LConf LDAP Manager for Icinga

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Chapter 1. Introduction

LConf for icinga is a powerful web-based ldap configuration application. Mainly, it's been designed for use with the Netways LConf export tool, which allows you to easily manage your Icinga/Nagios® configuration in an LDAP tree. It's designed for easy use for people new to ldap, but also provides a powerful toolset for the experienced ldap user. The key features are

- A modern, easy-to-use web-interface that allows you to easily create, modify or delete ldap-nodes or attributes

- Copy, move nodes and create aliases via drag&drop

- Optional integration to the general Host/Service view of icinga-web

- LDAP Alias toolkit (Show me aliases pointing to this node, Jump to the node aliased by this node, etc)

- A simple to use element search if you just search occurences of a string, or

- Support for multiple connections, allowing move/copy of nodes from one connection to another

- Administrate connections and grant usage to users or groups

- RegExp and searchFilter based Search/Replace for your elements

- if you need a more complicated filter, a comprehensive filter template editor that allows you to create nested searches without nesting limitations.

- Icons, creation wizards, ajax-proposals, attribute inheritance, etc. are fully customizable

Chapter 2. Installation

This chapter entails the installation and software requirements of the LConf module.

Requirements

The following Software is required for installing the lconf-module

- Mysql 5.0 or higher

- PHP 5.2+ including

  - php5-mysql

  - php5-ldap

- A LDAP Server (for example slapd)

- Icinga-web 1.0.1+

The following Software is not required for installing the lconf-module, but recommended for use.

- The Netways LConf exporter tool (see www.netways.org)

Getting and installing LConf for Icinga

The installation is carried out by phing, which is delivered with the module.

1. Download the LConf-module.

   The module is available on http://www.netways.org [https://www.netways.org/projects/list_files/lconf-icinga-mod]

   Or via git :

   ```
   # git clone git://git.netways.de/lconf-icinga-mod.git
   ```

2. Extract the downloaded archive.

   ```
   # tar xvf lconf-icinga-mod.tgz
   ```

Dependencies

1. Installing the required packages from the distribution

   Debian Lenny:

   ```
   # aptitude install libapache2-mod-php5 \

   php5-mysql \

   php5-ldap \
   ```

Installation of the module

The installation is performed by a phing-based installation wizard shipped with the module. Please note that you need write-access to `<Path_to_icinga>`.

As the installer will create additional tables in your database, you'll need to change the database settings by typing

`vi <LConf_module_DIR>/db.ini`

Change the settings to fit to your connection. *Notice:* The database user must have rights to execute the CREATE TABLE order.

Now you can execute the installation by typing: `cd <LConf_module_DIR>`. `./install.sh`. When asked for the prefix, type in the prefix chosen by the lconf script. If you have an older lconf setup, use 'nagios' as prefix.

When you now log in to your icinga-web frontend, you'll notice that you'll notice no changes. This is because you haven't got any permissions to view the LConf module. To change this, login as an admin and add all the lconf.access credentials to your root user.

When you now log out and log in again you should see a new entry in the menu called "LConf".

Chapter 3. Creating Connections

Before you (or your colleagues) can start browsing through your lconf-tree, you must defina one or more connections. LConf for icinga offers both the admin and the normal user a connection manager, where you can create and manage your connections.

Managing connections

Admins generally see all connections and are able to grant or deny access to groups or users for each connection. "Normal" users are only allowed to manage connections created by them self and are not able to grant any access to other users.
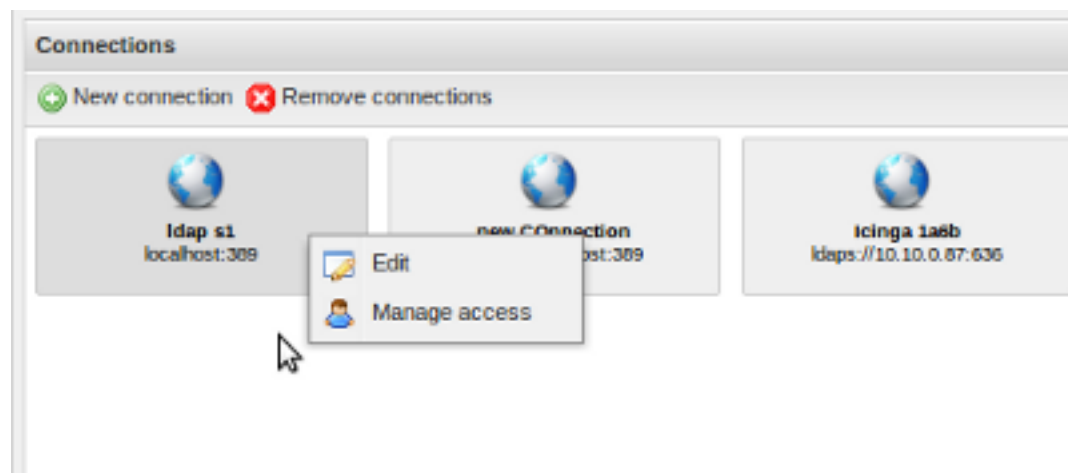
Connection list overview

