable and disable active checks for all hosts and/or services in the service group.
- Go directly to the configuration for this service group.

Service group reporting

From the service group command menu (see above) there are also a couple of reporting tools



From this menu you can view Availability reports and Alert history for the service group.

Another good way to use service groups is to create Service Level Agreement (SLA) reports based on service groups. If you take the example above and create a SLA report from it you will directly see if you can deliver your service the way you promised your customers.

Problem handling

Much of your work with op5 Monitor is about problem handling. In the beginning when you start working with op5 Monitor normally most of the time is about configuring, tweaking and fixing problems. After a while you will see that you can start work in a proactive way instead of how it used to be.

In this section we will take a look at how you can work effectively with op5 Monitor as a great help during your problem handling.

Hard and soft states

A problem is classified as a **soft** problem until the number of checks has reached the configured

max_check_attempts value. When **max_check_attempts** is reached the problem is reclassified as **hard** and normally op5 Monitor will send out a notification about the problem. **Soft** problems does not result in a notification.

Alerts and notifications management

Alerts and notifications are two of the most important things for you as an system administrator who depend almost all your work on a monitoring tool like op5 Monitor.

Alerts, alarm, notifications are called different things in most monitoring system. Here in op5 Monitor we define them like this:

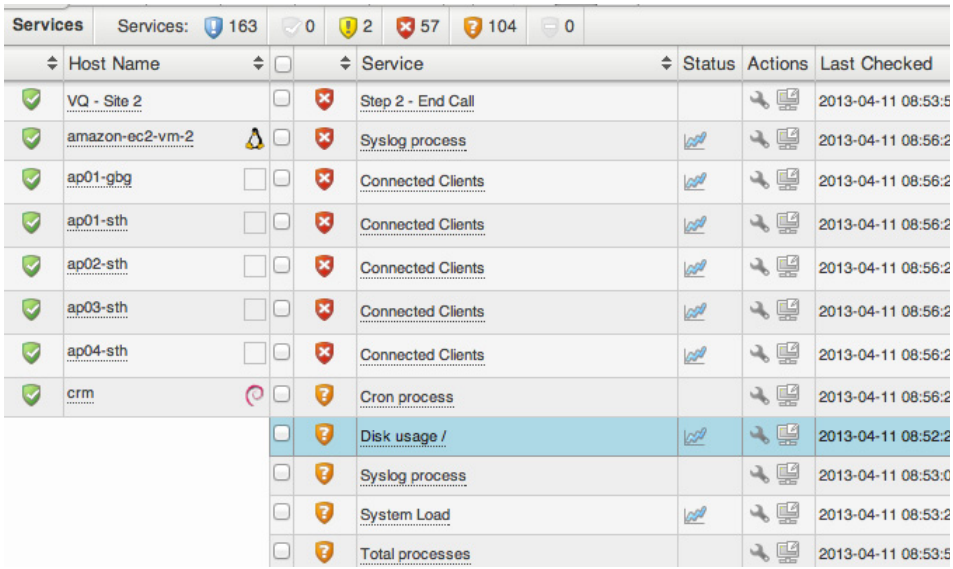
	Description
Alerts	An alert is when any kind of status changes on a host or a service, like: • host up • host down • service critical • service ok and so on.

	Description
Notifications	Notifications is the messages sent out to the contacts associated with the object the notification is sent about. Notifications are sent out on state changes. A notification is sent during one of the following alerts: • any service or host problem or recovery • acknowledgements • flapping started, stopped and disabled • downtime started, stopped and canceled Notifications can be sent by almost anything. The following are included by default in op5 Monitor: • email • sms • dial up Of course there are a lot of other ways to send notifications like sending them to a database, ticket handling system etc.

An alert can happens any time and it does not necessary needs to be associated with a notification but a notification is always associated to an alert.

Unhandled problems view

As you can see in the GUI there are many views in op5 Monitor to show you host and service status in. One of the most useful, for a system administrator, is the unhandled problems view.



In this view you will only find unacknowledged problems.

This view can be accessed from the quickbar menu.

Acknowledge problems

When a new problem is discovered you need to take care of it. The first thing you should do is to acknowledge the problem. There are many ways to acknowledge a problem.

When you acknowledge a problem you will:

- make sure no more notifications are sent out.
- show other users that you have seen the problem and are aware of it.

We will here take a look at two of them, acknowledge by:

- the GUI
- SMS

Acknowledging a problem in the GUI

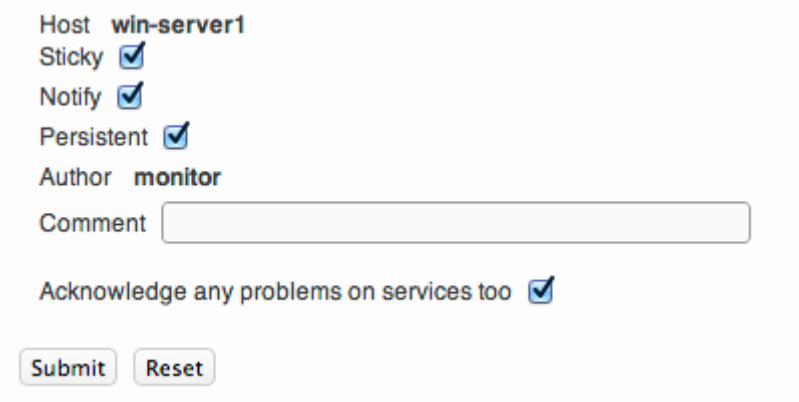
The most common way to acknowledge a problem is to do it in the GUI. This is easy and you will also be able to add a comment to your acknowledge. It is also the same routine no matter if it is a host or service problem you are about to acknowledge.

To acknowledge a host problem:

1. Look up the host in the GUI and click on the host name.

2 Click on **Acknowledge This host problem** in Service commands.

3 Fill in a comment and click **Submit**.



With the **Sticky** options all notifications are subpressed until the problem goes to OK or UP. Uncheck this box to remove the acknownlegement even when the problem goes to another problemstate, for example from WARNING to CRITICAL or from CRITICAL to WARNING.

Use the **Notify** checkbox to send out a notification that this problem has been acknowledged.

With every acknowledgement a comment is added to the object. If you would like this comment to remain after the problem has retured to OK or UP use the **Persistent** checkbox.

4

5 Click **Done** and you will be directed back to the host you where on when you started.

Acknowledging a problem by sms

If you have received your notification by sms you can acknowledge it by sending a sms back to the op5 Monitor server.

To acknowledge a problem by sms

1 Pick up the notification sms in your mobile phone.

2 Forward it to the op5 Monitor server (you must forward the complete sms just the way it looked like when you got it).

If you now take a look at the host or service you will see that it has been acknowledged and a small comment is placed in the comment part for the object.

Removing an acknowledge

Sometimes you might need to remove an acknowledge. Maybe you acknowledged the wrong problem or you for some reason need to stop working on it but you like more notifications to be sent out.

To remove an acknowledge for a host:

1. Pick up the host or service in the gui.
2. Click on **Remove Problem acknowledgement**

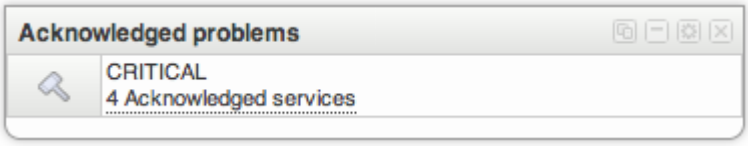
   Now the notifications will continue as it is setup for the object.

Note: The comment for the acknowledge *is not removed*.

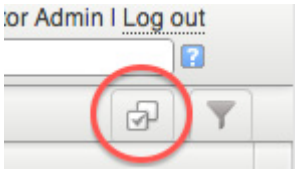
Removing multiple acknowledgements

To remove several acknowledgements:

1. Go to "**tactical overview**" and in the "**acknowledge service problem**" widget and click on "X Acknowledged services"

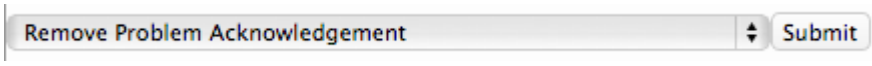
   

2. Click **Send Multi Action** below the search field

   (It is located in the top right of the list.)

3. Chose **Acknowledge** in **Select Action** drop down list just below the list and click **Submit**.

Schedule downtime

Using scheduled downtime enables you to plan for system work ahead. When a host or service is scheduled for downtime op5 Monitor suppresses alarms for that host or service. Furthermore op5 Monitor informs you about when a host or service is scheduled for downtime through the web interface. Information about the scheduled downtime is also stored so that planned system work does not affect availability reports.

It is possible to schedule downtime for

- hosts

- services
- all members of a host group
- all members of a service group.

You can also configure triggered downtime for hosts located below a host currently in scheduled downtime. To do this you need to have your parenting configured correctly. Read more about *Parenting* on page 56.

Viewing scheduled downtime

Basically the Scheduled Downtime view is a summary of all currently configured scheduled downtime for hosts and services.

Downtimes Count: 3

ID	Type	Host Name	Service	Entry Time	Author	Comment	Start Time
1	Host	ap03-sth		2013-04-11 09:22:19	osandstrom	demo	2013-04-11 09:22:
2	Host	ap02-sth		2013-04-11 09:22:19	osandstrom	demo	2013-04-11 09:22:
3	Host	ap01-sth		2013-04-11 09:22:19	osandstrom	demo	2013-04-11 09:22:

In this view you can also remove scheduled downtime

To view all scheduled downtime

1 Click **Scheduled downtime** in the main menu under the **Monitoring menu**.

Scheduling downtime

As you have seen we can schedule downtime for both hosts and services. Now we will take a look at how to schedule downtime for a host and a host group. The procedure is the same for services and service groups.

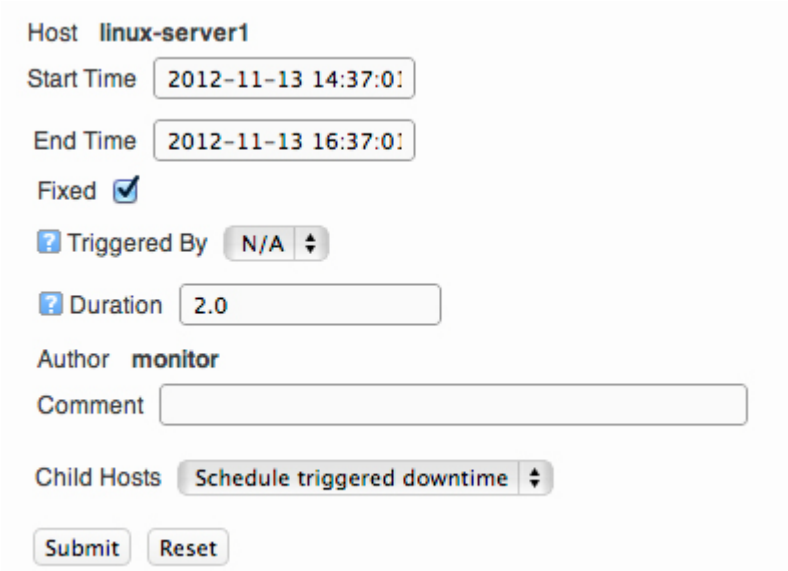
When the scheduled downtime starts a notification is sent saying that the scheduled downtime has started.

When adding a retroactively downtime, this will be noted in the log for the service or host.

To schedule downtime for a host

1. Find the host you like to schedule downtime for and pick up the host information page (*A host in detail* on page 45).
2. In the **Host commands** click **Schedule Downtime For This Host**.

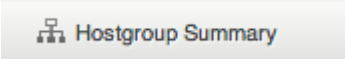
3. Fill in the form



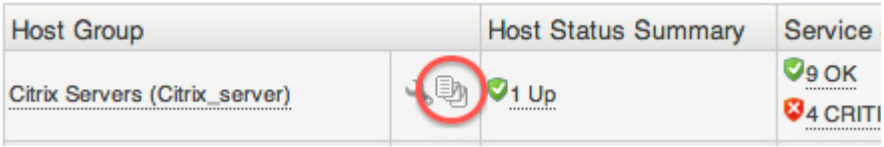
   a. Enter start and end time.
   b. Choose between fixed or flexible.
      Fixed downtime starts and stops at the exact start and end times that you specify when you schedule it.
      Flexible is used when you know for how long a host or service will be down but do not know exacly when it will go down.
   c. Use **Triggered by** if you would like another schedule downtime to start the downtime. For instance, if you schedule flexible downtime for a particular host (because its going down for maintenance), you might want to schedule triggered downtime for all of that hosts's "children".
   d. If you chosen flexible in **b** then type in how long the scheduled downtime is supposed to be active.
   e. Add a comment about this scheduled downtime.
   f. Choose what to do with the child host of this host (if there are any).
4. Click **Submit**.
5. Click **Done**.

To schedule downtime for a host group

1 Locate the host group you like to schedule downtime for by clicking on Hostgroup summary in the main menu under Monitoring.



2 Click on the hostgroup extinfo icon



3 Click **Schedule downtime for all hosts in this Hostgroup** in the list of Hostgroup Commands.

4 Follow a-g (except for f) in step *3* in *To schedule downtime for a host* on page 67.

5 Click **Submit**.

6 Click **Done**.

Remove a scheduled downtime

Sometimes it is necessary to remove a scheduled downtime. This can be done both before the scheduled downtime has started and during the downtime. If the scheduled downtime has been canceled before it has reached its end time a notification will be sent saying that the scheduled downtime have been canceled.

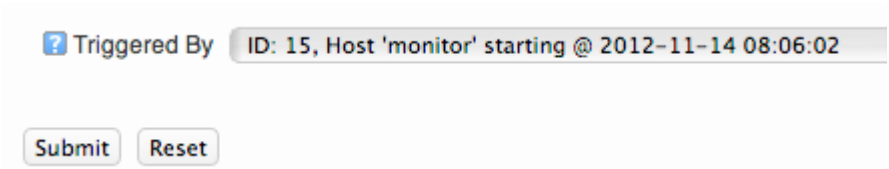
Removing a scheduled downtime

To remove a scheduled downtime

1 Open up the scheduled downtime view by follow the instructions in *To view all scheduled downtime* on page 66.

2 Click the **delete icon** under Actions.

3 Click **Submit**.



Now the scheduled downtime and the comment saved when you created the scheduled downtime is removed.

