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# op5 Monitor user manual

**op5 Monitor user manual**  
**Version 5.6, Rev 1**  
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# Introduction

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## About introduction

This chapter covers the following topics:

Subject	Page	Subsections
<i>Using this manual</i>	2	
<i>About op5 Monitor</i>	3	

## 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

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## About The GUI

This chapter covers the following topics:

Subject	Page	Subsections
<i>Navigation</i>	6	<i>Login and logout</i> on page 6 <i>Main menu</i> on page 7 <i>Minimize and expand the main menu</i> on page 10
<i>Multiple host and service commands</i>	12	<i>Multiple host commands list</i> on page 12 <i>Multiple service commands list</i> on page 12 <i>Example</i> on page 13
<i>Quick Action Menu</i>	14	<i>Host Actions</i> on page 14 <i>Service Actions</i> on page 14
<i>Searching</i>	16	<i>Simple search</i> on page 16 <i>Advanced search</i> on page 17 <i>Notes search</i> on page 19 <i>Search result</i> on page 20
<i>Refresh time</i>	21	
<i>Widgets</i>	22	<i>Widget parts</i> on page 23 <i>Moving widgets</i> on page 28 <i>Restoring to factory settings</i> on page 29 <i>Create you own widgets</i> on page 29

## Navigation

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

## In-line help

A manual is great but many times 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 with the help text included in.

- 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 use op5 Monitor. To login to the op5 Monitor GUI:

- 1 Point your browser to the portal page of your op5 Monitor server ( <https://youserver/> )
- 2 Click op5 Monitor:



---

Username	<input type="text"/>
Password	<input type="password"/>

---

### 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 in many ways the same as in the old CGI GUI. But there are a couple of things that is new like:

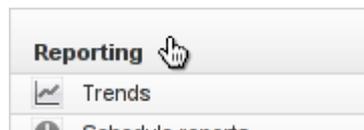
- widgets
- Tactical overview made editable
- NagVis
- a search function.

## Hide and show parts of the main menu

If you do not want to see the whole main menu you can easily hide parts of it by clicking on the section header of the section you want to hide.

### Hide a section

Let's say you want to hide the Reports section of the menu. Then you should click on **Reports** like in the picture below:



### Show a section

To show the Reports section again you just have to click on the Reports section header again.

## Scroll the main menu

Sometimes your browser is unable to show the complete main menu. You can scroll the main menu by using the scroll bar just to the right of the menu, shown in the picture below:

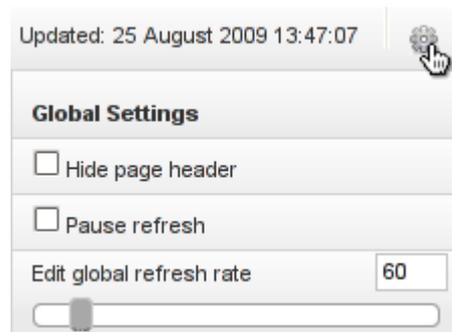


## Hide and show page header

In many views in op5 Monitor you can hide the page header. This will give you a bit more space to show the "important" things on the page.

**Note:** This is not persistent. This means that if you navigate away from the current view and back again the header is visible again.

If you take the **Unhandled problems** as an example the normal page header looks like the picture below. Under the page header the list of monitored objects is shown.



## Hiding the page header

### To hide the page header

- 1 Click Settings in the top right corner of the gui:
- 2 Click Hide page header check box and the page header will disappear at once.

## Showing the page header

### To show the page header again you just need do one of the following

- Either click on the same menu choice in the main menu.
- or follow the two steps below:

- 1 Click Settings icon.
- 2 Click Hide page header to uncheck the check box.

## Minimize and expand the main menu

It is possible to hide the main menu and only show the icons instead of the icons plus the captions.

To minimize or expand the main menu you only need to click on the icon the top of the main menu.

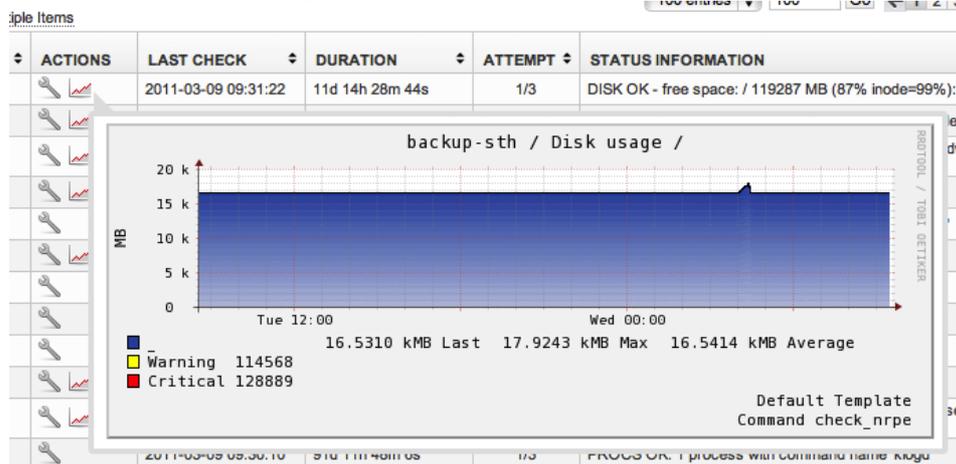


## Pop up graphs and comments

In every view where you find the icons for

- graphs
- comments

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

POP UPS	
Use popups	<input checked="" type="radio"/> On <input type="radio"/> Off
Popup delay	1500

- 3 Click Save.

## Mouse over host

To quickly show the host address of a host, hold the mouse on the host. 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 the current view in the GUI.
Paging to the left	Alt+Shift+left	Takes you to the left in a view that have more than one page.
Paging to the right	Alt+Shift+right	Takes you to the right in a view that have 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 123.

## Multiple host and service commands

Multiple commands is used to apply a single command to one or more host or services.

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 you may then 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** view.
- 2 Click **Select Multiple Items**

 [Select Multiple Items](#)

(It is located on top of the list.)

- 3 Select the services problems you like to acknowledge.

Service Status Details For Host 'win2008-x86\_64':  [Select multiple items](#)

	HOST			SERVICE	ACTIONS	LAST CHECK
	win2008-x86_64		<input checked="" type="checkbox"/>	CPU Load	 	2011-10-28 11:28:45
			<input type="checkbox"/>	Disk usage C:	 	2011-10-28 11:29:23
			<input checked="" type="checkbox"/>	Mem usage	 	2011-10-28 11:30:09

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

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

Service

Sticky   
 Notify   
 Persistent   
 Author monitor  
 Comment

## Quick Action Menu

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

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

HOST	ACTIONS
 ESXi server	
 linux-server1	

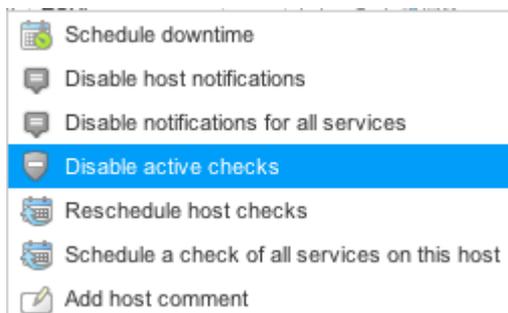
This menu will only appear if you are ‘Authorized for system commands’ under Access Rights in the configuration.

Information about the different actions can be found in the Monitoring chapter, [About Monitoring](#) on page 31

## Host Actions

The actions that are available on a host are:

- The actions accessible from the host quick access menu are:
- Schedule Downtime
- Disable host notifications
- Disable notifications for all services
- Disable active checks
- Reschedule host check
- Reschedule a check for all services on this host
- Add host comment



## Service Actions

The actions that are available on a service are:

- Schedule Downtime

- Disable service notifications
- Disable active checks
- Reschedule service check
- Add service comment
- 

-  Schedule downtime
-  Disable service notifications
-  Disable active checks
-  Reschedule service checks
-  Add service comment

## Searching

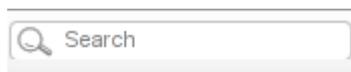
op5 Monitor has got a search functionality that makes it easy to find:

- 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 16 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 now 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 and 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:

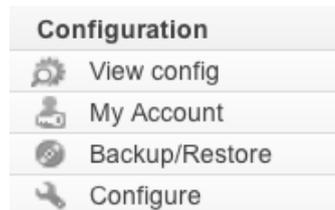
%

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

## Notes search

The search function can search on notes that is set in the configuration on both in hosts and services.

By default the search function will not search in notes. To enable this go to 'My Account' in the menu



and set 'Show Notes' to 'Yes'



## 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.

Host results for: "web": [Select Multiple Items](#) pages **1**

HOST	ACTIONS	ALIAS	ADDRESS	STATUS INFORMATION	DISPLAY NAME
www.op5.com		op5.com web server	www.op5.com	OK - www.op5.com responds to ICMP Packet 1, rtt 0.402ms	
www.op5.org		op5.org web server	www.op5.org	OK - www.op5.org responds to ICMP Packet 1, rtt 0.336ms	

Service results for: "web": [Select Multiple Items](#) pages **1**

HOST	SERVICE	ACTIONS	LAST CHECK	STATUS INFORMATION	DISPLAY NAME
www.op5.com	Web Service		2011-10-28 13:36:40	HTTP OK: HTTP/1.1 200 OK - 64695 bytes in 0.006 second response time	
www.op5.org	Web Service		2011-10-28 13:37:59	HTTP OK: HTTP/1.1 200 OK - 24029 bytes in 0.110 second response time	

Servicegroup results for: "web" pages **1**

SERVICEGROUP	ALIAS	ACTIONS
web_services	Web Services	

Hostgroup results for: "web" pages **1**

HOSTGROUP	ALIAS	ACTIONS
web_servers	Webservers	

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

## Refresh time

Every view is automatically refreshed after a certain time. You can easily pause or edit the global refresh time in the GUI.

The default Global refresh time is: 90 seconds.

The Global refresh time is valid for all views that uses auto refresh. So it does not matter in what view you are pausing or editing.

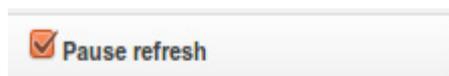
## Pausing the page refresh

### To pause the page refresh

- 1 Click **Settings** in the top right corner of the gui:



- 2 Click in the **Pause refresh** check box and the Global refresh time is paused.



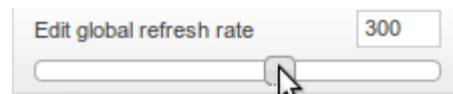
## Editing the refresh time

### To edit the Global refresh time

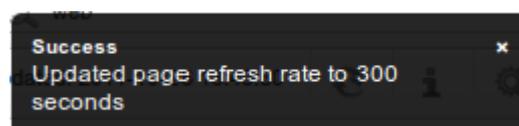
- 1 Click on the **Settings** icon in the top right corner of the gui:



- 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 look like the picture below.