In the connection manager, you can

Create new connections	Located at the top toolbar of the connection list, this allows you to create a new connection.
Remove connections	Located at the top toolbar of the connection list. With this button you can delete one or more selected connections.
Edit connections	To edit a connection, perform a left-click on the connection and select the 'edit' item.
Manage access to connections	Click on a connection and select 'Manage access' to grant or deny this connection for users/groups

Creating and editing connections

When you want to create or edit connections, you'll see the following mask:

Connection modification mask

|	
Connection name (*)	The name that should be shown for your connection.
Connection Description	The description for the connection, if any.
Bind DN (*)	The Bind DN with which to access the ldap server.
Bind Pass (*)	The password to use in order to identify at the server
Host (*)	The host address of the ldap server

Port (*)	The port of the ldap server
RootDN	The DN to use as your trees root, if any
Use TLS	If checked, STARTTLS will be used to start the connection
Enable SSL	If checked, ldaps:// will be used for the connection (check your port then)
Check Connection	Check whether a connection can be established. You must enter the password in order to check the connection
Save	Saves the changes

Grant usage for connections

When you have the lconf.admin credential, you are allowed to manage the access for users. This can be done by dragging Users/Groups from the 'available' field to the 'selected' field.
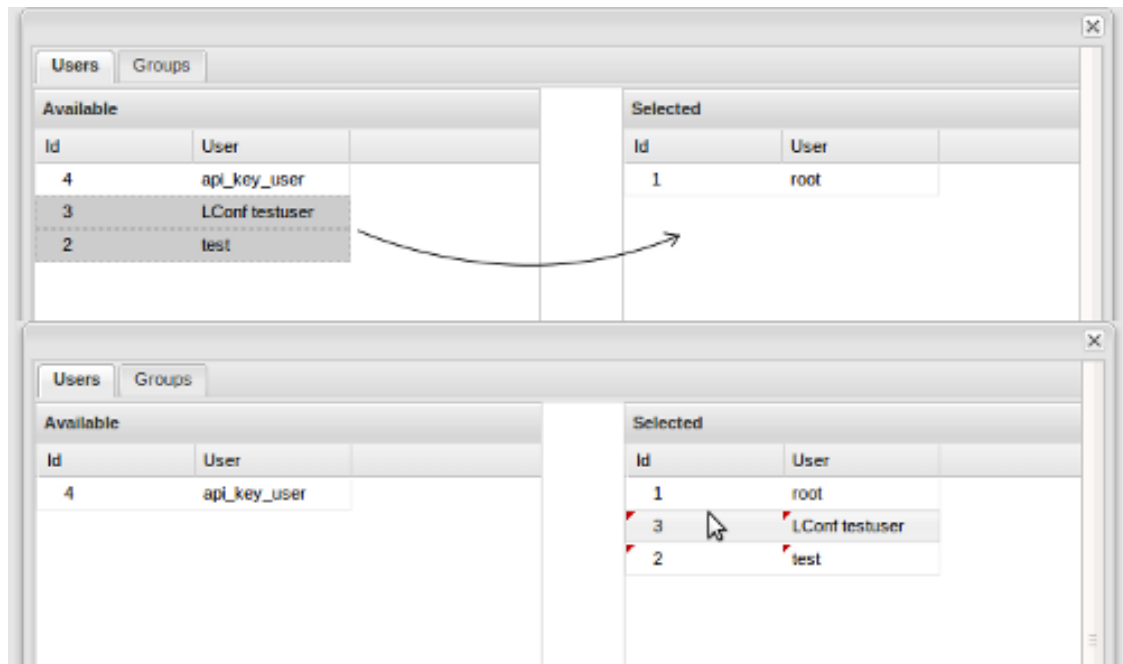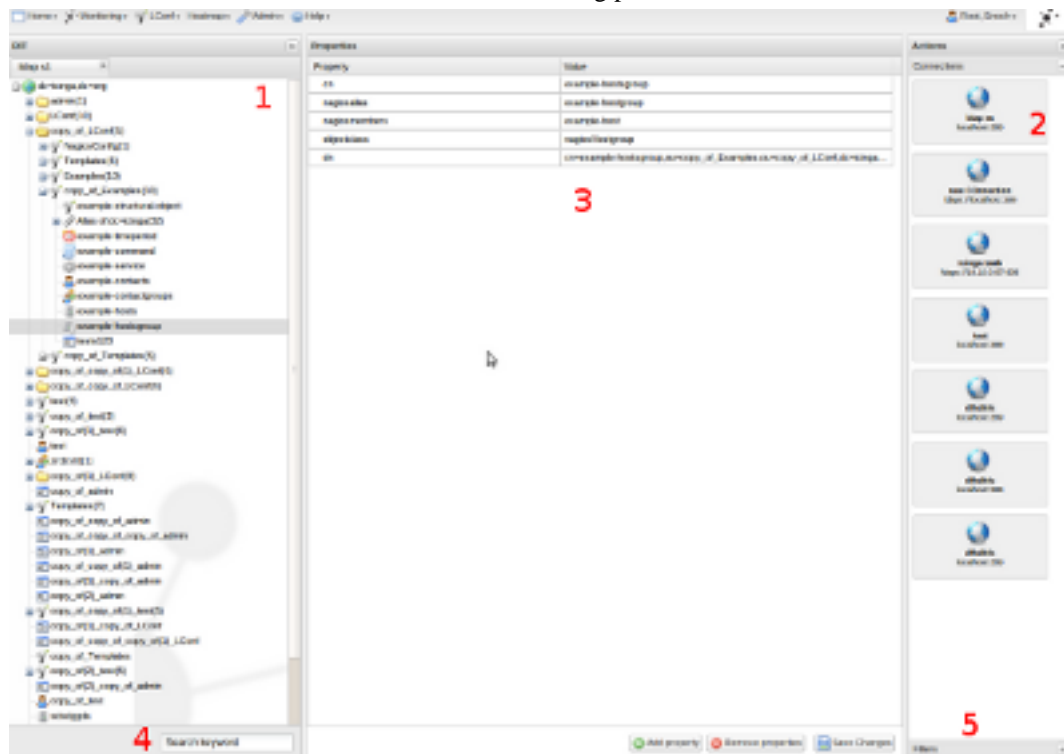

Granting access

Chapter 4. The LDAP Editor - a quick overview