Schedule recurring downtime

As a good practice you shall put your hosts and services in scheduled downtime when you are planing to take them down. Many downtime events are recurring and it is pretty easy to forget to put your objects in scheduled downtime.

It is now schedule Recurring Downtime is a great help for you.

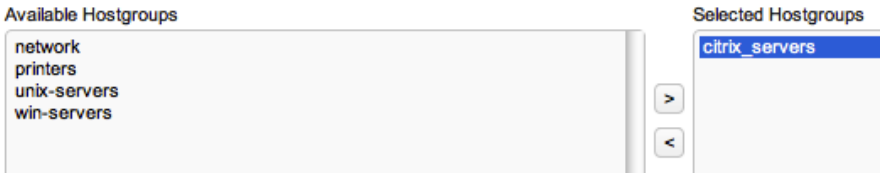
Scheduling a recurring downtime

Let us say that you are using Citrix and you need to reboot your citrix servers once per week. This is a perfect case of when you should use a recurring downtime schedule.

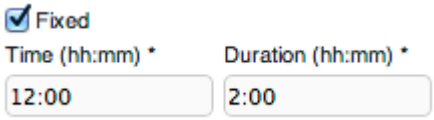
To add a recurring downtime

1. Click **Recurring downtime** in the Monitoring menu.
2. Choose the object type.

3. Chose objects to use, in this case the citrix host group.



4. Add a comment.
5. Set start and end time.



6. Choose day of week and months of the year this schedule shall be used.
7. Click **Add schedule**.

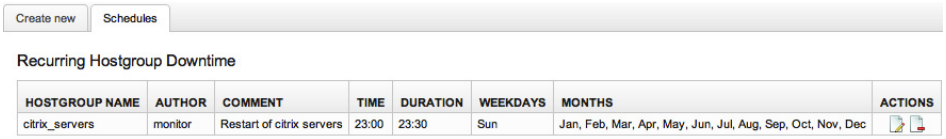
Viewing your recurring downtime schedules

Once you have created a recurring downtime schedule you may

- view it
- edit it
- delete it.

This is done from the Schedules tab.

The view looks like this



HOSTGROUP NAME	AUTHOR	COMMENT	TIME	DURATION	WEEKDAYS	MONTHS	ACTIONS
citrix_servers	monitor	Restart of citrix servers	23:00	23:30	Sun	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	

Editing a recurring downtime

To edit a recurring downtime

1. Click **Recurring downtime** and then **Schedules**.
2. Click **Edit**.

3. Edit the fields you like to change and click **Add schedule**.

Deleting a recurring downtime

To delete a recurring downtime

1. Click **Recurring downtime** and then **Schedules**.
2. Click **Delete**.

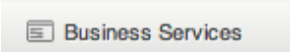
3. Click **Ok**.

Business Process

The business process view is designed to combine your IT monitoring and your business service management (BSM) to give an overview of the applications and/or services that your organisation is providing either to customers or internally.

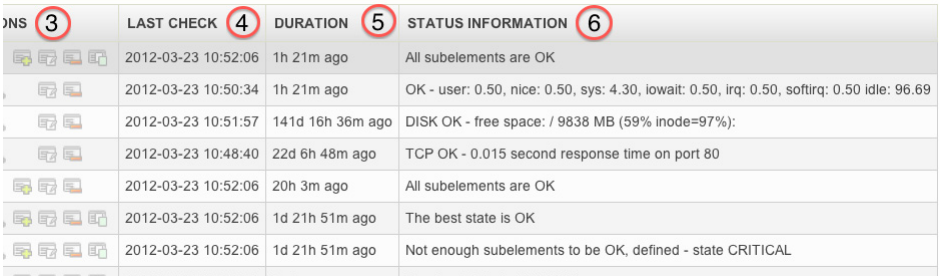
Viewing Business Process

To access the Business Process view click on **Business Process** in the main menu.



The Business Process view gives an easy overview of how your Business Processes are working.

For better viewing the following screenshot has been divided in to two pieces.



Nr	Description
1	Business Object List all the Business process objects. An object can be one of the following items • Group • Service • Host. • Random value • Constant value

Nr	Description
2	Rule Shows which rule is applied to the group. For more information about the different rules see *Rules types* on page 146 in op5 Administrator manual.
3	Actions A list of action buttons. Click the icons to • Look up service/host in op5 monitor • Go to the configuration for the host or service • Add sub element, only available on groups • Edit object • Remove object • Clone object, only available on groups
4	Last check. This will show when the object was last checked. The time on a group is the time for when the last sub element was checked.
5	Duration Displays how long the group or service has been in it's current state.
6	Status Information Displays in what state the current group is in. For hosts and services the output from the op5 monitor check is displayed.

Graphs

op5 Monitor includes support for graphing what's known as "performance data" returned by check plugins that support this feature.

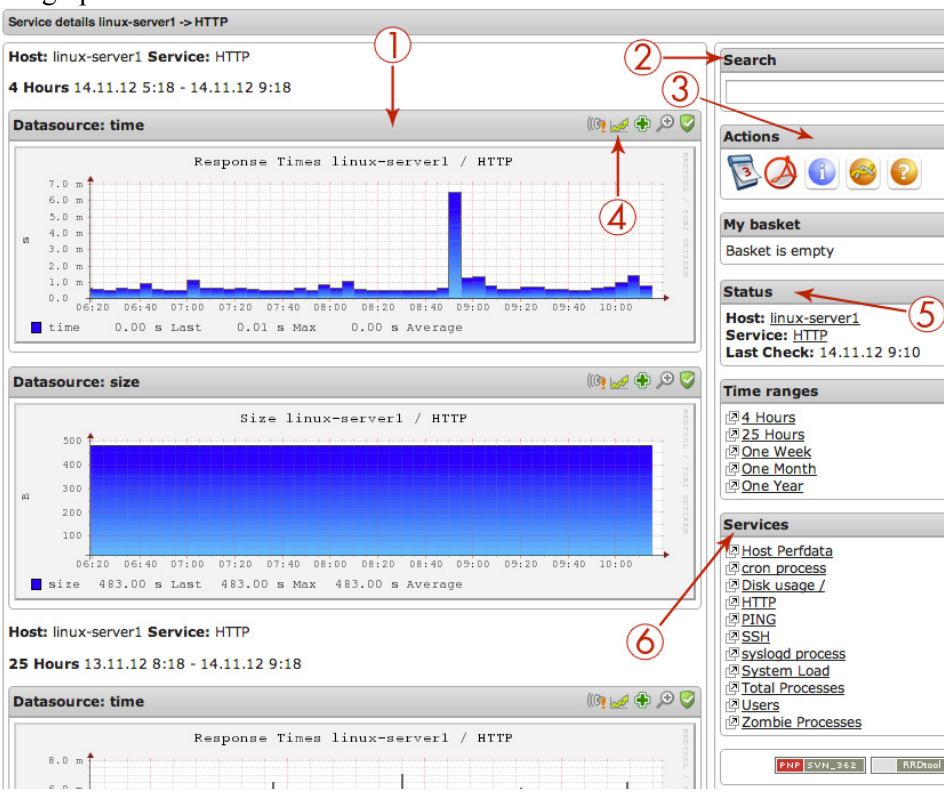
Performance data can be anything that gives a more detailed picture of a particular check's performance characteristics than the OK/WARNING/CRITICAL levels that Monitor reacts to.

For example, check_ping returns performance data for packet loss and round trip times. This data is stored by Monitor and used to create graphs for different time periods, such as the last 24 hours and past week. This feature can be very helpful in identifying trends or potential problems in a network.

Viewing graphs

From most of the views in op5 Monitor you can find the graph icon looking like this:

To view the graphs for a service or a host click on the graph icon and you will get the graph view.



The table below describes the parts of the service overview which is where all graphs are being displayed.

Nr	Description
1	The graphs. Except for the graphs in it self they shows information like • host and service name • warning and critical levels • last, average and max values.
2	Here you can quickly get the graphs of an other host. Just type in the correct name of the host and press **Enter**.
3	Exports and calendar. Click the icons to • export to PDF or XML • open up the calendar to view old data.
4	Zooming and reports Click the icons to • zoom in the graph • show most resent alert for this time period for this host • create an availability report for this time period for this host.
5	Host information Here you see a short information about the host. Click the host or service name to get extended details.
6	Other graphs on this host The list shows the rest of the graphs available for this host. Just click on one of them to view the graphs of an other service.

Adding graphs for custom plugins

Sometimes you find a plugin you like to use but there are no graphs made from the output of the plugin. Then you need to create your own template.

To create a template of your own follow the HOWTO that can be found in the documentation area of the support part at www.op5.com.

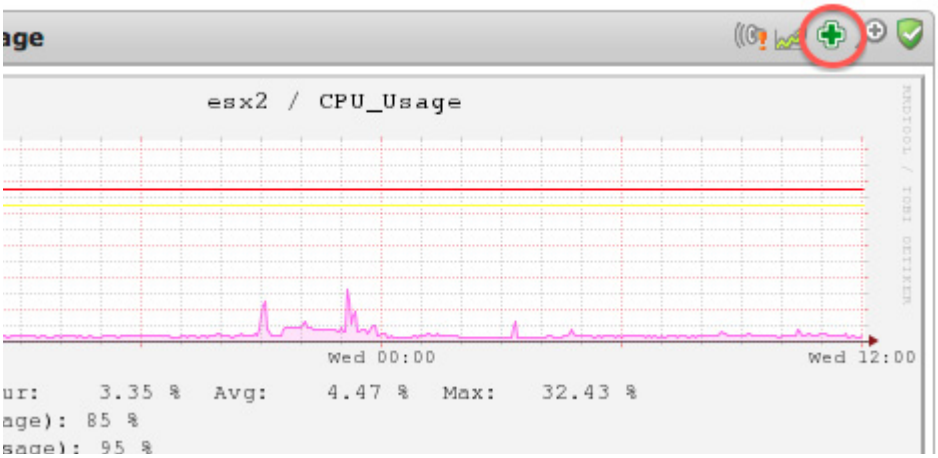
Graph basket

To view graphs from multiple sources it's possible to add graphs to the basket.

By adding a graphs to the basket it will be possible to view the basket with the selected graphs below each other.

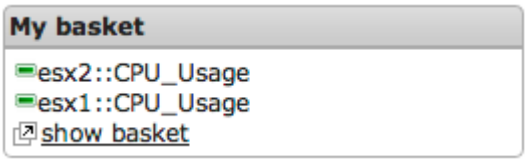
This will give you an easy way to compare graphs from one or more hosts.

To add a graph to the basket select the graph that you would like to add then click on the + icon above the graph



After adding the desired graphs select **graphs** from the menu

then click on **show basket**



Hyper Map

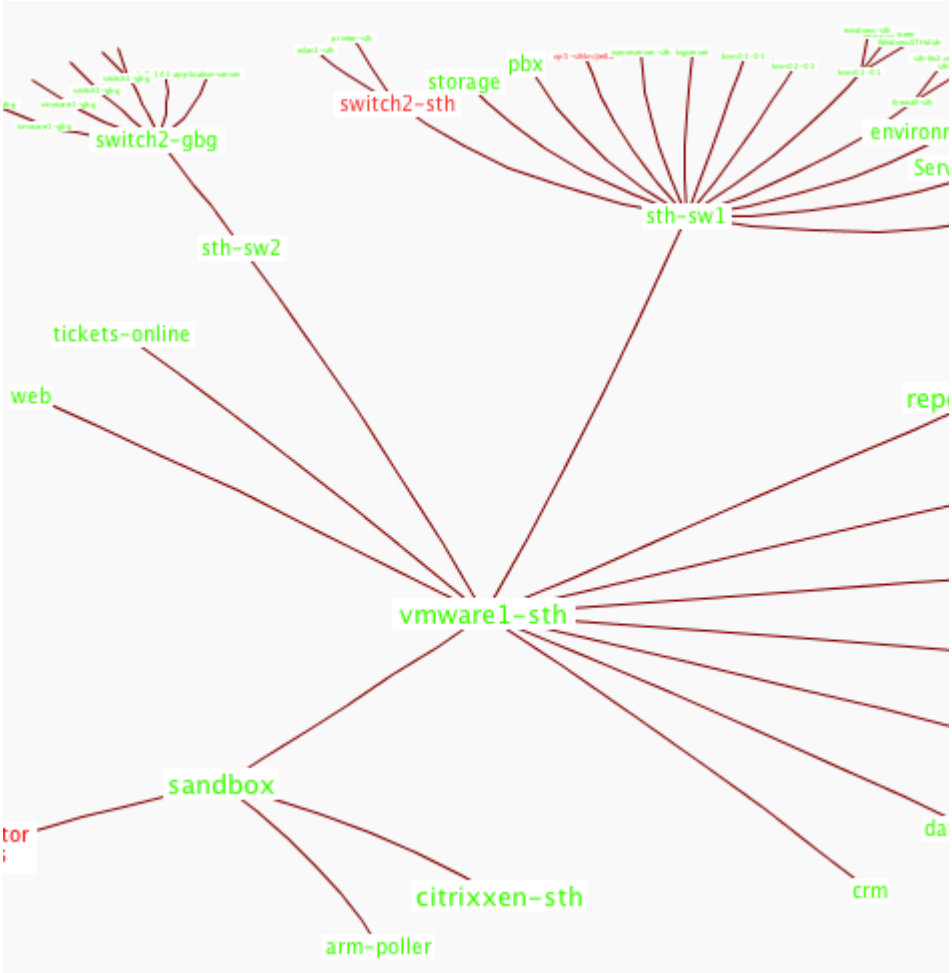
Hyper map visualises the relationships between hosts in a scrollable map.

To access the Hyper Map click on the icon in the menu

You need to accept the java-applet to run.

This map is autogenerated by the parent/child relationships of the hosts. If a host does not have any parent it is connected directly to the “op5 Monitor Process”.

To navigate in the hyper map use the mouse to drag the map in the direction you want to go.



Dokuwiki

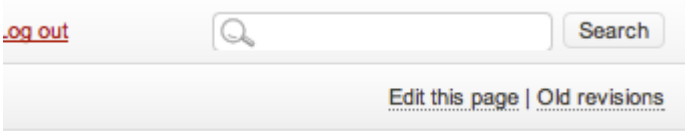
op5 Monitor comes with an dokuwiki that gives you a great way of document both your environments and things needed to know about your monitored system.

