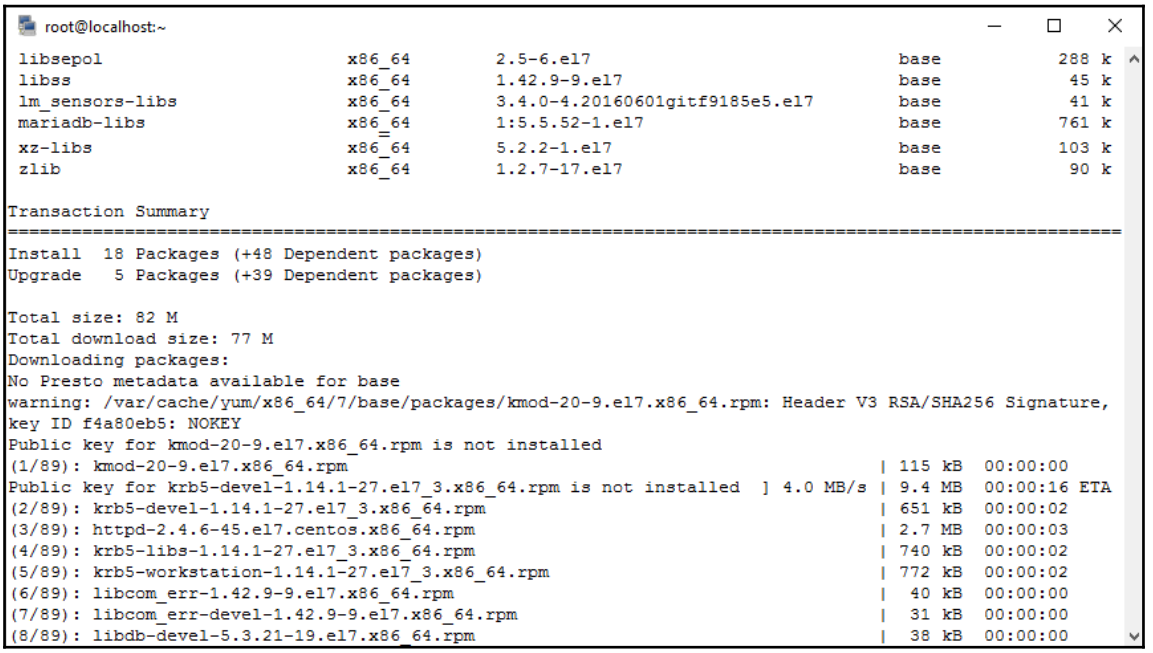
Chapter 1: Installing Cacti




```
[root@localhost html]# wget https://www.cacti.net/downloads/cacti-$CACTIVERSION.tar.gz
--2017-12-19 08:33:11--  https://www.cacti.net/downloads/cacti-1.1.28.tar.gz
Connecting to 10.27.30.106:80... connected.
Proxy request sent, awaiting response... 200 OK
Length: 8953179 (8.5M) [application/x-gzip]
Saving to: 'cacti-1.1.28.tar.gz'

63% [============================>                ] 5,699,341   1.87MB/s
```

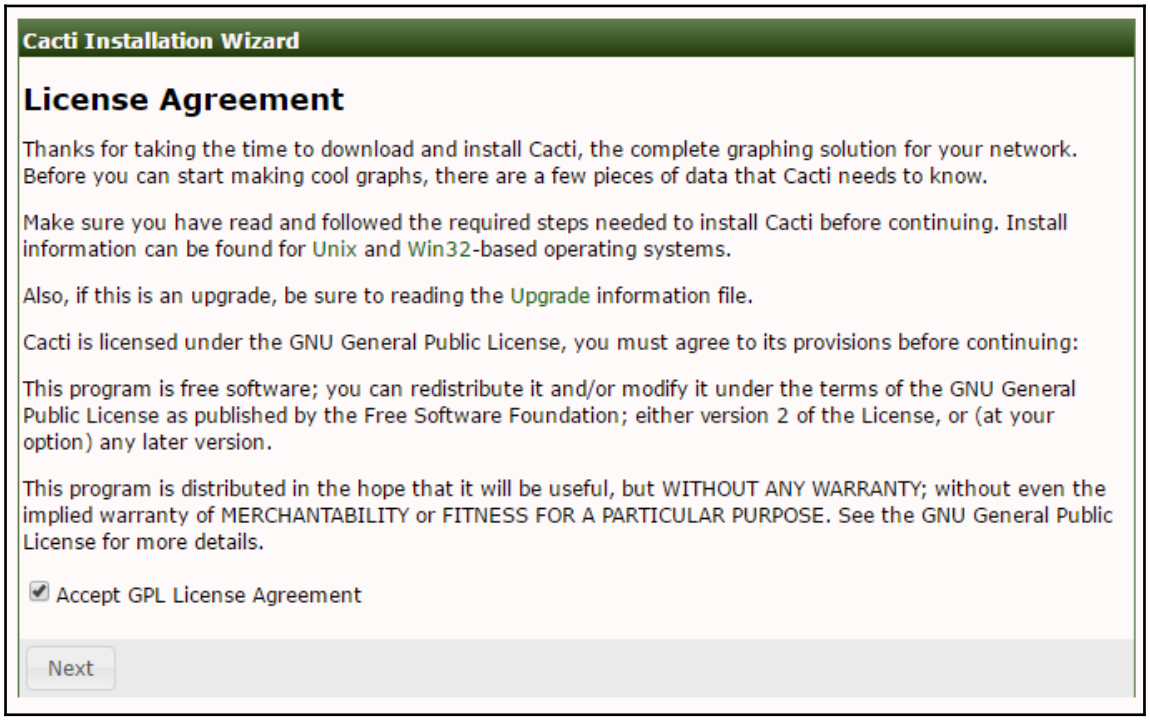
```
[root@localhost html]# ls -l
total 8748
lrwxrwxrwx. 1 root root      12 Dec 11 09:52 cacti -> cacti-1.1.28
drwxrwxr-x. 1 1000 1000    2826 Nov 19 15:27 cacti-1.1.28
-rw-r--r--. 1 root root 8953179 Nov 19 15:29 cacti-1.1.28.tar.gz
```

```
[root@localhost html]# mysql -u root -p mysql
Enter password:
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 14
Server version: 5.5.52-MariaDB MariaDB Server

Copyright (c) 2000, 2016, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [mysql]>
```

```
[mysqld]
datadir=/var/lib/mysql
socket=/var/lib/mysql/mysql.sock
symbolic-links=0
max_heap_table_size=90M
max_allowed_packet=16M
tmp_table_size=64M
join_buffer_size=64M
innodb_file_per_table=ON
innodb_buffer_pool_size=450M
innodb_doublewrite=OFF
innodb_additional_mem_pool_size=80M
innodb_lock_wait_timeout=50
innodb_flush_log_at_trx_commit=2
character_set_server=utf8
character_set_client=utf8
collation_server=utf8_general_ci
default-time-zone='Europe/Berlin'
innodb_flush_log_at_timeout=3
innodb_read_io_threads=32
innodb_write_io_threads=16
```

```
/* make sure these values reflect your actual database/host/user/password */

$database_type     = 'mysql';
$database_default  = 'cacti';
$database_hostname = 'localhost';
$database_username = 'cactiuser';
$database_password = 'MyV3ryStr0ngPassword';
$database_port     = '3306';
$database_ssl      = false;
```

```
DB_Host                 localhost
DB_Database             cacti
DB_User                 cactiuser
DB_Pass                 MyV3ryStr0ngPassword
DB_Port                 3306
```



Cacti Installation Wizard

Pre-installation Checks

MySQL TimeZone Support

Your Cacti database account has access to the MySQL TimeZone database and that database is populated with global TimeZone information.

Required PHP Module Support

Cacti requires several PHP Modules to be installed to work properly. If any of these are not installed, you will be unable to continue the installation until corrected. In addition, for optimal system performance Cacti should be run with certain MySQL system variables set. Please follow the MySQL recommendations at your discretion. Always seek the MySQL documentation if you have any questions.

The following PHP extensions are mandatory, and MUST be installed before continuing your Cacti install.

Required PHP Modules

Name	Required	Installiert
PHP version	5.2.0+	5.4.16
posix	Ja	Ja
session	Ja	Ja
sockets	Ja	Ja
PDO	Ja	Ja
pdo_mysql	Ja	Ja
xml	Ja	Ja
ldap	Ja	Ja
mbstring	Ja	Ja
pcre	Ja	Ja
json	Ja	Ja
openssl	Ja	Ja
gd	Ja	Ja
zlib	Ja	Ja

Optional PHP Module Support

The following PHP extensions are recommended, and should be installed before continuing your Cacti install.

Optional Modules

Name	Optional	Installiert
snmp	Ja	Ja
gmp	Ja	Ja

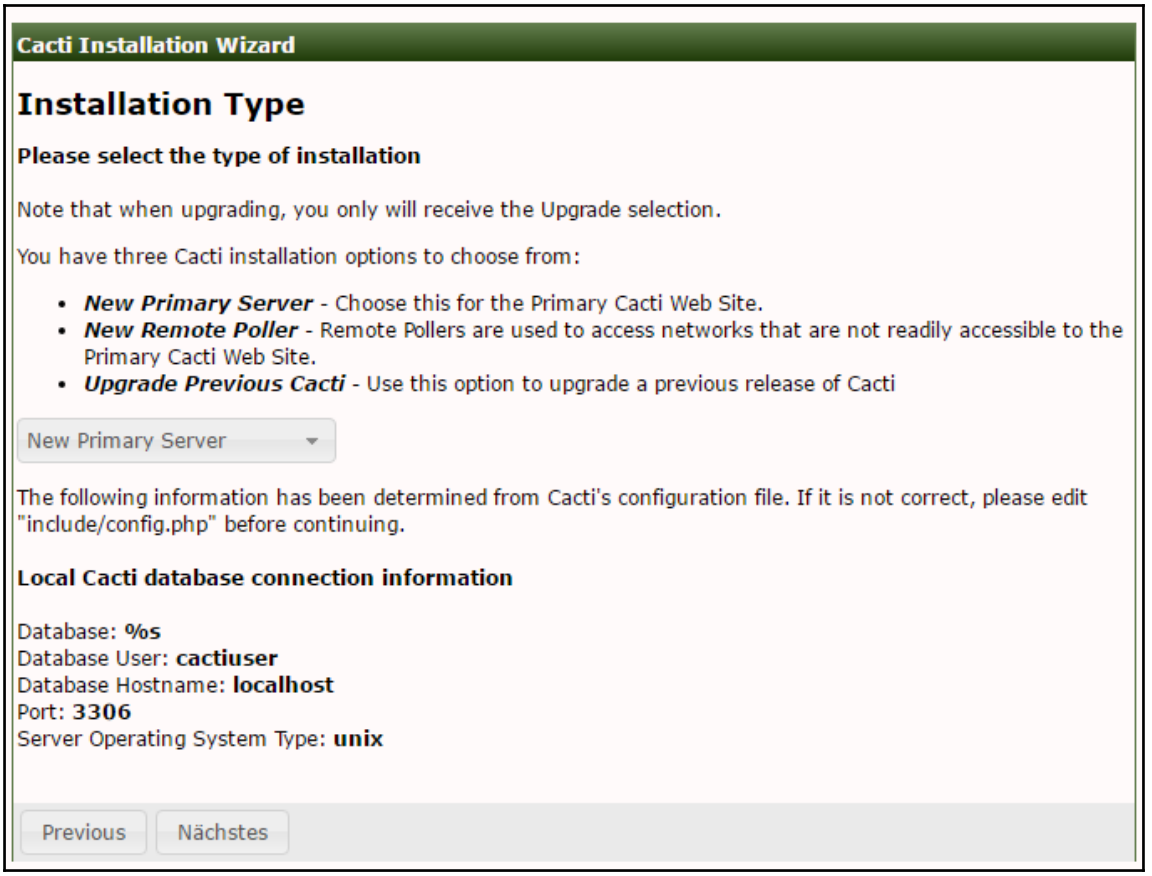
These MySQL performance tuning settings will help your Cacti system perform better without issues for a longer time.

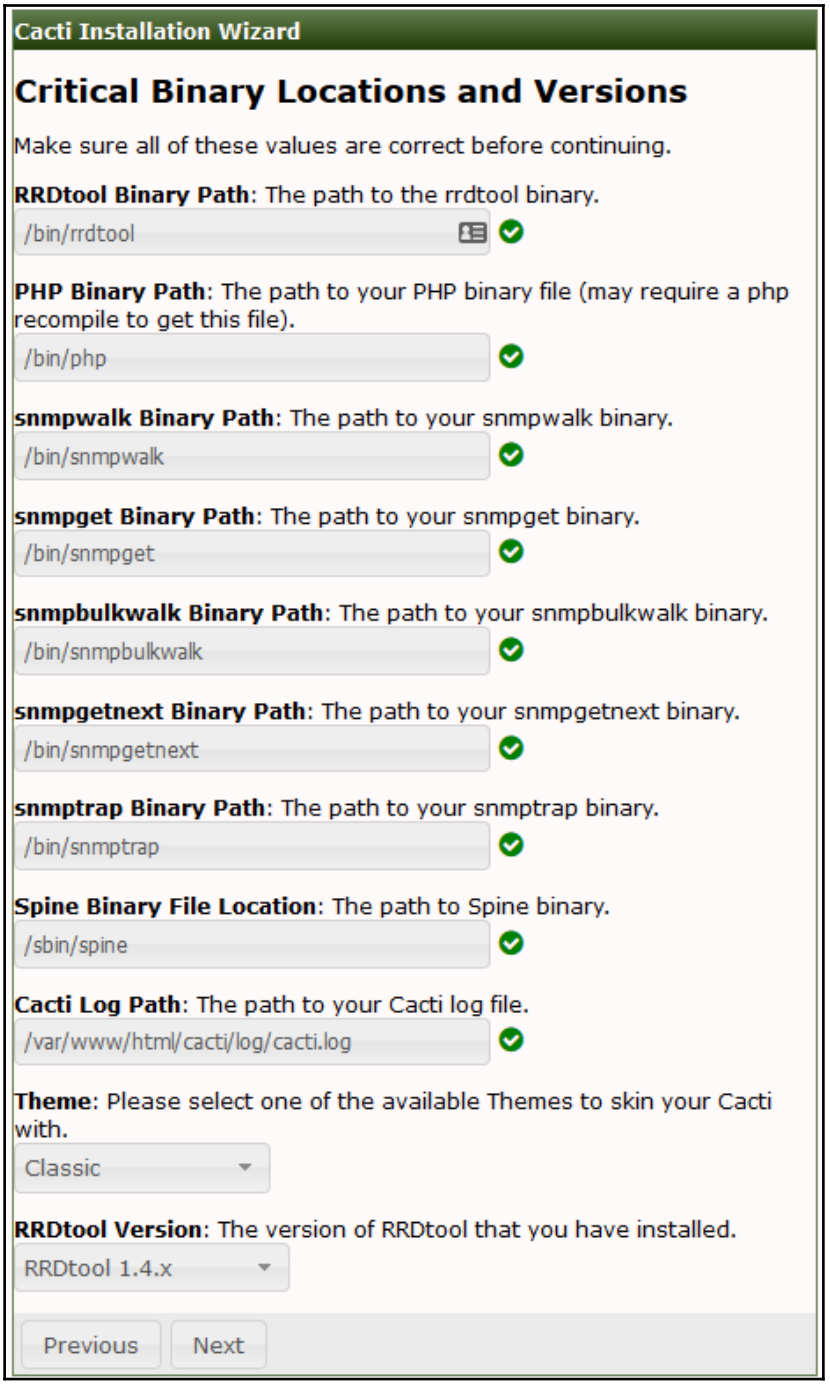
Recommended MySQL System Variable Settings

MariaDB Tuning (/etc/my.cnf) - [Documentation] Note: Many changes below require a database restart

Variable	Current Value	Recommended Value	Comments
version	10.1.21-MariaDB	>= 5.6	MySQL 5.6+ and MariaDB 10.0+ are great releases, and are very good versions to choose. Make sure you run the very latest release though which fixes a long standing low level networking issue that was causing spine m… issues with …
innodb_write_io_threads	16	>= 16	With modern SSD type storage, having multiple write io threads is advantageous for applications with high io characteristics.

Previous Next


Cacti Installation Wizard
Installation Type
Please select the type of installation
Note that when upgrading, you only will receive the Upgrade selection.
You have three Cacti installation options to choose from:
New Primary Server - Choose this for the Primary Cacti Web Site.
New Remote Poller - Remote Pollers are used to access networks that are not readily accessible to the Primary Cacti Web Site.
Upgrade Previous Cacti - Use this option to upgrade a previous release of Cacti
New Primary Server
The following information has been determined from Cacti's configuration file. If it is not correct, please edit "include/config.php" before continuing.
Local Cacti database connection information
Database: %s
Database User: cactiuser
Database Hostname: localhost
Port: 3306
Server Operating System Type: unix
Previous
Nächstes


Cacti Installation Wizard
Critical Binary Locations and Versions
Make sure all of these values are correct before continuing.
RRDtool Binary Path: The path to the rrdtool binary.
/bin/rrdtool
PHP Binary Path: The path to your PHP binary file (may require a php recompile to get this file).
/bin/php
snmpwalk Binary Path: The path to your snmpwalk binary.
/bin/snmpwalk
snmpget Binary Path: The path to your snmpget binary.
/bin/snmpget
snmpbulkwalk Binary Path: The path to your snmpbulkwalk binary.
/bin/snmpbulkwalk
snmpgetnext Binary Path: The path to your snmpgetnext binary.
/bin/snmpgetnext
snmptrap Binary Path: The path to your snmptrap binary.
/bin/snmptrap
Spine Binary File Location: The path to Spine binary.
/sbin/spine
Cacti Log Path: The path to your Cacti log file.
/var/www/html/cacti/log/cacti.log
Theme: Please select one of the available Themes to skin your Cacti with.
Classic
RRDtool Version: The version of RRDtool that you have installed.
RRDtool 1.4.x
Previous
Next

Cacti Installation Wizard

Directory Permission Checks

Please ensure the directory permissions below are correct before proceeding. During the install, these directories need to be owned by the Web Server user. These permission changes are required to allow the Installer to install Device Template packages which include XML and script files that will be placed in these directories. If you choose not to install the packages, there is an 'install_package.php' cli script that can be used from the command line after the install is complete.

After the install is complete, you can make some of these directories read only to increase security.

Required Writable at Install Time Only

/var/www/html/cacti-1.0.2/resource/snmp_queries is Writable

/var/www/html/cacti-1.0.2/resource/script_server is Writable

/var/www/html/cacti-1.0.2/resource/script_queries is Writable

/var/www/html/cacti-1.0.2/scripts is Writable

Required Writable after Install Complete

/var/www/html/cacti-1.0.2/log is Writable

/var/www/html/cacti-1.0.2/cache/boost is Writable

/var/www/html/cacti-1.0.2/cache/mibcache is Writable

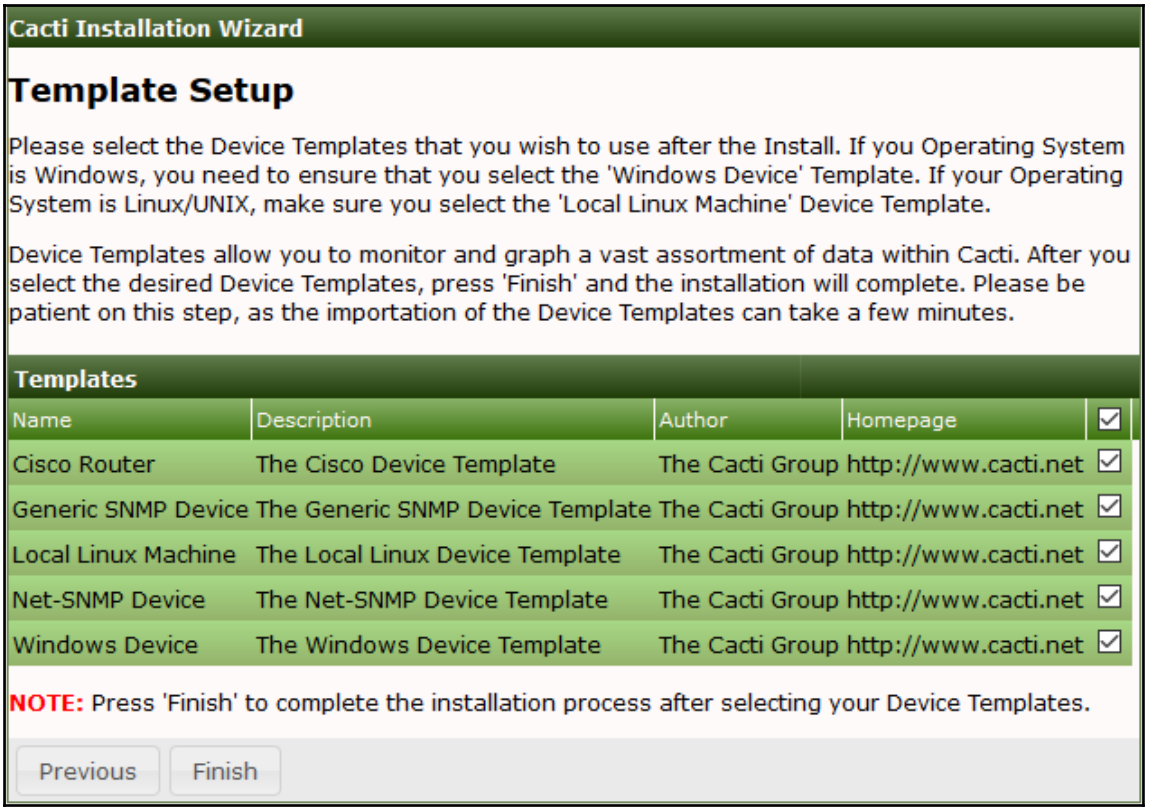
/var/www/html/cacti-1.0.2/cache/realtime is Writable

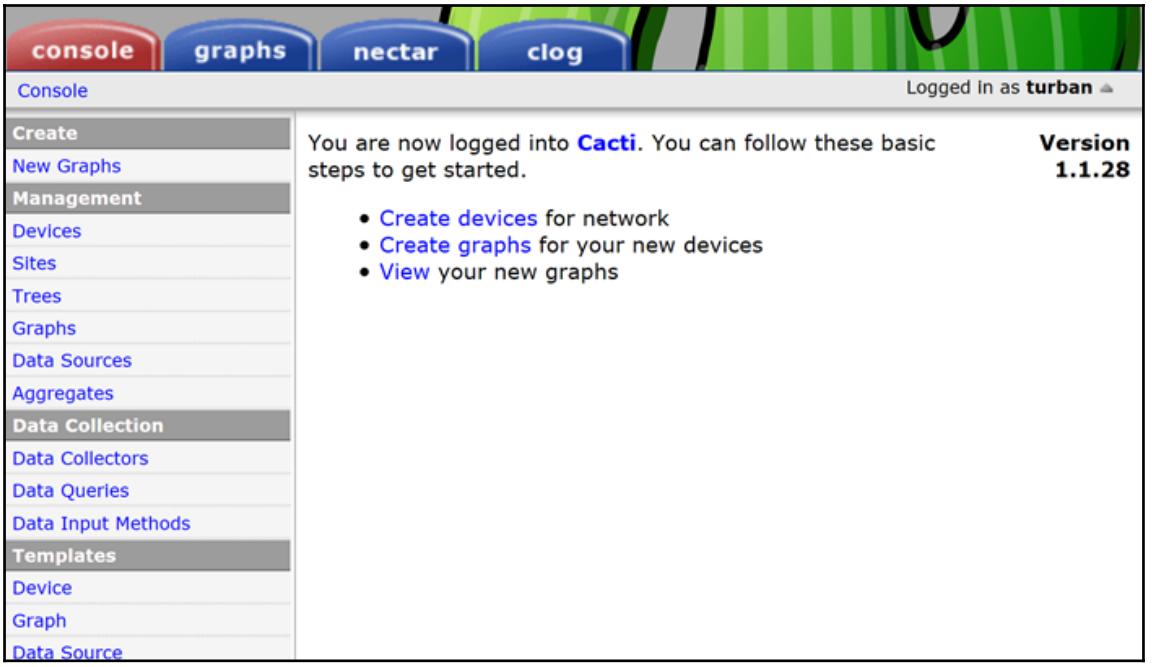
/var/www/html/cacti-1.0.2/cache/spikekill is Writable

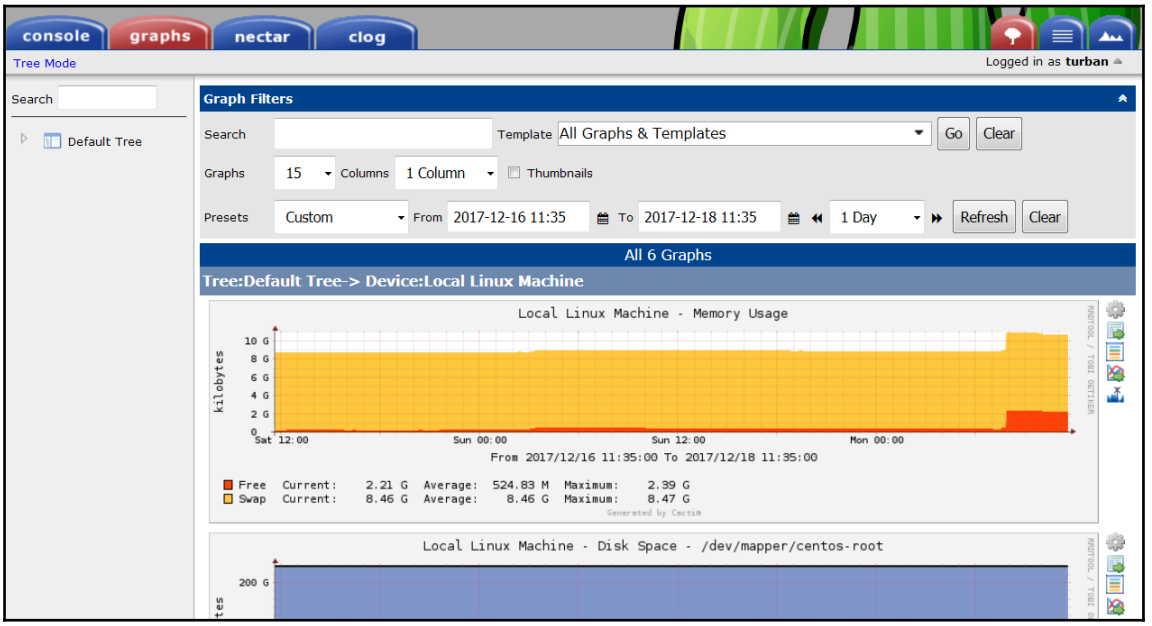
All folders are writable

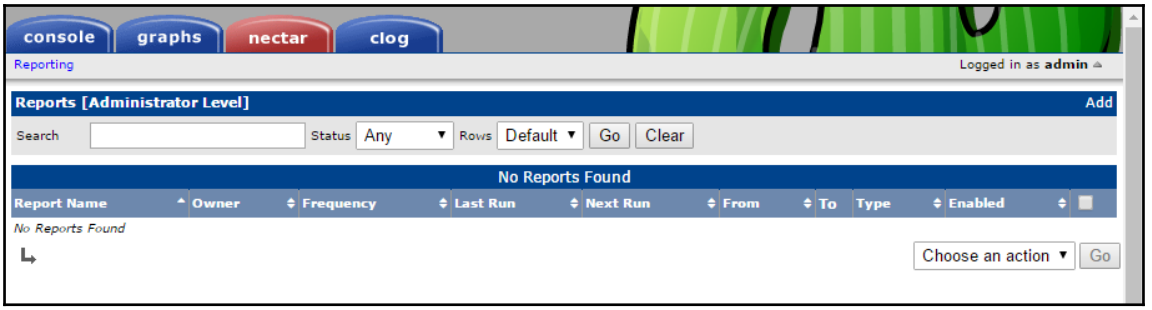
NOTE: If you are installing packages, once the packages are installed, you should change the scripts directory back to read only as this presents some exposure to the web site.