In this chapter you'll get a basic overview over the interface elements in the LConf LDAP editor.

The main interface

The main interface of the LDAP Editor consists of the following parts

The LDAP Main interface

The LDAP Tree (1)

The LDAP Tree displays the structure of you ldap server in a handy tree view. In this tree you can create, delete, modify, move or clone entries via Drag&Drop, create aliases and perform search/replace operations.

You can switch between the trees of different connections via the tabbar on top of the tree. It's even possible to drag nodes from one tree to another. Please note that all trees are affected by filters (which we will discuss later).

The connection overview (2)

Here you see all connections you are granted for and connect to them via clicking on them and selecting "connect".

The property editor (3)

This editor assists you by modifying ldap entries. It features ajax-driven combofields for some entries.

Please note that the editor does not check if your modification makes sense. Though, the LDAP server will and you'll get a error message

If you want to customize the proposed items of the comobofield, refer to chapter 10 - Pimpin' your LConf-config files

|	
The quick search (4)	Enter a search word here and LConf for icinga will search every entry containing this text snippet, showing it in a nice groupable view.
The filter editor (5)	If you only want to see specific entries, you can create a filter for it here and save it. There should be some default filters shipped with your installation.

Chapter 5. The LDAP Tree

LConf for icinga displays the content of your ldap database in a tree view, like almost any other LDAP Tool does (perhaps because it makes sense).