Of course you can also use this dokuwiki to save other kind of related information in too. This makes it easy to reach and you will ensure you have all documentation in the same place.

Editing a wiki page

To edit an existing page, go to the page you want to edit and select 'Edit this page' in the top right corner.

A backup of the previous page will automatically be created.



Formatting a wiki page

You can format your text by using wiki markup. This consists of normal characters like asterisks, single quotes or equal signs which have a special function in the wiki, sometimes depending on their position. For example, to format a word in italic, you include it in two pairs of single quotes like "this".

Description	you type
Italic	//italic//
Bold	**bold**
Underline	__underline__
Bold & Italic	**//bold & italic//**
Headings of different levels	==== Headline Level 3 ==== === Headline Level 4 === == Headline Level 5 == Note: An article with 3 or more headings automatically creates a table of contents.

For more information about formatting text please go to http://www.dokuwiki.org/syntax

More information about how to use the dokuwiki in op5 Monitor can be found in op5 Monitor Administrator Manual or at http://docuwiki.net/

Agents

op5 Monitor can do a lot on its own. But to get the most out of op5 monitor you should use our agents.

The following agents are available from the download section in the support section at http://www.op5.com/get-op5-monitor/download/#Agents-tab.

- op5 NSClient++
- NRPE
- MRTGEXT
- Windows syslog Agent
- Nagstamon

The table describes each agent briefly

Name	Description
op5 NSClient++	This is the agent used for monitoring Microsoft Windows operating systems. You can use it to monitor things like • CPU, memory and disk usage • services, windows events and files You can also use the built-in NRPE support to create your own commands for op5 NSClient++
NRPE	This is the most commonly used agent for Linux and Unix systems. NRPE is used to execute plugins on an remote machine and then send the results back to op5 Monitor. You may also send arguments to the NRPE daemon on the remote machine to make it a bit more flexible. This must be turned on before you use the feature.
MRTGEXT	MRTGEXT was originally written as an NLM for Novel Netware to obtain values used with the widely known MRTG, but it can also be used to poll values from op5 Monitor.
op5 Syslog Agent	op5 Syslog Agent runs as a service under Windows. It formats all types of Windows Event log entries into syslog format and sends them to a syslog host (The op5 Monitor server or the op5 LogServer). The agent can also forward plaintext log-files.

Name	Description
Nagstamon	Nagstamon is a status monitor for the desktop. It can connect to several servers and resides in the systray or as a floating statusbar at the desktop showing a brief summary of critical, warning, unknown, unreachable and down hosts and services and pops up a detailed status overview when moving the mouse pointer over it

More information about the agents can be found in the op5 Monitor administrator manual.

NagVis

Introduction

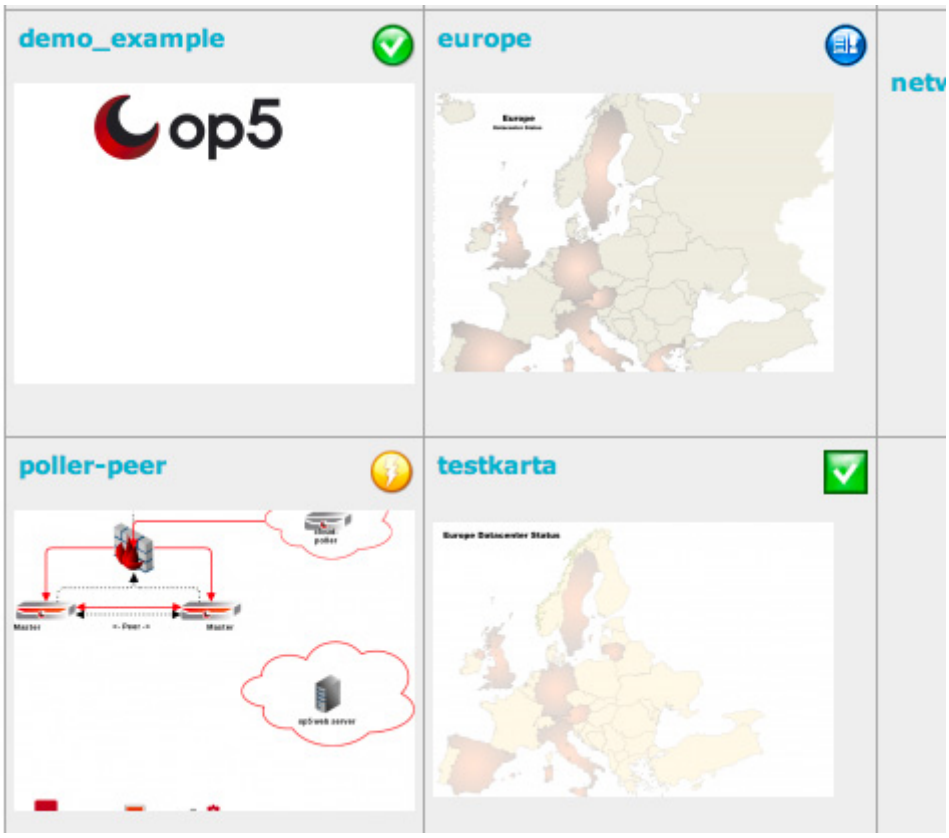
NagVis is a visualization add-on for op5 Monitor and it is used to visualize op5 Monitor data, e.g. to display business processes like a mail system, network infrastructure or critical production processes.

In this chapter each type of map will be described. You will also learn how to complete the most common tasks like how to

- add, edit and delete maps
- add, edit and delete objects
- change global configuration

The first thing you will see when you open up NagVis in op5 Monitor is a few default demo maps, Automap and Geomap.

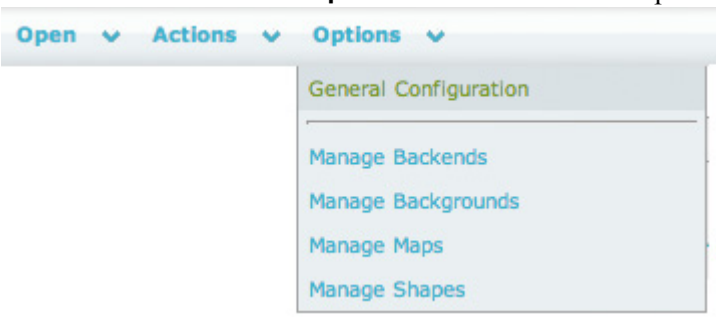
The picture below shows an example of how the view may look like.



It is from this view you can display and manage you maps.

Configuration

All settings are administrated through the Configuration. The **Configuration** menu can be found under **Options** in the menu at the top of the default view



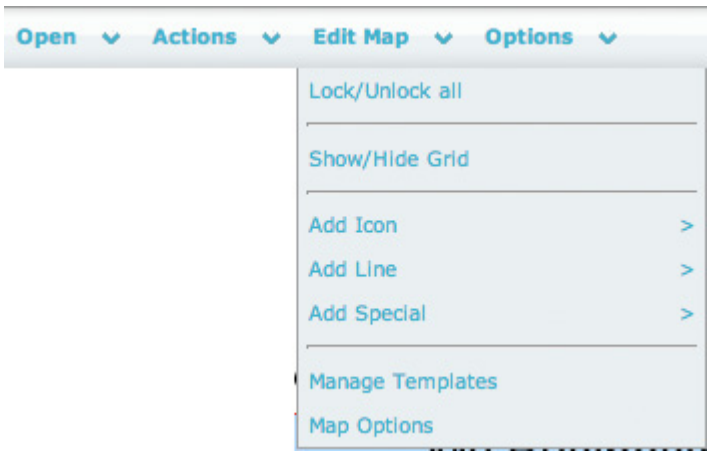
From this menu you can:

- Change the global configuration
- Add, edit and delete map and objects
- Add and delete background images
- Add, edit and delete shapes
- Configure the backend.

Edit plain maps

To edit a plain NagVis map

1. Click on NagVis in the monitoring menu of op5 Monitor.
2. Click on the NagVis map that you want to edit.
3. Use the menu on the top to access the edit options.



NagVis maps

As you have seen there are a couple of demo maps in the default configuration. They are included so you have something to start with when you are using NagVis for the first time.

Manage backgrounds

When you start to create your own maps you will need to have a background image. The background image can be what ever you want.

The following image types are supported:

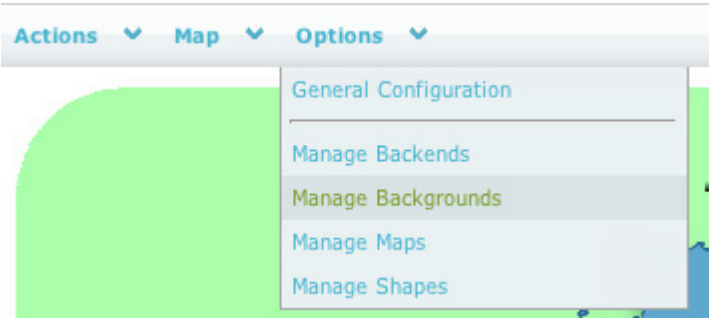
- jpeg (jpg)
- png
- gif

Add

To add a new background image

1 Go to nagvis in the monitoring menu.

2 Go to the menu on top and select **Options -> Manage Backgrounds**



3 Click on **Choose File** in the **Upload background image** and choose the image to upload.

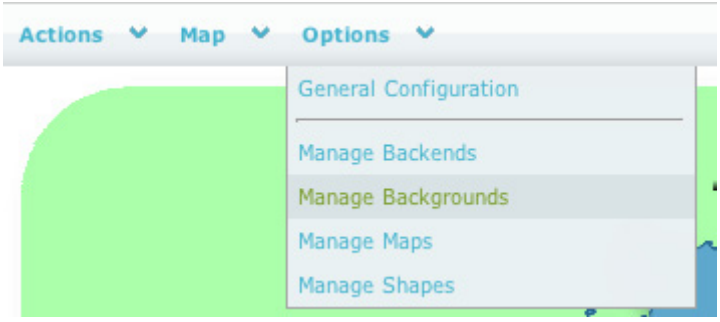
4 4. Click **Upload**. Now your background image is ready to use.

Delete

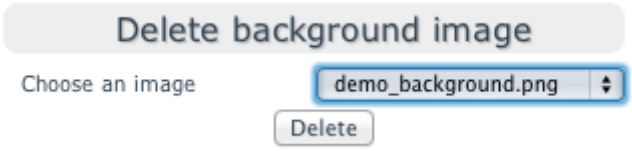
To delete a background image

1 Go to nagvis in the monitoring menu.

2 Go to the menu on top and select **Options -> Manage Backgrounds**



3 Under **Delete background image** choose the background image you like to remove and click **Delete**.

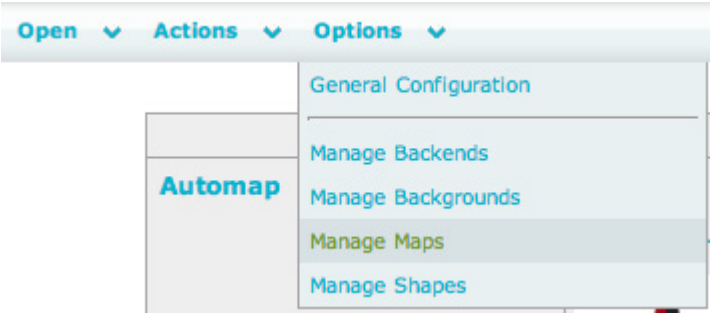


Manage maps

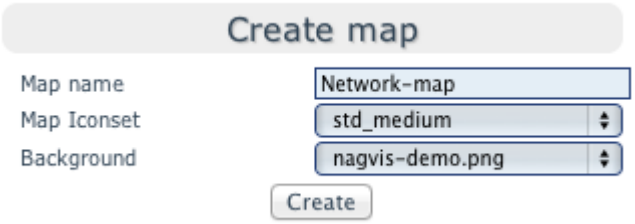
Add

To add a new map

1 Go to the menu on top and select **Options -> Manage Maps**



2 Now fill in the following fields:



Option	Description
Map name	The map name without space in the name. [a]
Map Iconset	Choose what iconset you like to use.
Background	Choose what background image you like to use.

a.This will be the name of the map and used both in URLs and it will be the name of the configuration file in the file system

3 Click on the **Create** button and your map is created and ready to be filled with objects.

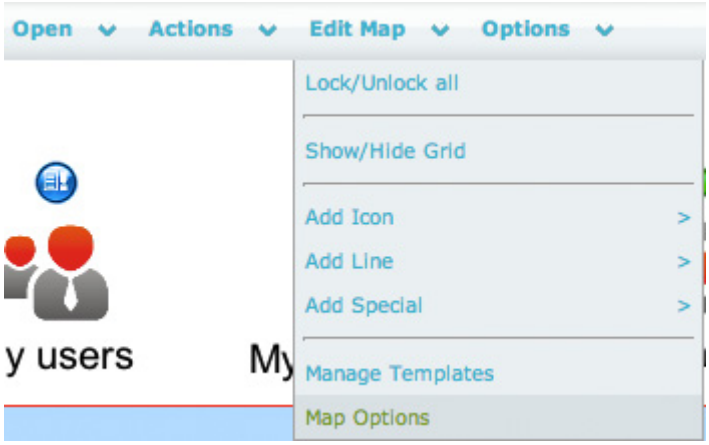
Change options

Since the **Add new map** window is pretty limited you probably want to change some of the options for your newly created map.

To find the Option window for your map.