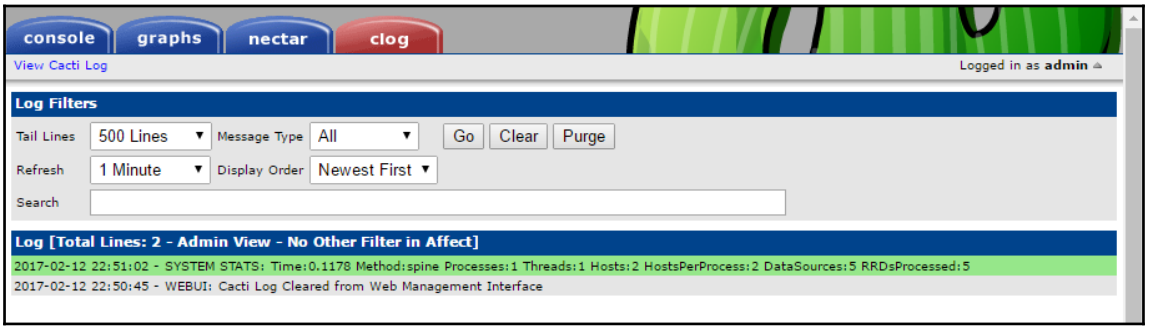
Previous Next

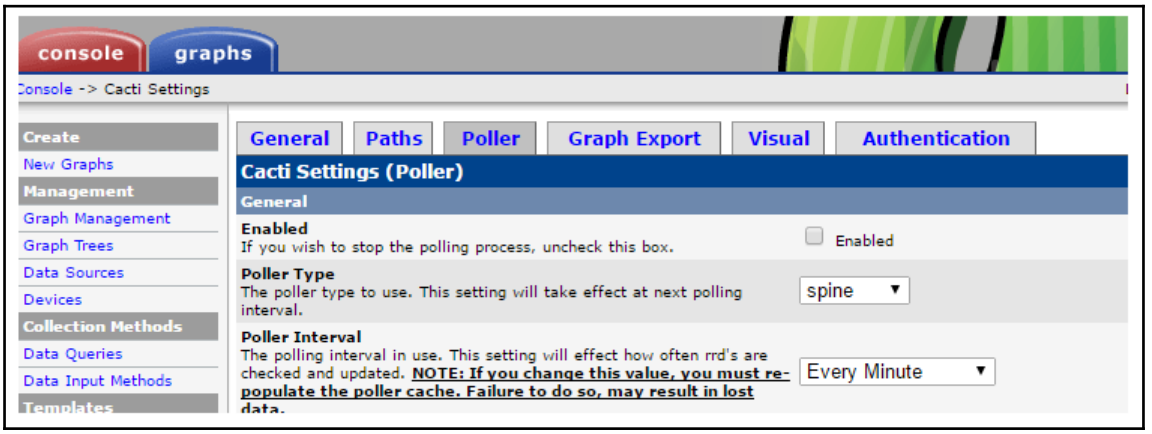

Cacti Installation Wizard
Template Setup
Please select the Device Templates that you wish to use after the Install. If you Operating System is Windows, you need to ensure that you select the 'Windows Device' Template. If your Operating System is Linux/UNIX, make sure you select the 'Local Linux Machine' Device Template.
Device Templates allow you to monitor and graph a vast assortment of data within Cacti. After you select the desired Device Templates, press 'Finish' and the installation will complete. Please be patient on this step, as the importation of the Device Templates can take a few minutes.
Templates
Name
Description
Author
Homepage
Cisco Router
The Cisco Device Template
The Cacti Group
http://www.cacti.net
Generic SNMP Device
The Generic SNMP Device Template
The Cacti Group
http://www.cacti.net
Local Linux Machine
The Local Linux Device Template
The Cacti Group
http://www.cacti.net
Net-SNMP Device
The Net-SNMP Device Template
The Cacti Group
http://www.cacti.net
Windows Device
The Windows Device Template
The Cacti Group
http://www.cacti.net
NOTE: Press 'Finish' to complete the installation process after selecting your Device Templates.
Previous
Finish

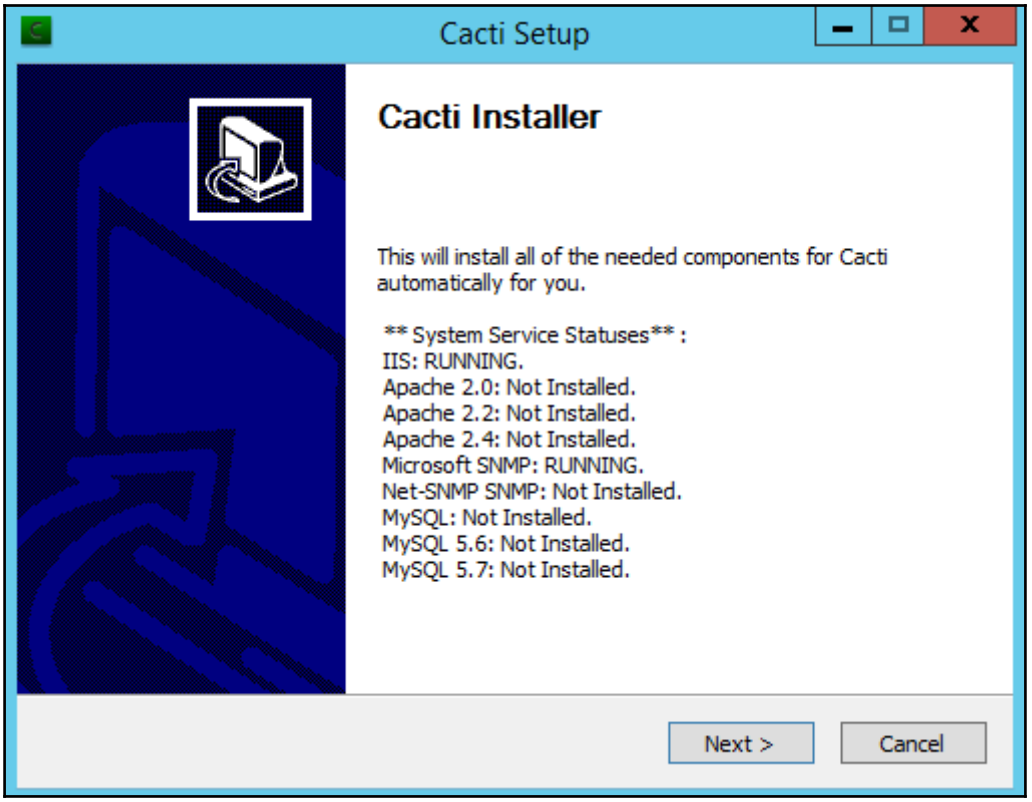

console
graphs
nectar
clog
Console
Logged in as turban
Create
New Graphs
Management
Devices
Sites
Trees
Graphs
Data Sources
Aggregates
Data Collection
Data Collectors
Data Queries
Data Input Methods
Templates
Device
Graph
Data Source
You are now logged into Cacti. You can follow these basic steps to get started.
Version 1.1.28
Create devices for network
Create graphs for your new devices
View your new graphs

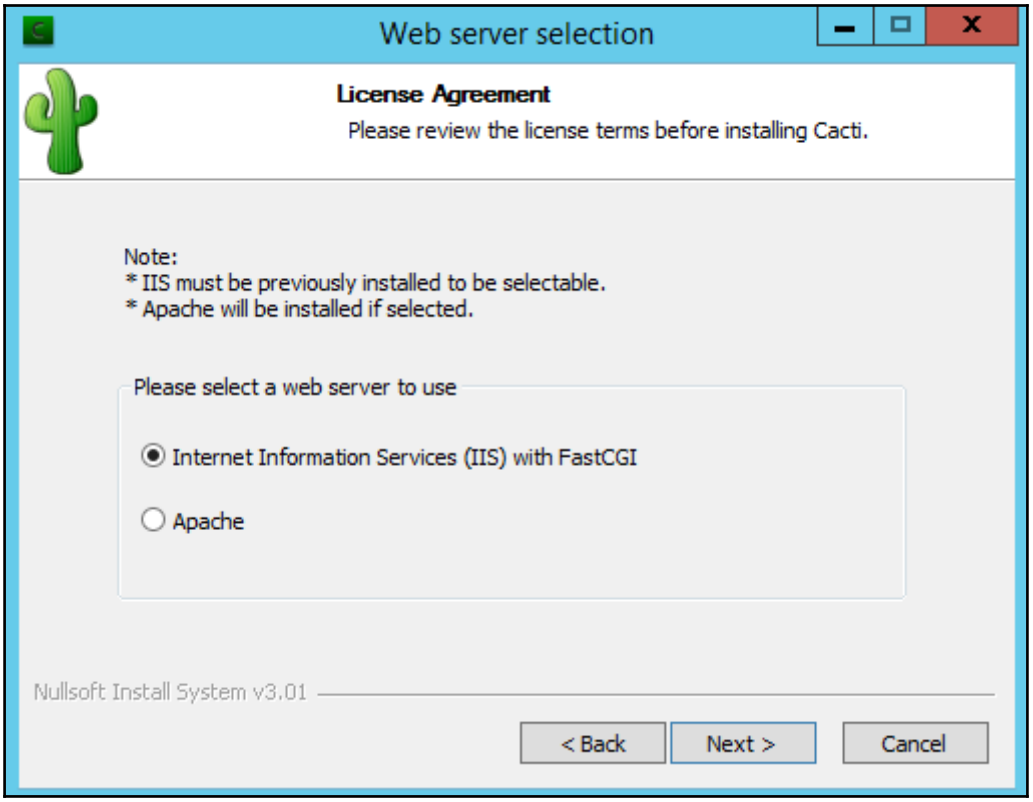

console
graphs
nectar
clog
Tree Mode
Logged in as turban
Search
Default Tree
Graph Filters
Search
Template
All Graphs & Templates
Go
Clear
Graphs
15
Columns
1 Column
Thumbnails
Presets
Custom
From
2017-12-16 11:35
To
2017-12-18 11:35
1 Day
Refresh
Clear
All 6 Graphs
Tree:Default Tree-> Device:Local Linux Machine
Local Linux Machine - Memory Usage
kilobytes
10 G
8 G
6 G
4 G
2 G
0
Sat 12:00
Sun 00:00
Sun 12:00
Mon 00:00
From 2017/12/16 11:35:00 To 2017/12/18 11:35:00
Free Current: 2.21 G Average: 524.83 M Maximum: 2.39 G
Swap Current: 8.46 G Average: 8.46 G Maximum: 8.47 G
Local Linux Machine - Disk Space - /dev/mapper/centos-root
200 G

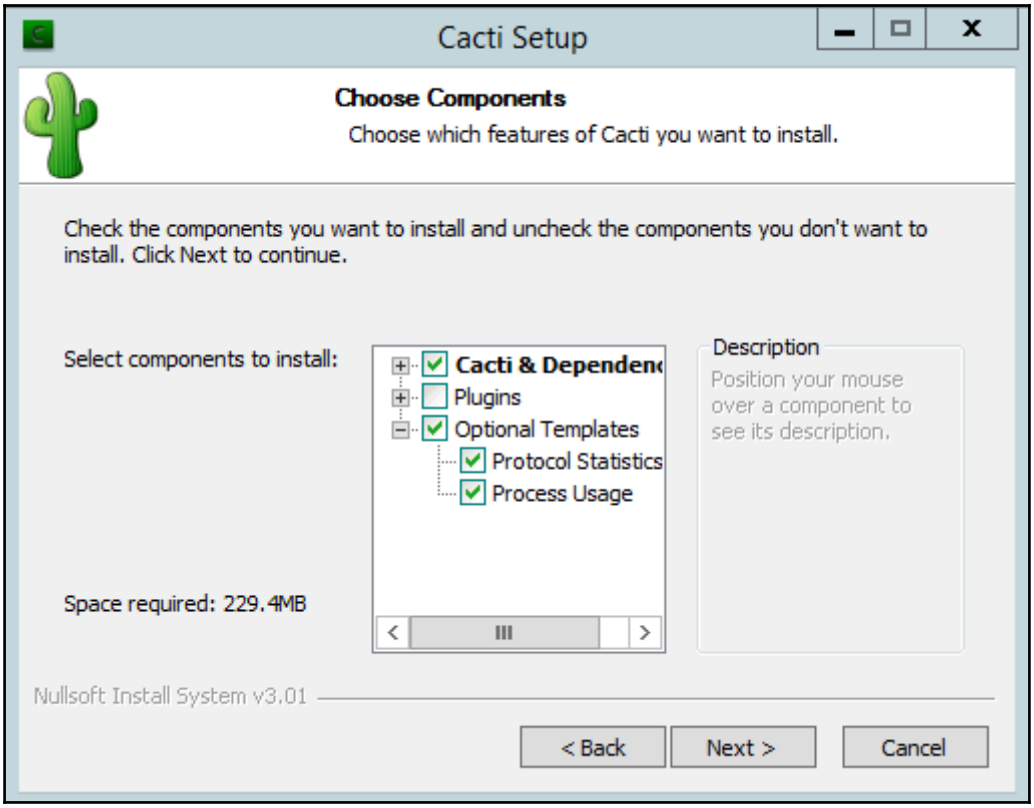

console
graphs
nectar
clog
Reporting
Logged in as admin
Reports [Administrator Level]
Add
Search
Status
Any
Rows
Default
Go
Clear
No Reports Found
Report Name
Owner
Frequency
Last Run
Next Run
From
To
Type
Enabled
No Reports Found
Choose an action
Go

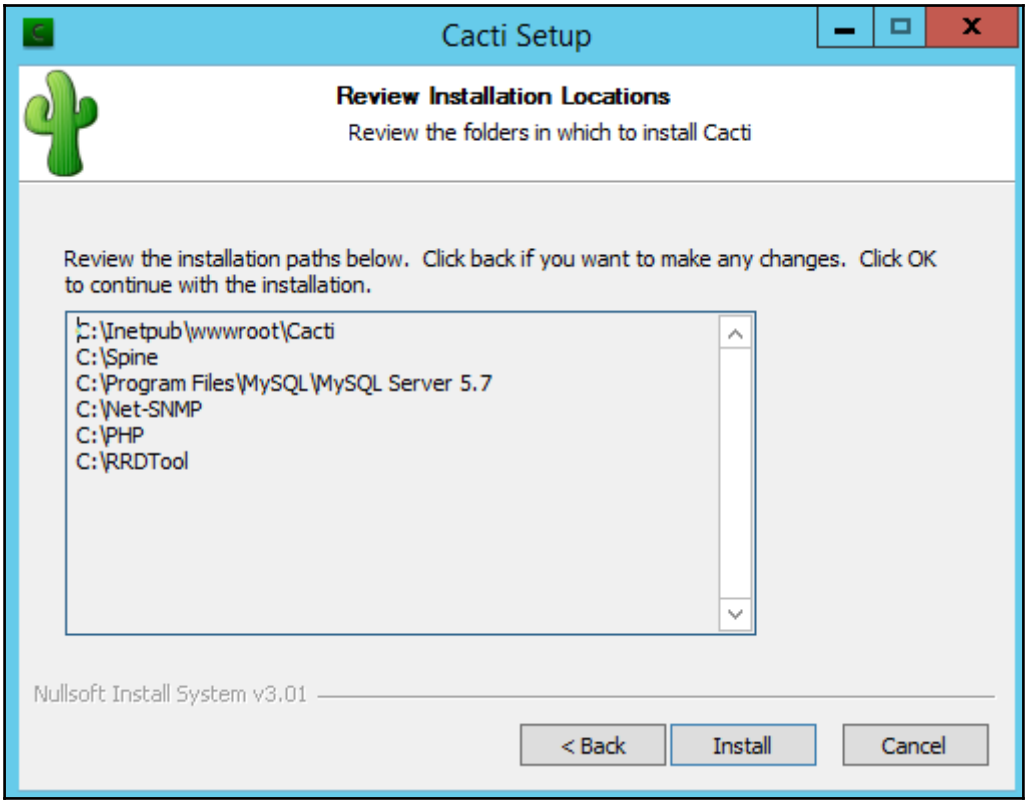

console
graphs
nectar
clog
View Cacti Log
Logged in as admin
Log Filters
Tail Lines
500 Lines
Message Type
All
Go
Clear
Purge
Refresh
1 Minute
Display Order
Newest First
Search
Log [Total Lines: 2 - Admin View - No Other Filter in Affect]
2017-02-12 22:51:02 - SYSTEM STATS: Time:0.1178 Method:spine Processes:1 Threads:1 Hosts:2 HostsPerProcess:2 DataSources:5 RRDsProcessed:5
2017-02-12 22:50:45 - WEBUI: Cacti Log Cleared from Web Management Interface


console
graphs
Console -> Cacti Settings
Create
New Graphs
Management
Graph Management
Graph Trees
Data Sources
Devices
Collection Methods
Data Queries
Data Input Methods
Templates
General
Paths
Poller
Graph Export
Visual
Authentication
Cacti Settings (Poller)
General
Enabled
If you wish to stop the polling process, uncheck this box.
Enabled
Poller Type
The poller type to use. This setting will take effect at next polling interval.
spine
Poller Interval
The polling interval in use. This setting will effect how often rrd's are checked and updated. NOTE: If you change this value, you must re-populate the poller cache. Failure to do so, may result in lost data.
Every Minute

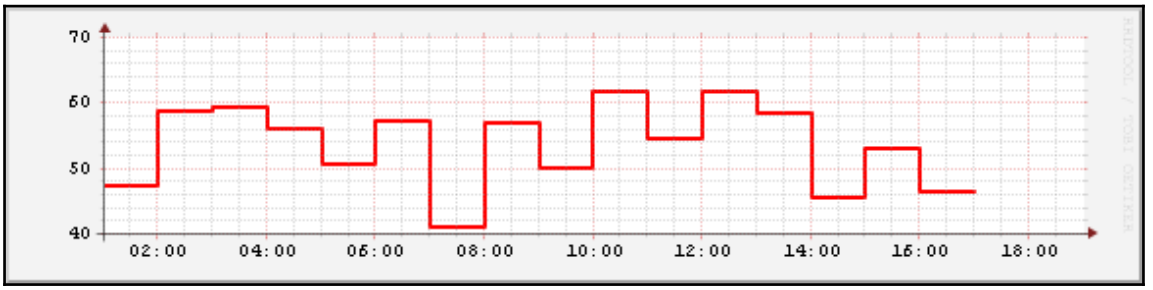

Cacti Setup
Cacti Installer
This will install all of the needed components for Cacti automatically for you.
** System Service Statuses** :
IIS: RUNNING.
Apache 2.0: Not Installed.
Apache 2.2: Not Installed.
Apache 2.4: Not Installed.
Microsoft SNMP: RUNNING.
Net-SNMP SNMP: Not Installed.
MySQL: Not Installed.
MySQL 5.6: Not Installed.
MySQL 5.7: Not Installed.
Next >
Cancel

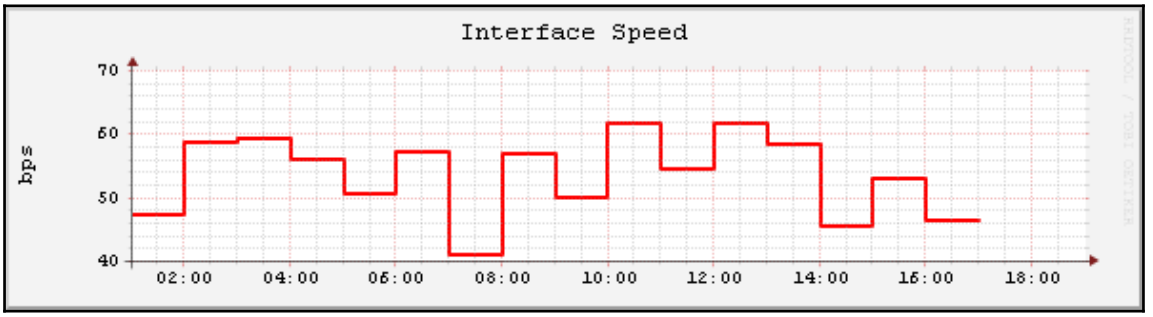

Web server selection
License Agreement
Please review the license terms before installing Cacti.
Note:
* IIS must be previously installed to be selectable.
* Apache will be installed if selected.
Please select a web server to use
Internet Information Services (IIS) with FastCGI
Apache
Nullsoft Install System v3.01
< Back
Next >
Cancel

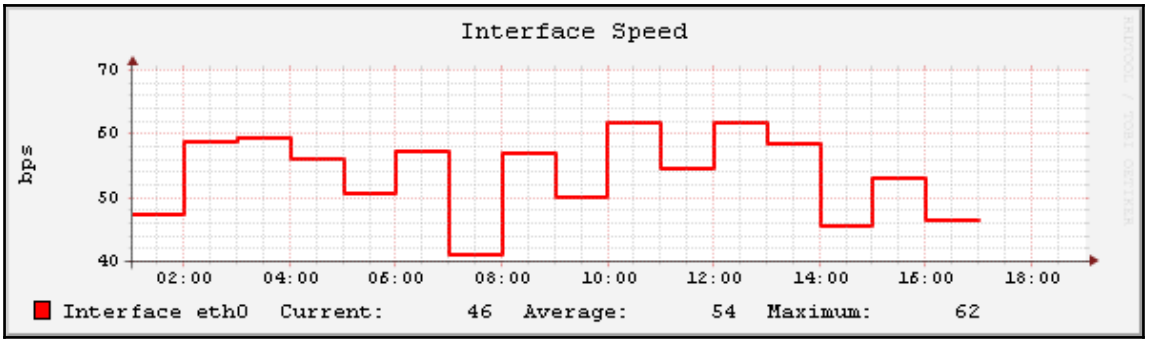

Cacti Setup
Choose Components
Choose which features of Cacti you want to install.
Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.
Select components to install:
Cacti & Dependenc
Plugins
Optional Templates
Protocol Statistics
Process Usage
Description
Position your mouse over a component to see its description.
Space required: 229.4MB
Nullsoft Install System v3.01
< Back
Next >
Cancel

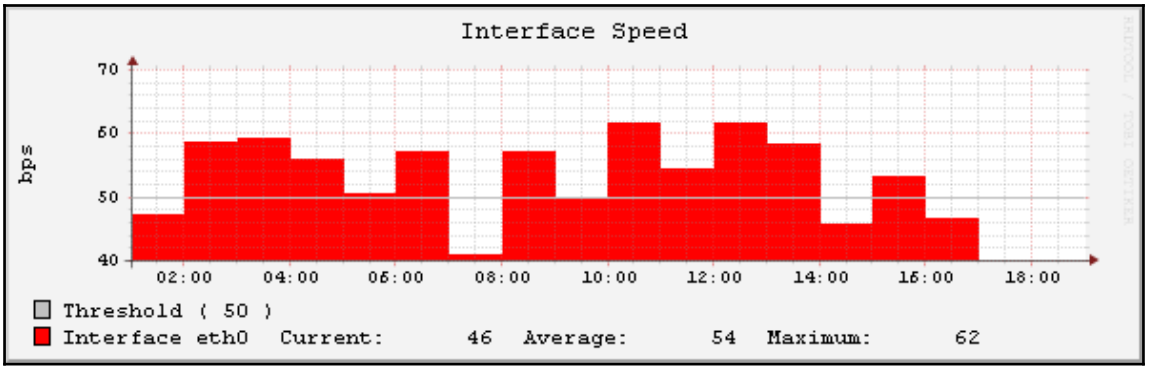

Cacti Setup
Review Installation Locations
Review the folders in which to install Cacti
Review the installation paths below. Click back if you want to make any changes. Click OK to continue with the installation.
C:\Inetpub\wwwroot\Cacti
C:\Spine
C:\Program Files\MySQL\MySQL Server 5.7
C:\Net-SNMP
C:\PHP
C:\RRDTool
Nullsoft Install System v3.01
< Back
Install
Cancel

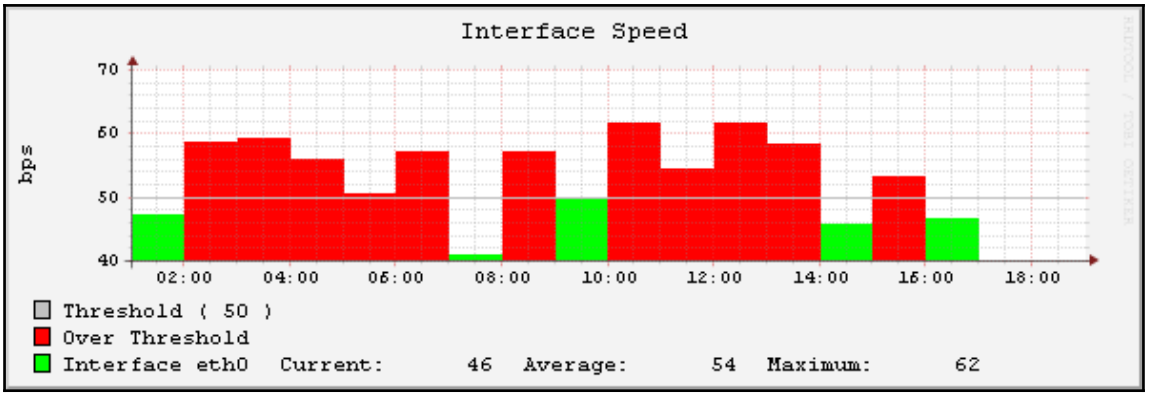
Chapter 2: Using Graphs to Monitor Networks and Devices

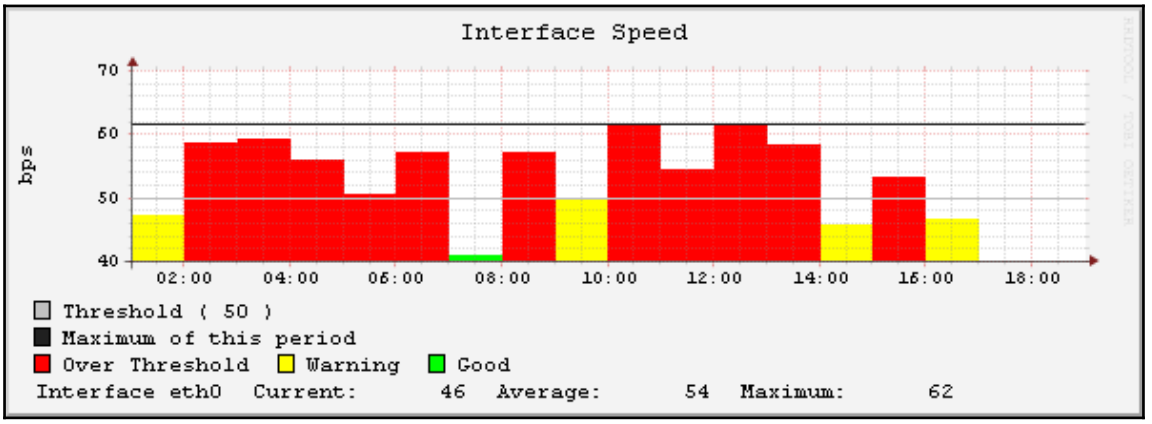


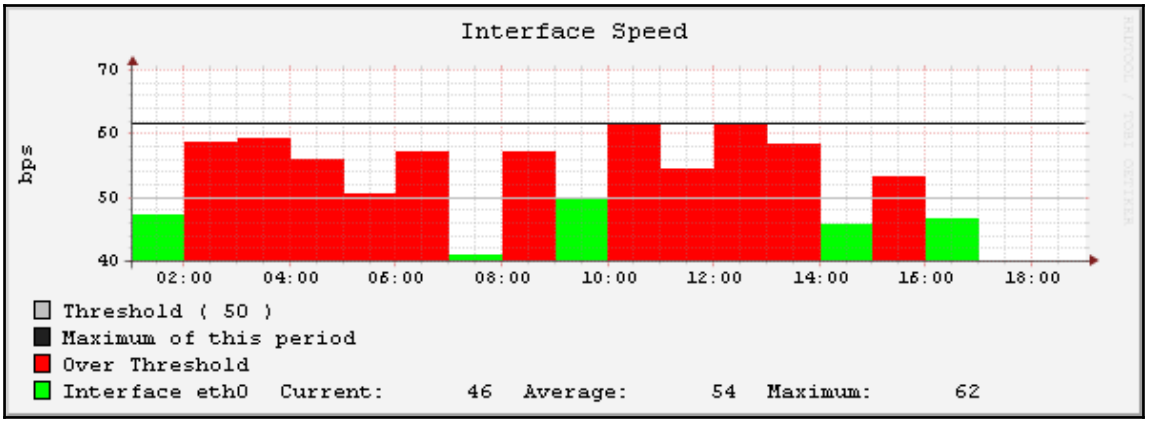


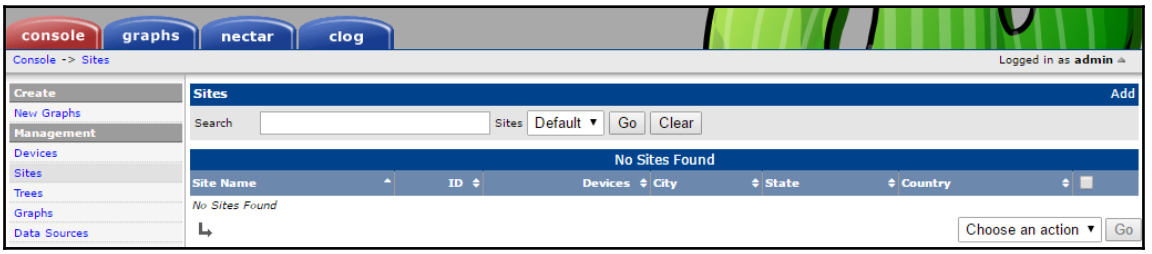


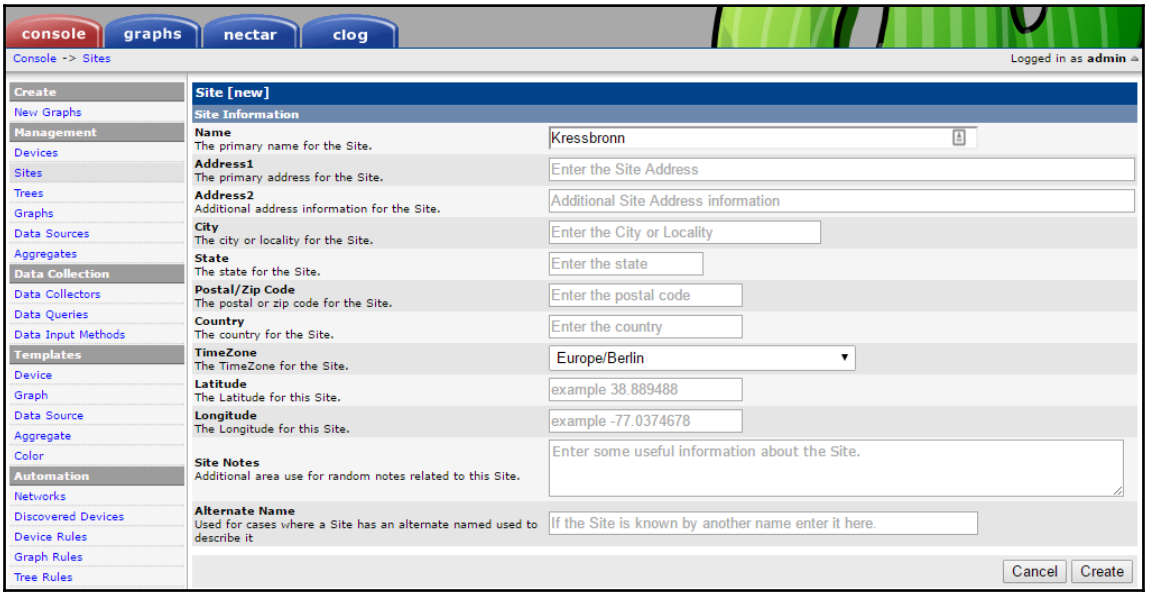

Interface Speed
bps
70
60
50
40
02:00
04:00
06:00
08:00
10:00
12:00
14:00
16:00
18:00
Threshold (50)
Interface eth0 Current: 46 Average: 54 Maximum: 62

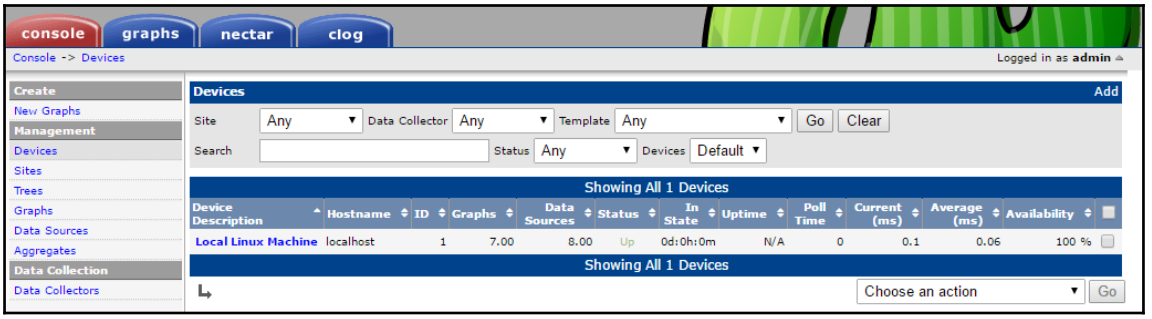

Interface Speed
bps
70
60
50
40
02:00
04:00
06:00
08:00
10:00
12:00
14:00
16:00
18:00
Threshold (50)
Over Threshold
Interface eth0 Current: 46 Average: 54 Maximum: 62