# Widgets

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

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

The screenshot displays the Tactical Overview dashboard with several widgets:

- Monitoring Performance:** Shows service check execution and latency times for both services and hosts, along with active and passive host/service check counts.
- Scheduled downtime:** Currently shows 'N/A'.
- Acknowledged problems:** Shows 2 acknowledged services with a 'CRITICAL' status.
- Network outages:** Currently shows 'N/A'.
- Network health:** Displays two large yellow boxes showing 88.0% for HOSTS and 82.9% for SERVICES.
- Unhandled problems:** A list of unhandled issues including Host Down (3), Service Critical (15), Service Warning (2), and Service Unknown (11).
- Disabled checks:** Shows 2 disabled services.
- Unacknowledged service problems table:**

HOST	SERVICE	ACTIONS	LAST CHECK	ALERT TIME	STATUS INFORMATION
www.op5.org	HTTPS Server	[Icons]	2012-03-22 13:05:16	2012-03-19 16:38:16	CRITICAL - Cannot make SSL connection
- Acknowledged service problems table:**

HOST	SERVICE	ACTIONS	LAST CHECK	ALERT TIME	STATUS INFORMATION
www.op5.com	Nameserver	[Icons]	2012-03-22 14:05:31	2011-10-28 19:24:31	CRITICAL - Plugin timed out while executing system call
www.op5.org	Nameserver	[Icons]	2012-03-22 14:03:40	2011-10-28 19:22:06	CRITICAL - Plugin timed out while executing system call

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:

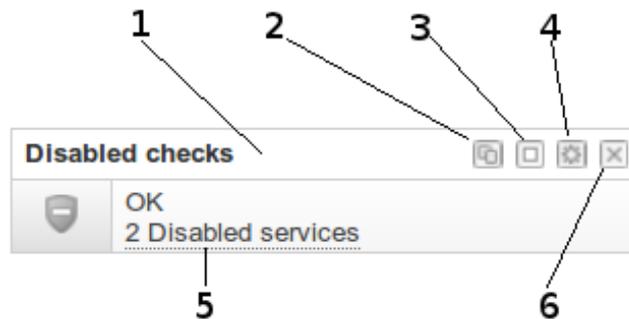
- Unacknowledged Service Problems
- Scheduled Downtime
- Acknowledged Service Problems
- Nagvis

- 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](http://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

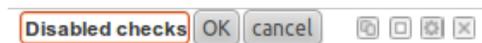
Nr	Description
4	Widget settings icon
5	Widget content
6	Hide widget

## 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 like 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 settings is:

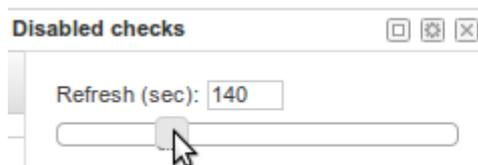
- Refresh time

**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” 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.

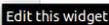
Backlog is a little more complicated. This setting can be useful if Tactical overview is displayed on a screen as a NOC-dashboard to monitor the status of hosts and services.

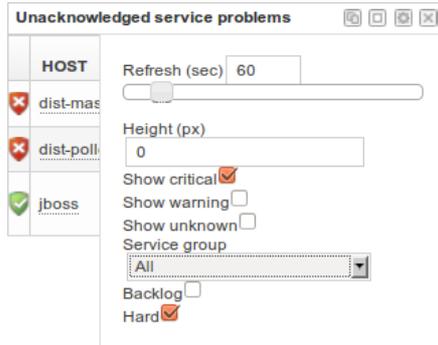
When the Backlog setting is used the widget will display all the problems that has been reported since your last login, even if these problems has been resolved.

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.

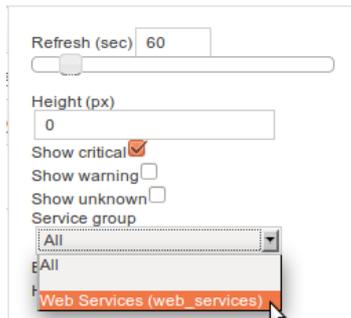
**Note:** The backlog setting is global and affects all users

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

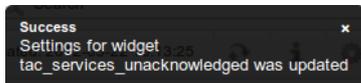
1 Click settings button  and select a servicegroup:



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.

Unacknowledged service problems						
HOST	SERVICE	ACTIONS	LAST CHECK	ALERT TIME	STATUS INFORMATION	
www.op5.org	HTTPS Server		2012-03-22 15:10:16	2012-03-19 16:38:16	CRITICAL - Cannot make SSL connection	

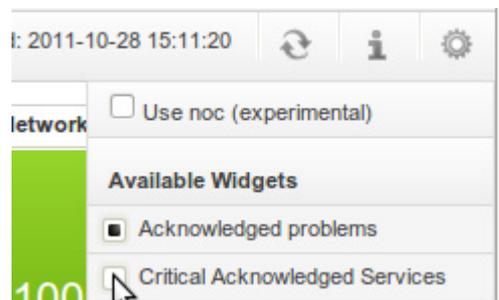
## Hiding widget 1

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

Just click on the **Hide widget icon** to hide the widget completely from the Tactical overview. 

## Hiding widget 2

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



And then you just uncheck the widget, you like 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 28 about how to show the widget again.

## Multiple instances

It is possible to create multiple instances of a widgets, this can be useful to use 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 .

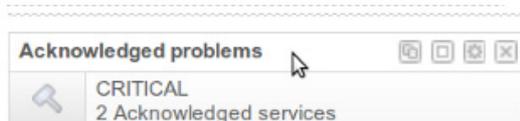
This will create an identical copy of the widget.

## 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 the *Widget parts* on page 23 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 frame of dots are displayed:



## 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 widget have

- 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

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## About Monitoring

This chapter covers the following topics:

Subject	Page	Subsections
<i>Introduction</i>	32	
<i>Hosts and services</i>	33	<i>A host in detail</i> on page 33 <i>A service in detail</i> on page 38
<i>Host and service groups</i>	44	<i>Host and service groups</i> on page 44 <i>Using Service groups</i> on page 45
<i>Parenting</i>	43	
<i>Problem handling</i>	47	<i>Hard and soft states</i> on page 47 <i>Alerts and notifications management</i> on page 47 <i>Unhandled problems view</i> on page 48 <i>Acknowledge problems</i> on page 49 <i>Schedule downtime</i> on page 51 <i>Schedule recurring downtime</i> on page 55
<i>Business Process</i>	58	<i>Viewing Business Process</i> on page 58
<i>Graphs</i>	60	<i>Viewing graphs</i> on page 60 <i>Adding graphs for custom plugins</i> on page 61
<i>Hyper Map</i>	62	
<i>Dokuwiki</i>	63	<i>Editing a wiki page</i> on page 63 <i>Formatting a wiki page</i> on page 63
<i>Agents</i>	65	

## Introduction

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

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 Monitor 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 picture below shows the Host information view.

View, for this host: [Status detail](#) [Alert history](#) [Trends](#) [Alert histogram](#) [Availability report](#) [Notifications](#)

**Firewall Gothenburg (gbg-fw1)**

Address: 192.168.1.1  
 Parents: switch1-gbg  
 Member of: Gothenburg, default-hostgroup, nested\_1, nested\_2, network-hostgroups  
 Notifies to: peter support-group

[Extra notes](#) [Configure](#) [Show performance graph](#)

HOST STATE INFORMATION	
Current status	Up (for 7d 9h 19m 24s)
Status information	OK - 192.168.1.1 responds to ICMP. Packet 1, rtt 11.884ms
Performance data	pkt=1;0;0;5 rta=11.884;2000.000;2000.000;; pl=0%;95;100;;
Current attempt	1/3 (HARD state)
Last check time	2011-10-31 08:26:51
Check type	Active
Check latency / duration	0.046 / 0.019 seconds
Next scheduled active check	2011-10-31 08:32:01
Last state change	2011-10-24 00:09:12
Last notification	N/A (Notifications 0)
Is this host flapping?	No (0.00% state change)
In scheduled downtime?	No
Last update	2011-10-25 21:55:01 (5d 11h 33m 35s ago)
Active checks	Enabled
Passive checks	Enabled
Obsessing	Disabled
Notifications	Enabled
Event handler	Enabled
Flap detection	Enabled

**HOST COMMANDS**

- Disable active checks of this host
- Re-schedule the next check of this host
- Submit passive check result for this host
- Stop accepting passive checks for this host
- Start obsessing over this host
- Disable notifications for this host
- Send custom host notification
- Schedule downtime for this host
- Disable notifications for all services on this host
- Enable notifications for all services on this host
- Schedule a check of all services on this host
- Disable checks of all services on this host
- Enable checks of all services on this host
- Disable event handler for this host
- Disable flap detection for this host

Enter text to filter

Host Comments:

ENTRY TIME	AUTHOR	COMMENT	ID	PERSISTENT	TY
This host has been associated with a...					

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 <ul style="list-style-type: none"> <li>• status of all services on this host</li> <li>• Trends</li> <li>• Alerts and notifications for this host</li> <li>• Reports</li> </ul>
2	Host information header	Displays brief information about the host and its surroundings like <ul style="list-style-type: none"> <li>• host name and address</li> <li>• parent host</li> <li>• extra actions and notes</li> <li>• links to configure and graphs.</li> </ul>
3	Host state information	Here you can see status information for the host like <ul style="list-style-type: none"> <li>• current status</li> <li>• current attempt</li> <li>• last state changes and notification</li> <li>• what is enabled or not on this host.</li> </ul>
4	Host commands	Here you can perform different commands for the host and/or all services on that host.
5	Comments	This is 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 host and its services.

View, for this host:	<a href="#">Status detail</a>	<a href="#">Alert history</a>	<a href="#">Trends</a>	<a href="#">Alert histogram</a>	<a href="#">Availability report</a>	<a href="#">Notifications</a>
----------------------	-------------------------------	-------------------------------	------------------------	---------------------------------	-------------------------------------	-------------------------------

## Host header information

Here you will get a short summary of the host.

 HP Procurve 2524 Gothenburg (switch1-gbg)

Address [192.168.1.18](#)  
 Parents [dev-mon.int.op5.se](#)  
 Member of [Gothenburg](#), [default-hostgroup](#), [network-hostgroups](#)  
 Notifies to [peter](#) [support-group](#)

 [Extra actions](#)  [Extra notes](#)  [Configure](#)  [Show performance graph](#)

The host header information contains

- the host address
- the parent host
- what host groups it is a 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 138d 15h 52m 30s)
Status information	OK - 192.168.1.18 responds to ICMP. Packet 1, rtt 16.703ms
Performance data	pkt=1;0;0;0;5 rta=16.703;2000.000;2000.000;; pl=0%;95;100;;
Current attempt	1/3 (HARD state)
Last check time	2011-10-31 08:55:01
Check type	 Active
Check latency / duration	0.299 / 0.023 seconds
Next scheduled active check	2011-10-31 09:00:11
Last state change	2011-06-14 18:06:30
Last notification	N/A (Notifications 0)
Is this host flapping?	 No (0.00% state change)
In scheduled downtime?	 No
Last update	2011-10-31 08:57:23 (0d 0h 1m 37s ago)
Active checks	 Enabled
Passive checks	 Enabled
Obsessing	 Disabled
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.

HOST COMMANDS	
	<a href="#">Disable active checks of this host</a>
	<a href="#">Re-schedule the next check of this host</a>
	<a href="#">Submit passive check result for this host</a>
	<a href="#">Stop accepting passive checks for this host</a>
	<a href="#">Start obsessing over this host</a>
	<a href="#">Disable notifications for this host</a>
	<a href="#">Send custom host notification</a>
	<a href="#">Schedule downtime for this host</a>
	<a href="#">Disable notifications for all services on this host</a>
	<a href="#">Enable notifications for all services on this host</a>
	<a href="#">Schedule a check of all services on this host</a>
	<a href="#">Disable checks of all services on this host</a>
	<a href="#">Enable checks of all services on this host</a>
	<a href="#">Disable event handler for this host</a>
	<a href="#">Disable flap detection for this host</a>

## 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.

Enter text to filter

Host Comments:

ENTRY TIME	AUTHOR	COMMENT	ID
This host has no comments associated with it			

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 63 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.