1 Go to the map that you would like to change.

2 Go to the menu on top and select **Edit Map -> Map Options**



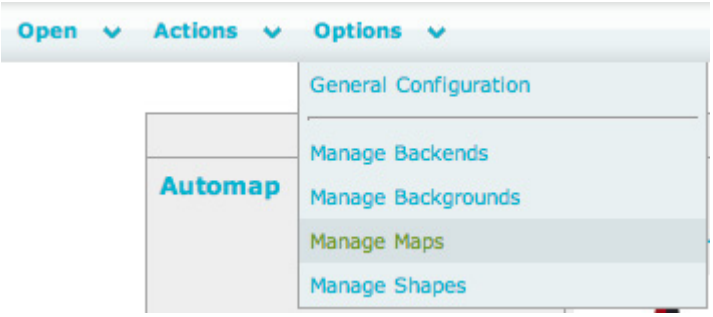
The number of options is large. For more information about the options please read more in the official NagVis Manual at:

http://www.nagvis.org/documentation

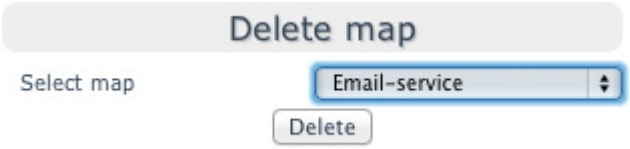
Deleting a map

To delete a map

1 Select **Options -> Manage Maps** from the menu on top



2 Under **Delete map** choose the map you like to remove and click **Delete**.

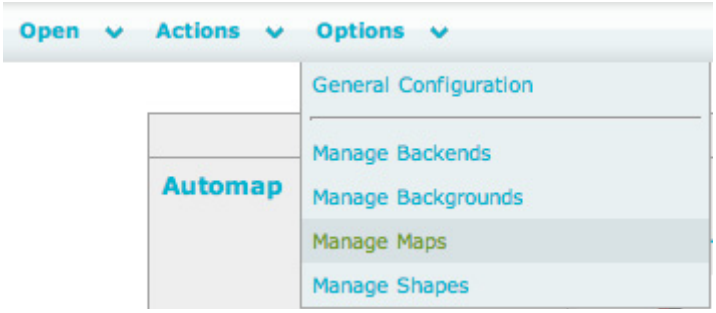


3 Click **Ok** in the pop-up question to deleted the map.

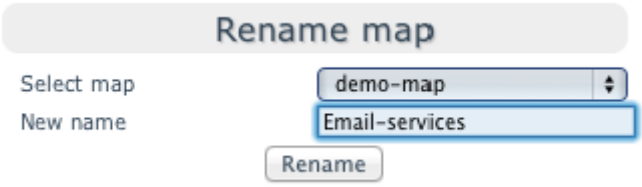
Renaming a map

To rename a map

1 Go to the top menu and choose **Options** -> **Manage Maps**



2 Select the map you like to rename.



3 Type the new name in the **New name** text field and click **Rename**.

4 Click **Ok** in the pop-up dialog that shows up and the map will be renamed.

Map object types

A map can have three types of objects. See the list of objects below:

- Icon
- Line
- Special

Each object type consist of a number of objects that may be used in a map. The table below briefly describes what objects each type includes:

Object Type	Objects
Icon	• Host • Service • Hostgroup • Servicegroup • Map
Line	• Host • Service • Hostgroup • Servicegroup • Map
Special	• Textbox • Shape • Stateless Line • Container

If a host is in a problem state or a service on that host is in a problem state the host will be displayed in a non-green color (red, yellow or grey).

If you hover the mouse over an object you will get a summary of how the current object.

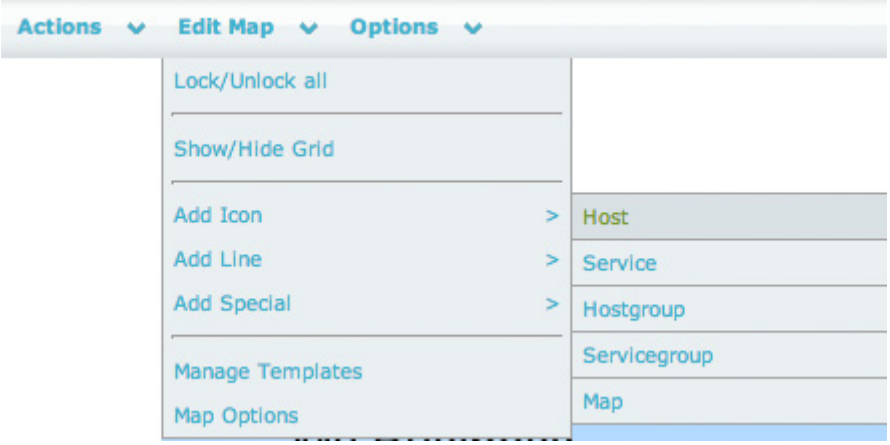
Icon objects

As you can see in the table in *Map object types* on page 91 the type Icon consists of five different objects. All of them are icons that displays status of a certain object in op5 Monitor. They will change color depending of the status of the corresponding object in op5 Monitor.

Adding a host icon

To add a host icon

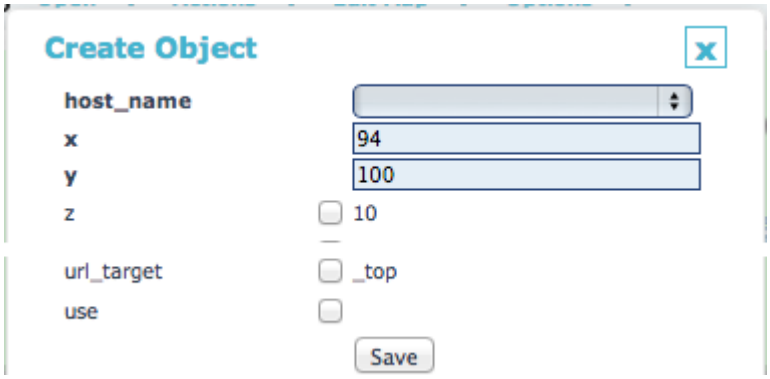
1 Go to the menu on top and select **Edit Map** -> **Add Icon** -> **Host**



2 You will now get a mouse pointer looking like a cross:

Click on the map where you like to add your host.

3 A box with the host options is now shown.



The options marked with bold text are mandatory. So the host name is the only one you have to change for now.

4 Click **Save** and your object is saved on the map.

Line objects

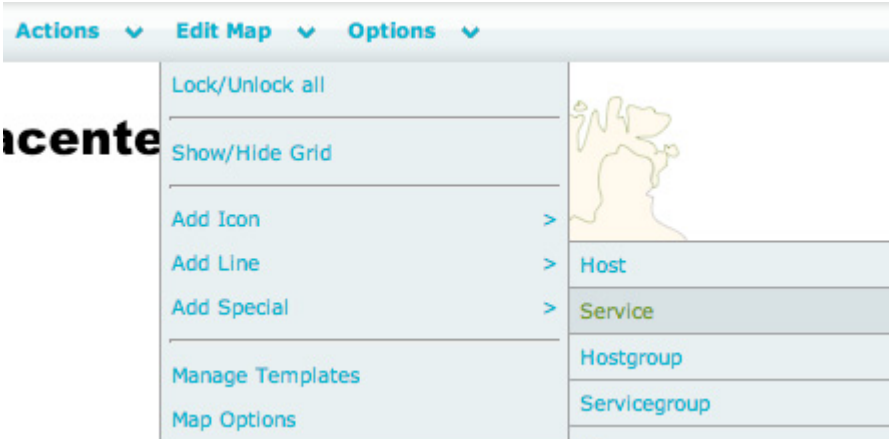
A line object is a printed line between two objects. It can symbolize a connection between two icon objects and be associated with a Nagios object.

Adding a line

Here we will add a line between two hosts and connect it to a switchport Bandwith Usage check.

To add a line

1 Go to the menu on top and chose: **Edit Map** -> **Add Line** -> **Service**



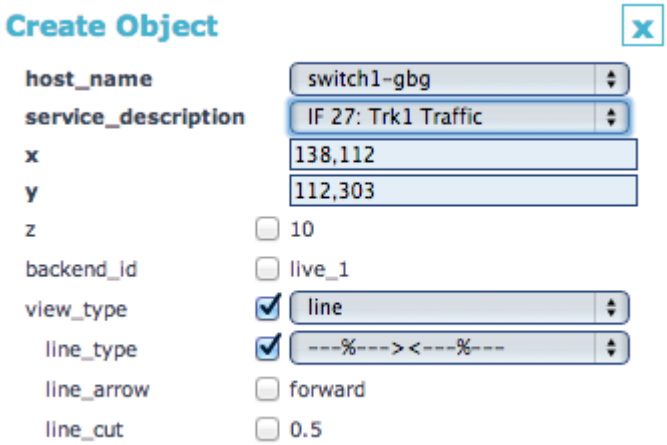
2 Place the line between your objects like this:

a Click on the host icon you like to start your line from.

b Drag the mouse to the other host you like to connect the line to.

c Click where you like to end the line.

3 A box with the line options is now shown.



The options marked with bold text and **line type** are mandatory. So the host name, service descriptions and line type the only one you have to change for now.

4 Select line_type. The line type "--%--><--%--" is used for presenting the usage in percent.

The line type "--%+BW--><--%+BW--" is used for showing both percentage and BandWith. This line does not work with the standard traffic check.

---

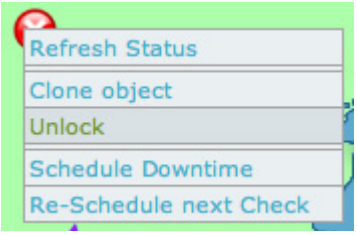
5 Click **Save** and your object is saved on the map.
Note that the percentage is not viewable in configuration mode.

Deleting objects

To delete an object

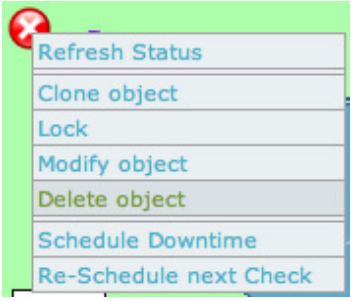
1 Open the map in which the object is located.

2 Right click on the object icon and the following dialog is shown

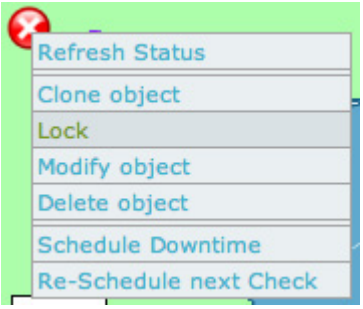


3 Click **Unlock** to enter edit mode for that object

4 Right click on the object again and select **Delete**.



5 Lock the object again to exit edit mode. Right click on the object and select **Lock**

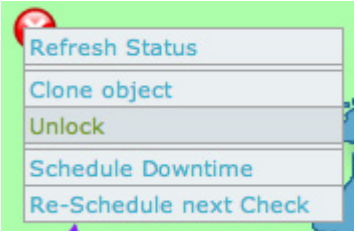


Modifying objects

To modify an object

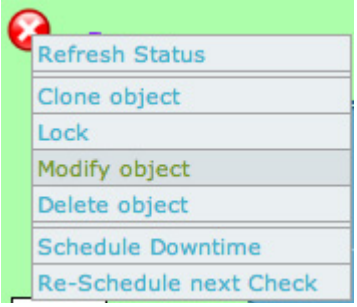
1 Open the map in which the object is located.

2 Right click on the object icon and the following dialog is shown

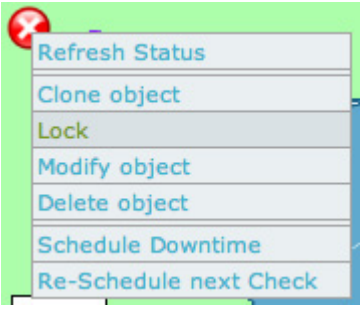


3 Click **Unlock** to enter edit mode for that object

4 Right click on the object again and select **Modify object**.



5 Lock the object again to exit edit mode. Right click on the object and select **Lock**



Automap

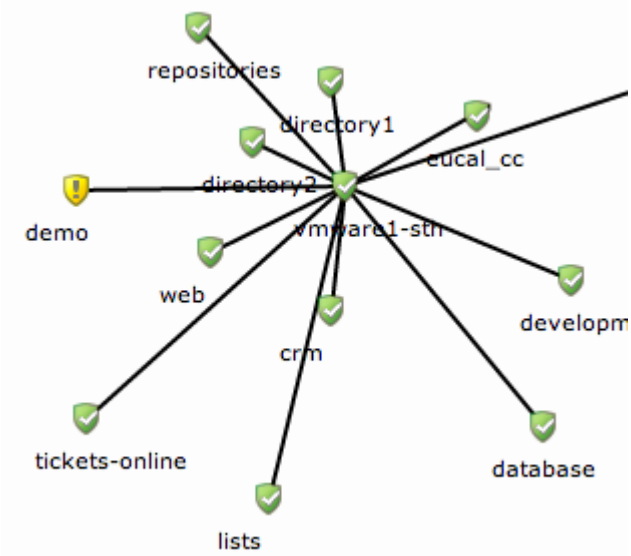
When you take a look at the Automap for the first time you will see the complete tree, including all your hosts. If you only like to see one part of the tree you have to change the following configuration setting:

`defaultroot`

Defaultroot tells Nagvis what host to start your tree with.

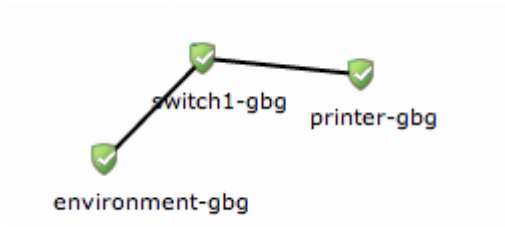
Example 1 *Example of how the defaultroot works in NagVis Automap*

In this example we have the following tree in op5 Monitor.



Here the ***demo*** *host is set to* ***defaultroot*** *and all of its children are displayed.*

If you set the host ***switch1-gbg*** *as* ***defaultroot*** *in Nagvis the automap only display* ***switch1-gbg*** *and it's children (****environment-gbg*** *and* ***printer-gbg****). The picture below shows how it would look like:*



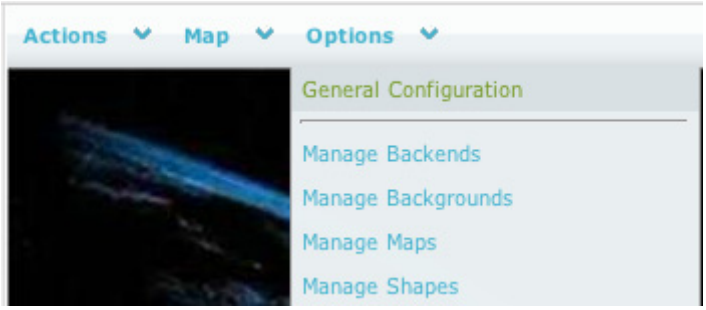
Setting defaultroot

This is done when you have one of the maps in Edit mode. There is no Edit mode on the automap so these steps have to be done on another map.