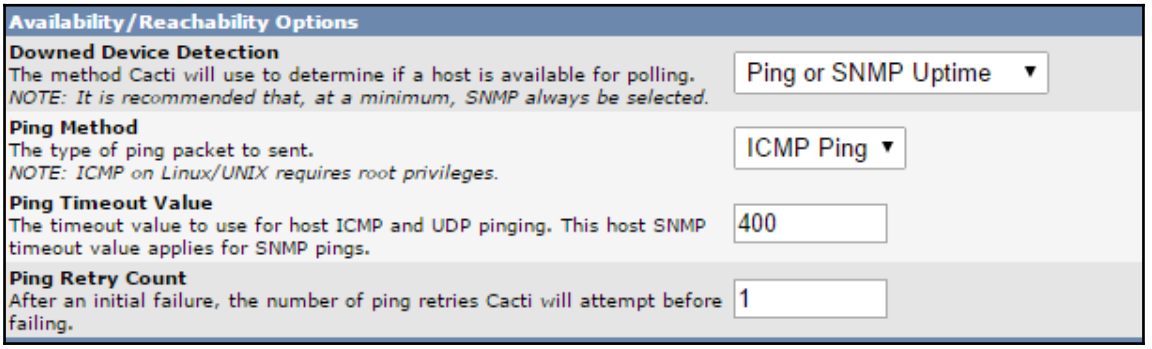

Interface Speed
bps
70
60
50
40
02:00
04:00
06:00
08:00
10:00
12:00
14:00
16:00
18:00
Threshold (50)
Maximum of this period
Over Threshold
Warning
Good
Interface eth0 Current: 46 Average: 54 Maximum: 62

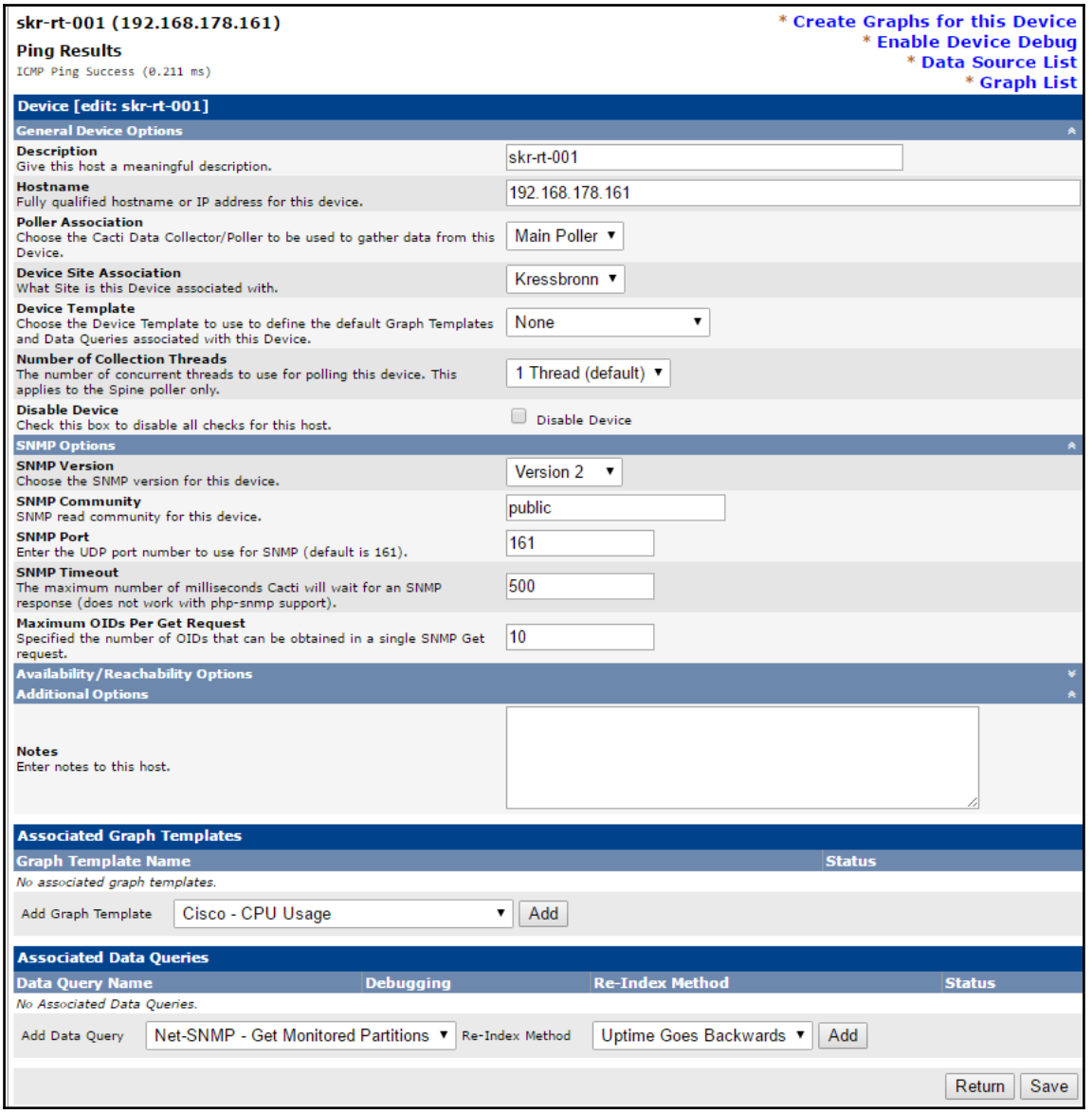

Interface Speed
bps
70
60
50
40
02:00
04:00
06:00
08:00
10:00
12:00
14:00
16:00
18:00
Threshold (50)
Maximum of this period
Over Threshold
Interface eth0 Current: 46 Average: 54 Maximum: 62

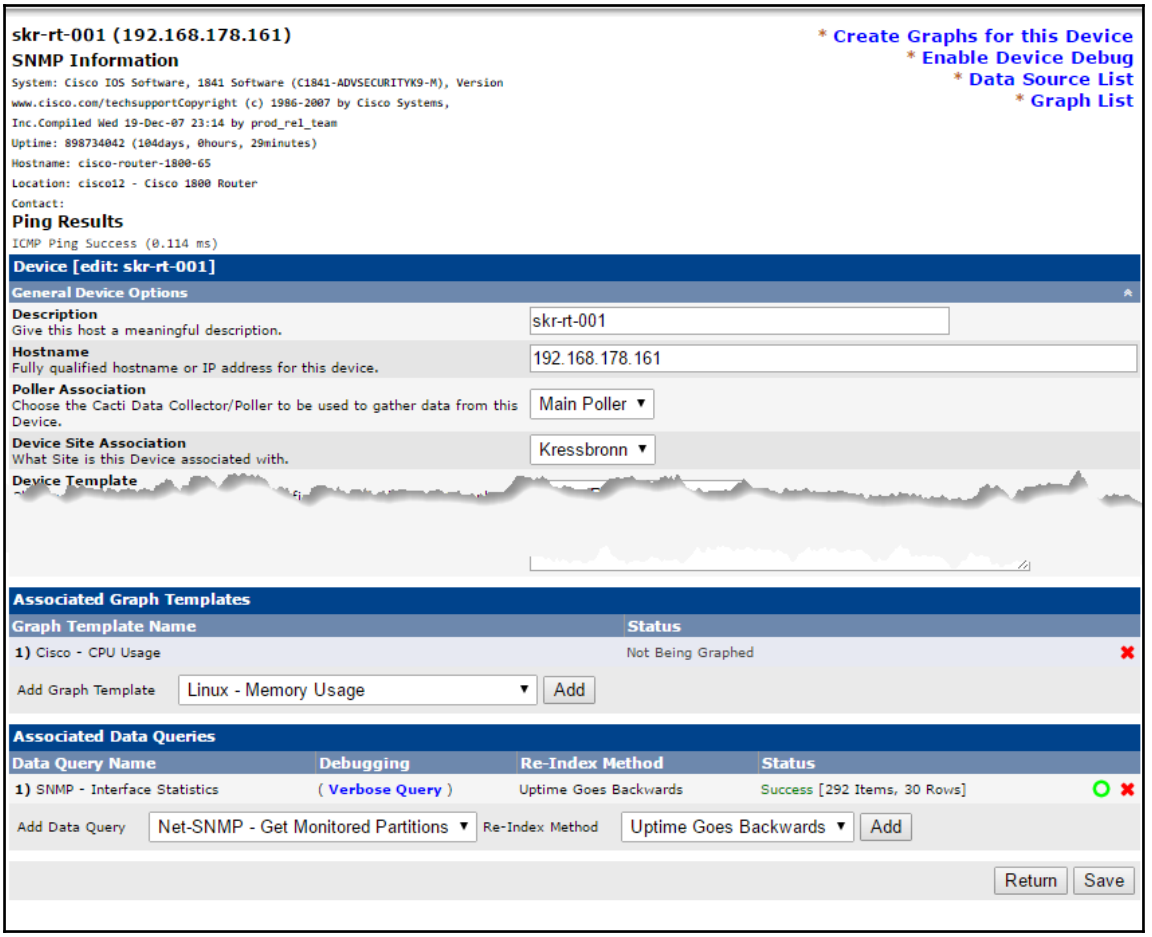

console
graphs
nectar
clog
Console -> Sites
Logged in as admin
Create
New Graphs
Management
Devices
Sites
Trees
Graphs
Data Sources
Sites
Add
Search
Sites
Default
Go
Clear
No Sites Found
Site Name
ID
Devices
City
State
Country
No Sites Found
Choose an action
Go

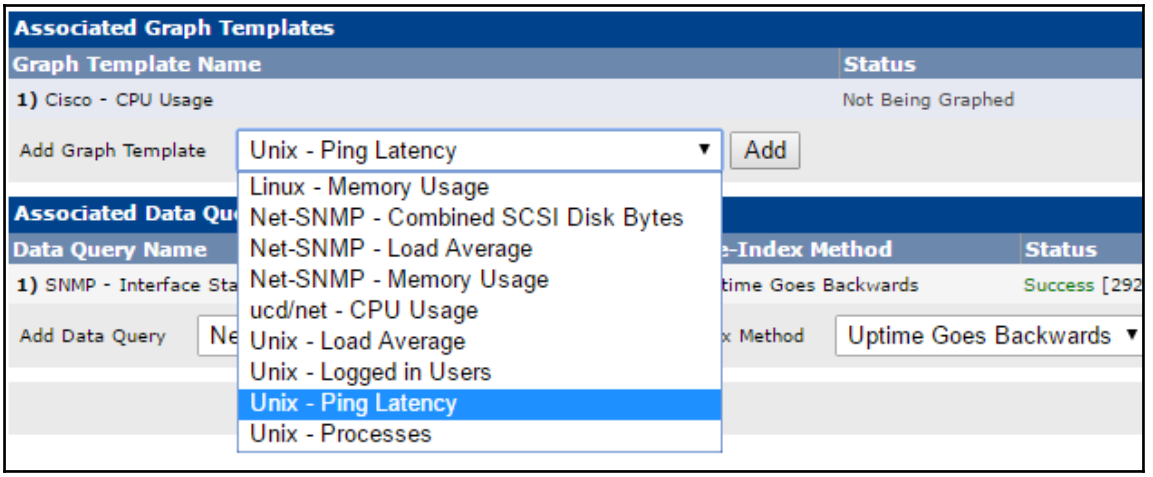

console
graphs
nectar
clog
Console -> Sites
Logged in as admin
Create
New Graphs
Management
Devices
Sites
Trees
Graphs
Data Sources
Aggregates
Data Collection
Data Collectors
Data Queries
Data Input Methods
Templates
Device
Graph
Data Source
Aggregate
Color
Automation
Networks
Discovered Devices
Device Rules
Graph Rules
Tree Rules
Site [new]
Site Information
Name
The primary name for the Site.
Kressbronn
Address1
The primary address for the Site.
Enter the Site Address
Address2
Additional address information for the Site.
Additional Site Address information
City
The city or locality for the Site.
Enter the City or Locality
State
The state for the Site.
Enter the state
Postal/Zip Code
The postal or zip code for the Site.
Enter the postal code
Country
The country for the Site.
Enter the country
TimeZone
The TimeZone for the Site.
Europe/Berlin
Latitude
The Latitude for this Site.
example 38.889488
Longitude
The Longitude for this Site.
example -77.0374678
Site Notes
Additional area use for random notes related to this Site.
Enter some useful information about the Site.
Alternate Name
Used for cases where a Site has an alternate named used to describe it
If the Site is known by another name enter it here.
Cancel
Create

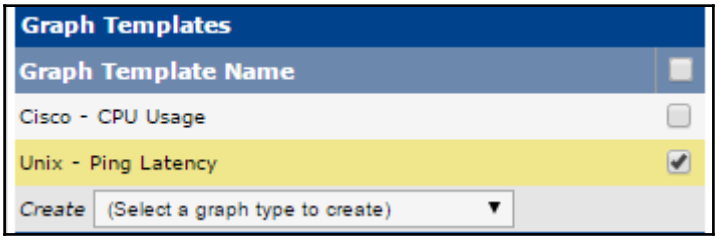

console
graphs
nectar
clog
Console -> Devices
Logged in as admin
Create
New Graphs
Management
Devices
Sites
Trees
Graphs
Data Sources
Aggregates
Data Collection
Data Collectors
Devices
Add
Site
Any
Data Collector
Any
Template
Any
Go
Clear
Search
Status
Any
Devices
Default
Showing All 1 Devices
Device Description
Hostname
ID
Graphs
Data Sources
Status
In State
Uptime
Poll Time
Current (ms)
Average (ms)
Availability
Local Linux Machine
localhost
1
7.00
8.00
Up
0d:0h:0m
N/A
0
0.1
0.06
100 %
Showing All 1 Devices
Choose an action
Go

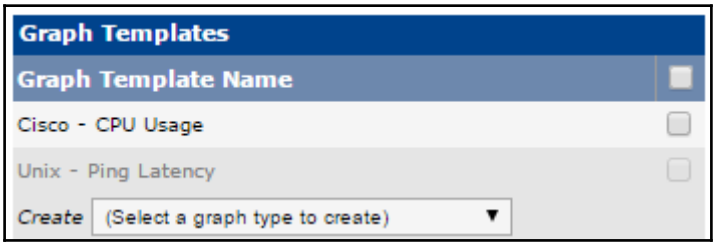

Availability/Reachability Options
Downed Device Detection
The method Cacti will use to determine if a host is available for polling.
NOTE: It is recommended that, at a minimum, SNMP always be selected.
Ping or SNMP Uptime
Ping Method
The type of ping packet to sent.
NOTE: ICMP on Linux/UNIX requires root privileges.
ICMP Ping
Ping Timeout Value
The timeout value to use for host ICMP and UDP pinging. This host SNMP timeout value applies for SNMP pings.
400
Ping Retry Count
After an initial failure, the number of ping retries Cacti will attempt before failing.
1

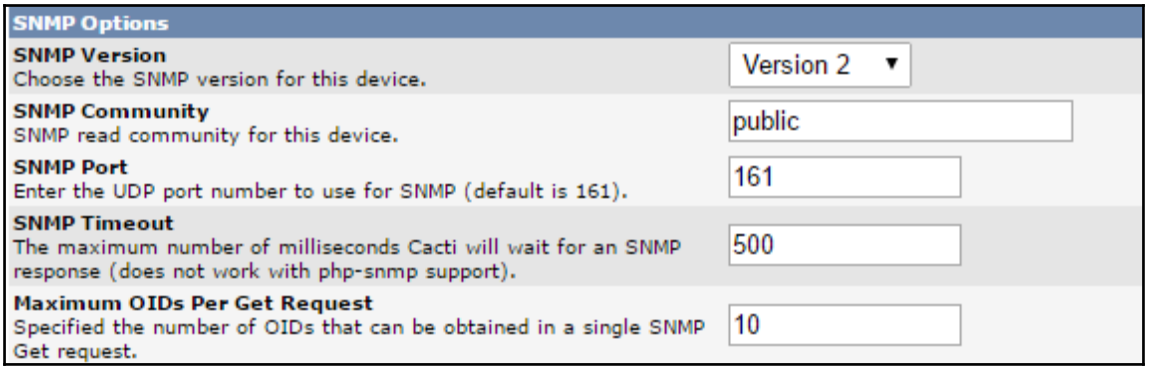

skr-rt-001 (192.168.178.161)
Ping Results
ICMP Ping Success (0.211 ms)
* Create Graphs for this Device
* Enable Device Debug
* Data Source List
* Graph List
Device [edit: skr-rt-001]
General Device Options
Description
Give this host a meaningful description.
skr-rt-001
Hostname
Fully qualified hostname or IP address for this device.
192.168.178.161
Poller Association
Choose the Cacti Data Collector/Poller to be used to gather data from this Device.
Main Poller
Device Site Association
What Site is this Device associated with.
Kressbronn
Device Template
Choose the Device Template to use to define the default Graph Templates and Data Queries associated with this Device.
None
Number of Collection Threads
The number of concurrent threads to use for polling this device. This applies to the Spine poller only.
1 Thread (default)
Disable Device
Check this box to disable all checks for this host.
Disable Device
SNMP Options
SNMP Version
Choose the SNMP version for this device.
Version 2
SNMP Community
SNMP read community for this device.
public
SNMP Port
Enter the UDP port number to use for SNMP (default is 161).
161
SNMP Timeout
The maximum number of milliseconds Cacti will wait for an SNMP response (does not work with php-snmp support).
500
Maximum OIDs Per Get Request
Specified the number of OIDs that can be obtained in a single SNMP Get request.
10
Availability/Reachability Options
Additional Options
Notes
Enter notes to this host.
Associated Graph Templates
Graph Template Name
Status
No associated graph templates.
Add Graph Template
Cisco - CPU Usage
Add
Associated Data Queries
Data Query Name
Debugging
Re-Index Method
Status
No Associated Data Queries.
Add Data Query
Net-SNMP - Get Monitored Partitions
Re-Index Method
Uptime Goes Backwards
Add
Return
Save

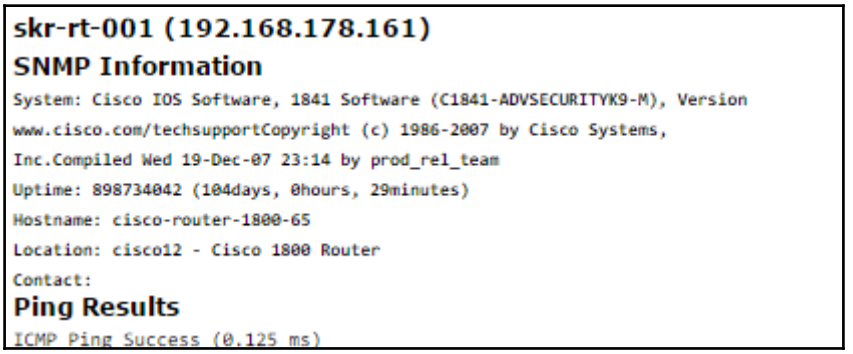

skr-rt-001 (192.168.178.161)
SNMP Information
System: Cisco IOS Software, 1841 Software (C1841-ADVSECURITYK9-M), Version
www.cisco.com/techsupportCopyright (c) 1986-2007 by Cisco Systems,
Inc.Compiled Wed 19-Dec-07 23:14 by prod_rel_team
Uptime: 898734042 (104days, 0hours, 29minutes)
Hostname: cisco-router-1800-65
Location: cisco12 - Cisco 1800 Router
Contact:
Ping Results
ICMP Ping Success (0.114 ms)
* Create Graphs for this Device
* Enable Device Debug
* Data Source List
* Graph List
Device [edit: skr-rt-001]
General Device Options
Description
Give this host a meaningful description.
skr-rt-001
Hostname
Fully qualified hostname or IP address for this device.
192.168.178.161
Poller Association
Choose the Cacti Data Collector/Poller to be used to gather data from this Device.
Main Poller
Device Site Association
What Site is this Device associated with.
Kressbronn
Device Template
Associated Graph Templates
Graph Template Name
Status
1) Cisco - CPU Usage
Not Being Graphed
Add Graph Template
Linux - Memory Usage
Add
Associated Data Queries
Data Query Name
Debugging
Re-Index Method
Status
1) SNMP - Interface Statistics
(Verbose Query)
Uptime Goes Backwards
Success [292 Items, 30 Rows]
Add Data Query
Net-SNMP - Get Monitored Partitions
Re-Index Method
Uptime Goes Backwards
Add
Return
Save

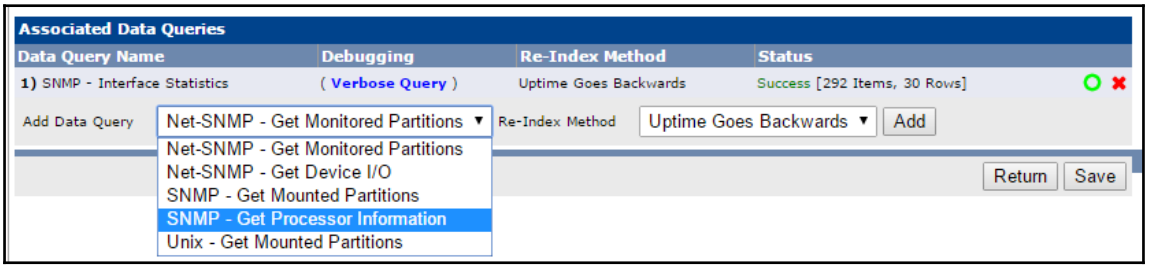

Associated Graph Templates
Graph Template Name
Status
1) Cisco - CPU Usage
Not Being Graphed
Add Graph Template
Unix - Ping Latency
Add
Linux - Memory Usage
Net-SNMP - Combined SCSI Disk Bytes
Net-SNMP - Load Average
Net-SNMP - Memory Usage
ucd/net - CPU Usage
Unix - Load Average
Unix - Logged in Users
Unix - Ping Latency
Unix - Processes
Associated Data Qu
Data Query Name
e-Index Method
Status
1) SNMP - Interface Sta
time Goes Backwards
Success [292
Add Data Query
Ne
x Method
Uptime Goes Backwards

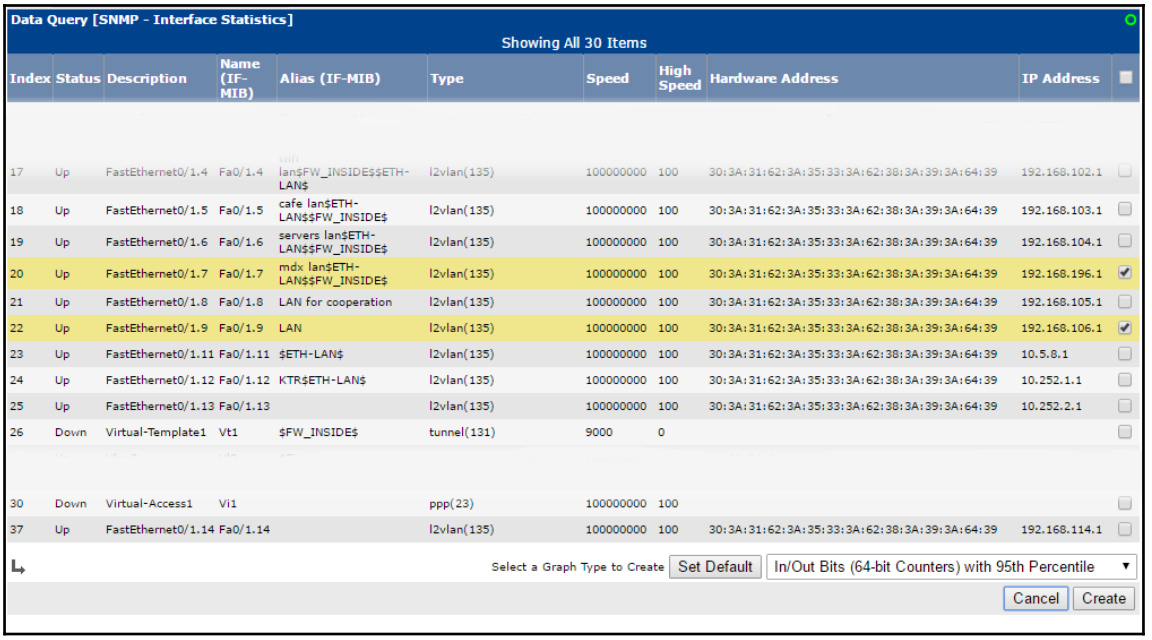

Graph Templates
Graph Template Name
Cisco - CPU Usage
Unix - Ping Latency
Create
(Select a graph type to create)

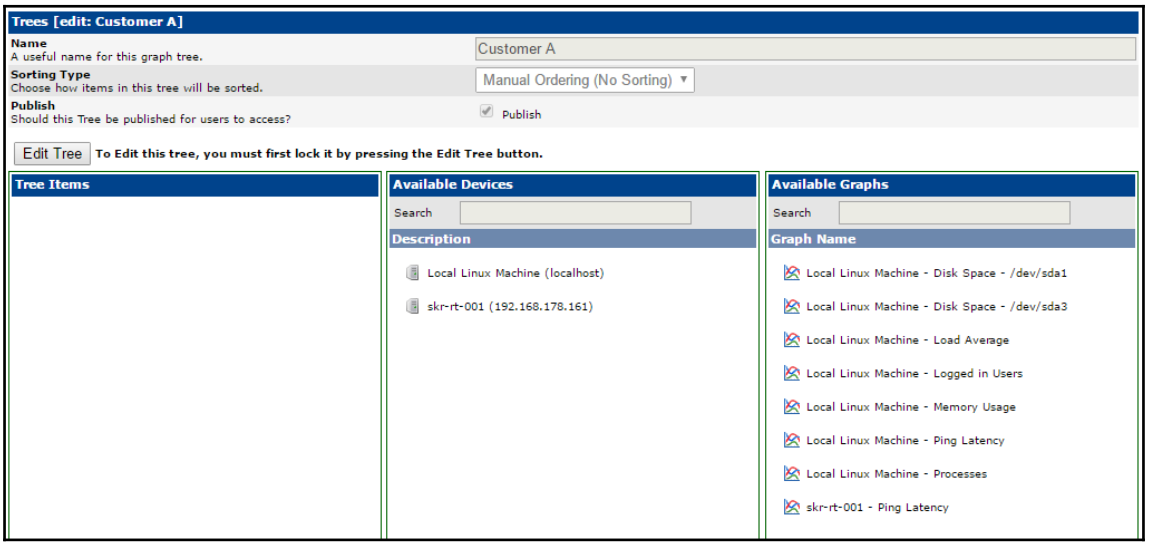

Graph Templates
Graph Template Name
Cisco - CPU Usage
Unix - Ping Latency
Create
(Select a graph type to create)

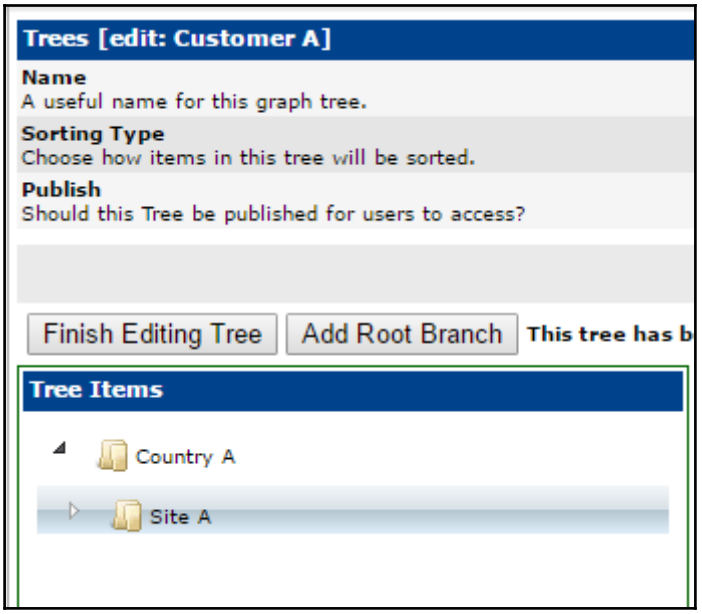

SNMP Options
SNMP Version
Choose the SNMP version for this device.
Version 2
SNMP Community
SNMP read community for this device.
public
SNMP Port
Enter the UDP port number to use for SNMP (default is 161).
161
SNMP Timeout
The maximum number of milliseconds Cacti will wait for an SNMP response (does not work with php-snmp support).
500
Maximum OIDs Per Get Request
Specified the number of OIDs that can be obtained in a single SNMP Get request.
10

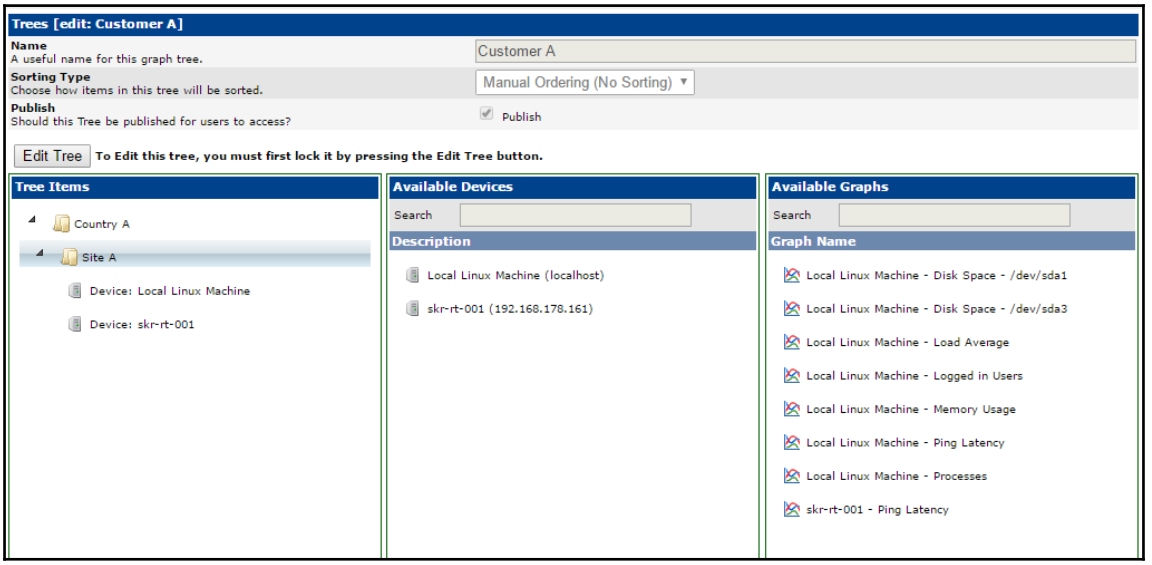

skr-rt-001 (192.168.178.161)
SNMP Information
System: Cisco IOS Software, 1841 Software (C1841-ADVSECURITYK9-M), Version
www.cisco.com/techsupportCopyright (c) 1986-2007 by Cisco Systems,
Inc.Compiled Wed 19-Dec-07 23:14 by prod_rel_team
Uptime: 898734042 (104days, 0hours, 29minutes)
Hostname: cisco-router-1800-65
Location: cisco12 - Cisco 1800 Router
Contact:
Ping Results
ICMP Ping Success (0.125 ms)