Enter text to filter

## A service in detail

A service is practically anything that can be measured, most 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	<p>Quick links to other information about the service and the host it is connected to.</p> <ul style="list-style-type: none"> <li>• Information the host</li> <li>• Status details for the host</li> <li>• Alerts and notifications for this service</li> <li>• Reports</li> </ul>

Nr	Part	Description
2	Service information header	Displays brief information about the service, host and its surroundings like <ul style="list-style-type: none"><li>• host name and address</li><li>• what service groups the service belongs to</li><li>• extra actions and notes</li><li>• links to configure and graphs.</li></ul>
3	Service state information	Here you can see status information for the service like <ul style="list-style-type: none"><li>• current status</li><li>• current attempt</li><li>• last state changes and notification</li><li>• what is enabled or not on this service.</li></ul>
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.

View, for this service: [Information for this Host](#) [Status detail for this Host](#) [Alert history](#) [Trends](#) [Alert histogram](#) [Availability report](#) [Notifications](#)

## Service header information

Here you will get a short summary of the service.

**PING**

<b>On host</b>	switch1-gbg (switch1-gbg)
<b>Address</b>	192.168.1.18
<b>Member of</b>	Gothenburg-services
<b>Notifies to</b>	support-group

 [Extra actions](#)  [Extra notes](#)  [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
- a link 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 4d 44m 12s)
Status information	OK - 192.168.1.18: rta 3.952ms, lost 0%
Performance data	rta=3.952ms;100.000;500.000;0; pl=0%;20;60;;
Current attempt	1/3 (HARD state)
Last check time	2011-10-31 09:19:17
Check type	✔ Active
Check latency / duration	0.12 / 0.295 seconds
Next scheduled check	2011-10-31 09:24:17
Last state change	2011-10-27 09:39:17
Last notification	N/A (Notifications 0)
Is this service flapping?	✔ No (0.00% state change)
In scheduled downtime?	✔ No
Last update	2011-10-31 09:20:10 (0d 0h 3m 19s ago)
Active checks	✔ Enabled
Passive checks	✔ Enabled
Obsessing	✘ Disabled
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.

SERVICE COMMANDS	
	<a href="#">Disable active checks of this service</a>
	<a href="#">Re-schedule the next check of this service</a>
	<a href="#">Submit passive check result for this service</a>
	<a href="#">Stop accepting passive checks for this service</a>
	<a href="#">Start obsessing over this service</a>
	<a href="#">Disable notifications for this service</a>
	<a href="#">Send custom service notification</a>
	<a href="#">Schedule downtime for this service</a>
	<a href="#">Disable event handler for this service</a>
	<a href="#">Disable flap detection for this service</a>

## 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.

Enter text to filter	<input type="button" value="Clear"/>			
Service Comments: <input type="button" value="Add comment"/> <input type="button" value="Delete all"/>				
ENTRY TIME	AUTHOR	COMMENT	ID	PERSISTENT
This service has no comments associated with it				

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 63 that is included in op5 Monitor.

## Parenting

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

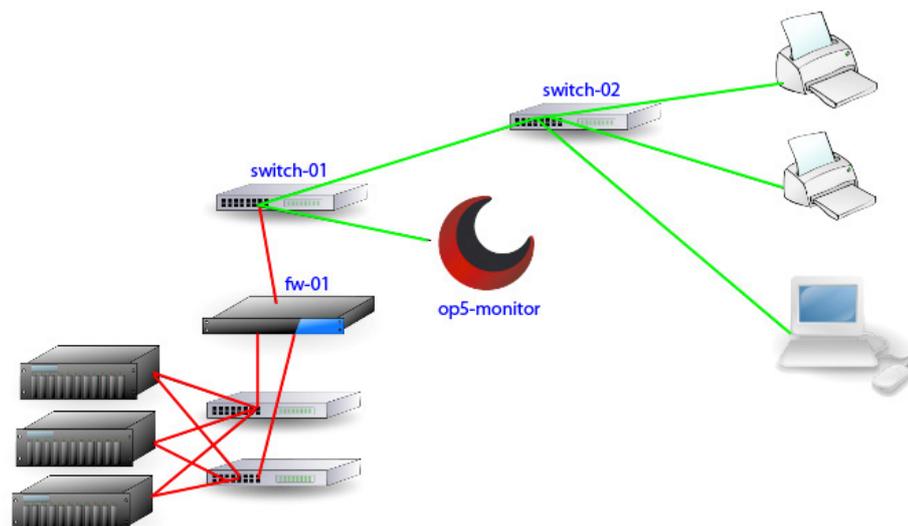
A host is

- 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 see 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

## Host group commands

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

**Hostgroup Commands for: Datacenter-servers (Datacenter)** 

	Schedule downtime for all hosts in this hostgroup
	Schedule downtime for all services in this hostgroup
	Enable notifications for all hosts in this hostgroup
	Disable notifications for all hosts in this hostgroup
	Enable notifications for all services in this hostgroup
	Disable notifications for all services in this hostgroup
	Enable active checks of all hosts in this hostgroup
	Disable active checks of all hosts in this hostgroup
	Enable active checks of all services in this hostgroup
	Disable active checks of all services in this hostgroup

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

[Status detail](#)   [Status overview](#)   [Status grid](#)   [Availability](#)   [Alert history](#)

- 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:

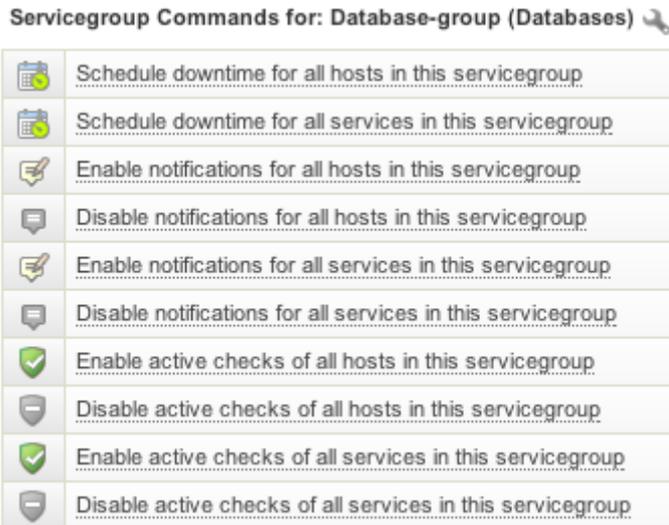
- DNS
- MTA
- IMAP-/POP-server
- Webmail
- Storage

On the hosts listed above there are services that must be working otherwise your customer will not be able to use 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: <ul style="list-style-type: none"><li>• host up</li><li>• host down</li><li>• service critical</li><li>• service ok</li></ul> and so on.

	Description
Notifications	<p>Notifications is the messages sent out to the contacts associated with the object the notification is sent about.</p> <p>Notifications are sent out on state changes. A notification is sent during one of the following alerts:</p> <ul style="list-style-type: none"><li>• any service or host problem or recovery</li><li>• acknowledgements</li><li>• flapping started, stopped and disabled</li><li>• downtime started, stopped and canceled</li></ul> <p>Notifications can be sent by almost anything. The following are included by default in op5 Monitor:</p> <ul style="list-style-type: none"><li>• email</li><li>• sms</li><li>• dial up</li></ul> <p>Of course there are a lot of other ways to send notifications like sending them to a database, ticket handling system etc.</p>

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.

DISPLAY FILTERS		Host Status Totals	
Host Status Types	All	26 Up	17 Down
Host Properties	Not In Scheduled Downtime & Has Not Been Acknowledged	0 Unreachable	0 Pending
Service Status Types	Pending   Unknown   Warning   Critical	43 Hosts	17 Problems
Service Properties	Not In Scheduled Downtime & Has Not Been Acknowledged		

Service Status Details For All hosts:  Select multiple items

	HOST	SERVICE	ACTIONS	LAST CHECK	DURATION	ATTEMPT
	172.27.86.97	Disk usage C:		2011-10-31 09:28:47	7d 10h 17m 26s	3/3
	beta.int.op5.se	yum		2011-10-31 09:28:13	5d 4h 19m 59s	3/3
	beta64	CPU Status		2011-10-31 09:26:27	66d 20h 42m 3s	3/3
		cron_process		2011-10-31 09:28:30	66d 20h 42m 28s	3/3
		Disk usage /		2011-10-31 09:30:29	66d 20h 41m 50s	3/3

In this view you will only find unacknowledged problems. From here it is easy to

## 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
- by this 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**.

Host	diskett
Sticky	<input checked="" type="checkbox"/>
Notify	<input checked="" type="checkbox"/>
Persistent	<input checked="" type="checkbox"/>
Author	monitor
Comment	<input type="text"/>
Acknowledge any problems on services too	<input checked="" type="checkbox"/>
	<input type="button" value="Submit"/> <input type="button" value="Reset"/>

- 4 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 “schedule downtime” in the menu.



- 2 Click on “Select multiple items”



- 3 Select the host or services you want to remove from scheduled downtime.
- 4 Click on “Delete selected” to delete the selected scheduled downtime. To remove the scheduled downtime for both hosts and services select “Delete services too”..



## 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 43.

## Viewing scheduled downtime

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

Scheduled host downtime

Enter text to filter   

HOST NAME	ENTRY TIME	AUTHOR	COMMENT	START TIME	END TIME	TYPE
<a href="#">build-centos</a>	2011-10-31 09:40:13	monitor	Upgrade	2011-10-31 10:40:07	2011-10-31 12:40:07	Fixed

Scheduled service downtime

Enter text to filter   

HOST NAME	SERVICE	ENTRY TIME	AUTHOR	COMMENT	START TIME	END TIME
<a href="#">build-centos</a>	<a href="#">syslogd process</a>	2011-10-31 09:40:13	monitor	Upgrade	2011-10-31 10:40:07	2011-10-31 12:40:07
<a href="#">build-centos</a>	<a href="#">ssh-agent process</a>	2011-10-31 09:40:13	monitor	Upgrade	2011-10-31 10:40:07	2011-10-31 12:40:07
<a href="#">build-centos</a>	<a href="#">ntp time</a>	2011-10-31 09:40:13	monitor	Upgrade	2011-10-31 10:40:07	2011-10-31 12:40:07
<a href="#">build-centos</a>	<a href="#">cron process</a>	2011-10-31 09:40:13	monitor	Upgrade	2011-10-31 10:40:07	2011-10-31 12:40:07

In this view you can

- schedule new downtime
- schedule recurring downtime
- remove scheduled downtime
- view all scheduled downtimes.

### To view all scheduled downtime

- 1 Click **Schedule downtime** in the main menu under **Monitoring**.



It is however easier to schedule downtime from the views Host Information, Service Information, Hostgroup Information and Servicegroup Information.

## 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.



You can not add a scheduled down time back in time. So if you missed to add one when you took down the host or service you can not repair it by adding scheduled downtime afterwards.

---

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

### 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 33).
- 2 In the **Host commands** click **Schedule Downtime For This Host**.



- 3 Fill in the form

Host	switch1-gbg
Start Time	2011-11-02 09:11:19
End Time	2011-11-02 11:11:19
Fixed	<input type="checkbox"/>
? Triggered By	N/A
? Duration	2.0
Author	monitor
Comment	
Child Hosts	Schedule triggered downtime
	<input type="button" value="Submit"/> <input type="button" value="Reset"/>

- a Enter start and end time
  - b Choose between fixed or flexible.
  - c Choose what this downtime is triggered by<sup>1</sup>, if any.
  - 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).
  - g Check **Schedule downtime for services too** if you like to do so. If you uncheck this check button the services on this host will not be set into scheduled downtime.
- 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.



---

1.This option is set if you want this scheduled downtime depending on an other scheduled downtime.