We tried to achieve a very high grade of usability in this tree, and, as you will see in this chapter, therefore tried to make every action as simple as possible (but not simpler).

Modify nodes

If you want to edit the properties od a node, just click on it. It's properties will be loaded to the property manager.

When you perform a right click on a node, you'll see the following context menu (note that 'delete all nodes' only is shown when more than one node is selected). Some of these options are not available when working on alias nodes.:
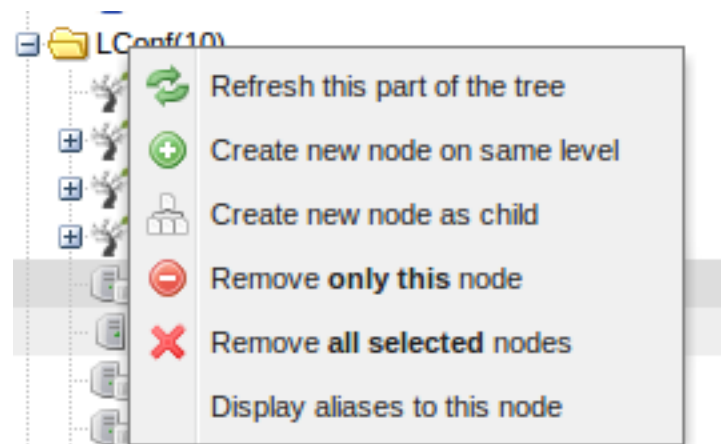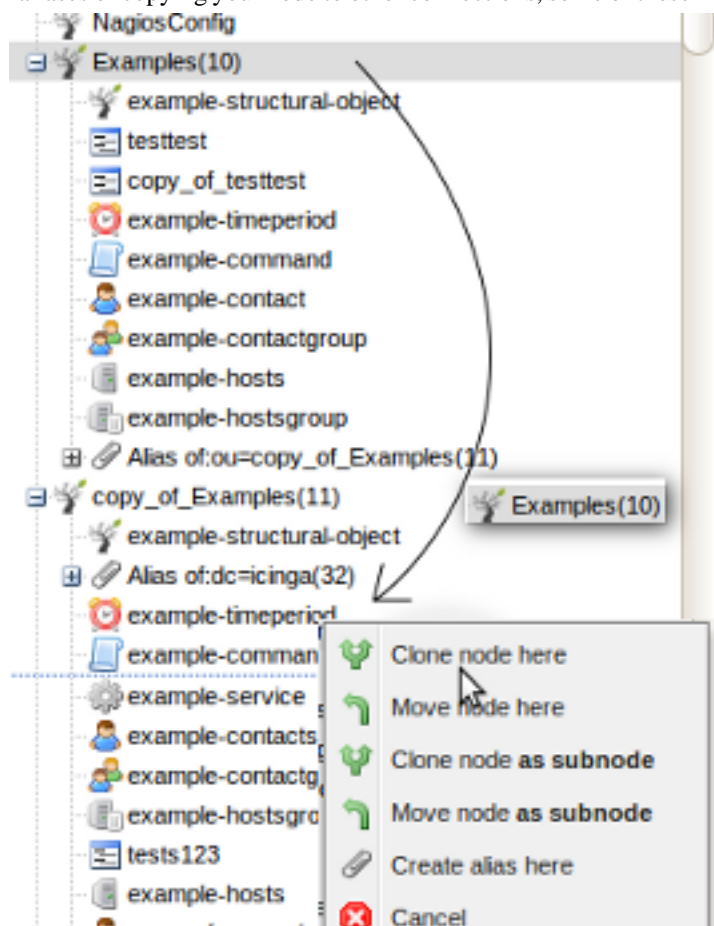

Node context-menu

Refresh this part of the tree	Reloads the content of this node and its subnodes from the server and displays it.
Create new node on same level	Creates a new node on the same level like this node.
Create new node as child	Creates a new node below this node.
Remove only this node	Removes this node and its subnodes. Aliases to these nodes will be deleted, too.
Remove all selected nodes	Removes all selected nodes and their subnodes. Aliases to these nodes will be deleted, too. If only one node is selected, this won't be displayed.
Display aliases to this node	Shows all aliases pointing to this node (if any).
Jump to alias target	Only displayed if this node is an alias (or below one). Jumps to the node represented by this alias.