Associated Data Queries
Data Query Name
Debugging
Re-Index Method
Status
1) SNMP - Interface Statistics
(Verbose Query)
Uptime Goes Backwards
Success [292 Items, 30 Rows]
Add Data Query
Net-SNMP - Get Monitored Partitions
Re-Index Method
Uptime Goes Backwards
Add
Net-SNMP - Get Monitored Partitions
Net-SNMP - Get Device I/O
SNMP - Get Mounted Partitions
SNMP - Get Processor Information
Unix - Get Mounted Partitions
Return
Save

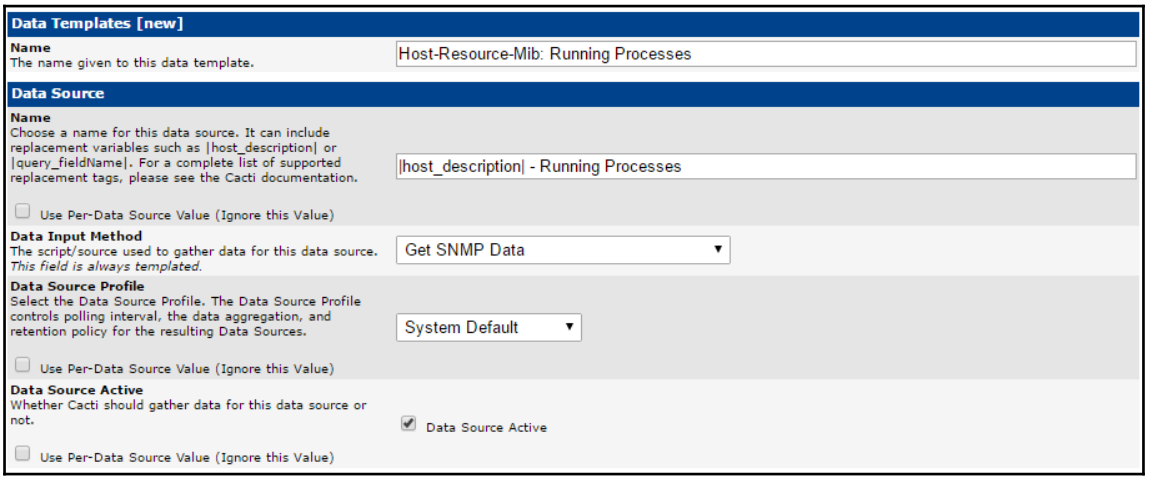

Data Query [SNMP - Interface Statistics]
Showing All 30 Items
Index Status Description Name (IF-MIB) Alias (IF-MIB) Type Speed High Speed Hardware Address IP Address
17 Up FastEthernet0/1.4 Fa0/1.4 lan$FW_INSIDE$$ETH-LAN$ l2vlan(135) 100000000 100 30:3A:31:62:3A:35:33:3A:62:38:3A:39:3A:64:39 192.168.102.1
18 Up FastEthernet0/1.5 Fa0/1.5 cafe lan$ETH-LAN$$FW_INSIDE$ l2vlan(135) 100000000 100 30:3A:31:62:3A:35:33:3A:62:38:3A:39:3A:64:39 192.168.103.1
19 Up FastEthernet0/1.6 Fa0/1.6 servers lan$ETH-LAN$$FW_INSIDE$ l2vlan(135) 100000000 100 30:3A:31:62:3A:35:33:3A:62:38:3A:39:3A:64:39 192.168.104.1
20 Up FastEthernet0/1.7 Fa0/1.7 mdx lan$ETH-LAN$$FW_INSIDE$ l2vlan(135) 100000000 100 30:3A:31:62:3A:35:33:3A:62:38:3A:39:3A:64:39 192.168.196.1
21 Up FastEthernet0/1.8 Fa0/1.8 LAN for cooperation l2vlan(135) 100000000 100 30:3A:31:62:3A:35:33:3A:62:38:3A:39:3A:64:39 192.168.105.1
22 Up FastEthernet0/1.9 Fa0/1.9 LAN l2vlan(135) 100000000 100 30:3A:31:62:3A:35:33:3A:62:38:3A:39:3A:64:39 192.168.106.1
23 Up FastEthernet0/1.11 Fa0/1.11 $ETH-LAN$ l2vlan(135) 100000000 100 30:3A:31:62:3A:35:33:3A:62:38:3A:39:3A:64:39 10.5.8.1
24 Up FastEthernet0/1.12 Fa0/1.12 KTR$ETH-LAN$ l2vlan(135) 100000000 100 30:3A:31:62:3A:35:33:3A:62:38:3A:39:3A:64:39 10.252.1.1
25 Up FastEthernet0/1.13 Fa0/1.13 l2vlan(135) 100000000 100 30:3A:31:62:3A:35:33:3A:62:38:3A:39:3A:64:39 10.252.2.1
26 Down Virtual-Template1 Vt1 FW_INSIDE tunnel(131) 9000 0
30 Down Virtual-Access1 Vi1 ppp(23) 100000000 100
37 Up FastEthernet0/1.14 Fa0/1.14 l2vlan(135) 100000000 100 30:3A:31:62:3A:35:33:3A:62:38:3A:39:3A:64:39 192.168.114.1
Select a Graph Type to Create
Set Default
In/Out Bits (64-bit Counters) with 95th Percentile
Cancel
Create

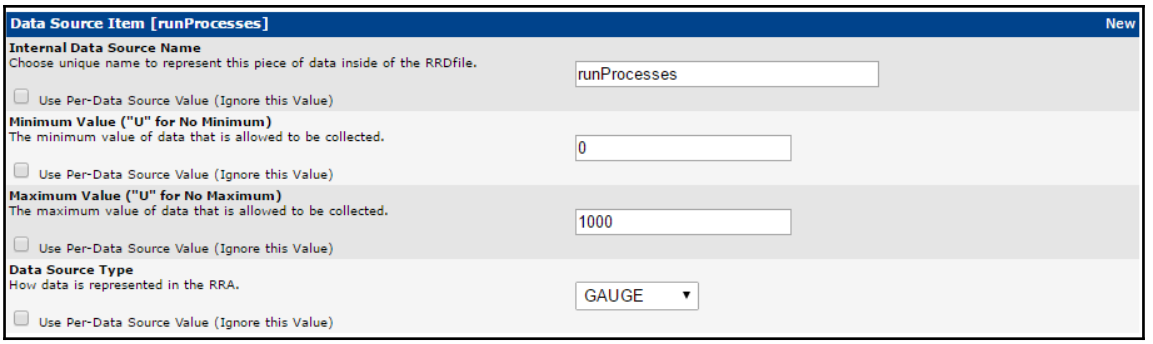

Trees [edit: Customer A]
Name
A useful name for this graph tree.
Customer A
Sorting Type
Choose how items in this tree will be sorted.
Manual Ordering (No Sorting)
Publish
Should this Tree be published for users to access?
Publish
Edit Tree
To Edit this tree, you must first lock it by pressing the Edit Tree button.
Tree Items
Available Devices
Search
Description
Local Linux Machine (localhost)
skr-rt-001 (192.168.178.161)
Available Graphs
Search
Graph Name
Local Linux Machine - Disk Space - /dev/sda1
Local Linux Machine - Disk Space - /dev/sda3
Local Linux Machine - Load Average
Local Linux Machine - Logged in Users
Local Linux Machine - Memory Usage
Local Linux Machine - Ping Latency
Local Linux Machine - Processes
skr-rt-001 - Ping Latency

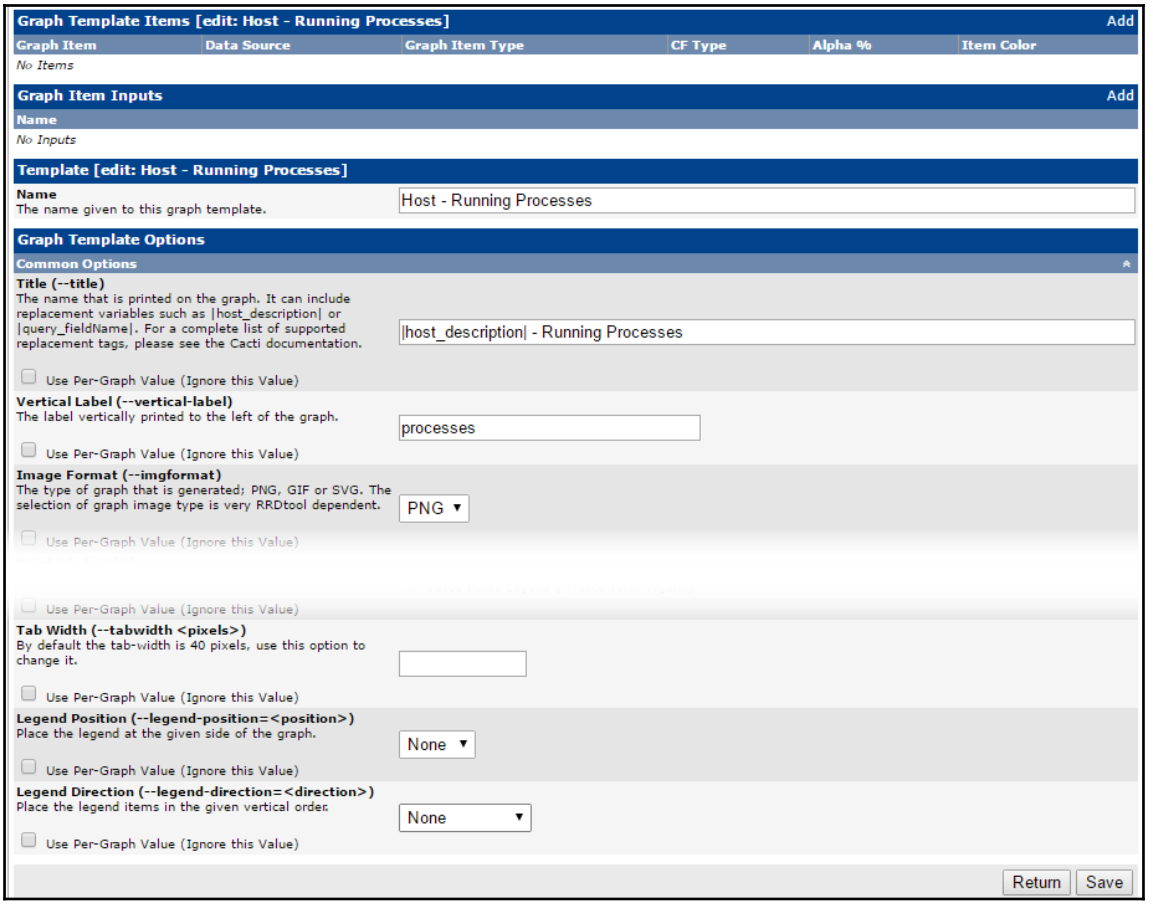

Trees [edit: Customer A]
Name
A useful name for this graph tree.
Sorting Type
Choose how items in this tree will be sorted.
Publish
Should this Tree be published for users to access?
Finish Editing Tree
Add Root Branch
This tree has b
Tree Items
Country A
Site A

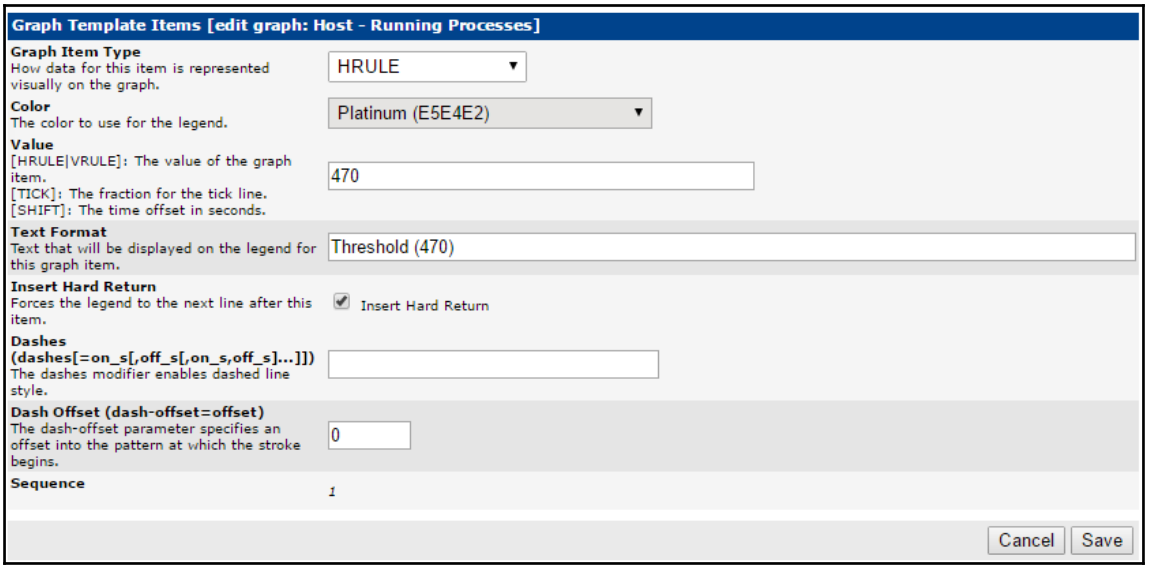

Trees [edit: Customer A]
Name
A useful name for this graph tree.
Customer A
Sorting Type
Choose how items in this tree will be sorted.
Manual Ordering (No Sorting)
Publish
Should this Tree be published for users to access?
Publish
Edit Tree
To Edit this tree, you must first lock it by pressing the Edit Tree button.
Tree Items
Country A
Site A
Device: Local Linux Machine
Device: skr-rt-001
Available Devices
Search
Description
Local Linux Machine (localhost)
skr-rt-001 (192.168.178.161)
Available Graphs
Search
Graph Name
Local Linux Machine - Disk Space - /dev/sda1
Local Linux Machine - Disk Space - /dev/sda3
Local Linux Machine - Load Average
Local Linux Machine - Logged in Users
Local Linux Machine - Memory Usage
Local Linux Machine - Ping Latency
Local Linux Machine - Processes
skr-rt-001 - Ping Latency

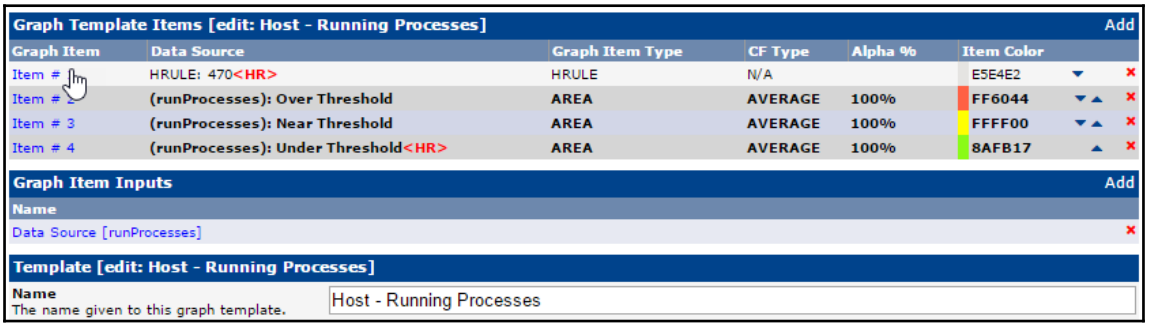
Chapter 3: Creating and Using Templates

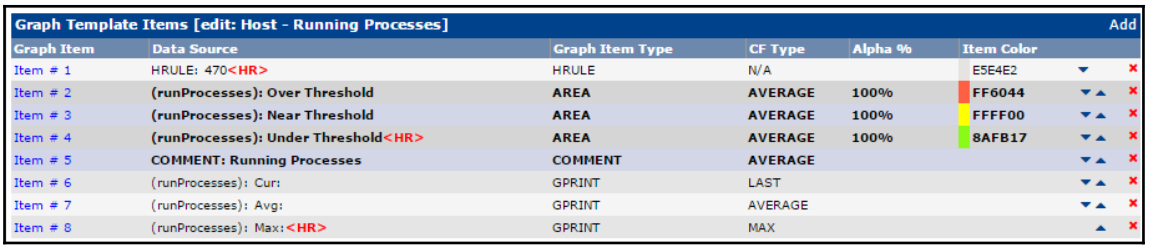





Graph Template Items [edit: Host - Running Processes]
Add
Graph Item
Data Source
Graph Item Type
CF Type
Alpha %
Item Color
No Items
Graph Item Inputs
Add
Name
No Inputs
Template [edit: Host - Running Processes]
Name
The name given to this graph template.
Host - Running Processes
Graph Template Options
Common Options
Title (--title)
The name that is printed on the graph. It can include replacement variables such as |host_description| or |query_fieldName|. For a complete list of supported replacement tags, please see the Cacti documentation.
|host_description| - Running Processes
Use Per-Graph Value (Ignore this Value)
Vertical Label (--vertical-label)
The label vertically printed to the left of the graph.
processes
Use Per-Graph Value (Ignore this Value)
Image Format (--imgformat)
The type of graph that is generated; PNG, GIF or SVG. The selection of graph image type is very RRDtool dependent.
PNG
Use Per-Graph Value (Ignore this Value)
Use Per-Graph Value (Ignore this Value)
Tab Width (--tabwidth <pixels>)
By default the tab-width is 40 pixels, use this option to change it.
Use Per-Graph Value (Ignore this Value)
Legend Position (--legend-position=<position>)
Place the legend at the given side of the graph.
None
Use Per-Graph Value (Ignore this Value)
Legend Direction (--legend-direction=<direction>)
Place the legend items in the given vertical order.
None
Use Per-Graph Value (Ignore this Value)
Return
Save


Graph Template Items [edit graph: Host - Running Processes]
Graph Item Type
How data for this item is represented visually on the graph.
HRULE
Color
The color to use for the legend.
Platinum (E5E4E2)
Value
[HRULE|VRULE]: The value of the graph item.
[TICK]: The fraction for the tick line.
[SHIFT]: The time offset in seconds.
470
Text Format
Text that will be displayed on the legend for this graph item.
Threshold (470)
Insert Hard Return
Forces the legend to the next line after this item.
Insert Hard Return
Dashes (dashes[=on_s[,off_s[,on_s,off_s]...]])
The dashes modifier enables dashed line style.
Dash Offset (dash-offset=offset)
The dash-offset parameter specifies an offset into the pattern at which the stroke begins.
0
Sequence
1
Cancel
Save


Graph Template Items [edit: Host - Running Processes]
Add
Graph Item
Data Source
Graph Item Type
CF Type
Alpha %
Item Color
Item # 1
HRULE: 470<HR>
HRULE
N/A
E5E4E2
Item # 2
(runProcesses): Over Threshold
AREA
AVERAGE
100%
FF6044
Item # 3
(runProcesses): Near Threshold
AREA
AVERAGE
100%
FFFF00
Item # 4
(runProcesses): Under Threshold<HR>
AREA
AVERAGE
100%
8AFB17
Graph Item Inputs
Add
Name
Data Source [runProcesses]
Template [edit: Host - Running Processes]
Name
The name given to this graph template.
Host - Running Processes


Graph Template Items [edit: Host - Running Processes]
Add
Graph Item
Data Source
Graph Item Type
CF Type
Alpha %
Item Color
Item # 1
HRULE: 470<HR>
HRULE
N/A
E5E4E2
Item # 2
(runProcesses): Over Threshold
AREA
AVERAGE
100%
FF6044
Item # 3
(runProcesses): Near Threshold
AREA
AVERAGE
100%
FFFF00
Item # 4
(runProcesses): Under Threshold<HR>
AREA
AVERAGE
100%
8AFB17
Item # 5
COMMENT: Running Processes
COMMENT
AVERAGE
Item # 6
(runProcesses): Cur:
GPRINT
LAST
Item # 7
(runProcesses): Avg:
GPRINT
AVERAGE
Item # 8
(runProcesses): Max:<HR>
GPRINT
MAX

Local Linux Machine - Running Processes

* Turn On Graph Debug Mode.
* Edit Graph Template.
* Edit Device.
* Unlock Graph.

Graph Template Selection [edit: Local Linux Machine - Running Processes]

Selected Graph Template
Choose a Graph Template to apply to this Graph. Please note that you may only change Graph Templates to a 100% compatible Graph Template, which means that it includes identical Data Sources.

Host - Running Processes

Device
Choose the Device that this Graph belongs to.

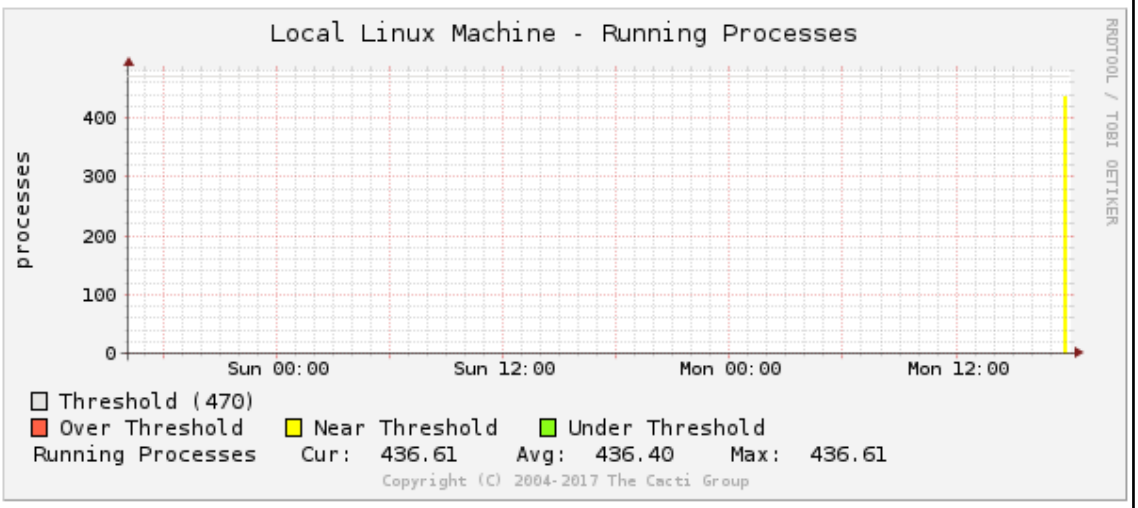
Local Linux Machine

Supplemental Graph Template Data

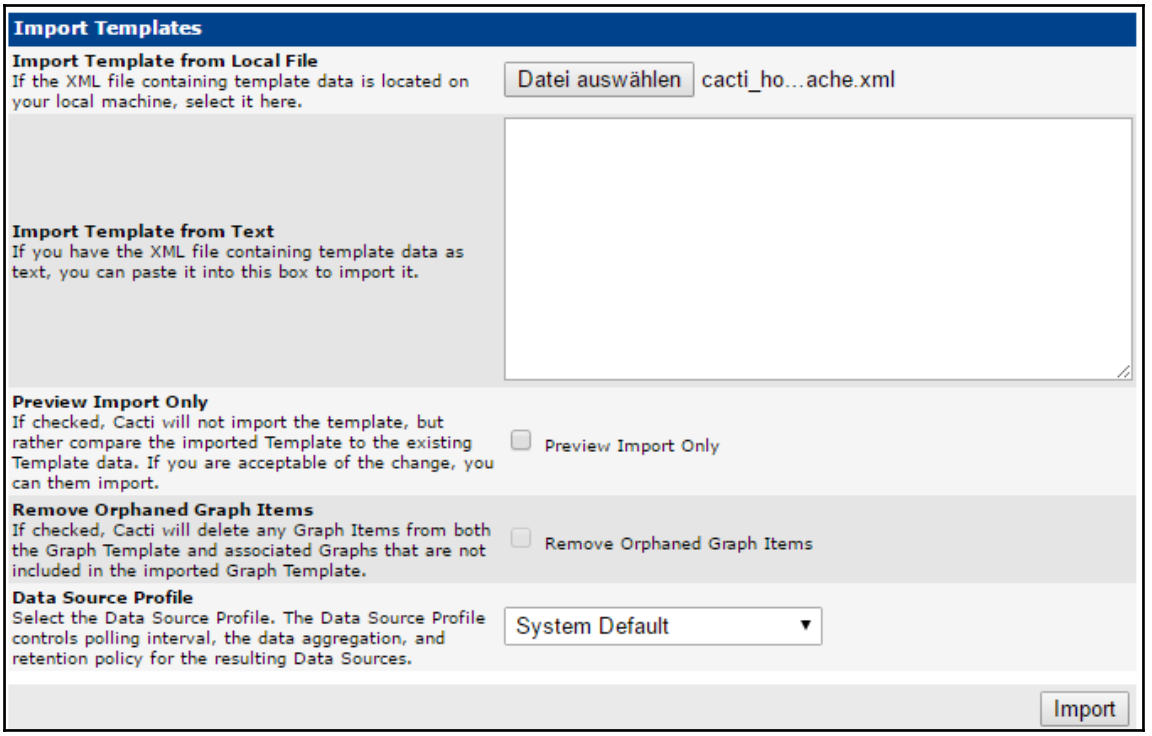
Graph Item Fields

Data Source [runProcesses]
The data source to use for this graph item.

Local Linux Machine - Running Processes (runProcesses)



Cancel Save


Import Templates
Import Template from Local File
If the XML file containing template data is located on your local machine, select it here.
Datei auswählen
cacti_ho...ache.xml
Import Template from Text
If you have the XML file containing template data as text, you can paste it into this box to import it.
Preview Import Only
If checked, Cacti will not import the template, but rather compare the imported Template to the existing Template data. If you are acceptable of the change, you can them import.
Preview Import Only
Remove Orphaned Graph Items
If checked, Cacti will delete any Graph Items from both the Graph Template and associated Graphs that are not included in the imported Graph Template.
Remove Orphaned Graph Items
Data Source Profile
Select the Data Source Profile. The Data Source Profile controls polling interval, the data aggregation, and retention policy for the resulting Data Sources.
System Default
Import

Import Results

Cacti has imported the following items for the Template:

CDEF

[success] Trend [new]
[success] Apache - Calculate Bytes / Request [new]
[success] Apache - Clean value for DEF a [new]
[success] Apache - Clean value for DEF b [new]
[success] Apache - Limit output to zero min and max [new]
[success] Turn Bytes into Bits [unchanged]
[success] Total All Data Sources [unchanged]
[success] Apache - A plus B [new]
[success] Apache - Calculate A as % of C [new]
[success] Apache - Calculate B as % of C [new]

GPRINT Preset

[success] Normal [unchanged]
[success] Exact Numbers [unchanged]

Data Input Method

[success] WebServer - Apache Statistics [new]

Data Template

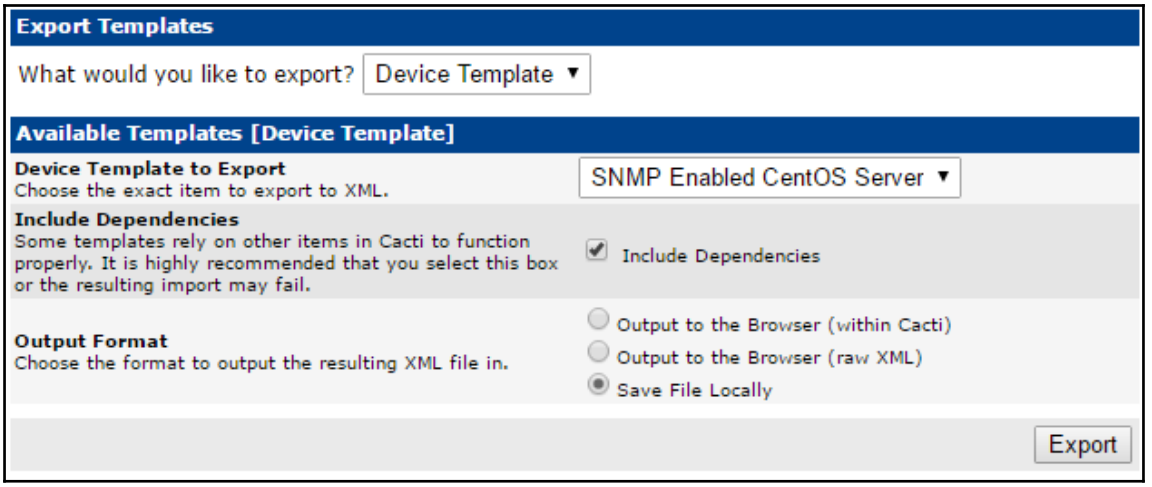
[success] WebServer - Apache Statistics [new]

Graph Template

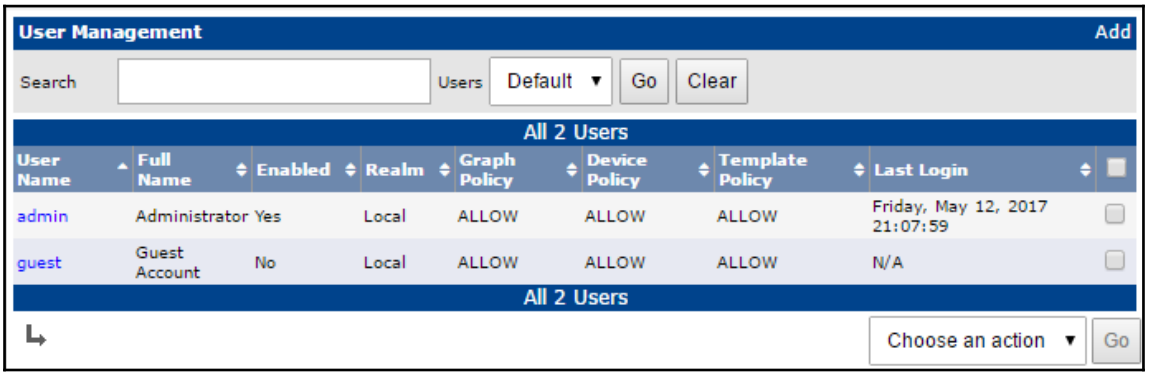
[success] WebServer - Apache Statistics - CPU Load [new]
[success] WebServer - Apache Statistics - Thread Scoreboard [new]
[success] WebServer - Apache Statistics - Bytes / Request [new]
[success] WebServer - Apache Statistics - Hits / s [new]
[success] WebServer - Apache Statistics - kBits / s [new]
[success] WebServer - Apache Statistics - Thread Details [new]
[success] WebServer - Apache Statistics - Thread Details (%) [new]

Device Template

[success] WebServer - Apache [new]


Export Templates
What would you like to export?
Device Template
Available Templates [Device Template]
Device Template to Export
Choose the exact item to export to XML.
SNMP Enabled CentOS Server
Include Dependencies
Some templates rely on other items in Cacti to function properly. It is highly recommended that you select this box or the resulting import may fail.
Include Dependencies
Output Format
Choose the format to output the resulting XML file in.
Output to the Browser (within Cacti)
Output to the Browser (raw XML)
Save File Locally
Export