- Click on the hostgroup alias (the one between the parenthesis, in the picture below)

HOST GROUP		HOST STATUS SUMMARY
Datacenter-servers (Datacenter)		 1 UP

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

Hostgroup Commands for: Datacenter-servers (Datacenter) 



- Follow a-g (except for f) in step 3 in [To schedule downtime for a host](#) on page 54.
- Click **Submit**.
- 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

- Open up the scheduled downtime view by follow the instructions in [To view all scheduled downtime](#) on page 53.
- Click the delete icon under Actions.



- Click **Submit**.

 Triggered By

ID: 74, Service 'syslogd process' on host 'build-centos' starting @

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 when 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

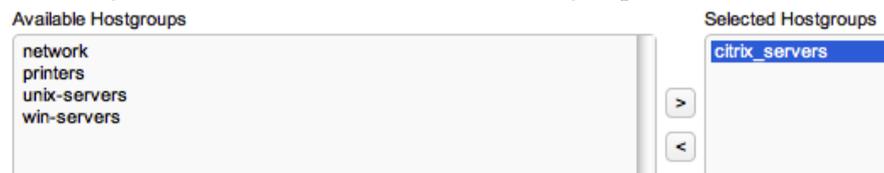
- 1 Click Schedule downtime in the menu.
- 2 Click Schedule recurring downtime.



- 3 Choose the object type.



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



- 5 Add a comment.
  - 6 Set start and end time.
- Start Time (hh:mm) \*    Duration (hh:mm) \*
- 23:00                      23:30
- 7 Choose day of week and months of the year this schedule shall be used.
  - 8 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

Create new    Schedules

Recurring Hostgroup Downtime

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 edit 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.

BUSINESS OBJECT   1	RULE 2	ACTIONS 3
<ul style="list-style-type: none"> <li>  CantonBusinessProcess                             </li> <li>  CPU Status on build-centos                             </li> <li>  Disk usage / on beta.op5.com                             </li> <li>  HTTP-Service-On-Hostgroup on build-centos                             </li> <li>  SubElement                             </li> <li>  ConsolBusiness                             </li> </ul>	<ul style="list-style-type: none"> <li>Worst state</li> <li>Service (build-centos, CPU Status)</li> <li>Service (beta.op5.com, Disk usage /)</li> <li>Service (build-centos, HTTP-Service-On-Hostgroup)</li> <li>Worst state</li> <li>Best state</li> </ul>	<ul style="list-style-type: none"> <li>  </li> <li>  </li> <li>  </li> <li>  </li> <li>  </li> <li>  </li> </ul>

IS 3	LAST CHECK 4	DURATION 5	STATUS INFORMATION 6
  	2012-03-23 10:52:06	1h 21m ago	All subelements are OK
 	2012-03-23 10:50:34	1h 21m ago	OK - user: 0.50, nice: 0.50, sys: 4.30, lowait: 0.50, irq: 0.50, softirq: 0.50 idle: 96.69
 	2012-03-23 10:51:57	141d 16h 36m ago	DISK OK - free space: / 9838 MB (59% inode=97%):
 	2012-03-23 10:48:40	22d 6h 48m ago	TCP OK - 0.015 second response time on port 80
  	2012-03-23 10:52:06	20h 3m ago	All subelements are OK
  	2012-03-23 10:52:06	1d 21h 51m ago	The best state is OK
  	2012-03-23 10:52:06	1d 21h 51m ago	Not enough subelements to be OK, defined - state CRITICAL

Nr	Description
1	Business Object List all the Business process objects. An object can be one of the following items <ul style="list-style-type: none"> <li>• Group</li> <li>• Service</li> <li>• Host.</li> <li>• Random value</li> <li>• Constant value</li> </ul>
2	Rule Shows which rule is applied to the group. For more information about the different rules see <a href="#">Rules types</a> on page 136 in op5 Administrator manual.
3	Actions A list of action buttons. Click the icons to <ul style="list-style-type: none"> <li>• Look up service/host in op5 monitor</li> <li>• Go to the configuration for the host or service</li> <li>• Add sub element, only available on groups</li> <li>• Edit object</li> <li>• Remove object</li> <li>• Clone object, only available on groups</li> </ul>
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 screenshot displays the op5 Monitor interface for a host named 'devel.int.op5.se' and service 'PING'. It features two main graphs and a sidebar with navigation options.

**Graph 1: Round Trip Times**  
Title: Ping times: devel.int.op5.se  
Y-axis: RTA (ms)  
X-axis: Time (06:40 to 10:20)  
Legend:  
- Round Trip Times: 19.02 ms Last, 63.51 ms Max, 16.36 ms Average  
- Warning: 100.000ms  
- Critical: 500.000ms

**Graph 2: Packets Lost**  
Title: Packets lost: devel.int.op5.se  
Y-axis: Packets Lost  
X-axis: Time (06:40 to 10:20)  
Legend:  
- Packets Lost: 0 % Last, 0 % Max, 0 % Average  
- Warning: 20%  
- Critical: 60%

**Right Sidebar:**  
- Search: [input field]  
- Actions: [icons for refresh, home, etc.]  
- My basket: Basket is empty  
- Status: Host: devel.int.op5.se, Service: PING, Last Check: 31.10.11 10:34  
- Time ranges: 4 Hours, 25 Hours, One Week, One Month, One Year  
- Services: Host Perfdta, CPU Status, Disk usage /, Mem usage, PING, process httpd status, System Load, Users

**Bottom:**  
Host: devel.int.op5.se Service: PING  
25 Hours 30.10.11 9:34 - 31.10.11 10:34

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 <ul style="list-style-type: none"><li>• host and service name</li><li>• warning and critical levels</li><li>• last, average and max values.</li></ul>
2	Here you can quickly get the graphs of an other host. Just type in the correct name of the host and press <b>Enter</b> . <b>Note:</b> This is not a search field.
3	Exports and calendar. Click the icons to <ul style="list-style-type: none"><li>• export to PDF or XML</li><li>• open up the calendar to view old data.</li></ul>
4	Zooming and reports Click the icons to <ul style="list-style-type: none"><li>• zoom in the graph</li><li>• show most resent alert for this time period for this host</li><li>• create an availability report for this time period for this host.</li></ul>
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](http://www.op5.com).

# Hyper Map

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

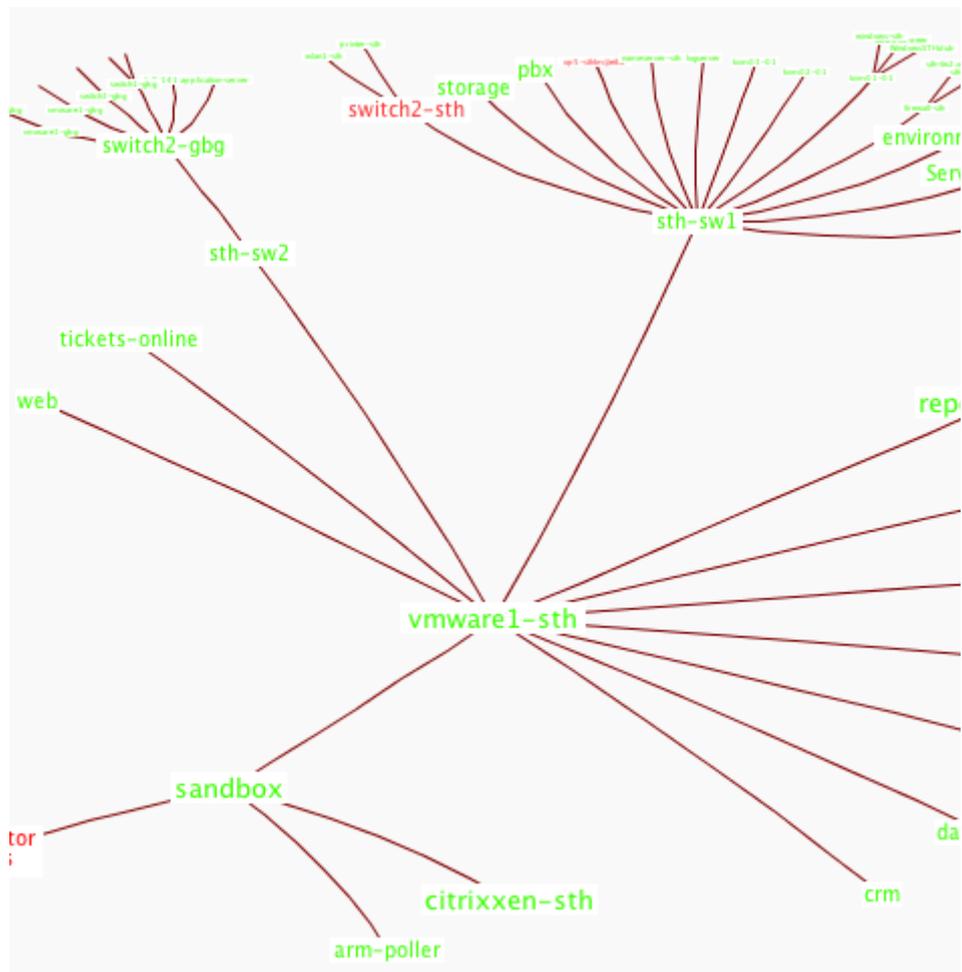
To access the Hyper Map click on the icon in the menu



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

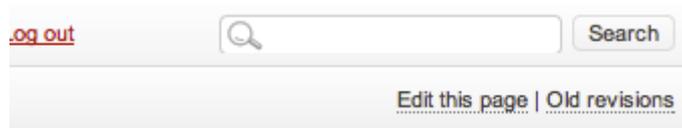
op5 Monitor comes with an dokuwiki that gives you a great way of document both your environments and things needed to know about your monitored system.

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
<i>Italic</i>	//italic//
<b>Bold</b>	**bold**
<u>Underline</u>	__underline__
<b><i>Bold &amp; Italic</i></b>	**//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

## 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 [www.op5.com/support/downloads](http://www.op5.com/support/downloads).

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

The table describes each agent briefly

Name	Description
op5 NSClient++	<p>This is the agent used for monitoring Microsoft Windows operating systems.</p> <p>You can use it to monitor things like</p> <ul style="list-style-type: none"> <li>• CPU, memory and disk usage</li> <li>• services, windows events and files</li> </ul> <p>You can also use the built-in NRPE support to create your own commands for op5 NSClient++</p>
NRPE	<p>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.</p> <p>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.</p>
MRTGEXT	<p>MRTGEXT was originally written as an NLM for Novel Netware to obtain values used with the widely known MRTG (predecessor of cacti, which is the base of OP5 Statistics), but it can also be used to poll values from op5 Monitor.</p>
op5 Syslog Agent	<p>op5 Syslog Agent runs as a service under Windows 2000, Windows XP and Windows 2003. 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).</p> <p>The agent can also forward plaintext log-files.</p>

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



# NagVis

---

## About NagVis

This chapter covers the following topics:

Subject	Page	Subsections
<i>Introduction</i>	68	<i>About NagVis</i> on page 67
<i>Configuration interface</i>	69	<i>Main configuration interface</i> on page 69 <i>Configure plain maps</i> on page 70
<i>NagVis maps</i>	71	<i>Manage backgrounds</i> on page 71 <i>Manage maps</i> on page 73 <i>Map object types</i> on page 78 <i>Icon objects</i> on page 78 <i>Line objects</i> on page 80
<i>Automap</i>	83	
<i>Rotation pools</i>	85	

# Introduction

NagVis is a visualization add-on for op5 Monitor and it is used to visualize op5 Monitor data, e.g. to display buissness 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 interface

All settings are administrated through the Configuration Interface . The Configuration Interface can be reached either from the configuration link at the top of the default view or from the edit buttons in the header of all plain maps in the thumbnail view on NagVis first page.