Moving and copying nodes

When you drag a node to another part of the tree, you can choose between one of these actions (note that when working with aliases or copying your node to other connections, some of these may not be available):
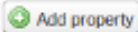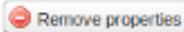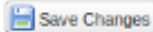

Node drag context-menu

Clone node here	Copies the node to this location (if it already exists here, copy_of will be prepended)
Move node on same level	Moves the node to this location. Aliases to this node (or its subnodes) will point to the new position of the node.
Clone node as subnode	(Only if applied on leaf) Creates a copy of the dragged node below this node.
Move node as subnode	(Only if applied on leaf) Moves the dragged node below this node. Aliases to this node (or its subnodes) will point to the new position of the node.
Create alias here	Create a aliasedObject node pointing to the dragged node here.

Chapter 6. Editing properties

Edit properties

When you select a node, it's properties will be loaded into the property editor. here you can modify, delete or add properties. Via the buttons at the button you can add properties or remove the selected.

The changes will only be applied if you press the "Save Changes" button.

When you click on a cell (except the dn cell, which can't be modified manually), you can edit the property. If a data provider is defined for the property type, you'll be assisted by an ajax driven combobox delivering you proposals.

Note

If the properties are invalid, the editor won't notice until the ldap server will inform you.

Note

Changing the objecttype is not possible, you'll have to create a new element with the same properties and delete this one manually.

Chapter 7. Searching the tree

There are two ways of finding entries in the tree: Perform searches or create filters. In this chapter the use of the search field, which can be used for simple text-occurence search, will be described.

The search field is located at the bottom of the LDAP Tree.
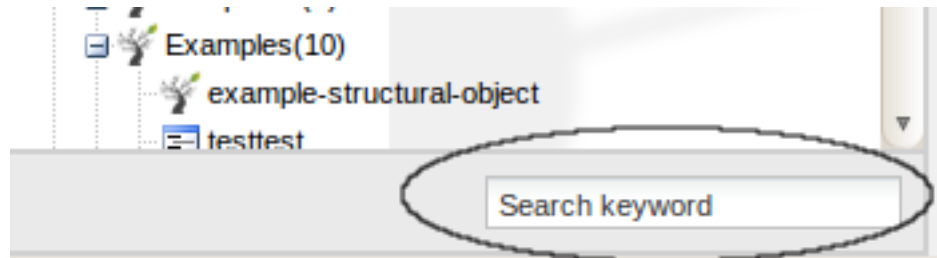
The search field. You'll like it.

After you enter the text snippet you want to search, you'll see the result window, nicely grouping the found nodes in categories. If you click on an entry, you can directly jump to the position in the tree where this node is located.
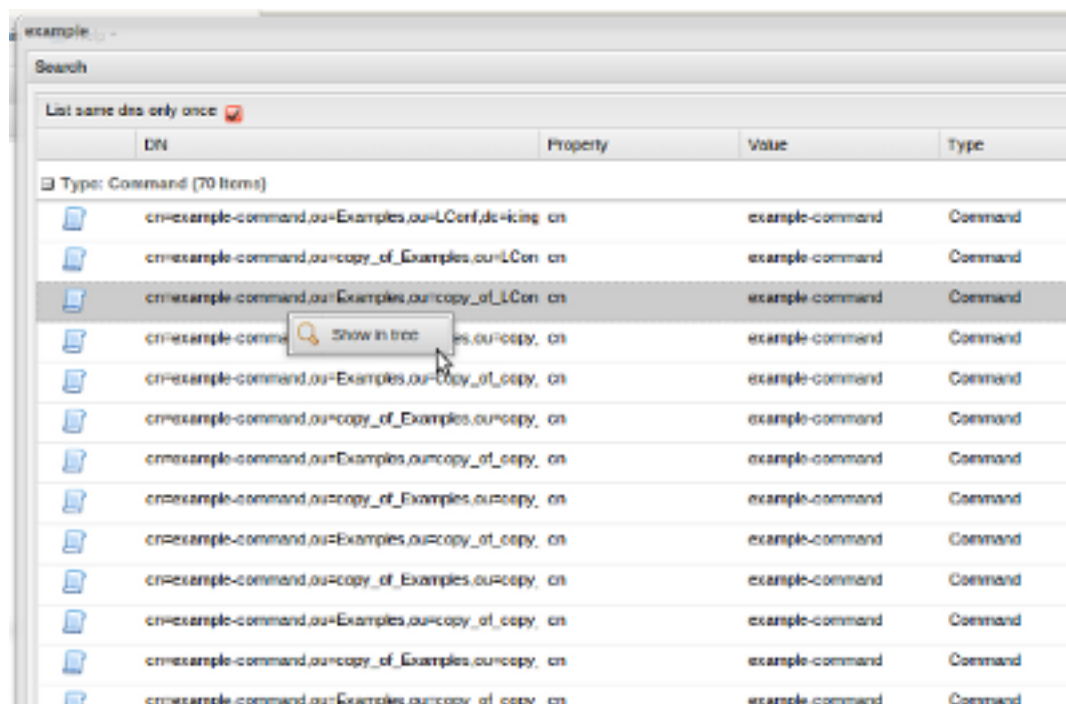
The result view.