Chapter 4: User Management



User Management [new]

User Name
The login name for this user.
thurban

Full Name
A more descriptive name for this user, that can include spaces or special characters.
Thomas Urban

Email Address
An Email Address where the User can be reached.
cactibook@urban-software.de

Password
Enter the password for this user twice. Remember that passwords are case sensitive!
••••••••••••
Password Validation Passes
••••••••••••
Passwords Match

Enabled
Determines if user is able to login.
☑ Enabled

Locked
Determines if the user account is locked.
☐ Locked

Account Options
Set any user account specific options here.
☐ Must Change Password at Next Login
☑ Change Password
☑ Maintain Custom Graph and User Settings

Graph Options
Set any graph specific options here.
☑ User Has Rights to Tree View
☑ User Has Rights to List View
☑ User Has Rights to Preview View

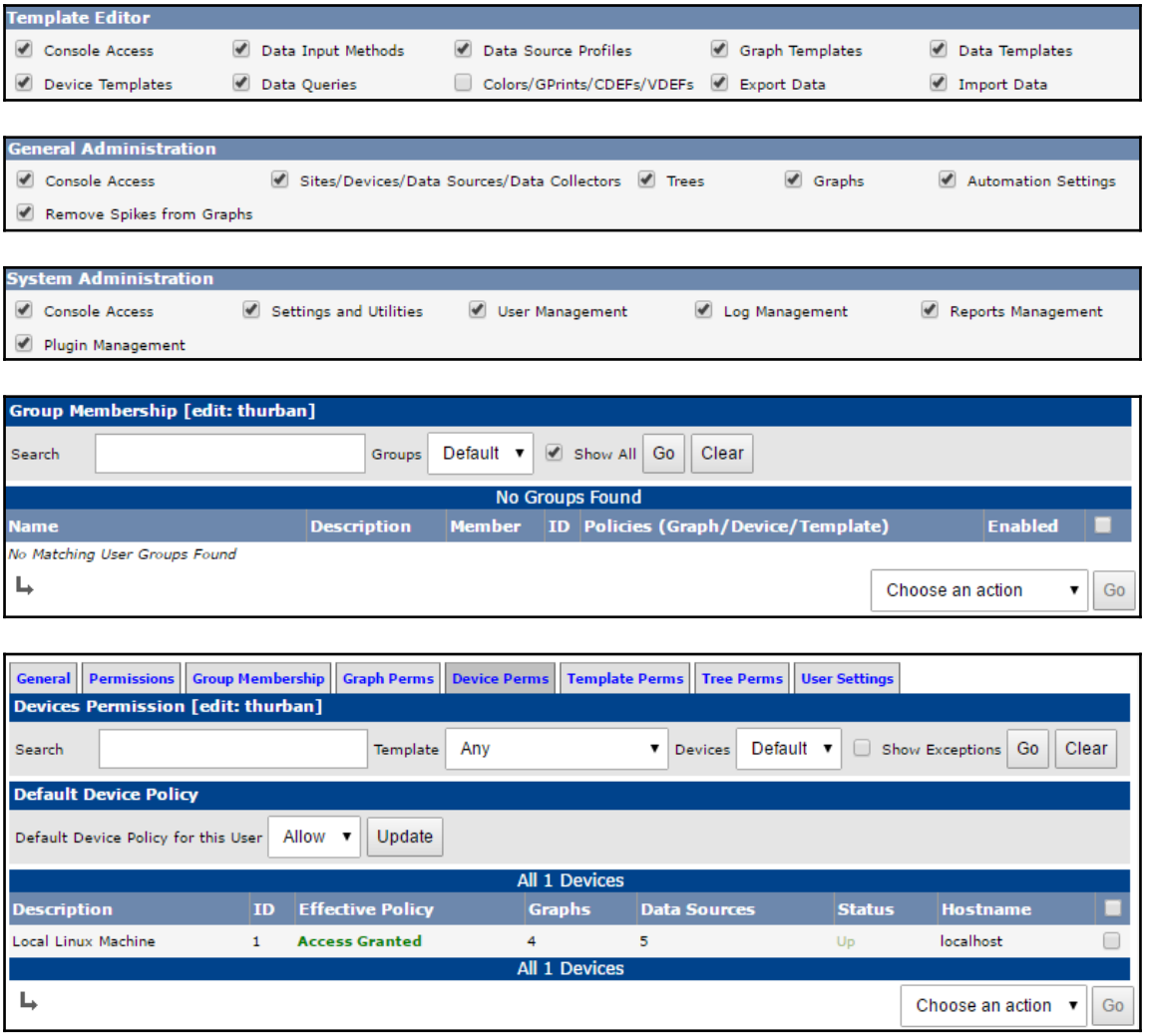
Login Options
What to do when this user logs in.
◉ Show the page that user pointed their browser to.
○ Show the default console screen.
○ Show the default graph screen.

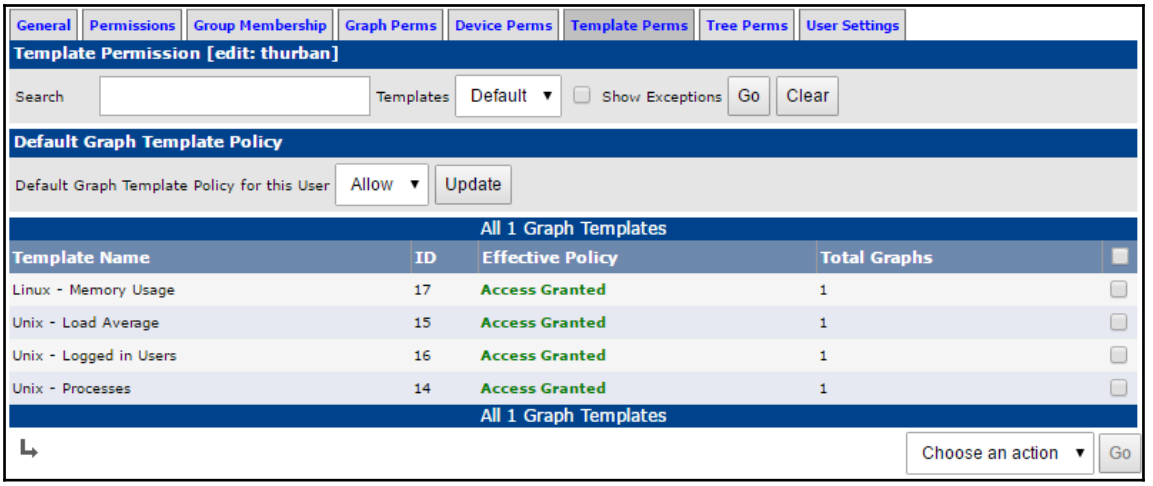
Authentication Realm
Only used if you have LDAP or Web Basic Authentication enabled. Changing this to a non-enabled realm will effectively disable the user.
Local

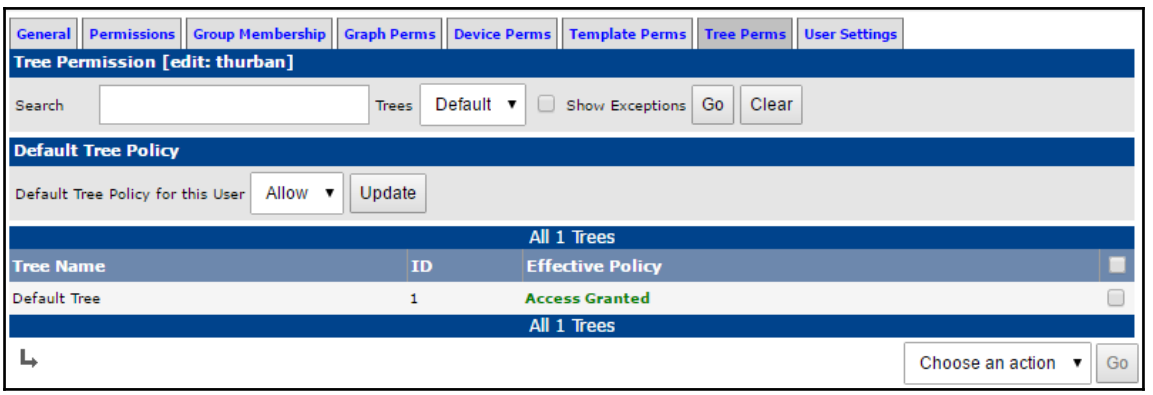
Cancel Create

Normal User

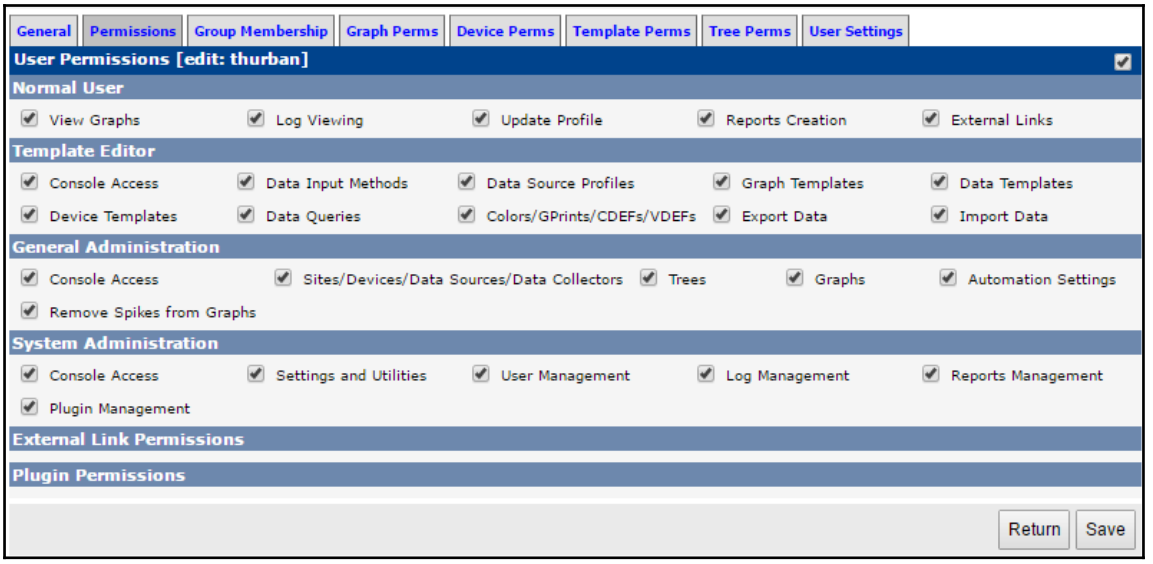
☑ View Graphs ☑ Log Viewing ☑ Update Profile ☑ Reports Creation ☑ External Links

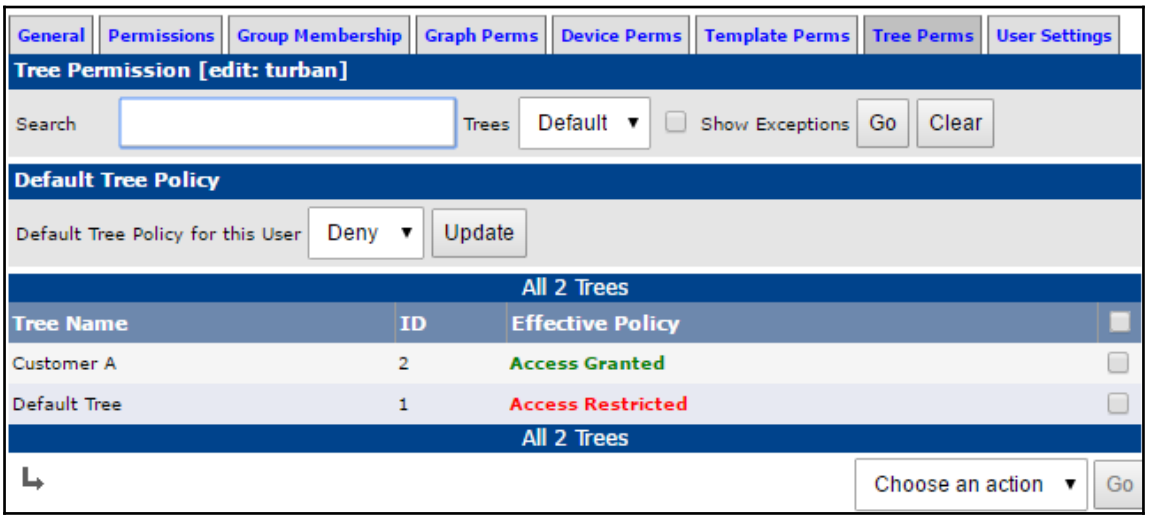

Template Editor
Console Access
Data Input Methods
Data Source Profiles
Graph Templates
Data Templates
Device Templates
Data Queries
Colors/GPrints/CDEFs/VDEFs
Export Data
Import Data
General Administration
Console Access
Sites/Devices/Data Sources/Data Collectors
Trees
Graphs
Automation Settings
Remove Spikes from Graphs
System Administration
Console Access
Settings and Utilities
User Management
Log Management
Reports Management
Plugin Management
Group Membership [edit: thurban]
Search
Groups
Default
Show All
Go
Clear
No Groups Found
Name
Description
Member
ID
Policies (Graph/Device/Template)
Enabled
No Matching User Groups Found
Choose an action
Go
General
Permissions
Group Membership
Graph Perms
Device Perms
Template Perms
Tree Perms
User Settings
Devices Permission [edit: thurban]
Search
Template
Any
Devices
Default
Show Exceptions
Go
Clear
Default Device Policy
Default Device Policy for this User
Allow
Update
All 1 Devices
Description
ID
Effective Policy
Graphs
Data Sources
Status
Hostname
Local Linux Machine
1
Access Granted
4
5
Up
localhost
All 1 Devices
Choose an action
Go

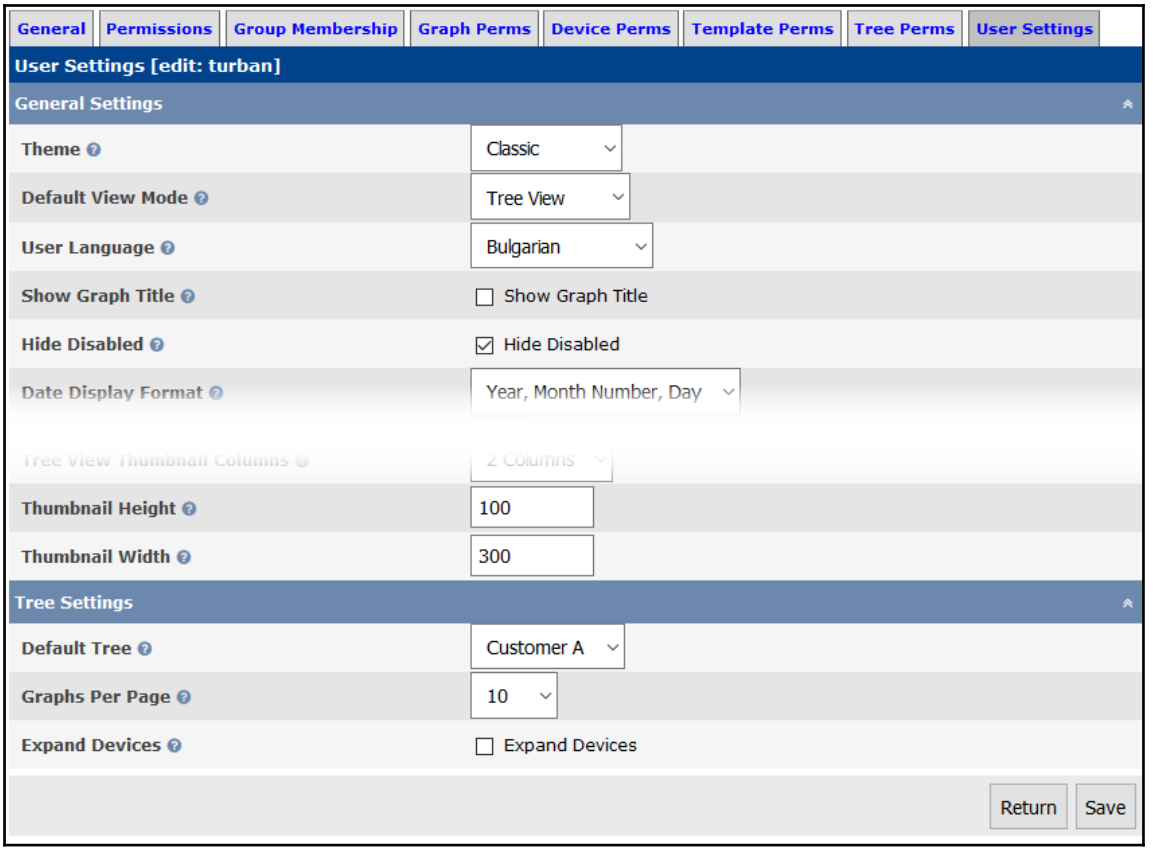

General
Permissions
Group Membership
Graph Perms
Device Perms
Template Perms
Tree Perms
User Settings
Template Permission [edit: thurban]
Search
Templates
Default
Show Exceptions
Go
Clear
Default Graph Template Policy
Default Graph Template Policy for this User
Allow
Update
All 1 Graph Templates
Template Name
ID
Effective Policy
Total Graphs
Linux - Memory Usage
17
Access Granted
1
Unix - Load Average
15
Access Granted
1
Unix - Logged in Users
16
Access Granted
1
Unix - Processes
14
Access Granted
1
All 1 Graph Templates
Choose an action
Go

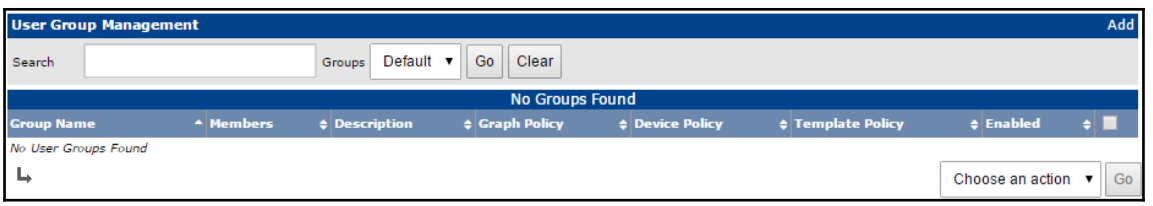

General
Permissions
Group Membership
Graph Perms
Device Perms
Template Perms
Tree Perms
User Settings
Tree Permission [edit: thurban]
Search
Trees
Default
Show Exceptions
Go
Clear
Default Tree Policy
Default Tree Policy for this User
Allow
Update
All 1 Trees
Tree Name
ID
Effective Policy
Default Tree
1
Access Granted
All 1 Trees
Choose an action
Go

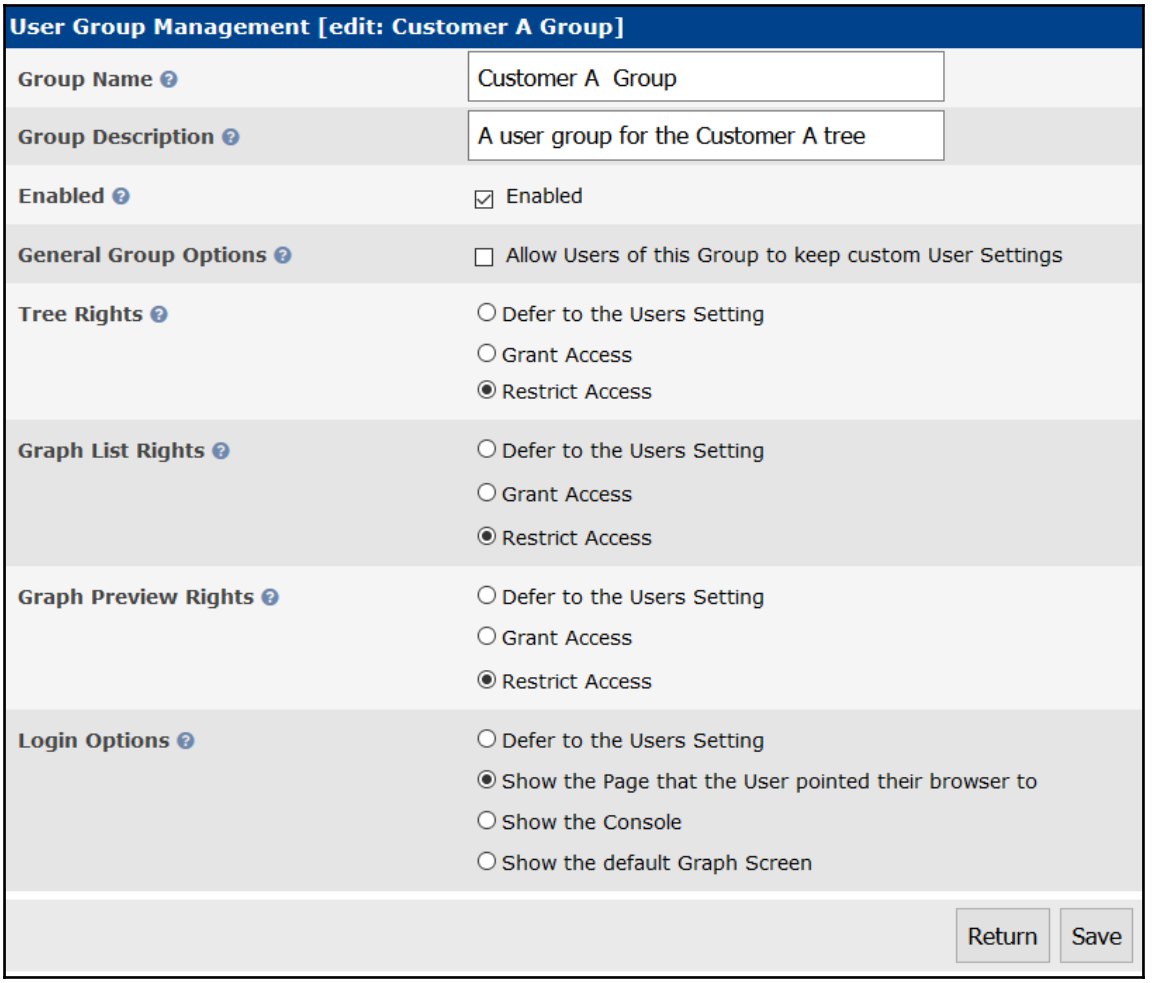
General
Permissions
Group Membership
Graph Perms
Device Perms
Template Perms
Tree Perms
User Settings
User Settings [edit: thurban]
General Settings
Theme
Classic
Default View Mode
Tree View
User Language
Bulgarian
Show Graph Title
Show Graph Title
Hide Disabled
Hide Disabled
Date Display Format
Year, Month Number, Day
Date Separator
/
Page Refresh
5 Minutes
Preview Graphs Per Page
10
Time Spanning/Shifting
Default Time Range
Daily (5 Minute Average)
Default Graph View Timespan
Last Day
Default Graph View Timeshift
1 Day
Allow Graph to extend to Future
Allow Graph to extend to Future
First Day of the Week
Monday
Start of Daily Shift
07:00
End of Daily Shift
18:00
Graph Thumbnail Settings
Thumbnail Sections
Preview Mode
Tree View
Preview Thumbnail Columns
2 Columns
Tree View Thumbnail Columns
2 Columns
Thumbnail Height
100
Thumbnail Width
300
Tree Settings
Default Tree
Default Tree
Graphs Per Page
10
Expand Devices
Expand Devices
Return
Save

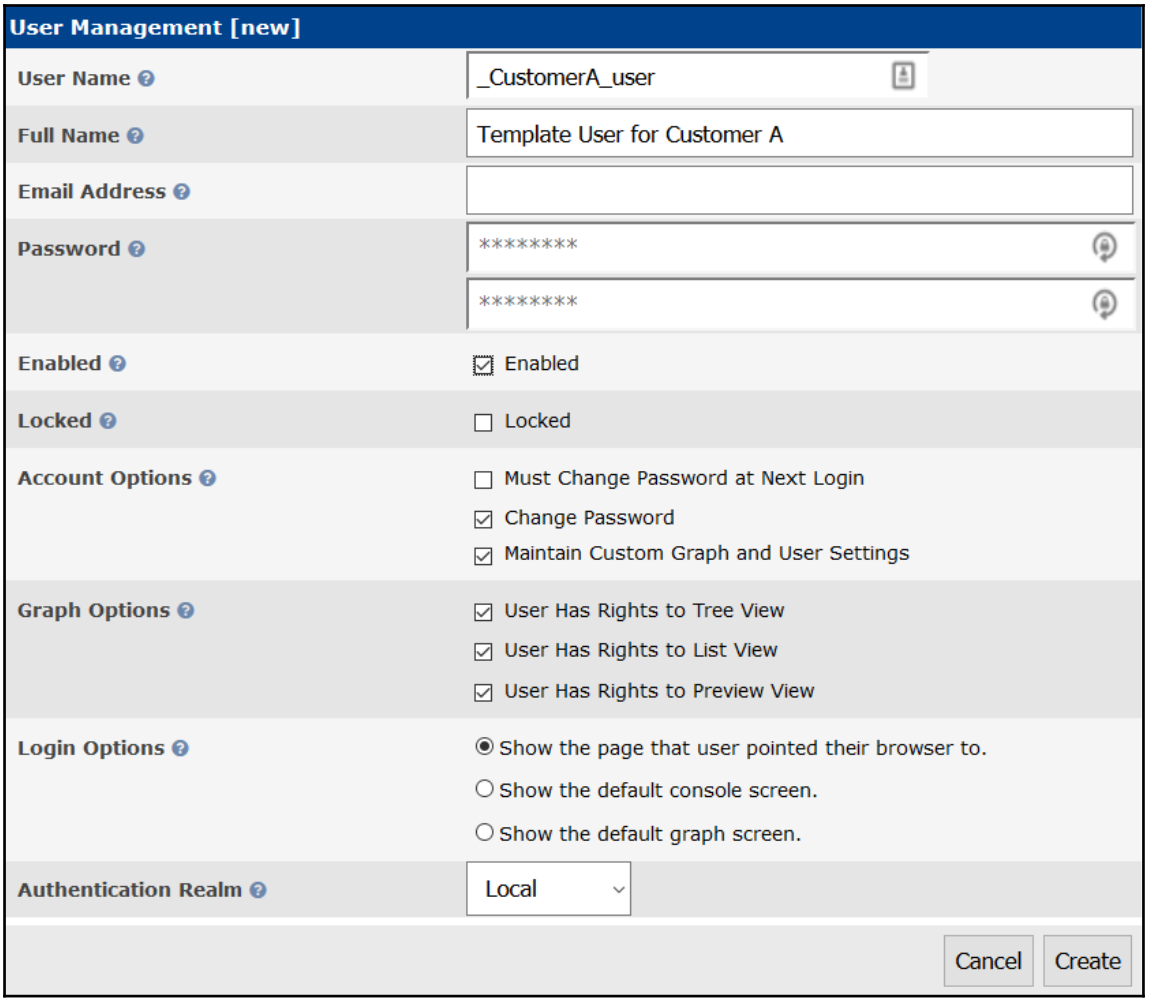

General
Permissions
Group Membership
Graph Perms
Device Perms
Template Perms
Tree Perms
User Settings
User Permissions [edit: thurban]
Normal User
View Graphs
Log Viewing
Update Profile
Reports Creation
External Links
Template Editor
Console Access
Data Input Methods
Data Source Profiles
Graph Templates
Data Templates
Device Templates
Data Queries
Colors/GPrints/CDEFs/VDEFs
Export Data
Import Data
General Administration
Console Access
Sites/Devices/Data Sources/Data Collectors
Trees
Graphs
Automation Settings
Remove Spikes from Graphs
System Administration
Console Access
Settings and Utilities
User Management
Log Management
Reports Management
Plugin Management
External Link Permissions
Plugin Permissions
Return
Save

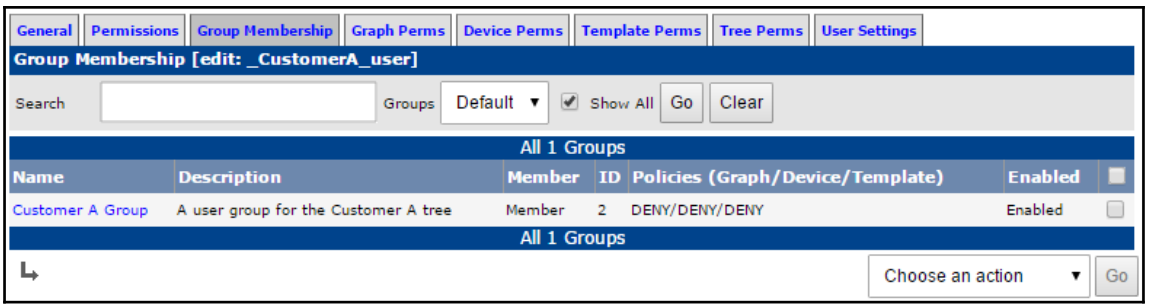

General
Permissions
Group Membership
Graph Perms
Device Perms
Template Perms
Tree Perms
User Settings
Tree Permission [edit: turban]
Search
Trees
Default
Show Exceptions
Go
Clear
Default Tree Policy
Default Tree Policy for this User
Deny
Update
All 2 Trees
Tree Name
ID
Effective Policy
Customer A
2
Access Granted
Default Tree
1
Access Restricted
All 2 Trees
Choose an action
Go

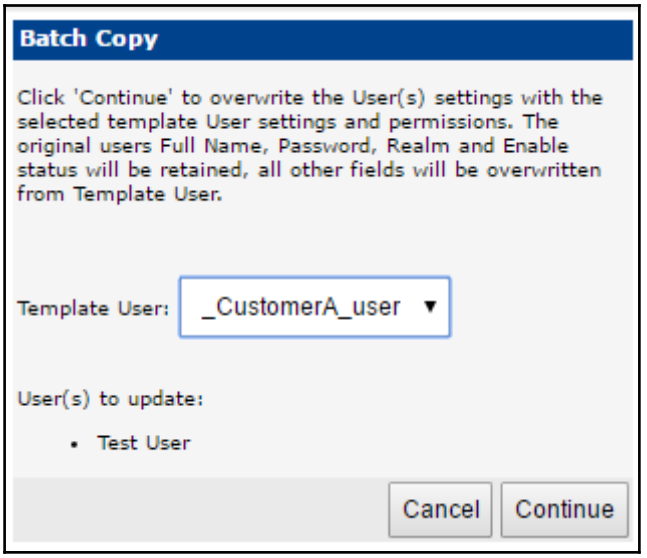

General
Permissions
Group Membership
Graph Perms
Device Perms
Template Perms
Tree Perms
User Settings
User Settings [edit: turban]
General Settings
Theme
Classic
Default View Mode
Tree View
User Language
Bulgarian
Show Graph Title
Show Graph Title
Hide Disabled
Hide Disabled
Date Display Format
Year, Month Number, Day
Tree View Thumbnail Columns
2 Columns
Thumbnail Height
100
Thumbnail Width
300
Tree Settings
Default Tree
Customer A
Graphs Per Page
10
Expand Devices
Expand Devices
Return
Save