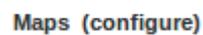
## Main configuration interface

### To open up the Configuration Interface

- 1 Click on NagVis in the main menu of op5 Monitor.



- 2 Click on the (Configure) link at the top of the page.

A screenshot of a link labeled "Maps (configure)" with a dotted underline.

- 3 Right click anywhere in the page and the Configuration Interface will show up.

A screenshot of a navigation bar with "Actions" and "Options" labels, each followed by a downward-pointing chevron.

## Welcome to the NagVis WUI!

This is the NagVis web configuration interface. You can use it to configure your own NagVis maps using your browser.

Unlike previous NagVis versions the navigation in the WUI uses the header menu has been removed.

Have fun using NagVis! And please report problems or bugs.

And if you really like NagVis you are welcome to [support NagVis](#).

From here you may now:

- change the global configuration
- add, edit and delete map and objects
- add and delete background images
- add, edit and delete shapes
- configure the backend.

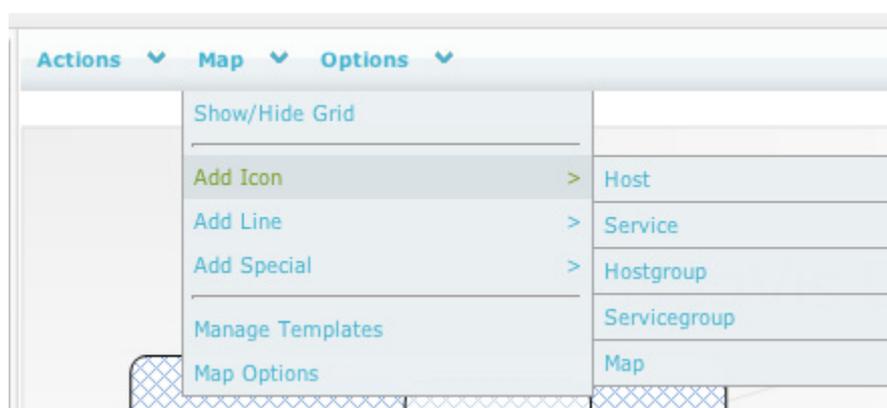
## Configure plain maps

### To configure a plain NagVis map

- 1 Click on NagVis in the main menu of op5 Monitor.
- 2 Click on the (Configure) icon in the header at the top of every plain NagVis map.



- 3 Use the menu on the top to access the Configuration Interface.



## 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.

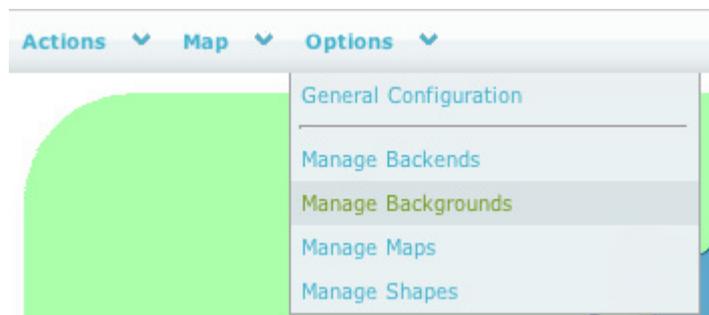
The following image types are supported:

- jpeg
- png
- gif

### Add

#### To add a new background image

- 1 Follow the instructions in [Main configuration interface](#) on page 69 about how to open up the Configuration Interface.
- 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.

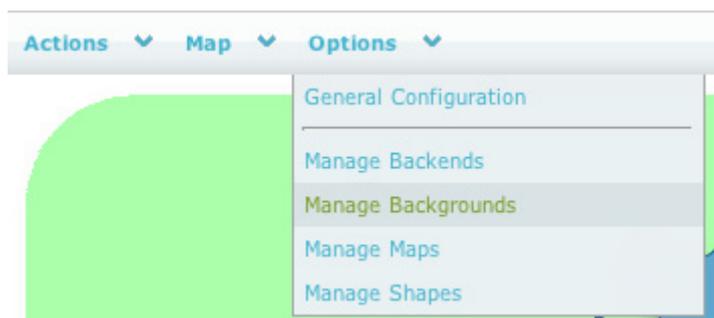


- 4 Click **Upload**. Now your background image is ready to use.

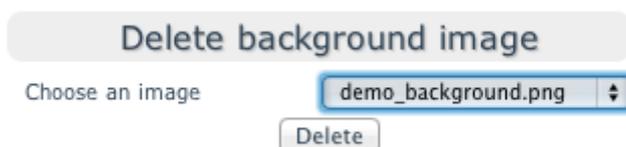
## Delete

### To delete a background image

- 1 Follow the instructions in *Main configuration interface* on page 69 about how to open up the Configuration Interface.
- 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

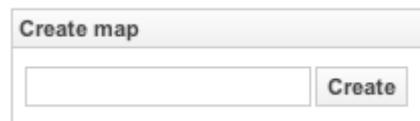
### Add

There are two ways to add a new map to NagVis.

#### To add a new map

##### Alt. 1

- 1 On the **NagVis default page** type in the name of the new map in the **Create Map** box:



The image shows a web form titled "Create map". It consists of a single-line text input field followed by a button labeled "Create".

- 2 Click **Create**.

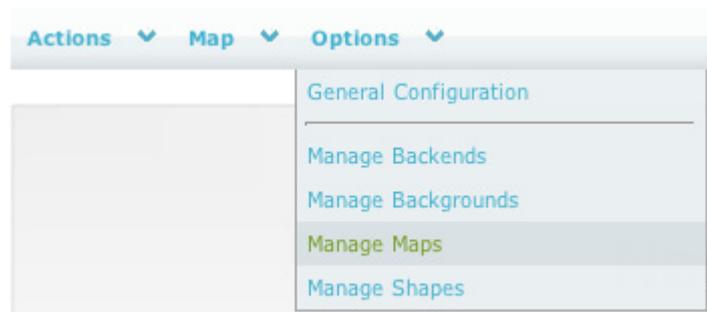


The map name can not contain any spaces

---

##### Alt. 2

- 1 Follow the instructions in [Main configuration interface](#) on page 69 about how to open up the Configuration Interface.
- 2 Go to the menu on top and select **Options -> Manage Maps**



3 Now fill in the following fields:



Option	Description
Map name	The map name without space in the name. <sup>a</sup>
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

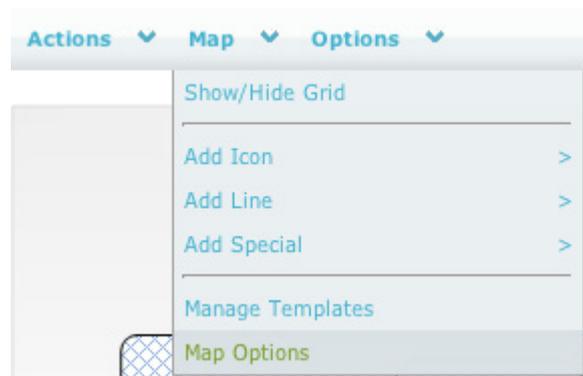
4 Click on the "Create" button and your map is created and ready to be filled with objects.

## 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 Follow the instructions in *Main configuration interface* on page 69 about how to open up the Configuration Interface. Remember to chose what map to edit.
- 2 Go to the menu on top and select **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

There are two ways to delete a map.

### To delete a map

#### Alt. 1

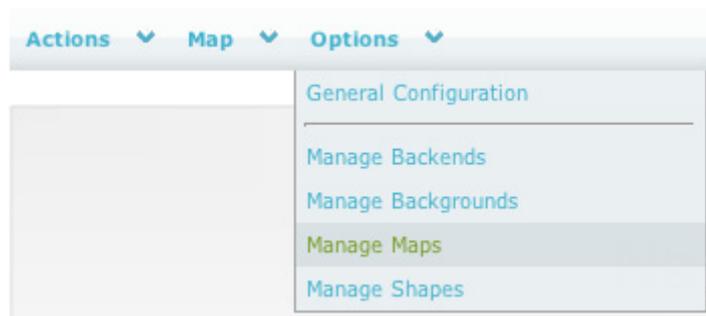
- 1 Click **delete icon** in the header of a plain NagVis map



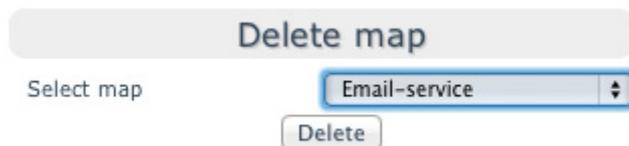
- 2 Click **Ok** and the map is deleted.

#### Alt. 2

- 1 Follow the instructions in *Main configuration interface* on page 69 about how to open up the Configuration Interface.
- 2 Select **Maps -> Manage Maps** from the menu on top



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



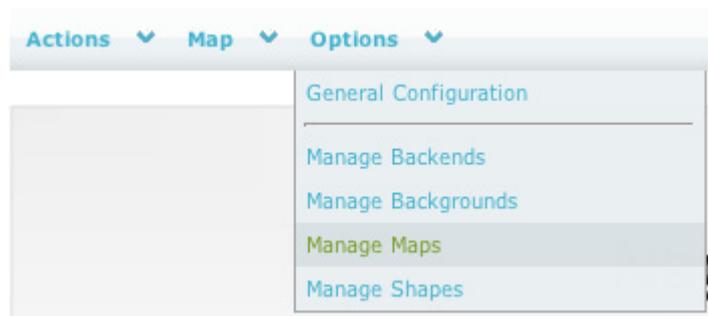
- 4 Click **Ok** in the pop-up question to deleted the map.

Once the map is removed you will be redirected to the NagVis WUI page.

## Renaming a map

### To rename a map

- 1 Follow the instructions in *Main configuration interface* on page 69 about how to open up the Configuration Interface.
- 2 Go to the top menu and choose **Options** -> **Manage Maps**



- 3 Select the map you like to rename.

A screenshot of the 'Rename map' dialog box. The dialog has a title bar that says 'Rename map'. Below the title bar, there are two text input fields. The first field is labeled 'Select map' and contains the text 'demo-map'. The second field is labeled 'New name' and contains the text 'Email-services'. Below the input fields, there is a button labeled 'Rename'.

- 4 Type the new name in the **New name** text field and click **Rename**.
- 5 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	<ul style="list-style-type: none"><li>• Host</li><li>• Service</li><li>• Hostgroup</li><li>• Servicegroup</li><li>• Map</li></ul>
Line	<ul style="list-style-type: none"><li>• Host</li><li>• Service</li><li>• Hostgroup</li><li>• Servicegroup</li><li>• Map</li></ul>
Special	<ul style="list-style-type: none"><li>• Textbox</li><li>• Shape</li><li>• Stateless Line</li></ul>

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.

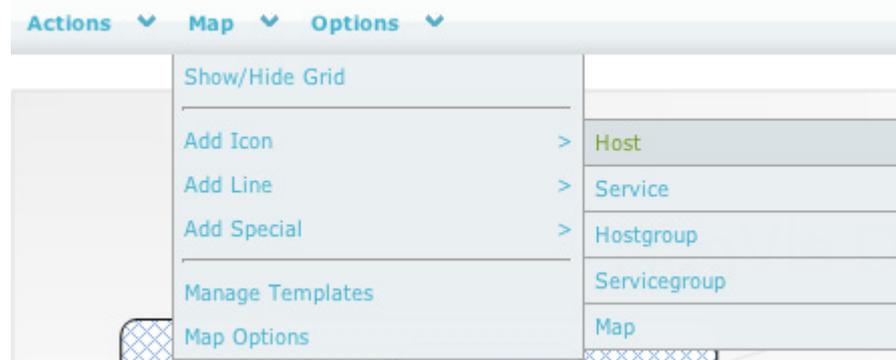
## Icon objects

As you can see in the table in [Map object types](#) on page 78 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 Follow the instructions in *Main configuration interface* on page 69 about how to open up the Configuration Interface.
- 2 Go to the menu on top and select **Map -> Add Icon -> Host**



- 3 You will now get a mouse pointer looking like a cross:



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

- 4 A box with the host options is now shown.