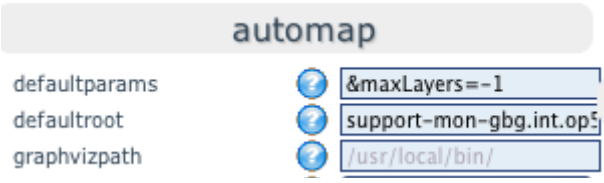
To set defaultroot.

1 Open Nagvis.

2 Go to the top menu and choose: **Option -> General Configuration**



3 In the **Automap** section and type in the complete host name in the "defaultroot" text box:



4 Click **Save** and the new setting has been saved.

Rotation pools

The Rotation pools are just sets of NagVis maps that are used to rotate between. So you can open up a rotate pool to have your maps shown for a certain time and then the rotate function will switch to the next map in the pool.

Note: Neither automap nor Geomap kan be used in a rotation pool.

There is no GUI to use for administration of the rotate pools. You have to edit the nagvis.ini.php file that is located here:

`/opt/monitor/op5/nagvis_ls/etc/nagvis.ini.php`

Adding a rotation pool

To add a new rotation pool you have to edit `nagvis.ini.php`. Look in the file for the following section:

```
; ----------------------------
; Rotation pool definitions
; ----------------------------
```

To add a rotation pool

1. 1. Logon to your op5 Monitor server, as root, via ssh or directly at the console.
2. 2. Open up `nagvis.ini.php` in your favorite editor.
3. 3. Go down to the ”**Rotation pool definitions**“ and add the following lines:

```
[rotation_demo]
rotationid="demo"
maps="demo,Demo2:demo2"
interval=15
```

The table below describes the options shown above:

Option	Description
`[rotation NAME]`	NAME is the displayed name of this rotation pool on NagVis default page.
`rotationid=”NAME”`	NAME is the ID of this rotation pool, need to be the same as NAME in [rotation_NAME].
`maps=”map1,map2:Maps”`	The **Maps** is a label which is being displayed in the index pages rotation list.
`interval=15`	15 is the rotation time in seconds between the maps.

Maps must be named exactly the same as the corresponding cfg file.

4 Save and quit your editor.

5 Go back to your browser and reload the NagVis default page

Geomap

Geomap

The Geomap part of op5 monitor is a geographical map that uses **Open Street Map, Google Maps and Clooud made maps.** To be able to use the Geomap your client must have access to Internet.

However it is also possible to choose pre-generated maps if a internet connection of the computer that is viewing the map is not available.

It is also possible to choose Google Maps as the preferred map

Note: It's only the client that needs access to the internet.

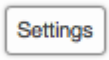
Map type

As mentioned above, there are three map types that is possible to use:

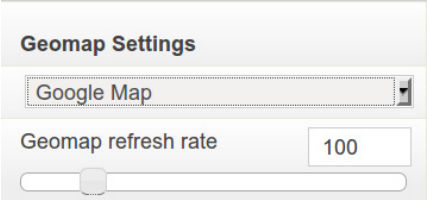
- Open Streetmap
- Google Maps
- Cloud made maps from Open Streetmap

To start configuring the map type for Geomap, follow the steps below:

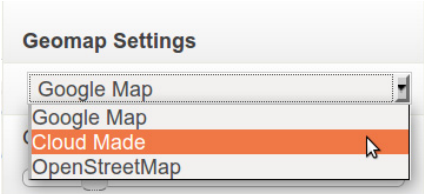
1 Click "Geomap" in the monitoring menu

2 Select **Settings** in the top right corner 

Besides the map type you can also set the refresh rate of the map with the lever from left to right, or manually enter the interval in seconds.



3 Select what map type you want to use:



4 Click on **Settings** again to save the setting and refresh the map.

Locations

Before Geomap is useful you have to add locations to the map. Each location can be associated with an object. The following object types can be used:

- Host
- Service
- Host Group
- Service Group

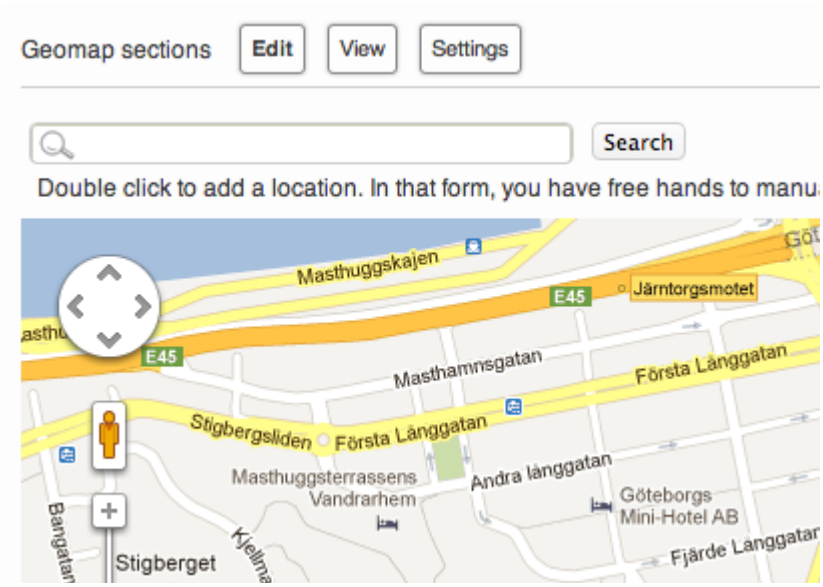
Adding a location

Here we will add a new location. First we need to locate where on the map we want to put it. Then we save the location with some basic settings.

To add the location

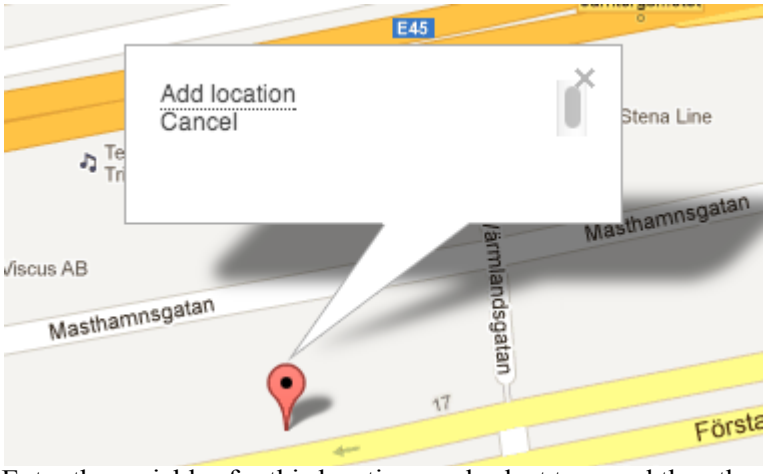
1 Open up the Geomap from the monitoring menu.

2 Click on edit in the upper left corner, just above the map.

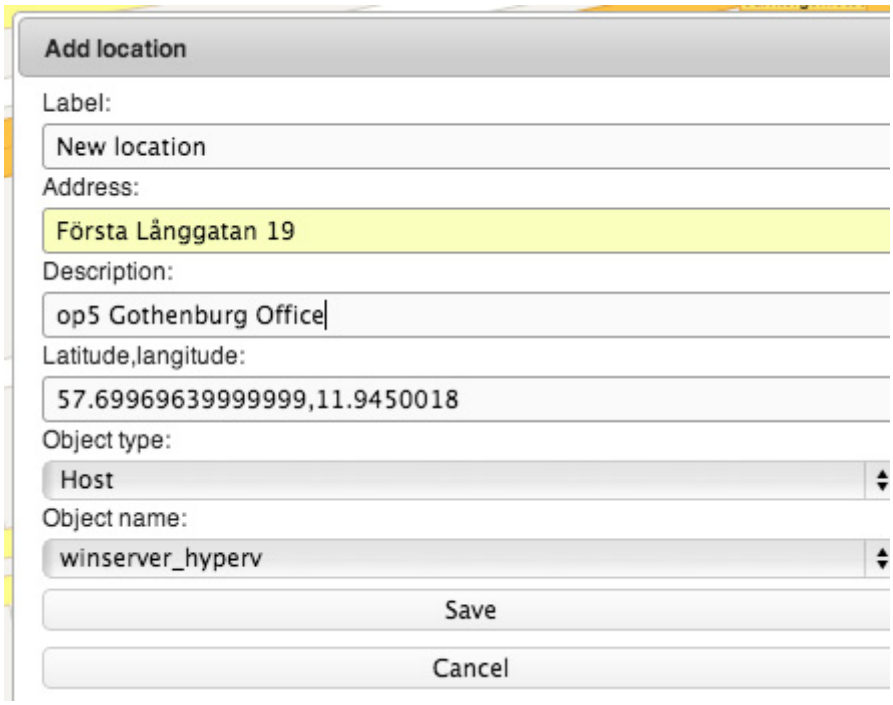


3 Double click on the map where you want your location:

4 A bubble will appear on the location, select ‘Add location’:



Enter the variables for this locations and select type and then the object you want to link to this location. You can also enter the exact latitude and longitude here.:



Click on save to create the location.

Links

When you have added a couple of locations to your Geomap you might want to add a link between them. This can easily be done by associating a service to a so called link object.

Adding a link

Here we will use two locations called:

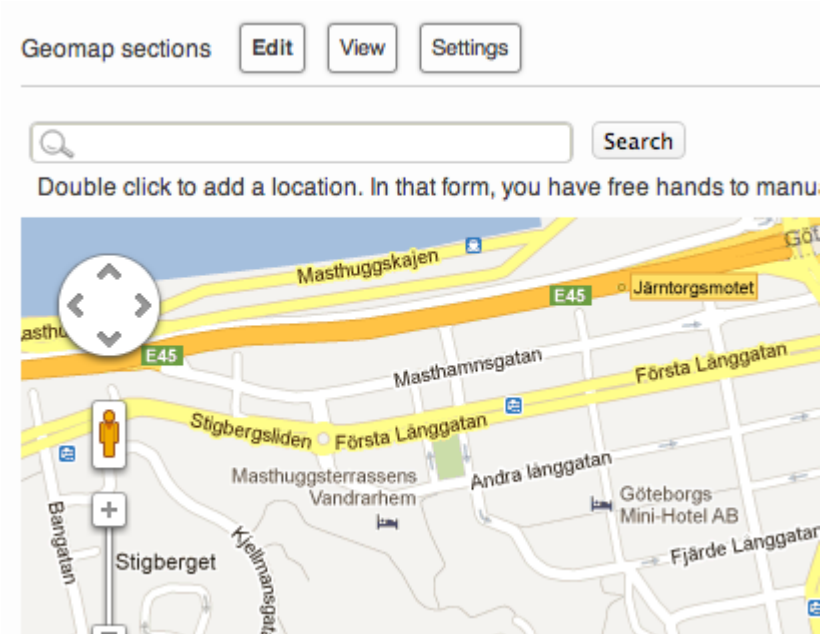
- Gothenburg
- Stockholm

The locations listed above are associated with one host each.

Now we will add a link between the two locations and associate it with a service that will symbolize the link between the both locations.

To add the link

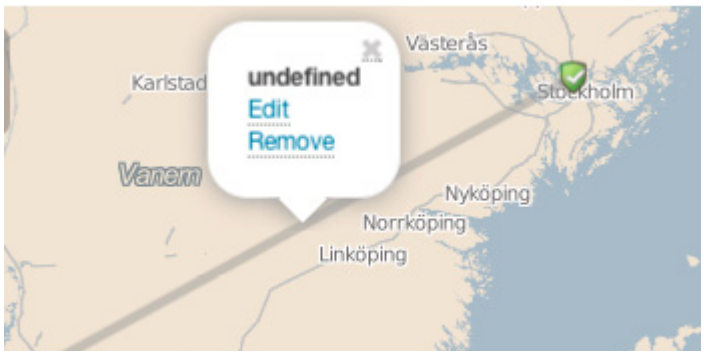
1 Open up the Geomap from the menu. Click on edit above the map:



2 Click on one of the locations that you want to link together and select 'Link':

3 Choose the second location and select ‘Link’ in the bubble on that location. This will create grey link between the two locations.

4 Click on the grey line. Click on ‘Edit’ in the bubble.



a Enter a description.

b Select a type.

c Select the object you want the link to representate.

5 Click **Save** to save your link.

Reporting

Reports

The Monitoring headline basically covers everything in op5 Monitor that is happening in real time. It shows you the status on your hosts and services right now. The Reporting headline is about letting the user create historical reports from the information that op5 Monitor has collected.

A monitoring system receives a huge amount of data from your IT environment. op5 Monitor has a powerful, yet easy-to-use, built-in report generator.

The reports are generated from the history-logs from all the elements included in the report.

SLA

The reports in op5 Monitor can be mapped against unique Service Level Agreements. This means that you can directly see and follow-up on both your internal and external SLAs.

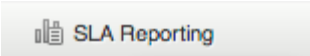
Creating an SLA report

The fast and easy way to create an SLA report is to only follow steps 1-3 and then skip to the end of the guide, which will cause default values to be used for almost all settings.