If you wan't to change the group field, just click on the field header and select "Group By This Field".
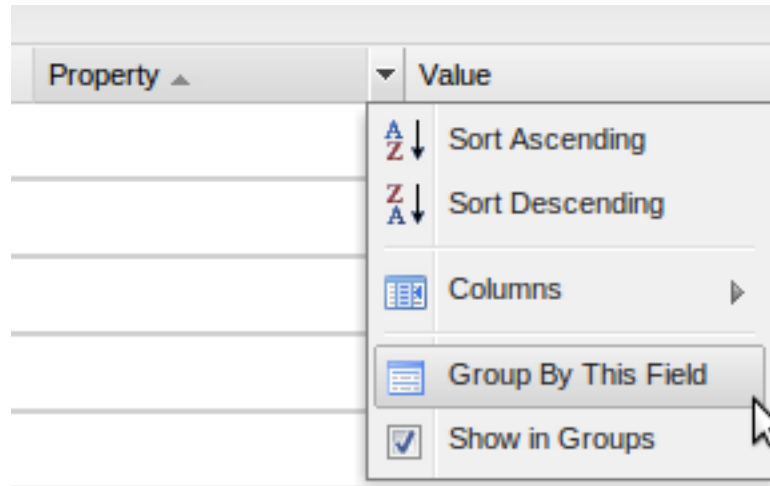
Changing the grouping parameter.

Chapter 8. Creating and managing filters

Filters offer you a great possibility of making your ldap tree more clear

Filters can be rather easy, like 'Show me all hostgroups starting with "local"', but can also get complex, like 'Show me all hostgroups, hosts starting with 'local' or all services with checkcoomands starting with PING except services havin g 'dummy' in their name'