TITLE		x
host_name	<input type="text"/>	
x	<input type="text" value="294"/>	
y	<input type="text" value="178"/>	
z	<input type="text" value="1"/>	
Use	<input type="text"/>	
		<input type="button" value="Save"/>

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

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

## Line objects

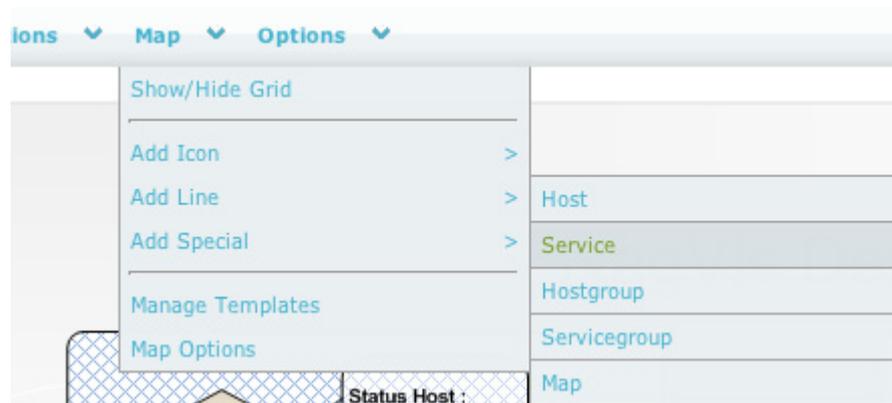
A line object is a printed line between two objects. It can symbolize a connection between two icon objects and be associated with a Nagios object.

### Adding a line

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

#### To add a line

- 1 Follow the instructions in *Main configuration interface* on page 69 about how to open up the Configuration Interface.
- 2 Go to the menu on top and chose: **Map -> Add Line -> Service**



- 3 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.

- A box with the line options is now shown.

Field	Value
host_name	switch1-gbg.int.op5.se
service_description	Interface 3 Traffic
x	220
y	79
z	10
backend_id	live_1
view_type	line
line_type	--%--><--%--
line_arrow	forward
line cut	0.5

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

- 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.

- 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

- Follow the instructions in [Main configuration interface](#) on page 69 about how to open up the Configuration Interface.
- Right click on the object icon and the following dialog is shown

Configured	
type	host
object_id	5
host_name	dobermann
x	115
y	48

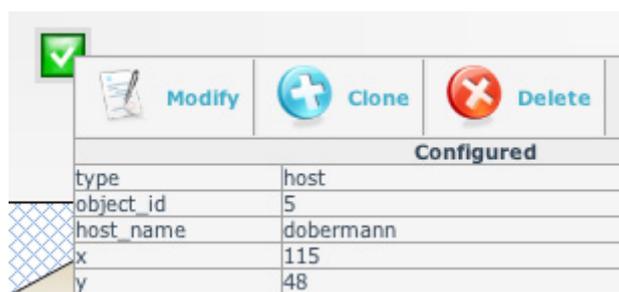
- Click **Delete**

- 4 Select **OK** in the pop-up dialog and the object is removed.

## Modifying objects

### To modify an object

- 1 Follow the instructions in *Main configuration interface* on page 69 about how to open up the Configuration Interface.
- 2 Right click on the object icon and the following dialog is shown.



- 3 Click **Modify** and the object option box is shown.