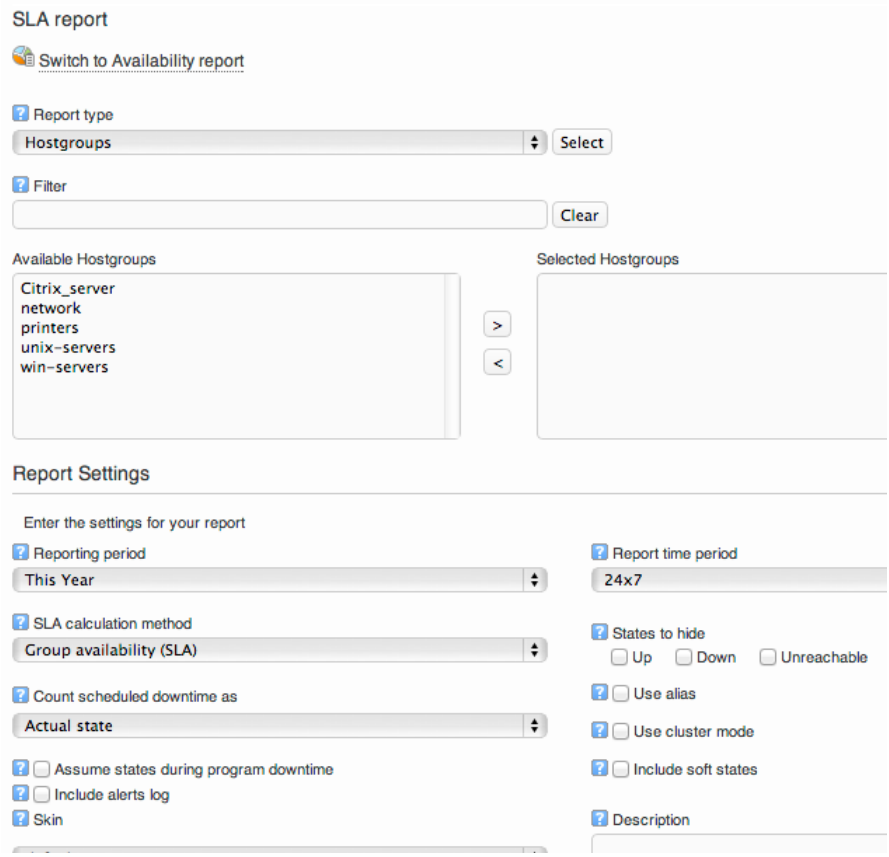
The complete instruction describes all settings.

To create a SLA report

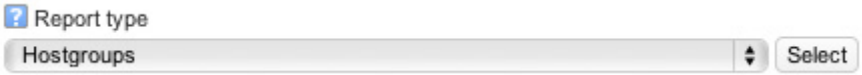
1 In the reporting menu click on **SLA Reporting**



The report setup page is displayed

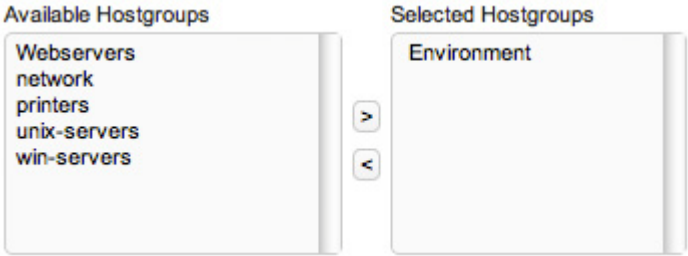


2 Choose **Report type** (what type of objects to base your reports on).



We use hostgroups in this guide.

3 Select the objects you like to base the report on and move them from **Available hostgroups** to **Selected hostgroups**.

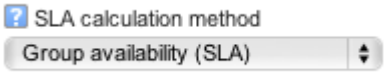


4 Select Reporting period and Report timeperiod. If you leave Report timeperiod empty it will be the same as 24/7.

Reporting period controls the length of the report.

Report time period can be used to include or exclude times and dates from the report. This is based on the time periods set in the configuration.

5 Choose which SLA calculation method to use.



You may choose between [1]

- Group availability (SLA)
- Average

6 Set the desired values in the following options or go directly to step 7 and leave the settings with their default value.

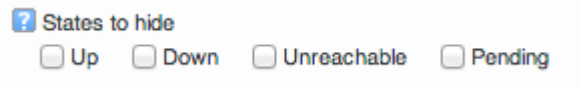
a Choose if you like to count scheduled downtime as uptime, actual state or uptime with difference.

“Uptime, with difference" will count downtime as uptime, but will also print the difference from counting downtime as the actual state.

b Choose whether you would like to see the alias instead of the host name in the generated report.

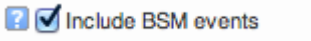
c Choose whether to assume the previous state still applies when op5 Monitor isn't running.

d Choose whether you would like to hide specific states for the hosts or services in the report.

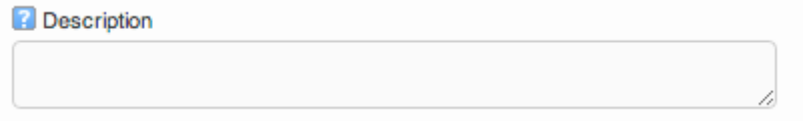


1.Traditional Availability reports are based on group availability (worst case). An alternative way is to use average values for the group or object in question. Note that using average values is sometimes considered not to be an proper form of SLA.

e If this report is based on a Business Service whose top level element has been published as a serviced, it is possible to include the events from the BSM. It will show the underlying checks that triggered alerts in the BSM. If the selected BSM service is not a top level element, no BSM events will be displayed.

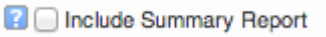


f Enter a description for the report. This will be included in the header of the report.



g Choose whether to include soft states or only use hard states in the report.

h It is possible to include a Summary Report with the SLA report. For more information about summare reports, see *Alert summary - Top alert producers* on page 123



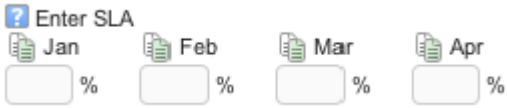
i Include performace graphs if you would like to include all the graphs for the hosts and services included in the SLA report.

j Select skin. Skins modify the visual appearance of the report.

This skin will be used in both HTML and PDF reports.

7 Check **Cluster mode** to invert the overall state logic, so that best state is used for SLA calculations, rather than the worst or average.

8 Enter SLA values as percentages between 0 and 100.



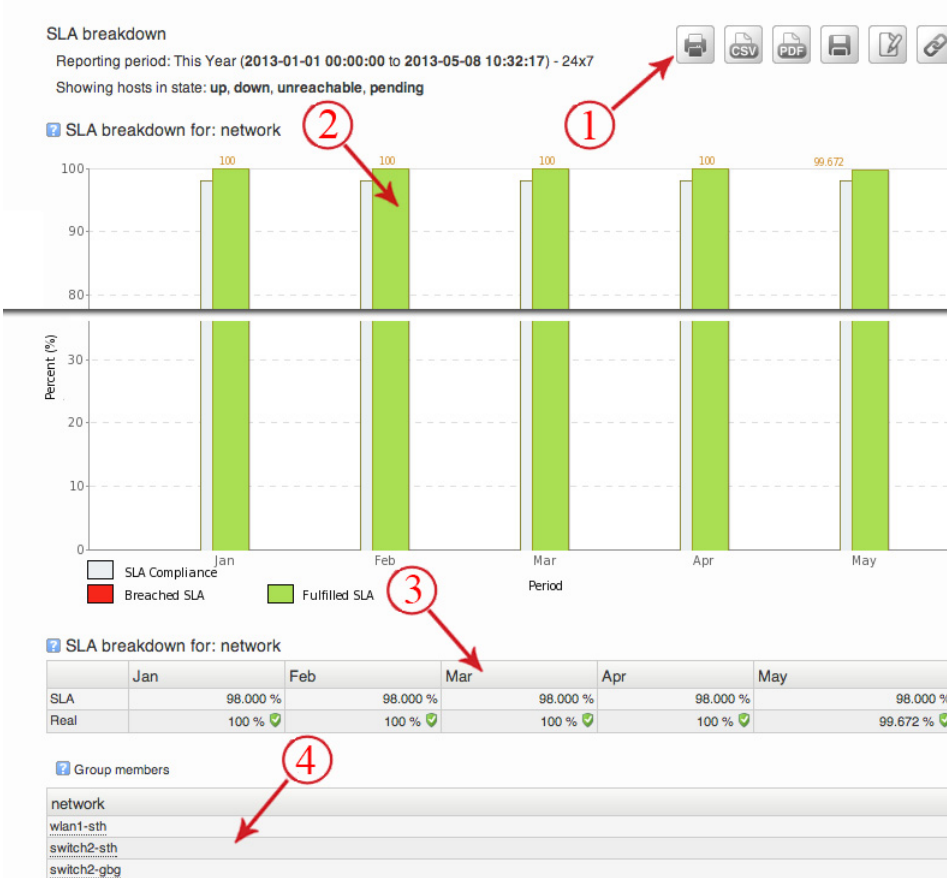
Click on the icon in front of the name of the months to copy the value to the other months that are available [1].

9 Click **Create report**.

1.Only the months that are included in the report will be available.

The SLA report

When you have created your report you will get a result page looking like this.



The table below describes the parts of the result page

Nr	Description
1	The action icons allow you to • save the report • direct link to report • save the report as a pdf • print the report.
2	The report graphs. Click on the graph to get an availability report for the duration of the SLA report.
3	The result, same result as above, shown in a table.
4	A list of every object included in the report. Click on the object name to get an SLA report for each and every object.

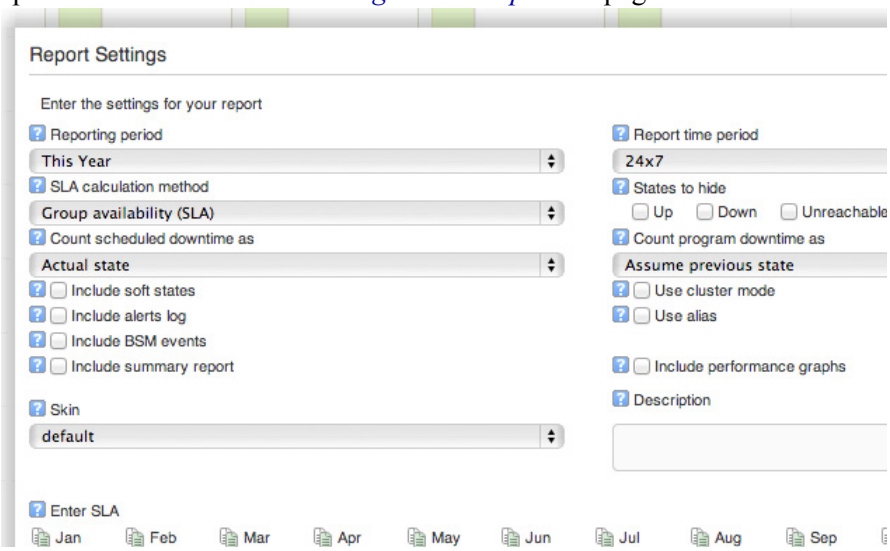
Editing the SLA report settings

ou do not have to create a completely new report if you only like to change a minor setting in the one you just created.

To edit the settings

1 Click edit settings.

2 Edit the settings you would like to change in the dialog shown below. All options are described in *Creating an SLA report* on page 108.



Click **Show report** to save the new values.

Availability

An availability report shows availability for host groups, service groups, hosts or services, during a specified period of time.

Creating an availability report

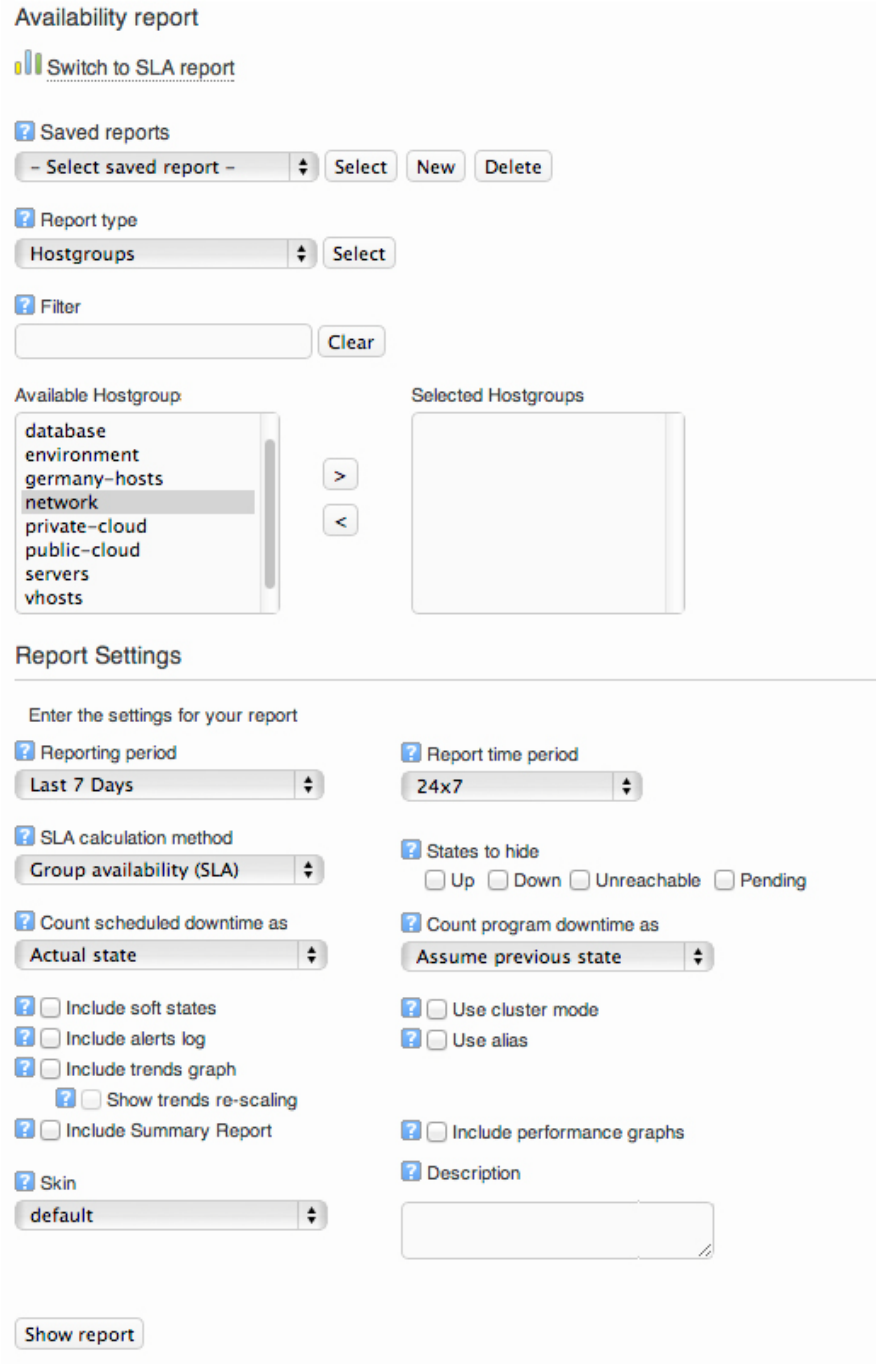
The fast and easy way to create an availability report is to only follow steps 1-3 and then skip to the end of the following guide, which will use default values for almost all settings.