Filters can be easily created via Drag&Drop. Just click on the 'New' Button in the filterdialog and the filter manager will appear.
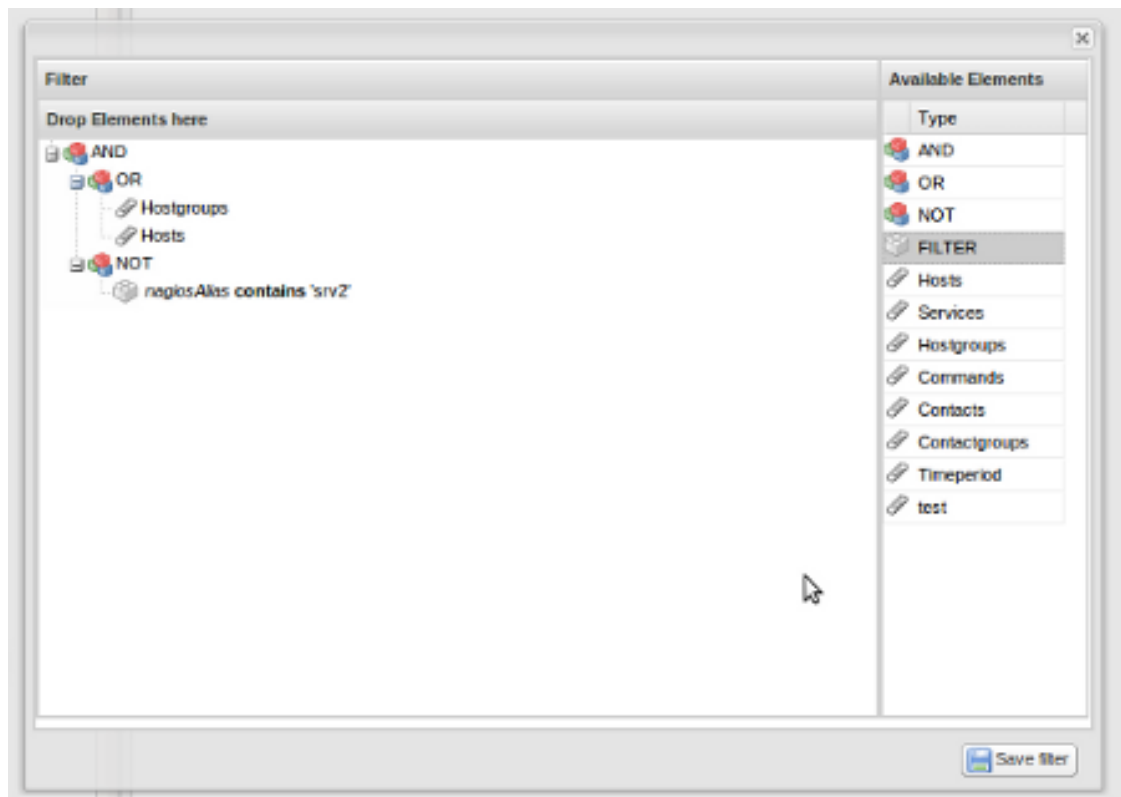
Creating a filter that only displays hosts and hostgroups not havingf srv2 in the name.

Notice that you can use previous defined filters as parts of your new filter. You can build complex filters out of smaller simple filters and keep the filter tree clear.

Click on a filter in the filterlist to activate it. Active filters are displayed with a green icon.
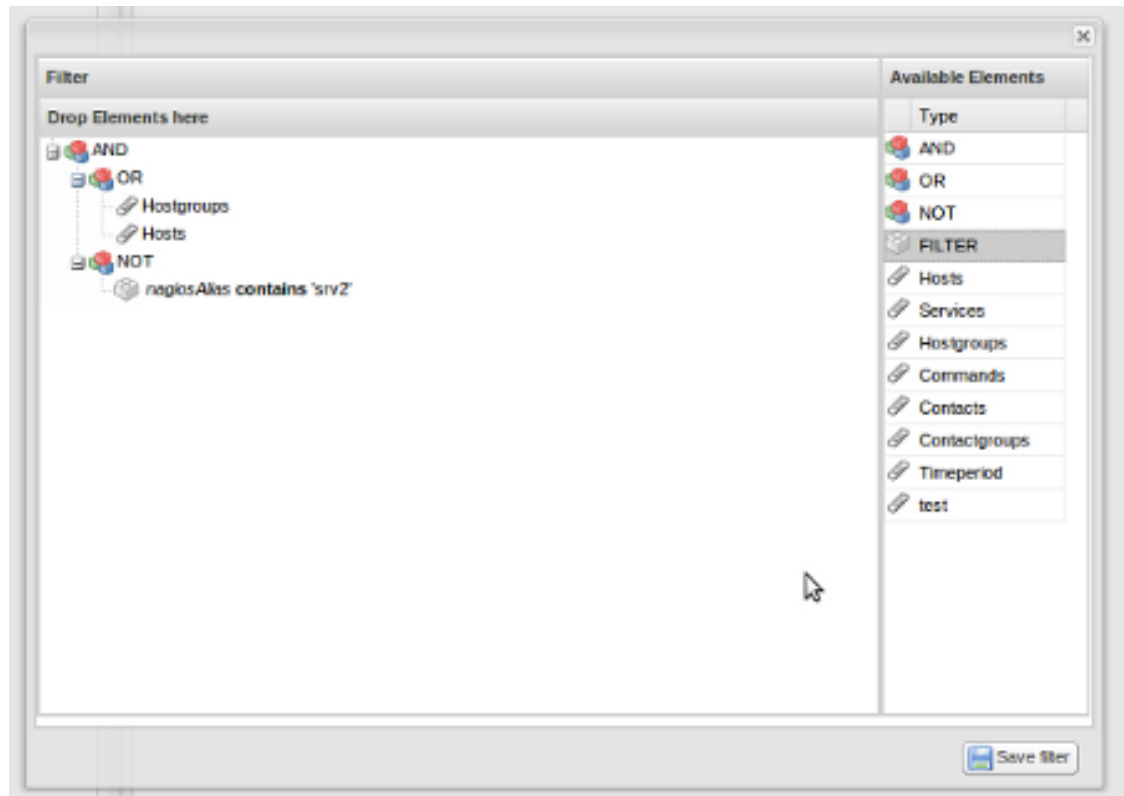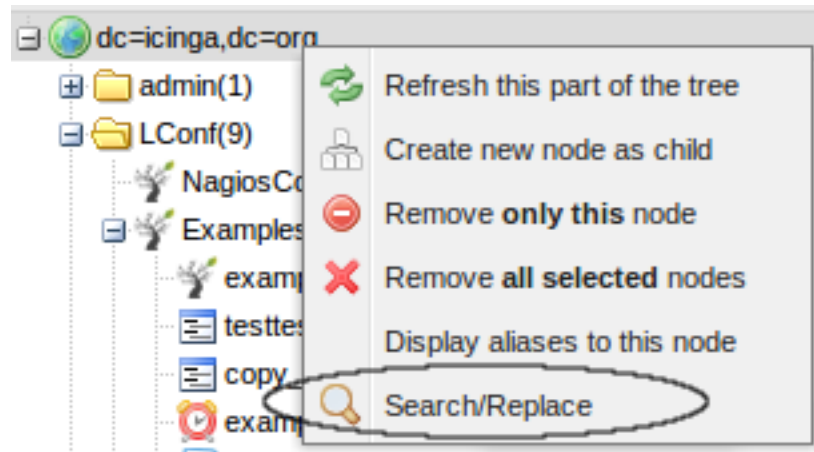
Activate a filter