## Automap

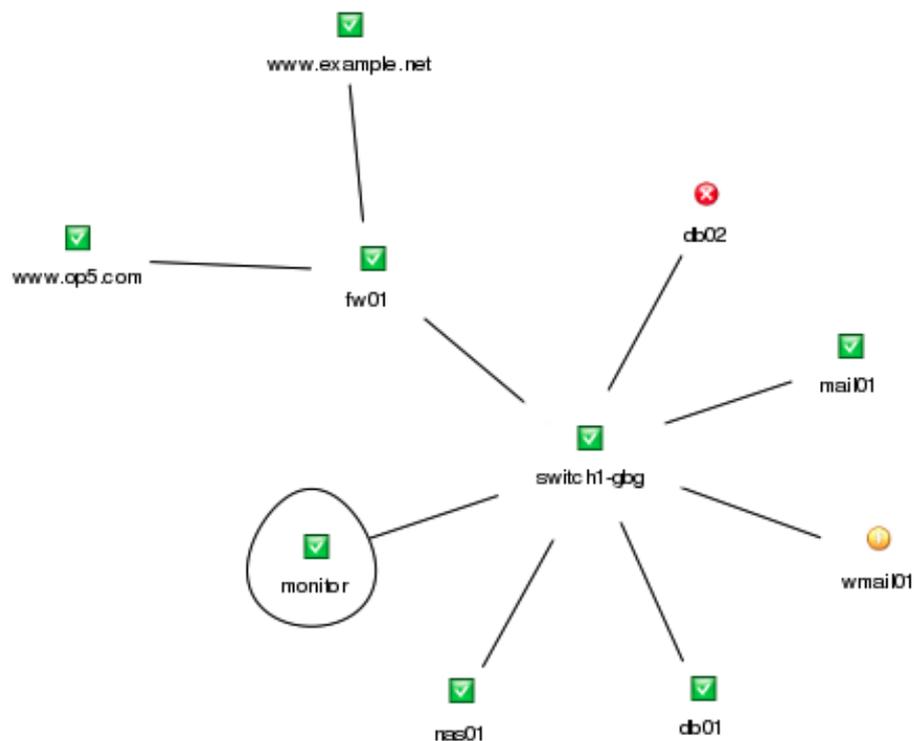
When you take a look at the Automap for the first time you will see the complete tree, including all your hosts. If you only like to see one part of the tree you have to change the following configuration setting:

```
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.*



*As you can see here the **monitor** host is marked with a line around it. That mark indicates that **monitor** is set to **defaultroot** and all of its children are displayed.*

*If you set the host **fw01** as **defaultroot** in Nagvis the automap only display **fw01** and it's children (**www.example.net** and **www.op5.com**). The picture below shows how it would look like:*

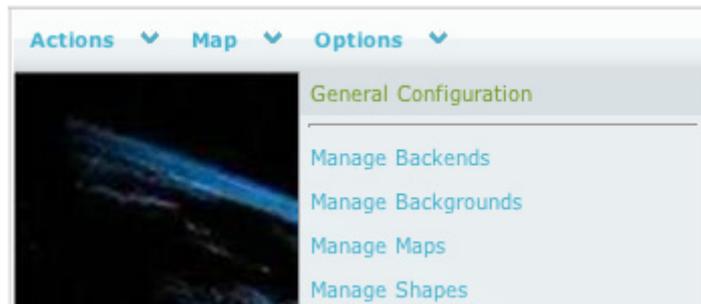


## Setting defaultroot

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 Follow the instructions in *Main configuration interface* on page 69 about how to open up the Configuration Interface.
- 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 can 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 <b>Maps</b> 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

---

## About Geomap

This chapter covers the following topics:

Subject	Page	Subsections
<i>Geomap</i>	88	<i>Map type</i> on page 88 <i>Locations</i> on page 89 <i>Links</i> on page 90

## Geomap

The Geomap part of op5 monitor is a special map that uses **Open Street Map** to create the map as default, and to be able to use the Geomap you must to have a connection to the 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 preffered map

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

## Map type

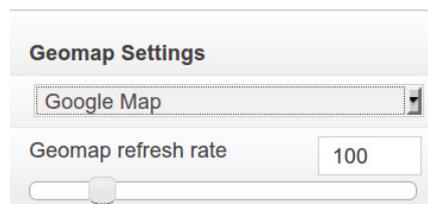
As mentioned above, there are three map types that is possible to use:

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

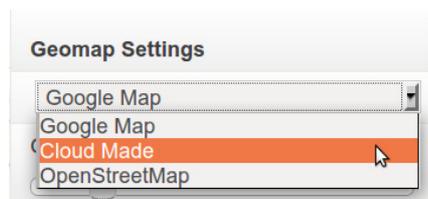
To start configuring the map type for Geomap, follow the steps below:

- 1 Click “Geomap” in the main menu
- 2 Select the cogwheel 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 Press the cogwheel 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:

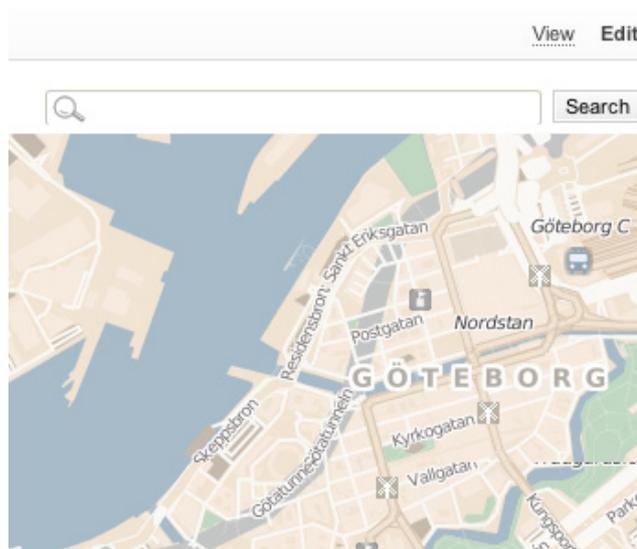
- Host
- Service
- Host Group
- Service Group

### 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.

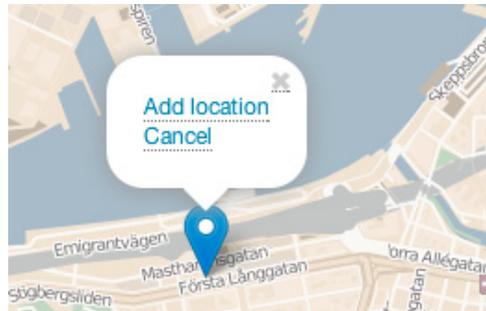
#### To add the location

- 1 Open up the Geomap from the left side menu.
- 2 Click on edit in the upper right 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.:

A screenshot of the 'Edit location' dialog box. It has a title bar with 'Edit location' and a close button. The form contains the following fields:

- Label:** op5 Office Gothenburg
- Address:** Första Långgatan 19
- Description:** Dev/support office
- Object type:** Host (dropdown menu)
- Object name:** switch1-gbg.int.op5.se (dropdown menu)

At the bottom, there are 'Save' and 'Cancel' buttons.

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:

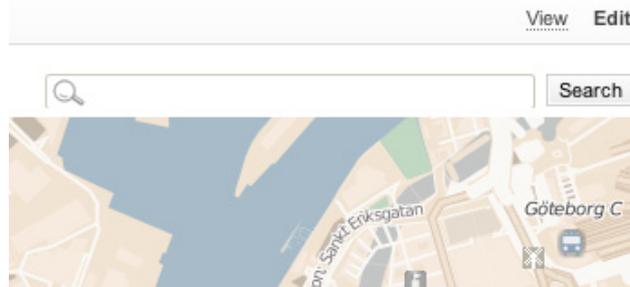
- Gothenburg
- Stockholm

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 left side menu. Click on edit above the search field 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 a 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

---

## About Reporting

This chapter covers the following topics:

Subject	Page	Subsections
<i>Reports</i>	94	<i>SLA</i> on page 94 <i>Availability</i> on page 99 <i>Save reports</i> on page 104 <i>Schedule reports</i> on page 106 <i>Modifying scheduled reports</i> on page 108 <i>Deleting scheduled reports</i> on page 108 <i>Debug Availability reports</i> on page 108
<i>Events and logs</i>	110	<i>Alert summary - Top alert producers</i> on page 110 <i>Trends</i> on page 113 <i>Event log</i> on page 115 <i>The logs are grouped by hours to make it a bit easier to find what you are looking for.</i> on page 116

## 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 but yet very easy built-in report generator.

Reports are made from events that have occurred in time, by elements, services or specific groups.

## SLA

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

### Creating a SLA report

You can either do it a fast an easy way and only follow step 1-3 and 11 in the following guide. By doing that you will use default values in almost all settings.

The complete instruction describes all settings.

To create a SLA report

1 In the main menu to the left click **SLA Reporting**



And the report setup page is displayed

SLA report  
 Switch to Availability report

Saved reports  
 - Select saved report -

Report type  
 Hostgroups

Filter

Available Hostgroups

- Datacenter
- Gothenburg
- Stockholm
- centos-servers-hostgroup
- default-hostgroup
- merlin-hosts
- nested\_1
- nested\_2

Selected Hostgroups

Reporting period  
 This Year

SLA calculation method  
 Group availability (SLA)

Count scheduled downtime as  
 Actual state

Assume states during program downtime  
 Assume initial states

First assumed host state  
 First Real State

Include Summary Report  
 Save report

Use SLA-values from saved report  
 - Select saved report -

Enter SLA  
 Jan % Feb % Mar % Apr % May % Jun % Jul % Aug % Sep % Oct % Nov %

Report time period

Use alias  
 Include soft states  
 Cluster mode  
 First assumed service state  
 First Real State

Include PNP graphs

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

Report type  
 Hostgroups

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**.

Available Hostgroups

- Webservers
- network
- printers
- unix-servers
- win-servers

Selected Hostgroups

- Environment

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

Reporting period  
 This Year

Report time period

**5** Choose what SLA calculation method to use.

SLA calculation method

You may choose between <sup>1</sup>

- 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.

Count scheduled downtime as

Uptime, with difference will calculate downtime without scheduled downtime but will show the difference between actual state and the actual state when scheduled downtime is calculated as uptime.

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

Use alias

- c** Choose whether to assume state during op5 Monitor downtime.<sup>2</sup>

Assume states during program downtime

- d** Choose whether to assume if the system is logging initial states or not. op5 Monitor does by default so if you have not changed anything in the nagios.cfg file leave the default value as it is.

Assume initial states

- e** Choose whether to include soft states or only use hard states in the report.

Include soft states

---

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 are by some, considered not to be actual SLA.

2. If the application is not running for some time during a report period we can by this option decide to assume states for hosts and services during the downtime.

**7** How to assume first host and service state.<sup>1</sup>

First assumed host state       First assumed service state  
First Real State      First Real State

Choose between:

- **Current state**  
The state the host or service has at the moment when the report is created.
- **Unspecified**  
No value given at all.
- **First Real state**  
Here the first real state (OK or not) found in the logs will be used.
- **Host UP / Service OK**  
This force the first state to be assumed to be UP or OK, depending of if it is a host or service.  
**Host Down / Service Critical or Warning**  
This force the first state to be assumed to be Down or Critical/Warning, depending of if it is a host or service.
- **Host Unreachable / Service Unknown**  
This force the first state to be assumed to be Unreachable or Unknown, depending of if it is a host or service.

**8** If you like to save your report already here in this state check the **Save report** box and type in the name of the report. This can be done later.

Save report

**9** Check **Cluster mode** to create the report where the group logic is reversed so that the OK/UP time is calculated using the most positive service/host state of the selected objects.

Cluster mode

**10** Type in the SLA values with values from 0.00 to 100.00.

Enter SLA  
 %     %     %     %

Click on the icon in front of the name of the months to copy the value to the other months that are available<sup>2</sup>.




---

1.If there is no information about the host or service in the current log file, op5 Monitor can assume status of the host/service.  
2.Only the months that is included in the report and where data is found will be available.

## 11 Click Create report.

### SLA report result

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 icons gives you the possibility to <ul style="list-style-type: none"> <li>• save the report</li> <li>• direct link to report</li> <li>• save the report as a pdf</li> <li>• print the report.</li> </ul>
2	The report graphs. Click on the numbers on top of every bar and you will get a detailed report for that month.
3	The report result in numbers.
4	A list of every object included in the report. Click on the object name to get a SLA report for each and every object.

## Availability

The availability report shows availability of host groups, service groups, hosts or services during a selected report period.

op5 Monitor comes with two different kinds of availability reports. The standard one that comes with Nagios and a new one with extended functionality and nicer presentation. As default the op5 availability report is used but you can reach the old CGI reports by clicking on the Old Availability link.

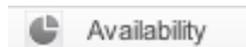
### Creating an Availability report

You can either do it a fast an easy way and only follow step 1-3 and 10 in the following guide. By doing that you will use default values in almost all settings.

The complete instruction describes all settings.

#### To create an Availability report

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



And the report setup page is displayed

Availability report

[Switch to SLA report](#)

**Saved reports**  
 - Select saved report - Select New Delete

**Report type**  
 Hostgroups Select

**Filter**  
 Clear

**Available Hostgroups**

- Datacenter
- Gothenburg
- Stockholm
- centos-servers-hostgroup
- default-hostgroup
- merlin-hosts
- nested\_1
- nested\_2

**Selected Hostgroups**

**Reporting period**  
 Last 7 Days

**Report time period**

**SLA calculation method**  
 Group availability (SLA)

**Status to display**  
 Up  Down  Unreachable  Undet

**Count scheduled downtime as**  
 Actual state

Use alias

Assume states during program downtime

Assume initial states

Include soft states

Cluster mode

**First assumed host state**  
 First Real State

**First assumed service state**  
 First Real State

Include Summary Report

Include PNP graphs

Save report

Output in CSV format

- 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**.

Available Hostgroups		Selected Hostgroups
Webservers network printers unix-servers win-servers	> <	Environment

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

- 5 Choose what SLA calculation method to use.

You may choose between <sup>1</sup>

- 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 like to see the alias instead of the host name in the generated report.

- c Choose whether to assume state during op5 Monitor downtime.<sup>2</sup>

---

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 are by some, considered not to be actual SLA.

2. If the application is not running for some time during a report period we can by this option decide to assume states for hosts and services during the downtime.

- d** Check this check box if you like to have the report output in CSV format instead of the ordinary graphical result.
-  Output in CSV format
- e** Choose whether to assume if the system is logging initial states or not. op5 Monitor does by default so if you have not changed anything in the nagios.cfg file leave the default value as it is.
-  Assume initial states
- f** Choose whether to include soft states or only use hard states in the report.
-  Include soft states

**7** How to assume first host and service state.<sup>1</sup>

 First assumed host state        First assumed service state

First Real State      First Real State

Choose between:

- **Current state**  
The state the host or service has at the moment when the report is created.
- **Unspecified**  
No value given at all.
- **First Real state**  
Here the first real state (OK or not) found in the logs will be used.
- **Host UP / Service OK**  
This force the first state to be assumed to be UP or OK, depending of if it is a host or service.
- **Host Down / Service Critical or Warning**  
This force the first state to be assumed to be Down or Critical/Warning, depending of if it is a host or service.
- **Host Unreachable / Service Unknown**  
This force the first state to be assumed to be Unreachable or Unknown, depending of if it is a host or service.

**8** If you like to save your report already here in this state check the **Save report** box and type in the name of the report. This can be done later.

 Save report

---

<sup>1</sup>.If there is no information about the host or service in the current log file, op5 Monitor can assume status of the host/service.

- 9 Check **Cluster mode** to create the report where the group logic is reversed so that the OK/UP time is calculated using the most positive service/host state of the selected objects.



- 10 Click **Create report**.

## Availability report result

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

Servicegroup breakdown  
Reporting period: thismonth (2011-10-01 to 2011-10-31)

Trends

Availability Report

Showing services in state: ok, warning, unknown, critical, pending

SERVICEGROUP: DEVEL WEBSERVICES	OK	WARNING	UNKNOWN	CRITICAL	UNDETERMINED
Services on host: beta.int.op5.se					
HTTP Server	100 %	0 %	0 %	0 %	0 %
Services on host: debug.int.op5.se					
HTTP Server	100 %	0 %	0 %	0 %	0 %
Services on host: dev.op5.org					
HTTP Server	99.739 %	0 %	0 %	0.261 %	0 %
Services on host: temp1-gbg.int.op5.se					
HTTP Server	100 %	0 %	0 %	0 %	0 %

Make testcase

AVERAGE AND GROUP AVAILABILITY FOR ALL SELECTED SERVICES	OK	WARNING	UNKNOWN	CRITICAL	UNDETERMINED
Average	99.935 %	0 %	0 %	0.065 %	0 %
Group availability (SLA)	99.739 %	0 %	0 %	0.261 %	0 %

STATUS OVERVIEW : DEVEL WEBSERVICES

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

Nr	Description