The complete instruction describes all settings.

To create an availability report

1 In the main menu to the left click **Availability**

The report setup page is displayed



2 Choose **Report type** (what type of objects to base your reports on).

We use hostgroups in this guide.

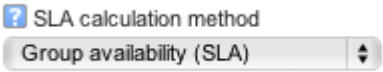
3 Select the objects you would like to base the report on and move them from **Available hostgroups** to **Selected hostgroups**.

4 Select Reporting period and Report timeperiod. If you leave Report timeperiod empty it will be the same as 24/7.

Reporting period controls the length of the report.

Report time period can be used to include or exclude times and dates from the report. This is based on the time periods set in the configuration.

5 Choose which SLA calculation method to use.

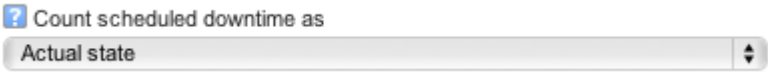


You may choose between [1]

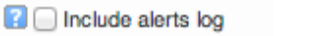
- Group availability (SLA)
- Average

6 Set the desired values in the following options or go directly to step 7 and leave the settings with their default value.

a Choose if you like to count scheduled downtime as uptime.



b Choose whether you would like to include a complete log for the included objects in the report



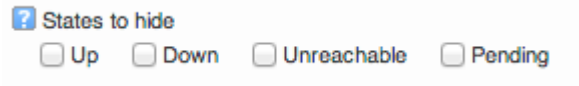
1.Traditional Availability reports are based on group availability (worst case). An alternative way is to use average values for the group or object in question. Note that using average values is sometimes considered not to be a proper form of SLA.

c Choose whether you would like to to include trend graphs. It is also possible to rescale the part of the graphs where there are state changes to make them more visible.

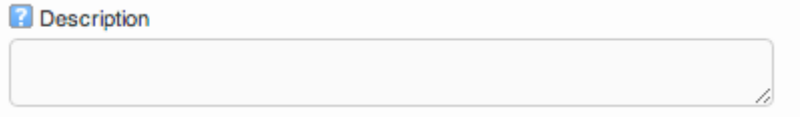
d Choose whether you would like to see the alias instead of the host name in the generated report.

e Choose whether to assume the previous state still applies when op5 Monitor isn't running.

f Choose whether you would like to hide specific states for the hosts or services in the report.



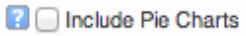
g Enter a description for the report. This will be included in the header of the report.



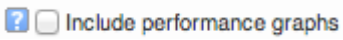
h Choose whether to include soft states or only use hard states in the report.

i It is possible to include a Summary Report with the SLA report. For more information about summare reports, see *Alert summary - Top alert producers* on page 123

j Include a summary pie chart to the report.



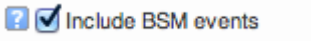
k Include performace graphs if you would like to include all the graphs for the hosts and services included in the SLA report.



l Select skin.

This skin will be used in both HTML and PDF reports.

m If this report is based on a Business Service whose top level element has been published as a serviced, it is possible to include the events from the BSM. It will show the underlying checks that triggered alerts in the BSM. If the selected BSM service is not a top level element, no BSM events will be displayed.

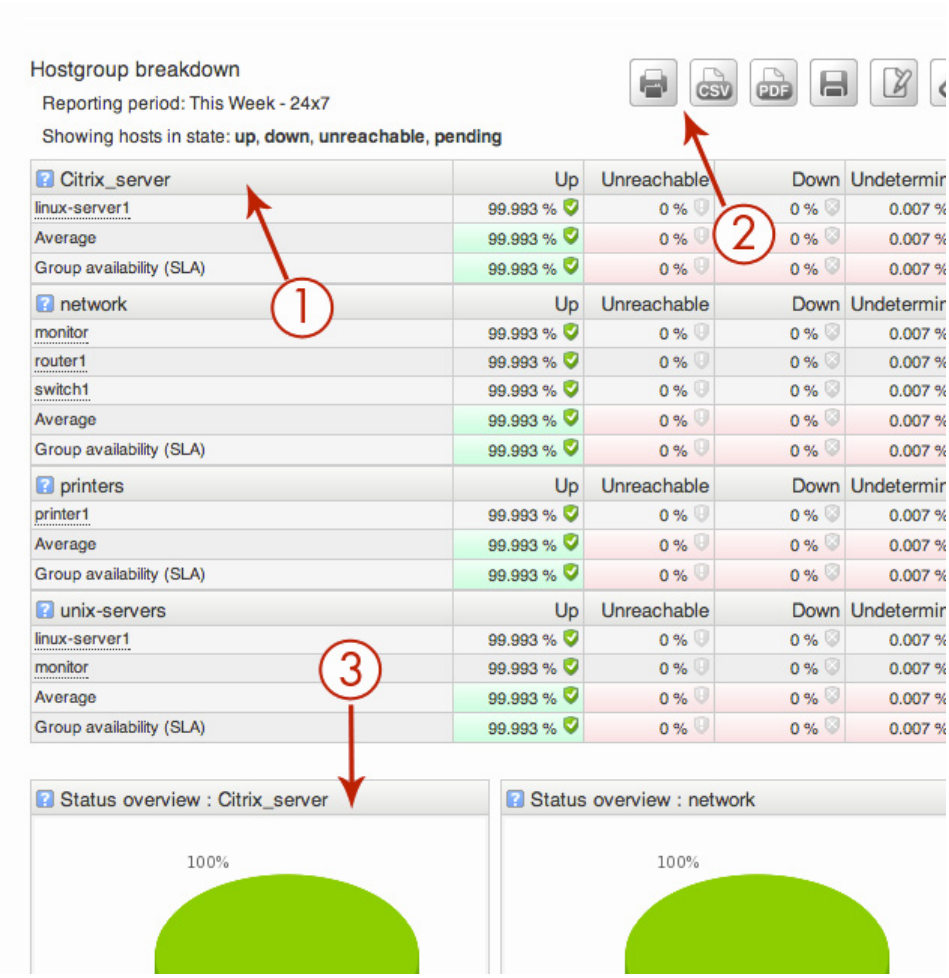


7 Check Cluster mode to invert the overall state logic, so that best state is used for SLA calculations, rather than the worst or average.

8 Click **Create report**.

The Availability report

When you have created your report you will get a result page looking like this.



The table below describes the different parts of the result page.

Nr	Description
1	The action icons allow you to change and save the report: • Save it to be able to create a scheduled report • Edit some report settings in a popup frame • Direct link to report • Download the report as a CSV file. • Show the report as an PDF. • Print the report.
2	This is the actual result. You can here see how much time each object has been in the different states. Click on the object names in the list to get a more detailed report for them. There are two summary rows in the bottom of the table: • Average This is the average value for a group of hosts/services. It is calculated by adding the % Time for each host/service and then divide the total value with the amount of hosts/services in the group. • Group Availability (SLA) The SLA value for a given time is the worst, "most broken" state of any of the objects in the report. It displays the amount of time where all hosts/services in the group has been UP/OK or in a PROBLEM state at the same time.
3	A pie chart displaying the result in a graphical way.

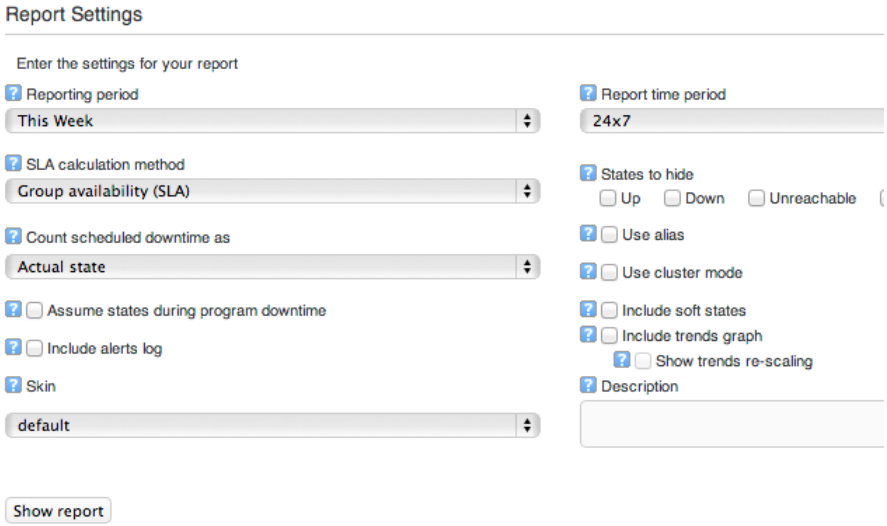
Editing the availability report settings

You do not have to create a totally new report if you only like to change a minor settings of the one you just created.

To edit the settings

1 Click edit settings.

2 Edit the settings you like to change in the dialog shown below. All options are described in *Creating an Availability report* on page 113.



3 Click **Show report** to save the new values.

Save reports

There are two reasons for saving a report:

- It is easy to reach the same report the next time you would like to see it.
- You can set up a schedule for it to be regularly regenerated with current data and sent to you or anybody else in an email, or saved as file.

To save a report you need first to create the report. When viewing the report the save option will be available.

The procedure is the same for both SLA reports and Availability reports. In the guide below we will use a SLA report.

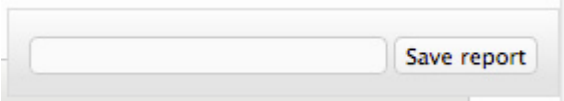
Saving a report

To save a report

1 Create a new report.

2 In the result page click **Save report**.

3 Give the report a name.



4 Click **Save report**.

Schedule reports

If you want a report to be regularly regenerated, you should schedule the report to do this automatically.

Before you schedule a report you need to create it (*Creating a SLA report* on page 108 or *Availability report result* on page 117) and then save it (*Save reports* on page 119).

Scheduling reports can be done when viewing the report, or by clicking Schedule in the reporting menu.

Note that the report first must be saved before a scheduled report can be created.

In the guides below we will schedule a SLA report but it is done exactly the same way for the availability reports.

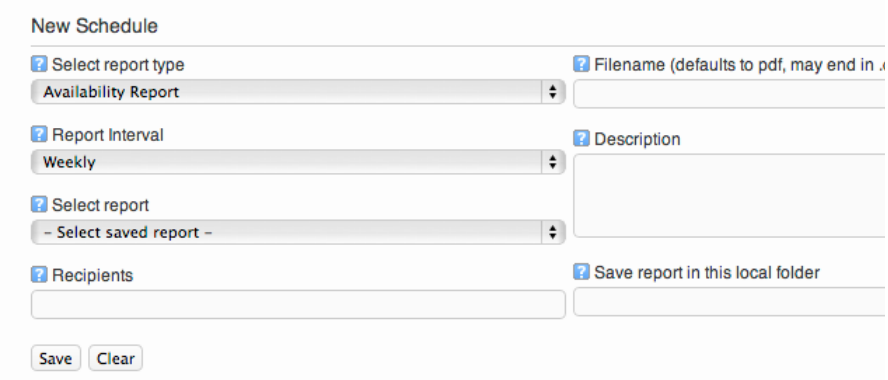
Schedule a report from the result page

1 Create the report as shown in *Creating a SLA report* on page 108.

2 Save the report as shown in *Saving a report* on page 120.

3 Click create schedule icon.

4 Fill in the options in the new window.



a Select report type, choose the same type of report that you saved before.

b Choose Report Interval. This will be how often the report is supposed to be sent.

c Select the saved report.

d Add Recipients email addresses, separated by a comma.

e Give the report a file name. This is the name that the pdf file will have when it arrives in your mailbox.

f Add a description for the scheduled report.

g Add a path where to save the report. The path must be absolute and include the filename, with either .pdf or .csv prefix depending in what format you want the file. This is optional.

5 Click **Save**.

Schedule a report from the report menu

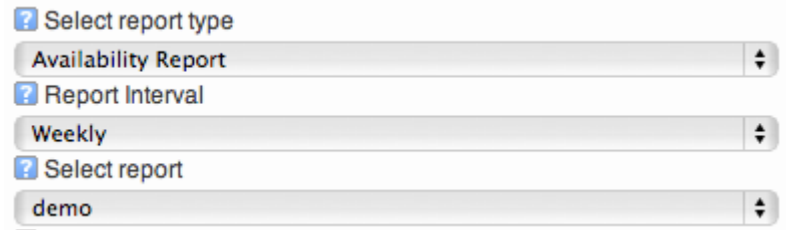
Before a report can be scheduled through the menu a report must first be saved.

1 Create the report as shown in *Creating a SLA report* on page 108.

2 Save the report as shown in *Saving a report* on page 120.

3 Go to the report menu and select **Schedule Reports**.

4 Select the report typ, the saved report and report interval.



5 Enter the email addresses of the recipients of the report. To enter multiple addresses, separate them by commas.

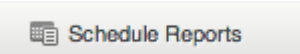
6 If you would like to save the report as a file, enter a local path of the op5 server. This could be saved to a mounted share on the op5 server.

7 Click on **Save**.

Modifying scheduled reports

To modify a scheduled report

1 Click Schedule reports in the main menu.

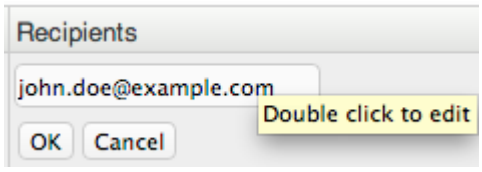


2 Double click on any field you like to modify.

SLA Reports

INTERVAL	REPORT	RECIPIENTS	FILENAME	DESCRIPTION	LOCAL PERSISTENT FILEPATH	ACTION
Monthly	test	user@example.com	rerport.csv	Double click to edit	/tmp	
Monthly	test	user@example.com	rerport.pdf	Double click to edit	Double click to edit	

3 Click **OK** to save.

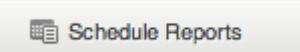


4 If you want to save the report as file, enter a absolute path including the filename and prefix (.pdf or .csv) in local persistent filepath.

Deleting scheduled reports

To delete a scheduled report

1 Click Schedule reports in the main menu.



2 Click delete icon on the schedule you like to delete.

3 Click **OK**.

Events and logs

Alert summary - Top alert producers

One of the most useful things when working with op5 Monitor is the Top alert producers report. This report is created from the Alert summary.