At the top of the filterlist there is a bypass button, which allowes you to temporary disable all filters. Filter modification or activation/deactivation is not possible when in bypass mode.
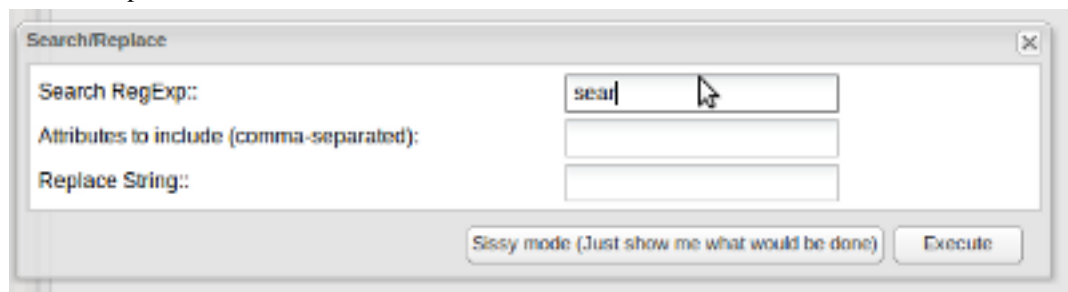
Chapter 9. Search&Replace

The last feature we'll describe here is the search&replace function. It's located at the context menu of the root node

The search/replace function is located at the tree root.

The search/replace mask looks like this:

Search replace.

Search RegExp   A regular expression which should be replaced with the replace string.
                              Backreferences can be achieved with \1.

Attributes to include   The attributes to include in the search/replace process.

Replace String   The String to replace the regexp with (grouped fields can be accessed
                              with $1, $2,..,,$9).

Sissy Mode   Shows which fields will be affected by the operation. It's better to be a
                              sissy than messing up your tree.

Execute   Execute the query.

Note

Filters will be respected when you use search/replace

Chapter 10. Integration to icinga-web host/service view (optional)

You have the possibility to execute the additional CronkIntegration script, which allows you to jump directly from a host/service in the host/service view to it's appropriate ldap entry. In the module folder, type `cd CronkIntegration;    ./install.sh` And follow the instructions.

Note

You need a CustomVariable entry named "DN" and containing the DN for each host that is in the tree

Chapter 11. Support

If you find any issues or have a feature request, feel free to open an issue at http://www.netways.org [https://www.netways.org/projects/list_files/lconf-icinga-mod]