1	<p>The action icons gives you the possibility to change and save the report. From left to right, those are the icons:</p> <ul style="list-style-type: none"> <li>• Save it to be able to create a scheduled report</li> <li>• Edit some report settings in a popup frame</li> <li>• Direct link to report</li> <li>• Download the report as a CSV file.</li> <li>• Show the report as an PDF.</li> <li>• Print the report.</li> </ul>
2	<p>This is the actual result. You can here see how much time each object has been in the different states.</p> <p>Click on the object names in the list to get a more detailed report.</p> <p>There are two summary rows in the bottom of the table:</p> <ul style="list-style-type: none"> <li>• <b>Average</b> 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.</li> <li>• <b>Group Availability (SLA)</b> This value is only calculated for UP and PROBLEM states (for services OK and PROBLEM states). 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.</li> </ul>
3	<p>The Make testcase button creates debug information to send to the developers at op5 if needed for any support case.</p> <p>Read more in <a href="#">Debug Availability reports</a> on page 108</p>
4	<p>A pie chart displaying the result in a graphical way.</p>

## 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 99.

- 3 Click **Update 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 like to see it.
- You can automate the report by scheduling it to be sent to you or anybody else in an email or save it as file.

As you saw in *Creating a SLA report* on page 94 and *Creating an Availability report* on page 99 and you are able to save the report already when creating it from the beginning. Many times you like to see the result first and maybe edit some settings before you save the report.

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 as in [Creating an Availability report](#) on page 99.
- 2 In the result page click **Save report**.



- 3 Give the report a name.



- 4 Click **Save**.

## Schedule reports

When you want to have the reports on regularly basis and do not want to get it through the op5 Monitor GUI each time it is a good idea to schedule the report.

Before you schedule a report you need to create it ( [Creating a SLA report](#) on page 94 or [Availability report result](#) on page 102) and then save it ([Save reports](#) on page 104 ).

Scheduling reports can be done from two places in the GUI:

- In the result page
- From the page where you create the report.

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

**To schedule a report from the result page**

- 1 Create the report as shown in *Creating a SLA report* on page 94.
- 2 Save the report as shown in *Saving a report* on page 106.
- 3 Click create schedule icon.



- 4 Fill in the options in the the new window.

**New schedule**

Report Interval  
Weekly

Recipients

Filename

Local persistent filepath (absolute path to folder, e.g. /tmp)

Description

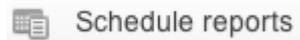
Save Clear

- a Choose Report Interval. This will be how often the report is supposed to be sent.
  - b Add Recipients email addresses, separated by a comma.
  - c Give the report a file name. This is the name that the pdf file will have when it arrives in your mailbox.
  - d 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.
  - e Add a description for the scheduled report.
- 5 Click **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.

**RECIPIENTS**

john.doe@example.org

- 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 modify 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**.

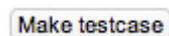
## Debug Availability reports

Sometimes things does not work as they are supposed to do. There fore we have built in a debug button for the Availability reports. This makes it easy to send the needed data to the op5 developers.

### To send debug data to op5

- 1 Create your report as shown in [Creating an Availability report](#) on page 99.

- 2 Click **Make testcase**.



- 3 Save the file report-test.txt

- 4 Send an email to op5 Support with the `report-test.txt` file attached to the email.

# 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 reports makes it easy to identify the biggest problem producers in your environment monitored by op5 Monitor.

There are a few predefined alert summary reports included in op5 monitor but to get the top alert producers we need to create a custom report.

### Creating a Top alert producers report

#### To create a Top alert producers report

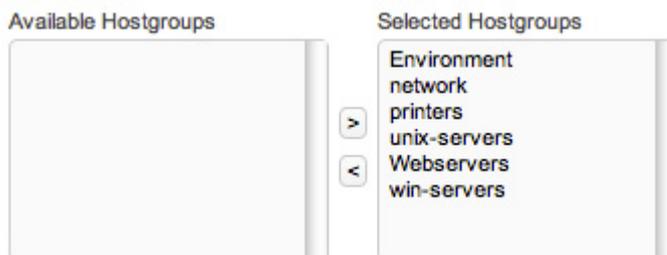
- 1 Click Alert summary in the main menu.



- 2 Select custom report mode.



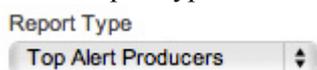
- 3 Select all hostgroups.



- 4 Select Report period <sup>1</sup>.



- 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

- 8 Choose only problems state for both hosts and services.

Host States      Service States  
     

- 9 Set the number of items to show in the resulting report.<sup>1</sup>

Items to show

- 10 Click **Create Summary 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

The reason for doing this is to minimize the number of false alerts and false notifications. Now start working with the problems. The sooner the better. You do not want to end up with a monitoring system you do not think you can trust.

## Saving an Alert summary report

Alert summary reports are usefull 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 110 and before you gennerate the report:

- 2 Click **Save report**.

Save report

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

---

<sup>1</sup>.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 110.

2 Click the plus icon at the right top of the page



3 Chose:  
Report interval  
Recipients (email address separated by a comma)  
Filename (the name of the pdf that will be sent to the recipients)

The screenshot shows a dialog box titled "New schedule" with a close button in the top right corner. It contains three input fields: "Report Interval" (a dropdown menu currently showing "Weekly"), "Recipients" (a text input field), and "Filename" (a text input field). Below these is a "Description" text area. At the bottom of the dialog are two buttons: "Save" and "Clear".

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 can also be reached from Availability reports.

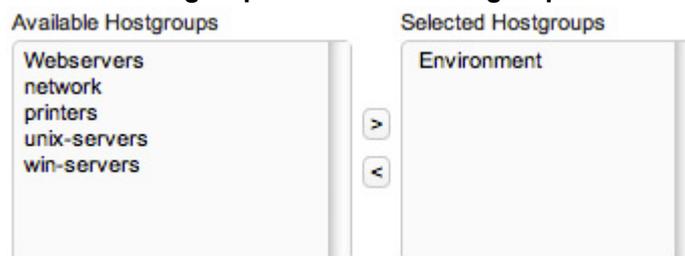
### Creating a trend report

#### To create a trend report

- 1 Click Trend in the main menu.



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



- 3 Select Reporting period



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

- a Choose whether to assume state during op5 Monitor downtime.<sup>1</sup>  
 **Assume states during program downtime**
- b Choose whether to assume if the system is logging initial states or not. op5 Monitor does by default so if you have not changed anything in the nagios.cfg file leave the default value as it is.  
 **Assume initial states**
- c Choose whether to include soft states or only use hard states in the report.  
 **Include soft states**

---

1.If the application is not running for some time during a report period we can by this option decide to assume states for hosts and services during the downtime.

5 How to assume first host and service state.<sup>1</sup>



Choose between:

- **Current state**  
The state the host or service has at the moment when the report is created.
- **Unspecified**  
No value given at all.
- **First Real state**  
Here the first real state (OK or not) found in the logs will be used.
- **Host UP / Service OK**  
This force the first state to be assumed to be UP or OK, depending of if it is a host or service.  
**Host Down / Service Critical or Warning**  
This force the first state to be assumed to be Down or Critical/Warning, depending of if it is a host or service.
- **Host Unreachable / Service Unknown**  
This force the first state to be assumed to be Unreachable or Unknown, depending of if it is a host or service.

6 Click **Create report**.

## Viewing a Trend report

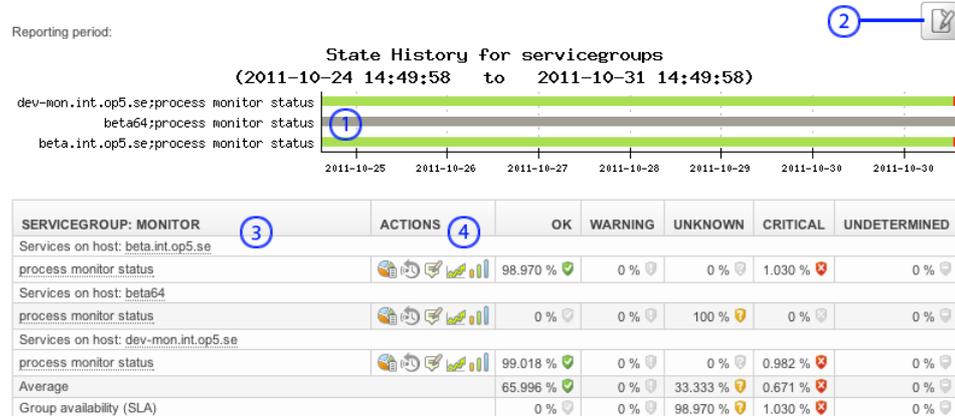
The Trend report result is actually divided into two parts.

- The upper part that contains the trend line.
- The lower part containing an availability report.

---

<sup>1</sup>.If there is no information about the host or service in the current log file, op5 Monitor can assume status of the host/service.

The picture below shows the result page.



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

Nr	Description
1	This is the trend graph showing you when the objects has been Up/OK or in a problem state.
2	Click edit settings icon to change some of the settings of the graph.
3	This whole part of the result page show you the corresponding availability report breakdown for the objects in the trend report.
4	Clicking the action icons and you will get other useful information about each and one of the hosts included in this report. From left to right this is the actions that can be performed here: The action icons gives you <ul style="list-style-type: none"> <li>• availability report for this host</li> <li>• alert history for this host</li> <li>• a list of notifications for this host</li> <li>• alert histogram for this host</li> </ul>

## Event log

Events is actually a long list of all events that has occurred on a host. It shows you everything from alerts and notifications to op5 Monitor service restartings. 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 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.

<b>State type options</b> <input checked="" type="checkbox"/> Soft states <input checked="" type="checkbox"/> Hard states	<b>Host state options</b> <input checked="" type="checkbox"/> Host down <input checked="" type="checkbox"/> Host unreachable <input checked="" type="checkbox"/> Host recovery	<b>Service state options</b> <input checked="" type="checkbox"/> Service warning <input checked="" type="checkbox"/> Service unknown <input checked="" type="checkbox"/> Service critical <input checked="" type="checkbox"/> Service recovery	<b>General options</b> <input type="checkbox"/> Hide flapping alerts <input type="checkbox"/> Hide downtime alerts <input type="checkbox"/> Hide process messages <input checked="" type="checkbox"/> Hide initial and current states <input type="checkbox"/> Hide logrotation messages <input type="checkbox"/> Hide external commands <input type="checkbox"/> Older entries first
<b>First time</b> (Click calendar to select date) <input type="text" value="31"/>	<b>Last time</b> (Click calendar to select date) <input type="text" value="31"/>		
<input type="button" value="Update"/>			

---

2011-10-31 16:00

[2011-10-31 15:01:15] Warning: Return code of 127 for check of service 'test multiline' on host 'dev-mon.int.op5.se' was out of bounds. Make sure the plugin you're trying to run actually exists.

---

2011-10-31 15:00

[2011-10-31 14:59:05] SERVICE ALERT: win2008-i386;PING;OK;SOFT;2;OK - 192.168.1.195: rta 13.350ms, lost 0%

[2011-10-31 14:58:05] SERVICE ALERT: win2008-i386;PING;WARNING;SOFT;1;WARNING - 192.168.1.195: rta 203.001ms, lost 0%

[2011-10-31 14:56:15] Warning: Return code of 127 for check of service 'test multiline' on host 'dev-mon.int.op5.se' was out of bounds. Make sure the plugin you're trying to run actually exists.

[2011-10-31 14:55:55] SERVICE ALERT: logserver;authentication failure;OK;HARD;3;OK - 5 matches for general filter 'authentication failure': Host: beta: fatal: Read from socket failed: Connection reset by peer

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 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 there you go.



### Filter alert history

The list can be long to try filter it by using the pre-defined filter options, time periods and free text filters to narrow down your search.

Alert history

#### State type options

- Soft states
- Hard states

#### Host state options

- Host down
- Host unreachable
- Host recovery

#### Service state options

- Service warning
- Service unknown
- Service critical
- Service recovery

#### General options

- Hide downtime alerts
- Hide process messages
- Older entries first

#### First time

(Click calendar to select date)

#### Last time

(Click calendar to select date)

Update

Clear



# Configuration

---

## About Configuration

This chapter covers the following topics:

Subject	Page	Subsections
<i>Introduction</i>	120	
<i>View config</i>	121	<i>Viewing config</i> on page 121
<i>My account</i>	122	
<i>Backup / Restore</i>	125	<i>Backing up the configuration</i> on page 125 <i>Backup/Restore actions</i> on page 125 <i>Restoring a configuration backup</i> on page 126

## 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.

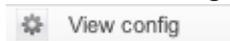
## View config

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 main menu.



As default hosts are shown.

Object type:

#### Hosts

HOST NAME	ALIAS/DESCRIPTION	ADDRESS	PARENT HOSTS	MAX. CHECK ATTEMPTS
172.27.76.202	172.27.76.202	172.27.76.202	router1	5
down-1	down-1	1.2.3.4	switch1	5

- 2 Change **Object type** to host groups

Object type:

- 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 behaviour
- how to display passive checks
- what skinn to use in the GUI
- keyboard commands used in the GUI.

## 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 recieving 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 behaviour 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

### Change password

Current Password	<input type="password" value="*****"/>
New Password	<input type="password" value="*****"/>
Confirm Password	<input type="password" value="*****"/>
	<input type="button" value="Change password"/>

- 3 Click **Change password**.

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

# Backup / 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.

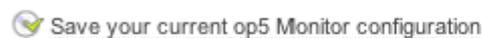


- 2 Click **Save your current op5 Monitor configuration**.



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

Backup/Restore



BACKUPS	ACTIONS
<a href="#">webconfig-pre-4.0.7-upgrade-2009-09-01 11.35</a>	  
<a href="#">webconfig-pre-4.0.7-upgrade-2009-09-01 11.19</a>	  

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

## Backup/Restore actions

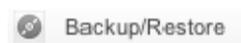
In the list of backups the second column is called **ACTIONS**. This is the functions you will find there, from the left to the right:

- 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.