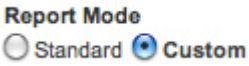
The Top alert producers report makes it easy to identify the biggest problem producers in your environment monitored by op5 Monitor.

Creating a Top alert producers report

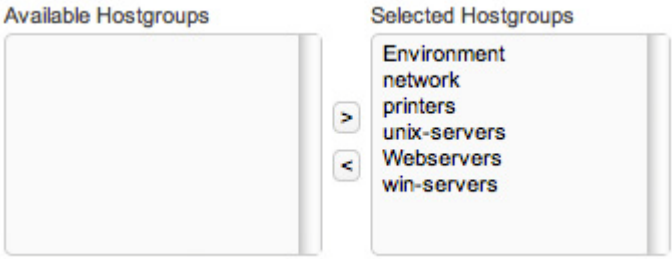
To create a Top alert producers report

1. Click Alert summary in the main menu.

2. Select custom report mode.

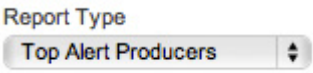


3. Select all hostgroups.



4. Select Report period [1].

5. Select Report type and set it to Top alert producers.



6. Leave the Alert Types with the default value.

1.Since this is the first time we generate this report we use the last 31 days. When you use this on, for example, weekly basis you could use the last 7 days.

7 Choose Hard states for State Types, we are only interested in the real problems.

State Types
Hard States

8 Choose only problems sate for both hosts and services.

Host States
Host Problem States

Service States
Service Problem States

9 Set the number of items to show in the resulting report. [1]

Items to show
50

10 Click on **Show Report**.

Top alert producers result

Now we have a report ready to be examined.

Top hard alert producers

2010-03-08 12:13:54 to 2010-04-08 12:13:54
Duration: 30d 23h 0m 0s

RANK	PRODUCER TYPE	HOST	SERVICE	TOTAL ALERTS
1	Service	Porta_SIP	PING	146
2	Service	router1	IF 10: ipsec0 Traffic	103
3	Service	router1	Monitor CPU	61
4	Service	router1	PING	10

This report can be used as a guide to help you to minimize the number of false alerts and notifications. Significant amounts of false alerts can lead to the users loosing faith in the monitoring system.

Saving an Alert summary report

Alert summary reports are useful from time to time. So when you have created a new one you will probably like to use that one an other time. Then it is a good idea to save it.

To save an Alert summary report.

1 Create an Alert summary report like you did in *Creating a Top alert producers report* on page 123, show the report then:

2 Click **Save report**.

3 Enter a name for the report and click **Create Summary Report**.

1.If you have a large environment with a lots of host you might want to increase the number of shown items.

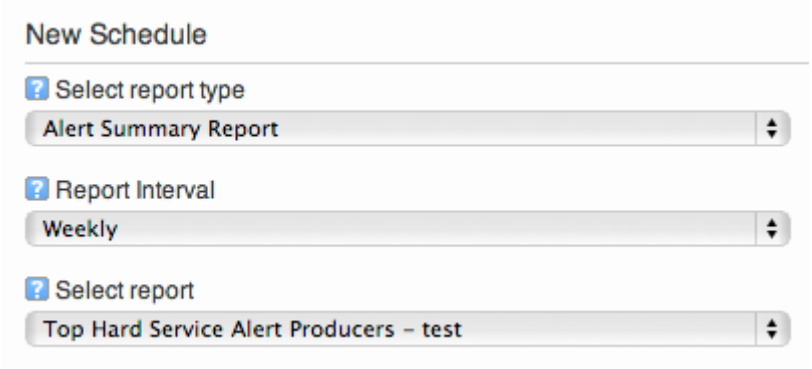
Scheduling an Alert summary report

For the exact same reason as it is to schedule an availability report or a SLA report you might want to schedule an alert summary report.

To schedule an alert summary report

1. Create an Alert summary report like you did in *Creating a Top alert producers report* on page 123 and save the report.
2. Click the plus icon at the right top of the page

3. Follow the instructions in *Schedule reports* on page 120, just select "Alert summary report" as report type.



4. Click **Save**.

Trends

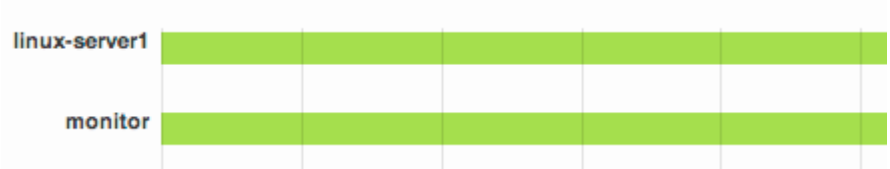
Trends display a graphic view of status on a host or a service during a selected time period. This graphical view is reached from Availability reports.

Creating a trend report

To create a trend report

1 Click **Include trends graph**.

2 The trends will be shown in the report.



Event log

An event log displays a list of all events that has occured in op5 Monitor. It shows you everything from alerts and notifications to op5 Monitor service restarting. In other words this is a log viewer for the main op5 Monitor log.

Viewing and filtering logs

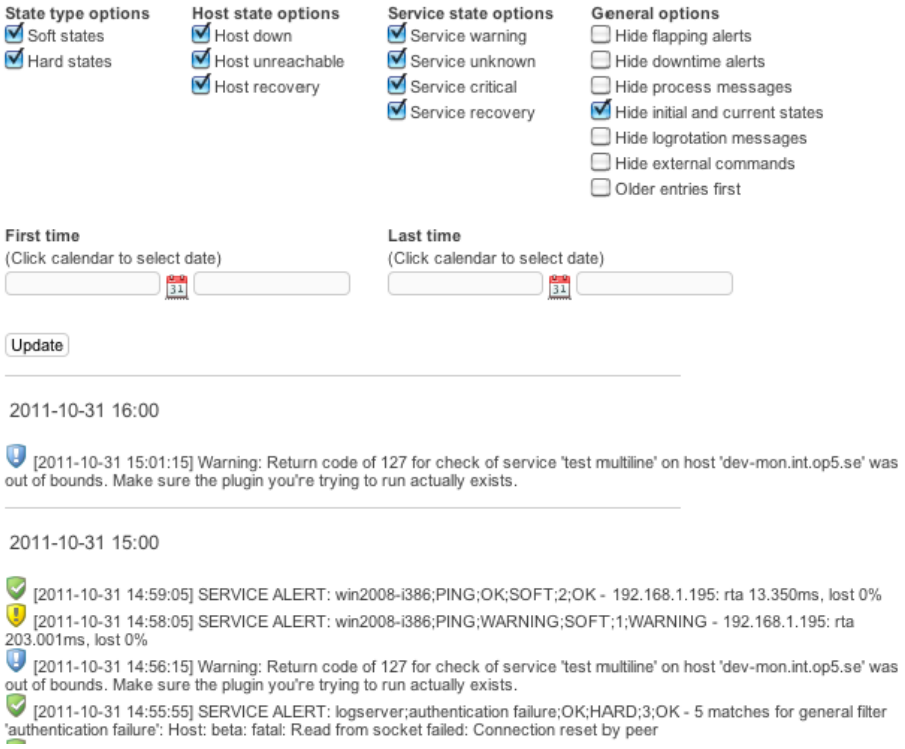
In the op5 Monitor event log you can

- view every event that took place in op5 Monitor
- filter out any kind of events you do not want to see
- set the start and end time of the logs you like to view.

To view the event log

Click the Event log icon in the main menu and there you go.

As you can see in the picture below everything except for **Initial and logrotation states** are shown by default.



The event log view is divided into two parts

- filtering
- logs

In the filtering you can change what type of events you like to show and also between what dates you would like to view logs for.

The logs are grouped by hours to make it a bit easier to find what you are looking for.

Alert History

The alert history view is a view for all alerts that has been detected by the system.

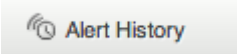
Viewing and filtering logs

In the op5 Monitor alert history you can

- view every alert that took place in op5 Monitor
- filter out any kind of alerts you do not want to see
- set the start and end time of the alerts you like to view.

To view the alert history

Click Alert history icon in the main menu, and you see an unfiltered list of alerts.



Filter alert history

The list can be long. Try applying a filter to it by using the filter options. You can access them through the **Edit** settings icon.

Configuration

Introduction

The Configuration head line in op5 Monitor is all about configuring op5 Monitor. Everything from you own password to hosts, services, notification escalations and so on is done here.

The Configuration head line is divided into the following parts

- View config
- Change password
- Backup / Restore
- Configure, will be covered in the chapter *op5 Monitor configuration tool* on page 105.

View config

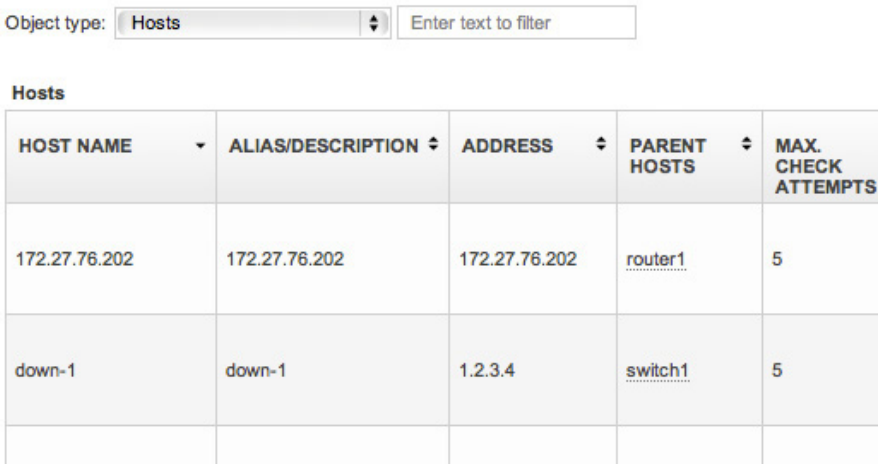
In many times you only need to view the configuration without changing it. Then you should use **View config** instead of the **op5 Monitor configuration tool**. This is a lot easier to get a more complete view of all objects of the same types.

Viewing config

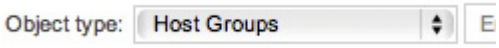
Example 1 *In this example we are going to view the hostgroups ordered by description.*

1 Click **View config** in the configuration menu.

As default hosts are shown.



2 Change **Object type** to host groups



3 Click on the sort arrows in the description column

My account

My account contains a few settings, including the possibility to change your password.

Here you may set

- pagination behavior
- how to display passive checks
- what skin to use in the GUI
- keyboard commands used in the GUI.
- Listview column settings

My Account is accessed through the menu.

Pagination behavior

Paginations are used in almost every view under the Monitoring section. You can set pagination

- limit
- step

Table 1 pagination settings

Setting	Description
limit	Sets the maximum number of items to display on each page
step	Sets the value is used to generate drop-down for nr of items per page to show.

The way passive checks are displayed

A service which is only receiving passive check results is normally displayed as inactive. This gives you an icon looking like this:

Here you may change how that service is displayed. To change this behavior you only need to set

```
Show Passive as Active = On
```

Then the passive only checks will appear as they were active.

What skin to use in the GUI

In op5 Monitor you are able to create your own skin to use in the GUI. How to create your own skin is described in the op5 Monitor administrator manual.

Here you may chose what skin you like to use.

Keyboard commands used in the GUI

You may use your own shortcuts to your keyboard commands. You need to set one or more modifier key plus any other key.

Possible Modifier keys are

- `Alt`
- `Shift`
- `Ctrl`

Modifier keys should be entered in alphabetical order.

Add a combination of keys with a `+` sign between like

`Alt+Shift-f`

without any spaces. All keys are case insensitive.

Changing my account settings

To change my account settings

1. Click **My account**.
2. Make the changes you need to do (password is saved separately).
3. Click **Save**.

Change popup behavior

You can select to disable the graph popup when hovering the mouse over a graph icon. It is also possible to change the popup delay.

Status pages

Here you can select if you want to show the display name and notes on hosts and services in the GUI. If the search function should also search in the notes filed “show notes” must be enabled.

Set URL target

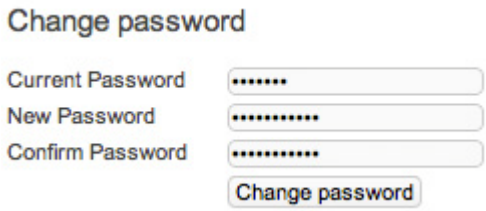
Select how you want a URL to open. You can choose to open in a new window or in the same window.

Changing your password

To change your password

1 Click **Change password** in the top right corner of the **My account** page

2 Type current password and the new password two times



3 Click **Change password**.

Next time you login you have to use the new password.

Backup and Restore

The op5 Monitor GUI has got a built-in backup feature. This is not supposed to be a replacement to op5-backup.

The configuration backup is only backing up the op5 Monitor configuration, nothing else.

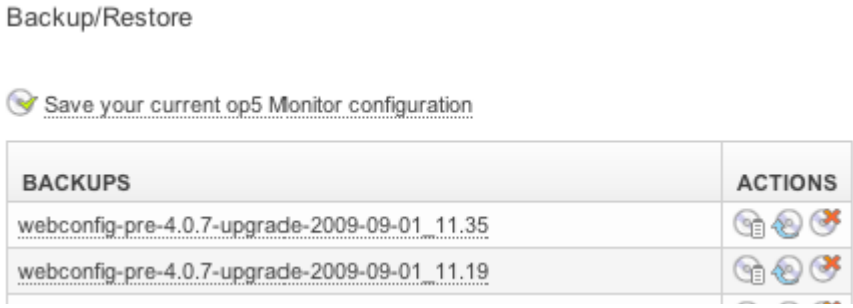
Backing up the configuration

To backup your op5 Monitor configuration

1 Click Backup/Restore in the main menu.

2 Click **Save your current op5 Monitor configuration**.

3 Now your backup is created and can be restored at any time you like.



4 Click the backup archive name to download and save the backup archive somewhere else.

Backup/Restore actions

In the list of backups the second column is called **ACTIONS**. This is the functions you will find there, from the left to the right:

- View what files are included in the backup.
- Restor the backup
- Delete the backup.

Restoring a configuration backup

To restor a op5 Monitor configuration backup

1 Click Backup/Restore in the main menu.

2 Click restor icon on the configuration backup you like to restore.

Now the backup has been restored.