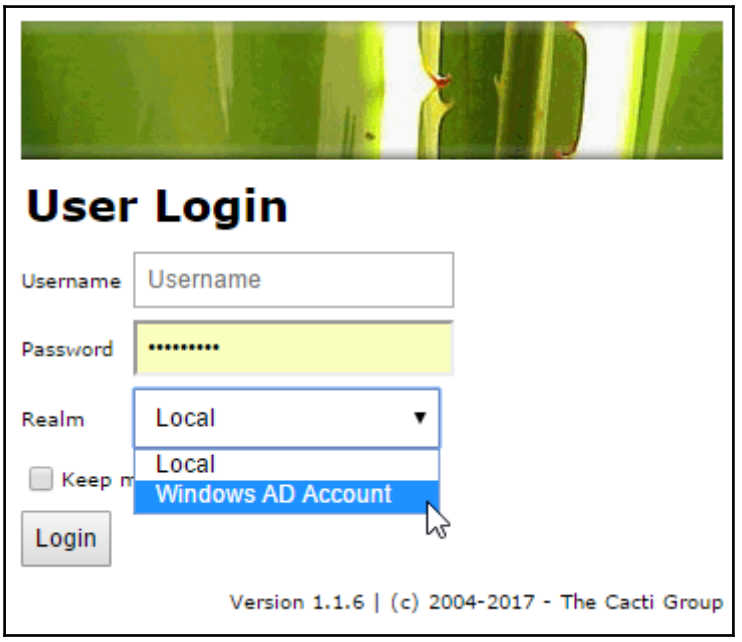

User Group Management
Add
Search
Groups
Default
Go
Clear
No Groups Found
Group Name
Members
Description
Graph Policy
Device Policy
Template Policy
Enabled
No User Groups Found
Choose an action
Go

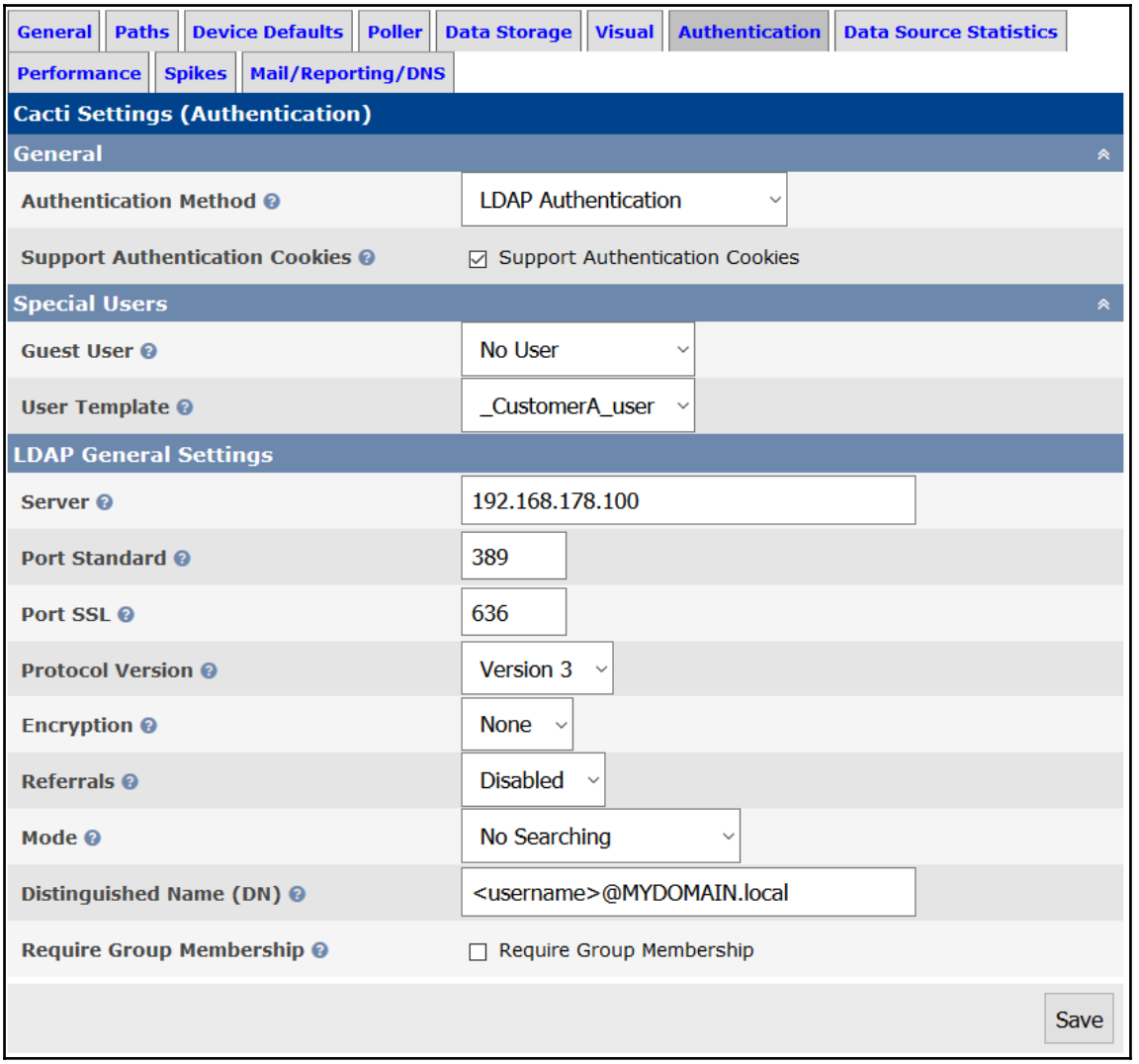

User Group Management [edit: Customer A Group]
Group Name
Customer A Group
Group Description
A user group for the Customer A tree
Enabled
Enabled
General Group Options
Allow Users of this Group to keep custom User Settings
Tree Rights
Defer to the Users Setting
Grant Access
Restrict Access
Graph List Rights
Defer to the Users Setting
Grant Access
Restrict Access
Graph Preview Rights
Defer to the Users Setting
Grant Access
Restrict Access
Login Options
Defer to the Users Setting
Show the Page that the User pointed their browser to
Show the Console
Show the default Graph Screen
Return
Save


User Management [new]
User Name
_CustomerA_user
Full Name
Template User for Customer A
Email Address
Password
****
****
Enabled
Enabled
Locked
Locked
Account Options
Must Change Password at Next Login
Change Password
Maintain Custom Graph and User Settings
Graph Options
User Has Rights to Tree View
User Has Rights to List View
User Has Rights to Preview View
Login Options
Show the page that user pointed their browser to.
Show the default console screen.
Show the default graph screen.
Authentication Realm
Local
Cancel
Create


General
Permissions
Group Membership
Graph Perms
Device Perms
Template Perms
Tree Perms
User Settings
Group Membership [edit: _CustomerA_user]
Search
Groups
Default
Show All
Go
Clear
All 1 Groups
Name
Description
Member
ID
Policies (Graph/Device/Template)
Enabled
Customer A Group
A user group for the Customer A tree
Member
2
DENY/DENY/DENY
Enabled
All 1 Groups
Choose an action
Go


Batch Copy
Click 'Continue' to overwrite the User(s) settings with the selected template User settings and permissions. The original users Full Name, Password, Realm and Enable status will be retained, all other fields will be overwritten from Template User.
Template User:
_CustomerA_user
User(s) to update:
Test User
Cancel
Continue

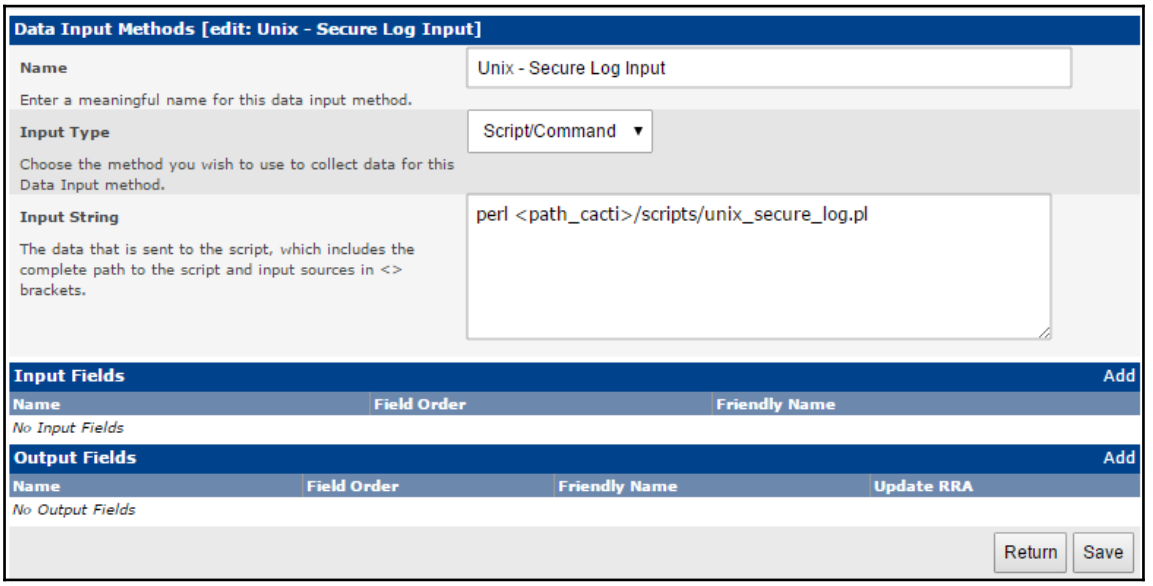

User Login
Username
Username
Password
Realm
Local
Local
Windows AD Account
Login
Version 1.1.6 | (c) 2004-2017 - The Cacti Group

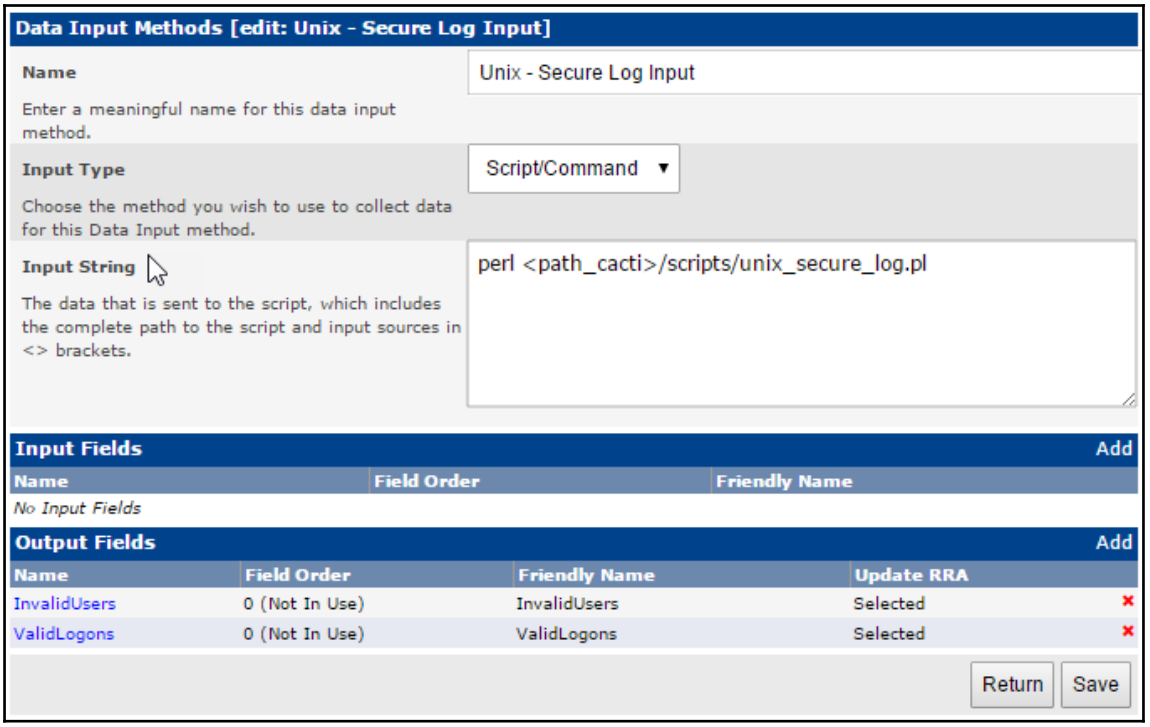

General
Paths
Device Defaults
Poller
Data Storage
Visual
Authentication
Data Source Statistics
Performance
Spikes
Mail/Reporting/DNS
Cacti Settings (Authentication)
General
Authentication Method
LDAP Authentication
Support Authentication Cookies
Support Authentication Cookies
Special Users
Guest User
No User
User Template
_CustomerA_user
LDAP General Settings
Server
192.168.178.100
Port Standard
389
Port SSL
636
Protocol Version
Version 3
Encryption
None
Referrals
Disabled
Mode
No Searching
Distinguished Name (DN)
<username>@MYDOMAIN.local
Require Group Membership
Require Group Membership
Save

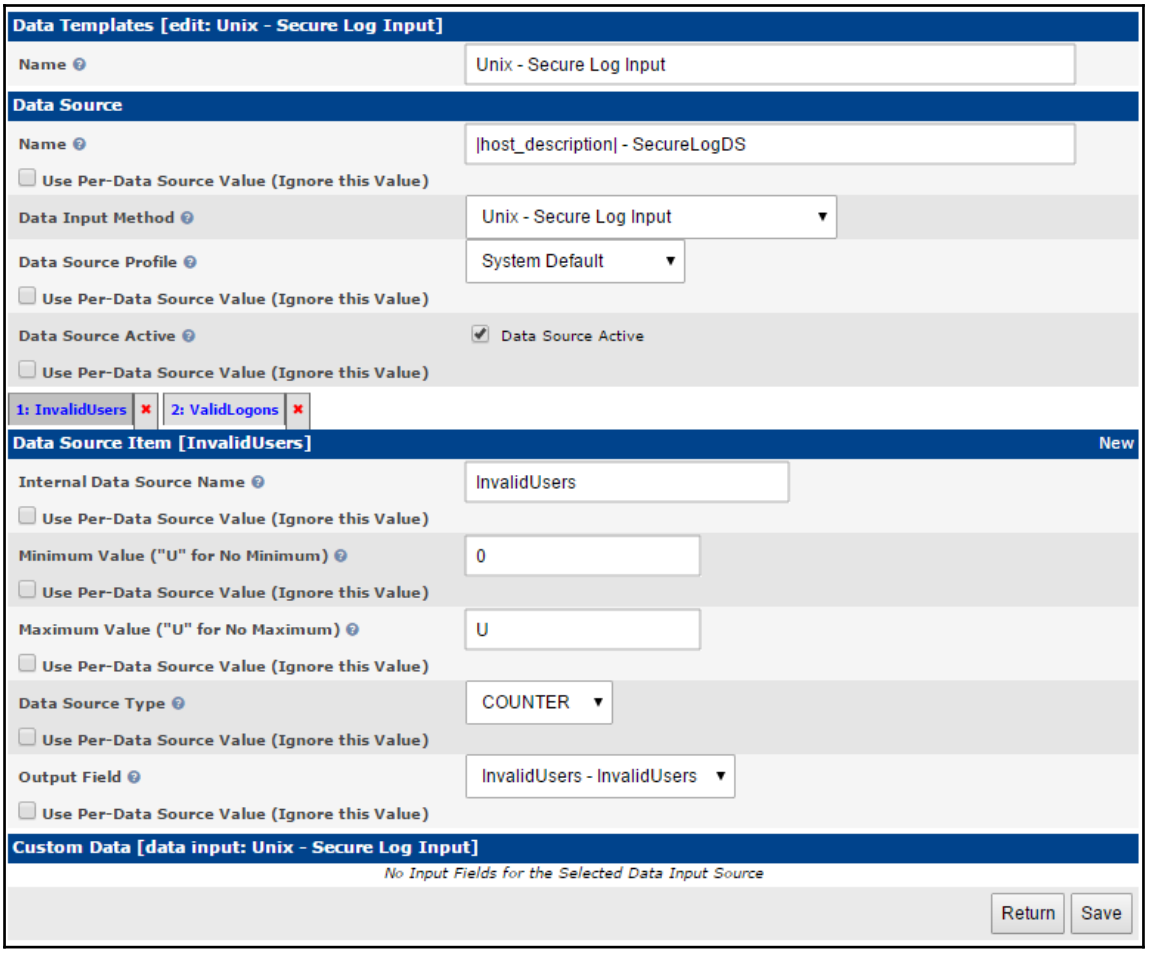
```
[root@localhost cli]# php import_user.php /tmp/users_list.txt _CustomerA_user 0

It is highly recommended that you use the web interface to copy users as this sc
ript will only copy Local Cacti users.

Cacti User Copy Utility
Template User: _CustomerA_user
Realm: Local

Copying/Creating User...
New User: user1
New User: user2
New User: user3
New User: user4
User copied...
[root@localhost cli]#
```

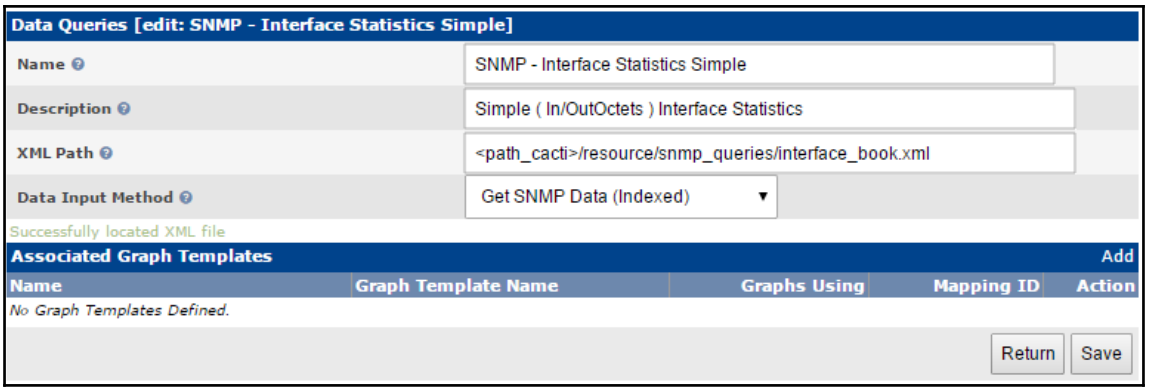
user1	User Name1	No	Local	ALLOW
user2	User Name2	No	Local	ALLOW
user3	User Name3	No	Local	ALLOW
user4	User Name4	No	Local	ALLOW
_CustomerA_user	Template User for Customer A	No	Local	ALLOW

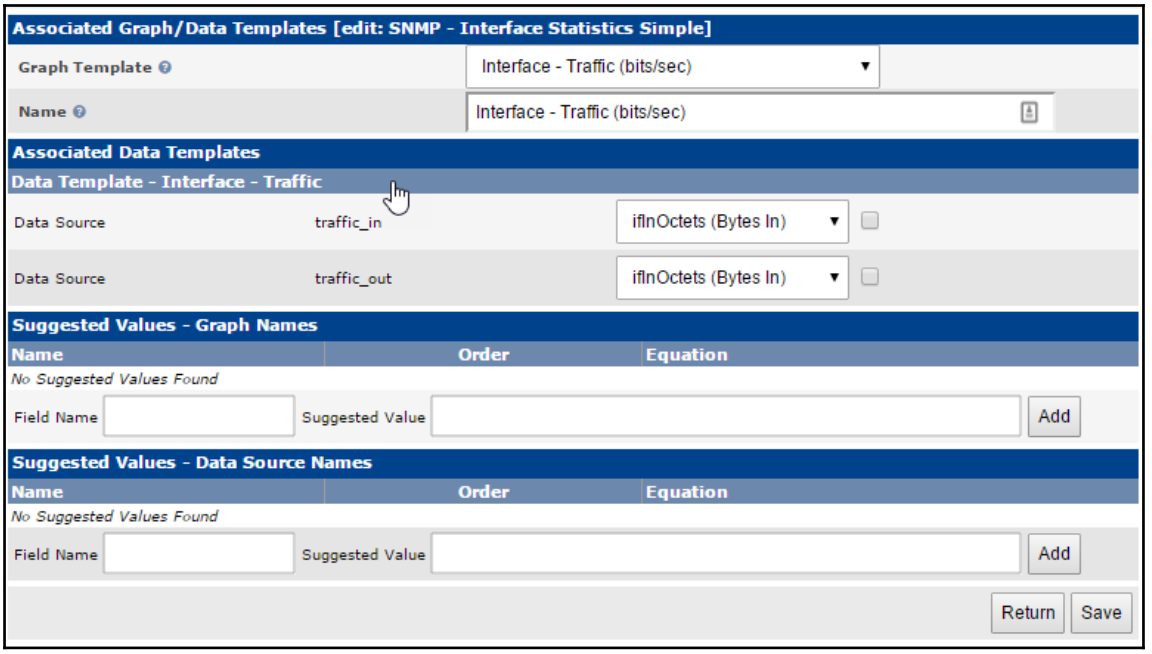
Chapter 5: Data Management

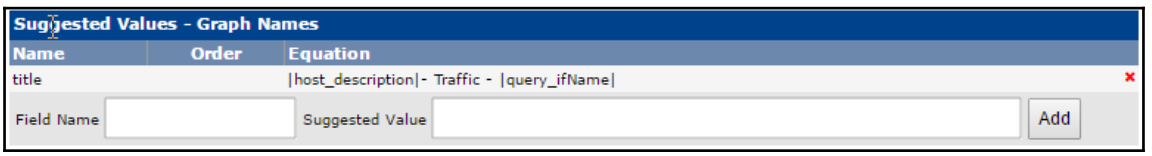


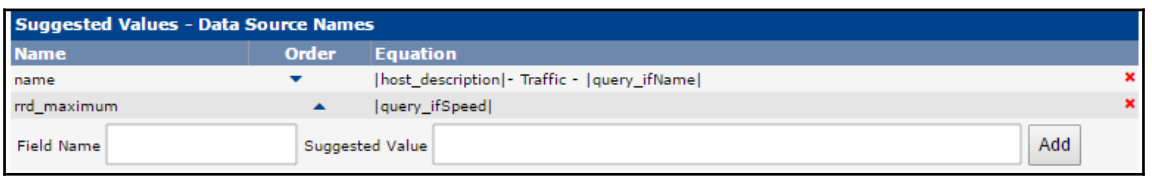

Data Input Methods [edit: Unix - Secure Log Input]
Name
Unix - Secure Log Input
Enter a meaningful name for this data input method.
Input Type
Script/Command
Choose the method you wish to use to collect data for this Data Input method.
Input String
perl <path_cacti>/scripts/unix_secure_log.pl
The data that is sent to the script, which includes the complete path to the script and input sources in <> brackets.
Input Fields
Add
Name
Field Order
Friendly Name
No Input Fields
Output Fields
Add
Name
Field Order
Friendly Name
Update RRA
InvalidUsers
0 (Not In Use)
InvalidUsers
Selected
ValidLogons
0 (Not In Use)
ValidLogons
Selected
Return
Save

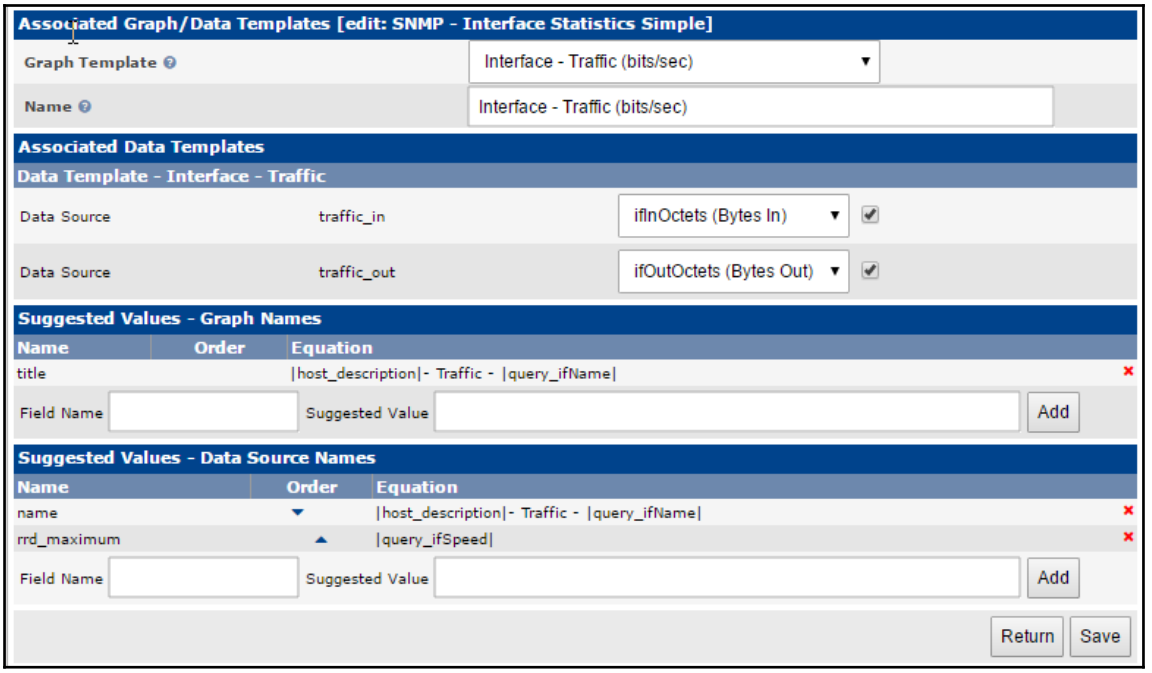

Data Templates [edit: Unix - Secure Log Input]
Name
Unix - Secure Log Input
Data Source
Name
|host_description| - SecureLogDS
Use Per-Data Source Value (Ignore this Value)
Data Input Method
Unix - Secure Log Input
Data Source Profile
System Default
Use Per-Data Source Value (Ignore this Value)
Data Source Active
Data Source Active
Use Per-Data Source Value (Ignore this Value)
1: InvalidUsers
2: ValidLogons
Data Source Item [InvalidUsers]
New
Internal Data Source Name
InvalidUsers
Use Per-Data Source Value (Ignore this Value)
Minimum Value ("U" for No Minimum)
0
Use Per-Data Source Value (Ignore this Value)
Maximum Value ("U" for No Maximum)
U
Use Per-Data Source Value (Ignore this Value)
Data Source Type
COUNTER
Use Per-Data Source Value (Ignore this Value)
Output Field
InvalidUsers - InvalidUsers
Use Per-Data Source Value (Ignore this Value)
Custom Data [data input: Unix - Secure Log Input]
No Input Fields for the Selected Data Input Source
Return
Save


Data Queries [edit: SNMP - Interface Statistics Simple]
Name
SNMP - Interface Statistics Simple
Description
Simple (In/OutOctets) Interface Statistics
XML Path
<path_cacti>/resource/snmp_queries/interface_book.xml
Data Input Method
Get SNMP Data (Indexed)
Successfully located XML file
Associated Graph Templates
Add
Name
Graph Template Name
Graphs Using
Mapping ID
Action
No Graph Templates Defined.
Return
Save


Associated Graph/Data Templates [edit: SNMP - Interface Statistics Simple]
Graph Template
Interface - Traffic (bits/sec)
Name
Interface - Traffic (bits/sec)
Associated Data Templates
Data Template - Interface - Traffic
Data Source
traffic_in
ifInOctets (Bytes In)
Data Source
traffic_out
ifInOctets (Bytes In)
Suggested Values - Graph Names
Name
Order
Equation
No Suggested Values Found
Field Name
Suggested Value
Add
Suggested Values - Data Source Names
Name
Order
Equation
No Suggested Values Found
Field Name
Suggested Value
Add
Return
Save


Suggested Values - Graph Names
Name
Order
Equation
title
|host_description|- Traffic - |query_ifName|
Field Name
Suggested Value
Add

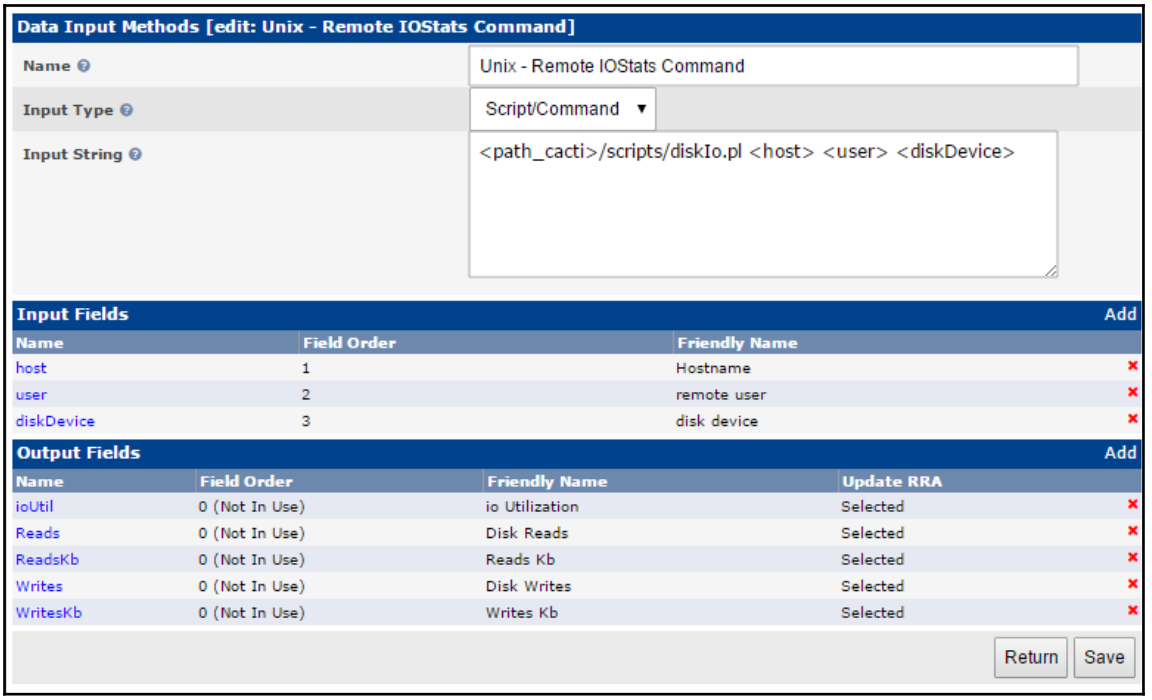

Suggested Values - Data Source Names
Name
Order
Equation
name
|host_description|- Traffic - |query_ifName|
rrd_maximum
|query_ifSpeed|
Field Name
Suggested Value
Add

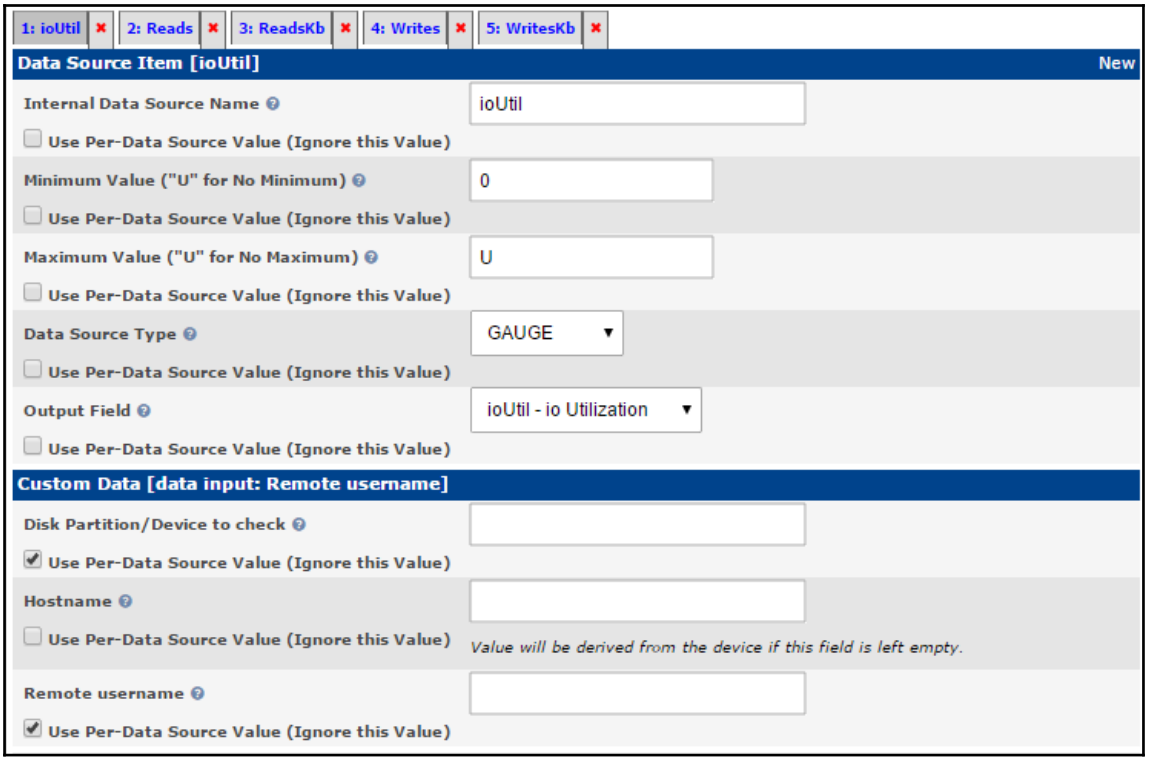


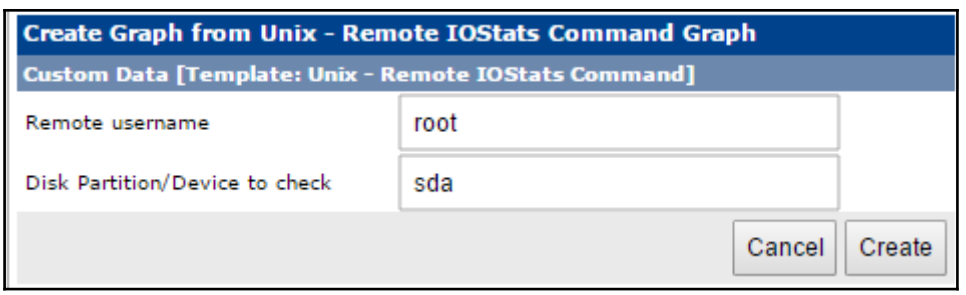

```
Linux 2.6.32-642.11.1.el6.x86_64 (localhost.localdomain)        05/28/2017      _x86_64_        (8 CPU)

Device:         rrqm/s   wrqm/s     r/s     w/s    rkB/s    wkB/s avgrq-sz avgqu-sz   await r_await w_await  svctm  %util
sda               0.09     1.53    0.23    0.51     6.86     7.96    40.14     0.00    3.40    0.69    4.62   0.86   0.06
```

```
Generating public/private rsa key pair.
Enter file in which to save the key (/home/cactiuser/.ssh/id_rsa):
Created directory '/home/cactiuser/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/cactiuser/.ssh/id_rsa.
Your public key has been saved in /home/cactiuser/.ssh/id_rsa.pub.
The key fingerprint is:
20:21:41:48:94:35:3f:f8:7b:ff:5f:05:fd:a0:b9:b4 cactiuser@localhost.localdomain
The key's randomart image is:
+--[ RSA 2048]----+
|o=*+.            |
|.. .+.         . |
|   ..o.       o .|
|    ....     o o.|
|     .  S   +   o|
|      .    . o  .|
|     . .    E  . |
|      . .     .  |
|         .....   |
+-----------------+
```

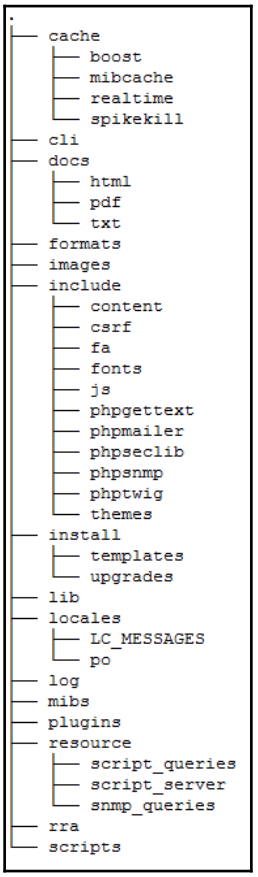
```
$ ssh-copy-id  root@remotehost
The authenticity of host 'remotehost (192.168.178.43)' can't be established.
RSA key fingerprint is fb:96:30:ad:40:ce:42:fe:2c:d7:d6:d5:26:9b:08:ba.
Are you sure you want to continue connecting (yes/no)? yes
/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
root@remotehost's password:

Number of key(s) added: 1

Now try logging into the machine, with:   "ssh 'root@remotehost'"
and check to make sure that only the key(s) you wanted were added.
```

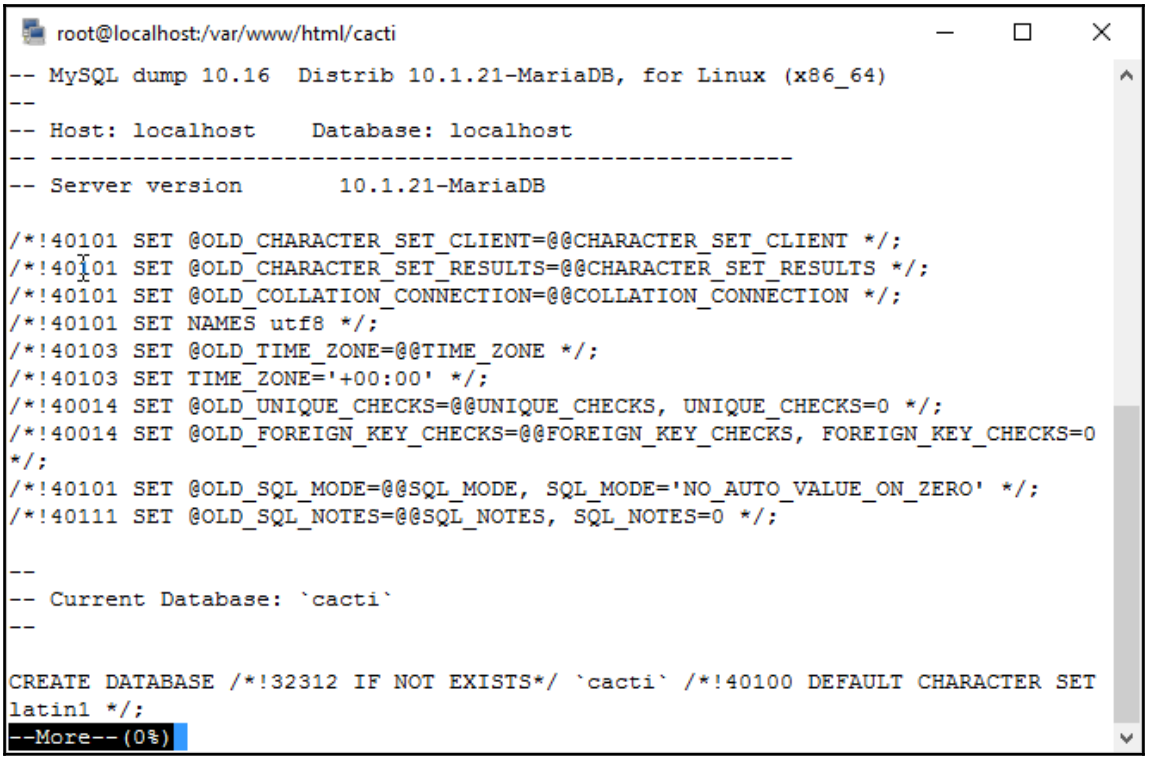

Data Input Methods [edit: Unix - Remote IOStats Command]
Name
Unix - Remote IOStats Command
Input Type
Script/Command
Input String
<path_cacti>/scripts/diskIo.pl <host> <user> <diskDevice>
Input Fields
Add
Name
Field Order
Friendly Name
host
1
Hostname
user
2
remote user
diskDevice
3
disk device
Output Fields
Add
Name
Field Order
Friendly Name
Update RRA
ioUtil
0 (Not In Use)
io Utilization
Selected
Reads
0 (Not In Use)
Disk Reads
Selected
ReadsKb
0 (Not In Use)
Reads Kb
Selected
Writes
0 (Not In Use)
Disk Writes
Selected
WritesKb
0 (Not In Use)
Writes Kb
Selected
Return
Save


1: ioUtil
2: Reads
3: ReadsKb
4: Writes
5: WritesKb
Data Source Item [ioUtil]
New
Internal Data Source Name
ioUtil
Use Per-Data Source Value (Ignore this Value)
Minimum Value ("U" for No Minimum)
0
Use Per-Data Source Value (Ignore this Value)
Maximum Value ("U" for No Maximum)
U
Use Per-Data Source Value (Ignore this Value)
Data Source Type
GAUGE
Use Per-Data Source Value (Ignore this Value)
Output Field
ioUtil - io Utilization
Use Per-Data Source Value (Ignore this Value)
Custom Data [data input: Remote username]
Disk Partition/Device to check
Use Per-Data Source Value (Ignore this Value)
Hostname
Use Per-Data Source Value (Ignore this Value)
Value will be derived from the device if this field is left empty.
Remote username
Use Per-Data Source Value (Ignore this Value)


Create Graph from Unix - Remote IOStats Command Graph
Custom Data [Template: Unix - Remote IOStats Command]
Remote username
root
Disk Partition/Device to check
sda
Cancel
Create

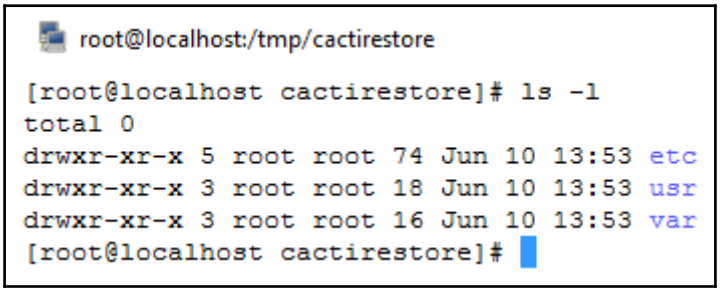
Chapter 6: Cacti Maintenance

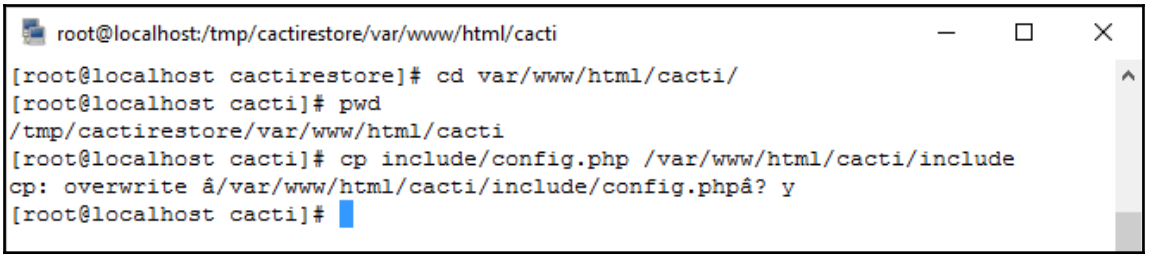


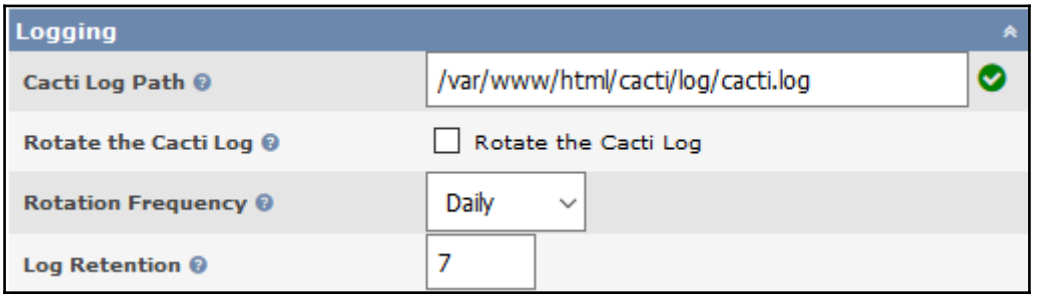


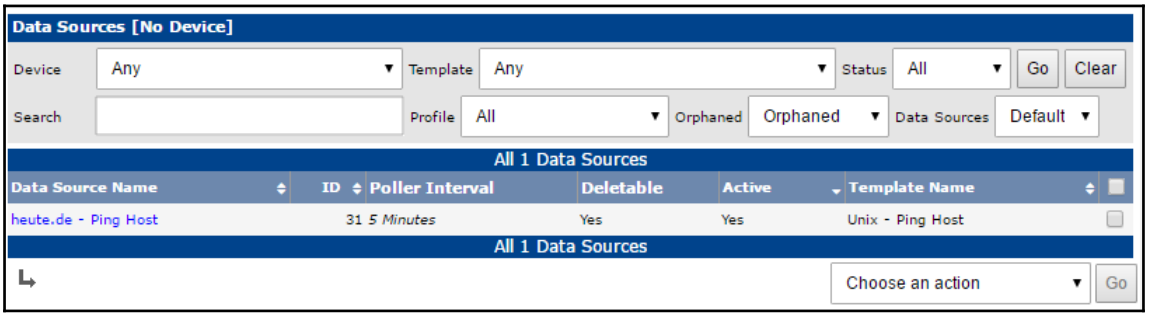

```
[root@localhost /]# ls -l /backup/
total 260
-rw-r--r-- 1 root root    692 Jun 10 13:41 backupCacti.sh
-rw-r--r-- 1 root root  82095 Jun 10 13:43 cacti_database_20170610.sql.gz
-rw-r--r-- 1 root root 173512 Jun 10 13:42 cacti_files_20170608.tgz
[root@localhost /]#
```

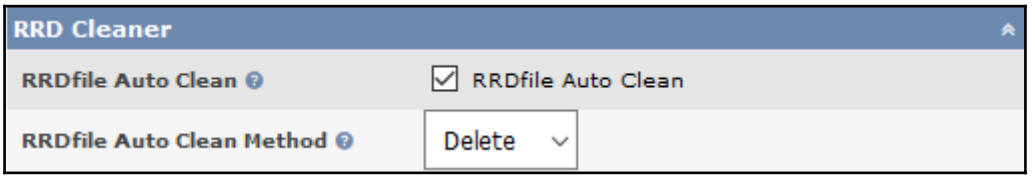
```
./var/www/html/cacti-1.1.28/cache/mibcache/
./var/www/html/cacti-1.1.28/cache/mibcache/index.php
./var/www/html/cacti-1.1.28/cache/mibcache/.htaccess
./var/www/html/cacti-1.1.28/cache/index.php
./var/www/html/cacti-1.1.28/cache/boost/
./var/www/html/cacti-1.1.28/cache/boost/index.php
./var/www/html/cacti-1.1.28/cache/boost/.htaccess
./var/www/html/cacti-1.1.28/boost_rrdupdate.php
./var/www/html/cacti-1.1.28/automation_tree_rules.php
./var/www/html/cacti-1.1.28/automation_templates.php
./var/www/html/cacti-1.1.28/automation_snmp.php
./var/www/html/cacti-1.1.28/automation_networks.php
./var/www/html/cacti-1.1.28/automation_graph_rules.php
./var/www/html/cacti-1.1.28/automation_devices.php
./var/www/html/cacti-1.1.28/auth_profile.php
./var/www/html/cacti-1.1.28/auth_login.php
./var/www/html/cacti-1.1.28/auth_changepassword.php
./var/www/html/cacti-1.1.28/aggregate_templates.php
./var/www/html/cacti-1.1.28/aggregate_items.php
./var/www/html/cacti-1.1.28/aggregate_graphs.php
./var/www/html/cacti-1.1.28/about.php
./var/www/html/cacti-1.1.28/README.md
./var/www/html/cacti-1.1.28/LICENSE
[root@localhost /]#
```

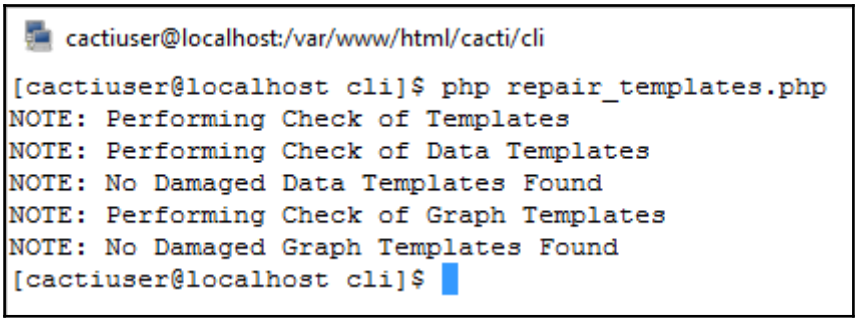


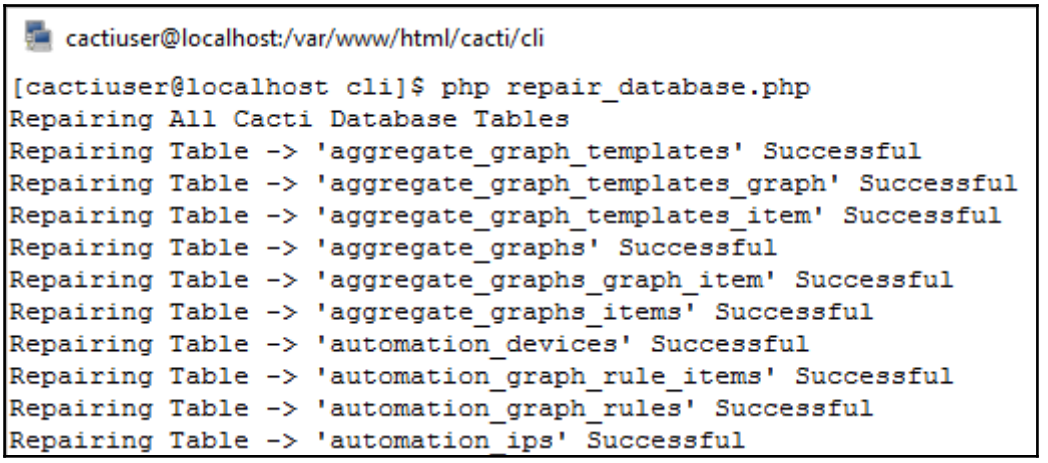

root@localhost:/tmp/cactirestore/var/www/html/cacti
[root@localhost cactirestore]# cd var/www/html/cacti/
[root@localhost cacti]# pwd
/tmp/cactirestore/var/www/html/cacti
[root@localhost cacti]# cp include/config.php /var/www/html/cacti/include
cp: overwrite â/var/www/html/cacti/include/config.phpâ? y
[root@localhost cacti]#


Logging
Cacti Log Path
/var/www/html/cacti/log/cacti.log
Rotate the Cacti Log
Rotate the Cacti Log
Rotation Frequency
Daily
Log Retention
7

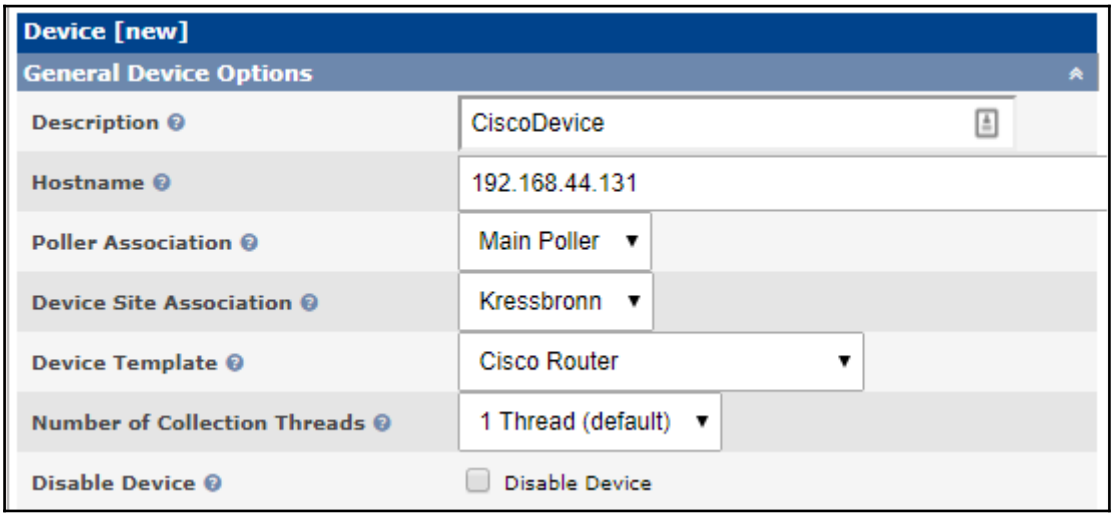

Data Sources [No Device]
Device
Any
Template
Any
Status
All
Go
Clear
Search
Profile
All
Orphaned
Orphaned
Data Sources
Default
All 1 Data Sources
Data Source Name
ID
Poller Interval
Deletable
Active
Template Name
heute.de - Ping Host
31
5 Minutes
Yes
Yes
Unix - Ping Host
All 1 Data Sources
Choose an action
Go

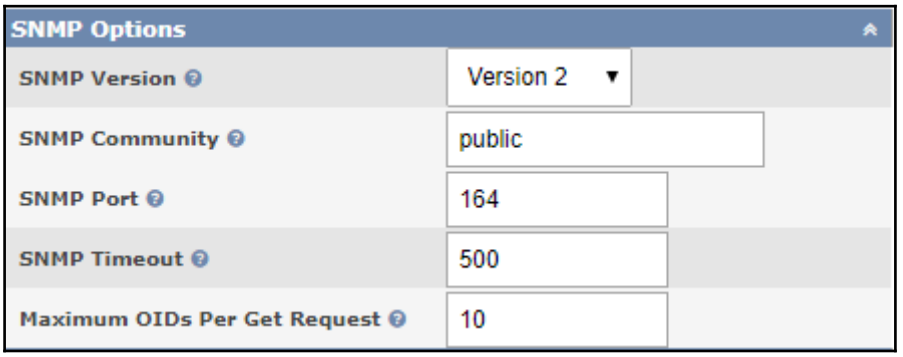

RRD Cleaner
RRDfile Auto Clean
RRDfile Auto Clean
RRDfile Auto Clean Method
Delete


cactiuser@localhost:/var/www/html/cacti/cli
[cactiuser@localhost cli]$ php repair_templates.php
NOTE: Performing Check of Templates
NOTE: Performing Check of Data Templates
NOTE: No Damaged Data Templates Found
NOTE: Performing Check of Graph Templates
NOTE: No Damaged Graph Templates Found
[cactiuser@localhost cli]$


cactiuser@localhost:/var/www/html/cacti/cli
[cactiuser@localhost cli]$ php repair_database.php
Repairing All Cacti Database Tables
Repairing Table -> 'aggregate_graph_templates' Successful
Repairing Table -> 'aggregate_graph_templates_graph' Successful
Repairing Table -> 'aggregate_graph_templates_item' Successful
Repairing Table -> 'aggregate_graphs' Successful
Repairing Table -> 'aggregate_graphs_graph_item' Successful
Repairing Table -> 'aggregate_graphs_items' Successful
Repairing Table -> 'automation_devices' Successful
Repairing Table -> 'automation_graph_rule_items' Successful
Repairing Table -> 'automation_graph_rules' Successful
Repairing Table -> 'automation_ips' Successful

Chapter 7: Network and Server Monitoring





Import Results

Cacti has imported the following items for the Template:

GPRINT Preset

[success] Normal [unchanged]
[success] Exact Numbers [unchanged]

Data Input Method

[success] Get SNMP Data [unchanged]

Data Template

[success] Cisco Router - 5 Minute CPU [updated]

- Table: data_template_data, Column: t_name, New Value: 'on', Old Value: ''

[success] pix-conn [new]
[success] pix-conn-max [new]

Graph Template

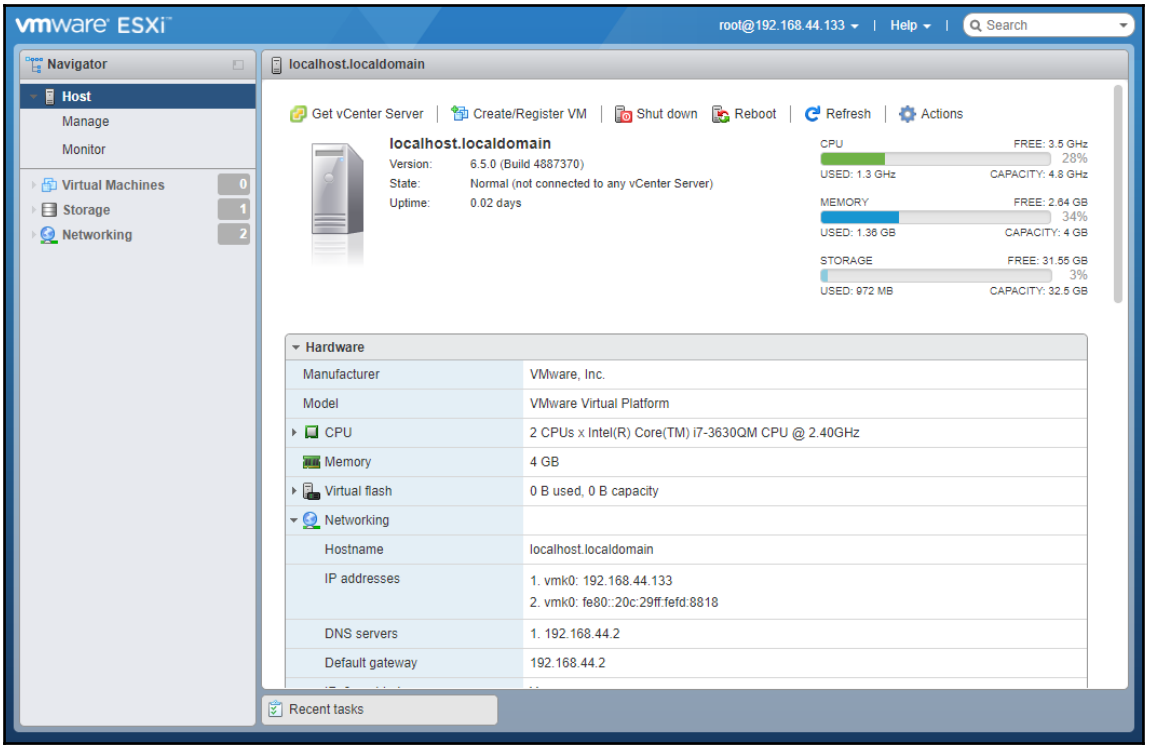
[success] Cisco - CPU Usage [updated]

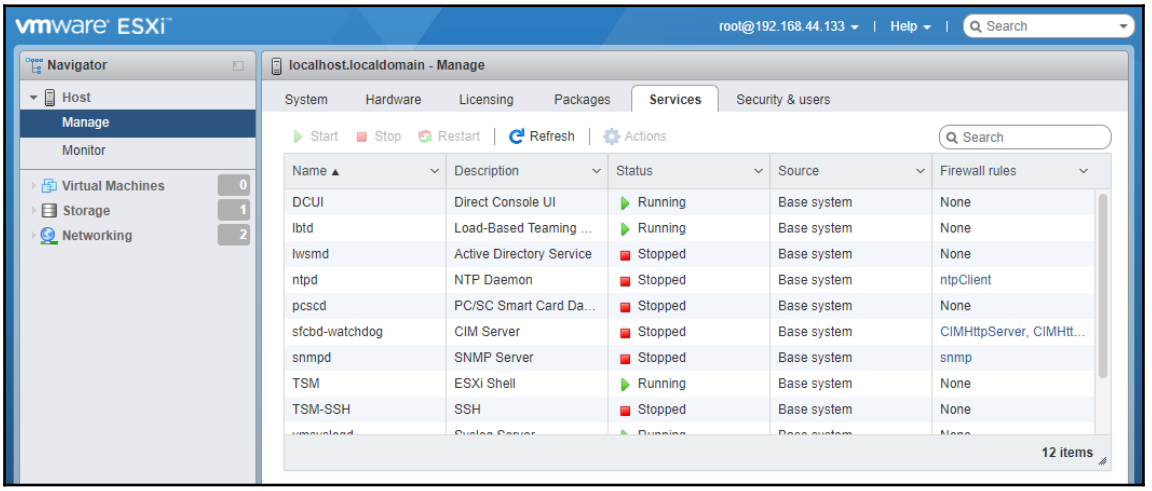
- Table: graph_templates_graph, Column: t_title, New Value: 'on', Old Value: ''
- Table: graph_templates_graph, Column: height, New Value: '100', Old Value: '150'
- Table: graph_templates_graph, Column: width, New Value: '800', Old Value: '600'
- Table: graph_templates_item, Column: hard_return, New Value: '', Old Value: 'on'

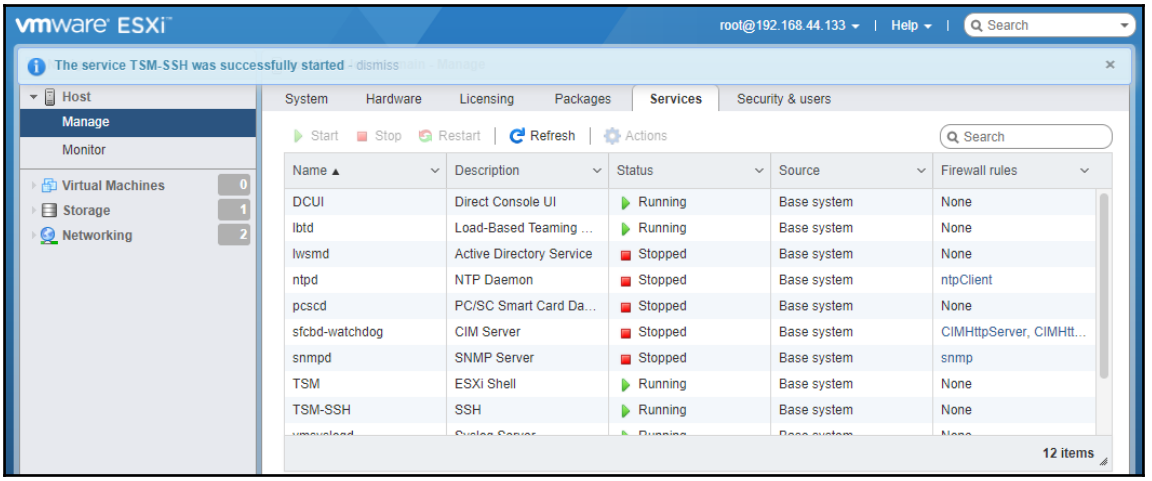
[success] Pix Connections [new]
[success] Pix Memory [new]

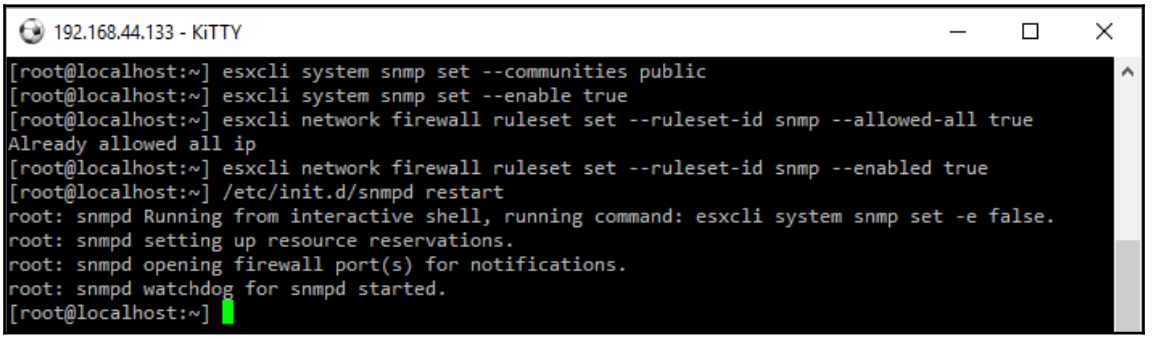
Device Template

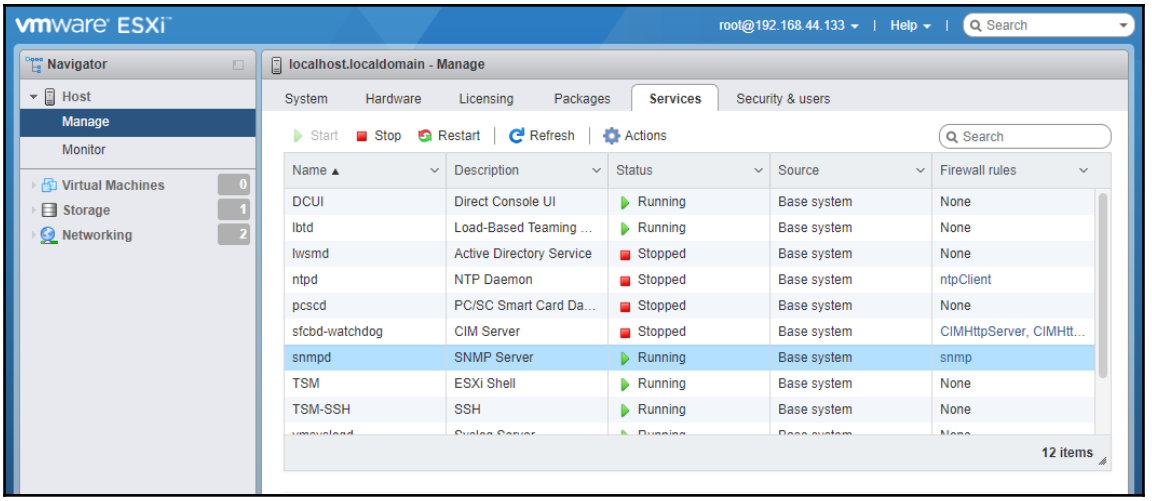
[success] PIX Firewall [new]


vmware ESXi
root@192.168.44.133
Help
Search
Navigator
Host
Manage
Monitor
Virtual Machines 0
Storage 1
Networking 2
localhost.localdomain
Get vCenter Server
Create/Register VM
Shut down
Reboot
Refresh
Actions
localhost.localdomain
Version: 6.5.0 (Build 4887370)
State: Normal (not connected to any vCenter Server)
Uptime: 0.02 days
CPU FREE: 3.5 GHz 28% USED: 1.3 GHz CAPACITY: 4.8 GHz
MEMORY FREE: 2.64 GB 34% USED: 1.36 GB CAPACITY: 4 GB
STORAGE FREE: 31.55 GB 3% USED: 972 MB CAPACITY: 32.5 GB
Hardware
Manufacturer VMware, Inc.
Model VMware Virtual Platform
CPU 2 CPUs x Intel(R) Core(TM) i7-3630QM CPU @ 2.40GHz
Memory 4 GB
Virtual flash 0 B used, 0 B capacity
Networking
Hostname localhost.localdomain
IP addresses 1. vmk0: 192.168.44.133 2. vmk0: fe80::20c:29ff:fefd:8818
DNS servers 1. 192.168.44.2
Default gateway 192.168.44.2
Recent tasks


vmware ESXi
root@192.168.44.133
Help
Search
Navigator
Host
Manage
Monitor
Virtual Machines 0
Storage 1
Networking 2
localhost.localdomain - Manage
System
Hardware
Licensing
Packages
Services
Security & users
Start
Stop
Restart
Refresh
Actions
Search
Name
Description
Status
Source
Firewall rules
DCUI Direct Console UI Running Base system None
lbtd Load-Based Teaming ... Running Base system None
lwsmd Active Directory Service Stopped Base system None
ntpd NTP Daemon Stopped Base system ntpClient
pcscd PC/SC Smart Card Da... Stopped Base system None
sfcbd-watchdog CIM Server Stopped Base system CIMHttpServer, CIMHtt...
snmpd SNMP Server Stopped Base system snmp
TSM ESXi Shell Running Base system None
TSM-SSH SSH Stopped Base system None
12 items


vmware ESXi
root@192.168.44.133 | Help | Search
The service TSM-SSH was successfully started - dismiss
Host
Manage
Monitor
Virtual Machines 0
Storage 1
Networking 2
System Hardware Licensing Packages Services Security & users
Start Stop Restart Refresh Actions
Search
Name | Description | Status | Source | Firewall rules
DCUI | Direct Console UI | Running | Base system | None
lbtd | Load-Based Teaming ... | Running | Base system | None
lwsmd | Active Directory Service | Stopped | Base system | None
ntpd | NTP Daemon | Stopped | Base system | ntpClient
pcscd | PC/SC Smart Card Da... | Stopped | Base system | None
sfcbd-watchdog | CIM Server | Stopped | Base system | CIMHttpServer, CIMHtt...
snmpd | SNMP Server | Stopped | Base system | snmp
TSM | ESXi Shell | Running | Base system | None
TSM-SSH | SSH | Running | Base system | None
12 items

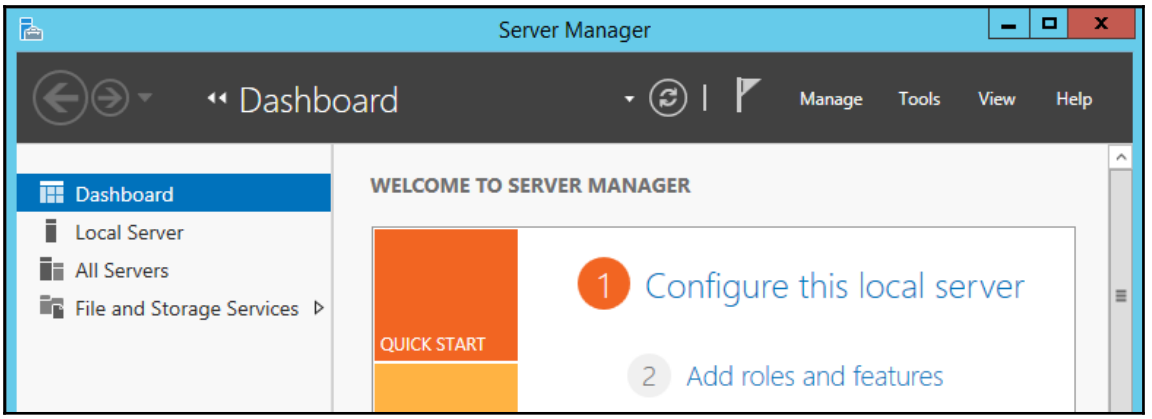

192.168.44.133 - KiTTY
[root@localhost:~] esxcli system snmp set --communities public
[root@localhost:~] esxcli system snmp set --enable true
[root@localhost:~] esxcli network firewall ruleset set --ruleset-id snmp --allowed-all true
Already allowed all ip
[root@localhost:~] esxcli network firewall ruleset set --ruleset-id snmp --enabled true
[root@localhost:~] /etc/init.d/snmpd restart
root: snmpd Running from interactive shell, running command: esxcli system snmp set -e false.
root: snmpd setting up resource reservations.
root: snmpd opening firewall port(s) for notifications.
root: snmpd watchdog for snmpd started.
[root@localhost:~]

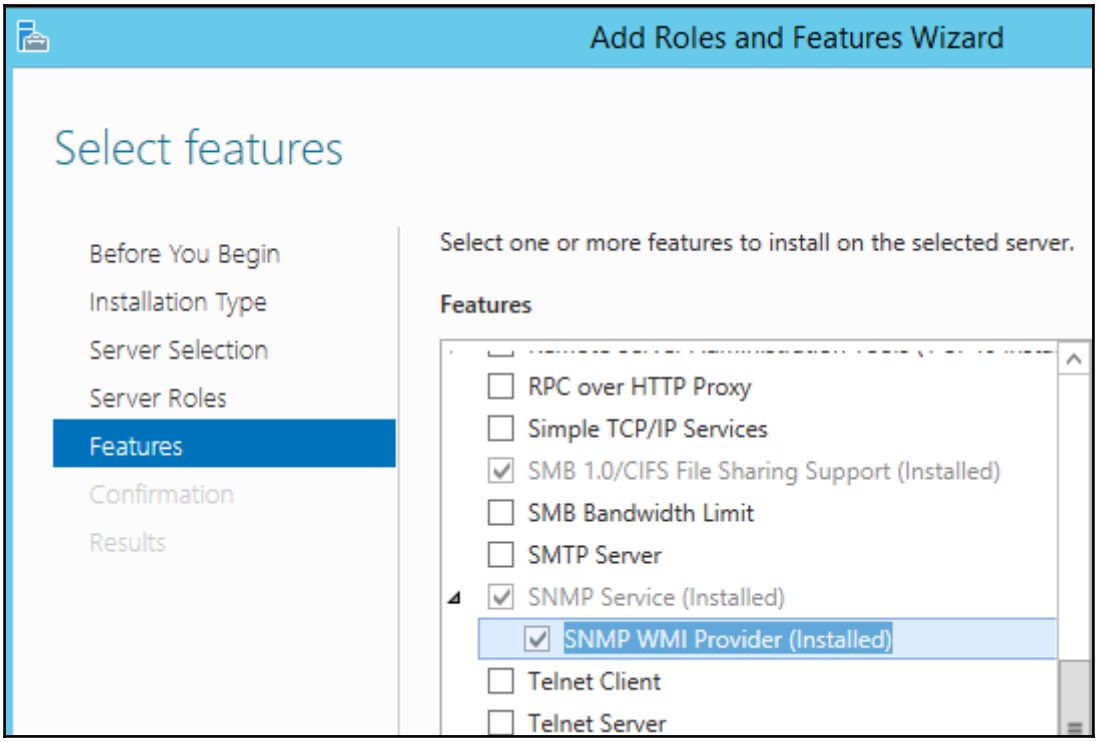

vmware ESXi
root@192.168.44.133 | Help | Search
Navigator
Host
Manage
Monitor
Virtual Machines 0
Storage 1
Networking 2
localhost.localdomain - Manage
System Hardware Licensing Packages Services Security & users
Start Stop Restart Refresh Actions
Search
Name | Description | Status | Source | Firewall rules
DCUI | Direct Console UI | Running | Base system | None
lbtd | Load-Based Teaming ... | Running | Base system | None
lwsmd | Active Directory Service | Stopped | Base system | None
ntpd | NTP Daemon | Stopped | Base system | ntpClient
pcscd | PC/SC Smart Card Da... | Stopped | Base system | None
sfcbd-watchdog | CIM Server | Stopped | Base system | CIMHttpServer, CIMHtt...
snmpd | SNMP Server | Running | Base system | snmp
TSM | ESXi Shell | Running | Base system | None
TSM-SSH | SSH | Running | Base system | None
12 items

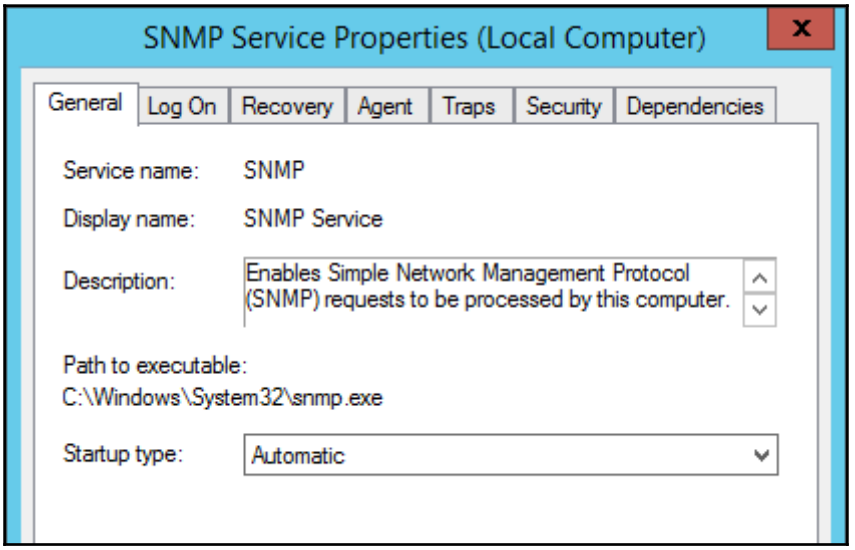
VmwareServer (192.168.44.133)

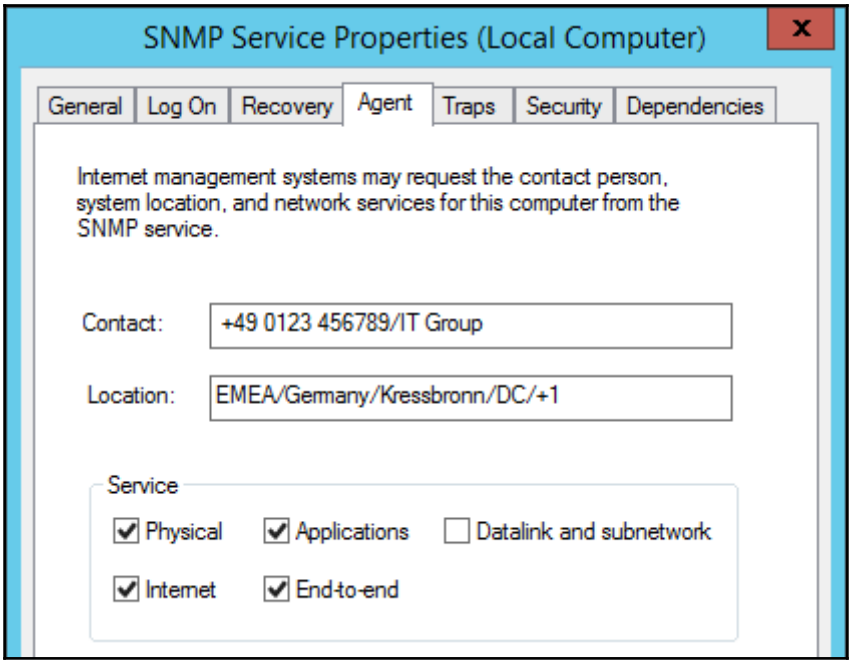
SNMP Information

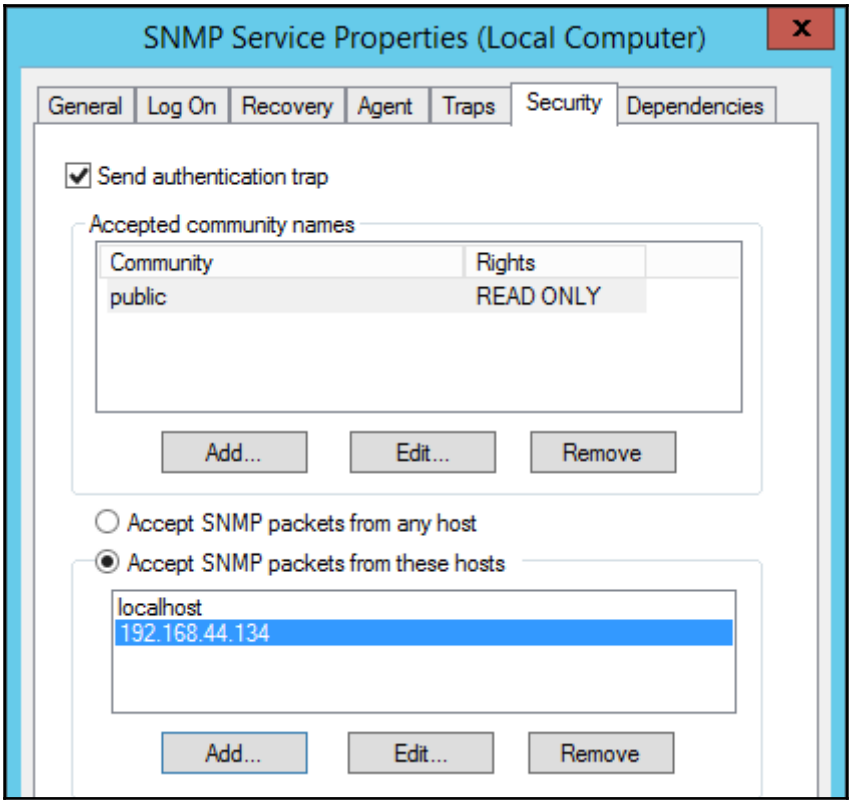
System: VMware ESXi 6.5.0 build-4887370 VMware, Inc. x86_64
Uptime: 290835700 (33 days, 15 hours, 52 minutes)
Hostname: localhost.localdomain
Location:
Contact:

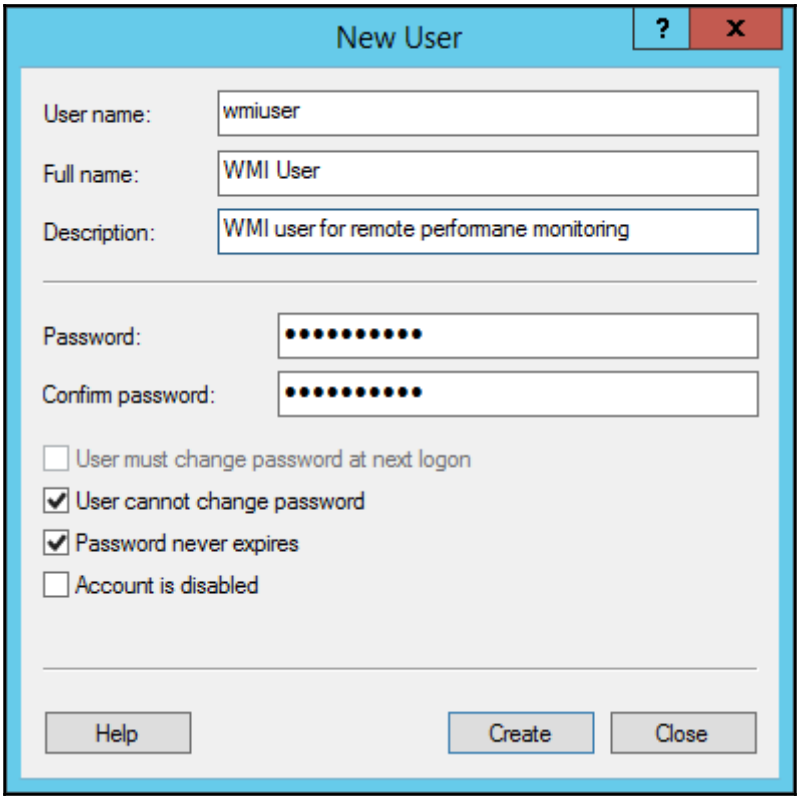


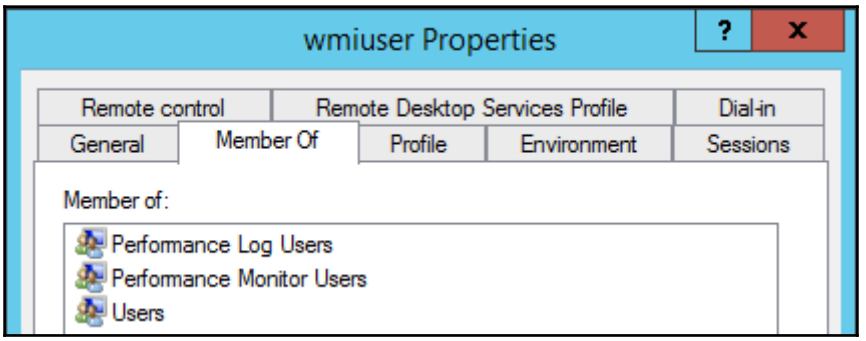

Add Roles and Features Wizard
Select features
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more features to install on the selected server.
Features
RPC over HTTP Proxy
Simple TCP/IP Services
SMB 1.0/CIFS File Sharing Support (Installed)
SMB Bandwidth Limit
SMTP Server
SNMP Service (Installed)
SNMP WMI Provider (Installed)
Telnet Client
Telnet Server

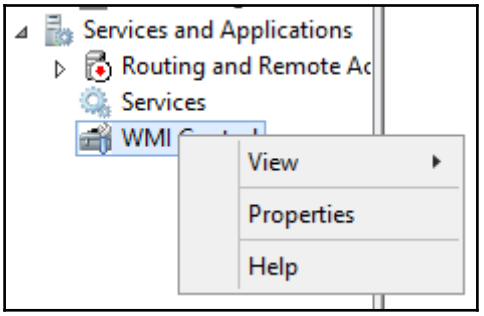

SNMP Service Properties (Local Computer)
General
Log On
Recovery
Agent
Traps
Security
Dependencies
Service name:
SNMP
Display name:
SNMP Service
Description:
Enables Simple Network Management Protocol (SNMP) requests to be processed by this computer.
Path to executable:
C:\Windows\System32\snmp.exe
Startup type:
Automatic

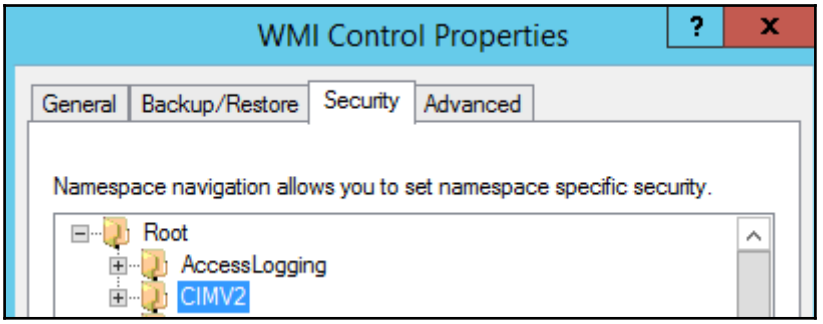

SNMP Service Properties (Local Computer)
General
Log On
Recovery
Agent
Traps
Security
Dependencies
Internet management systems may request the contact person, system location, and network services for this computer from the SNMP service.
Contact:
+49 0123 456789/IT Group
Location:
EMEA/Germany/Kressbronn/DC/+1
Service
Physical
Applications
Datalink and subnetwork
Internet
End-to-end

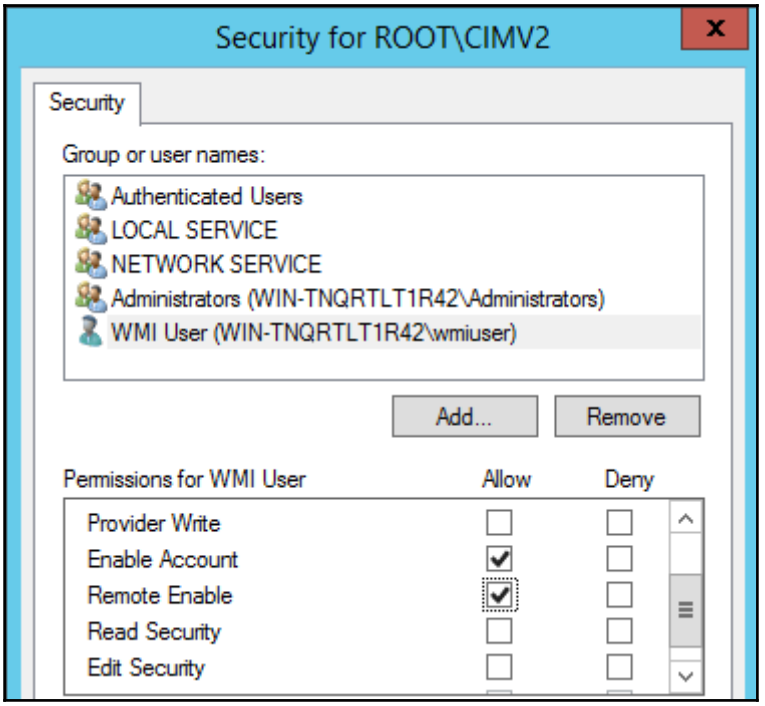

SNMP Service Properties (Local Computer)
General
Log On
Recovery
Agent
Traps
Security
Dependencies
Send authentication trap
Accepted community names
Community
Rights
public
READ ONLY
Add...
Edit...
Remove
Accept SNMP packets from any host
Accept SNMP packets from these hosts
localhost
192.168.44.134
Add...
Edit...
Remove


New User
User name:
wmiuser
Full name:
WMI User
Description:
WMI user for remote performane monitoring
Password:
Confirm password:
User must change password at next logon
User cannot change password
Password never expires
Account is disabled
Help
Create
Close


wmiuser Properties
Remote control
Remote Desktop Services Profile
Dial-in
General
Member Of
Profile
Environment
Sessions
Member of:
Performance Log Users
Performance Monitor Users
Users


Services and Applications
Routing and Remote Ac
Services
WMI
View
Properties
Help


WMI Control Properties
General
Backup/Restore
Security
Advanced
Namespace navigation allows you to set namespace specific security.
Root
AccessLogging
CIMV2



Import Results Hide

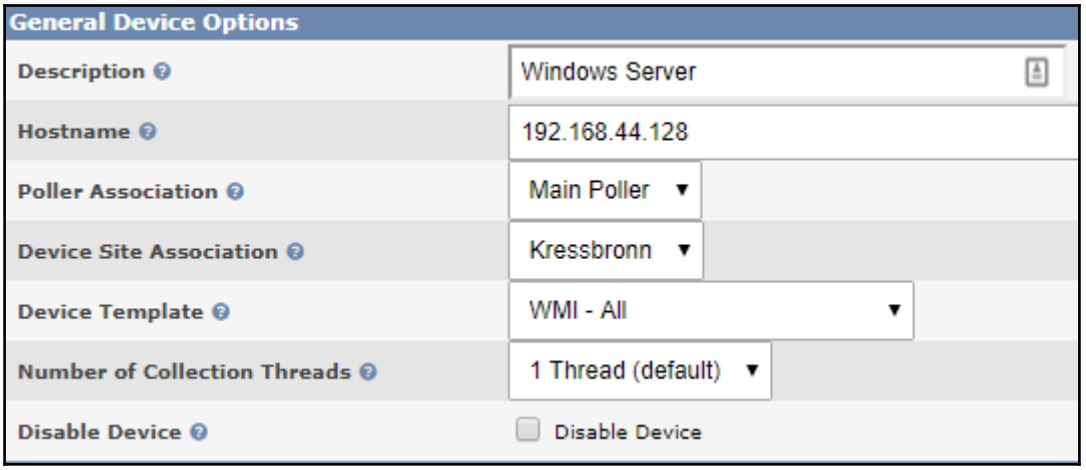
Cacti has imported the following items for the Template:

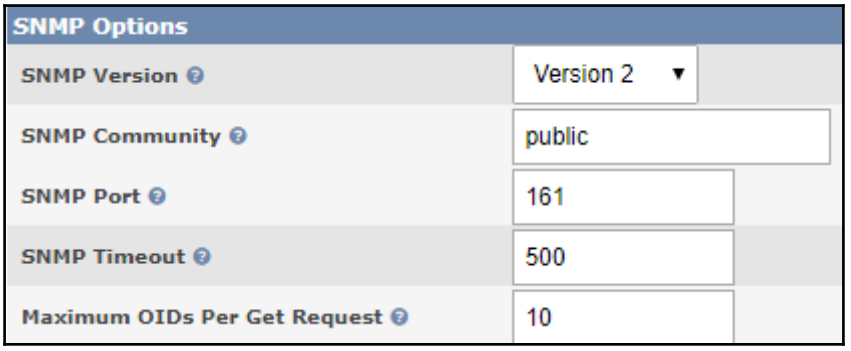
CDEF

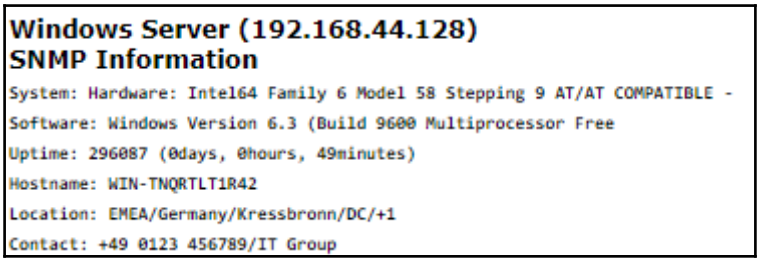
[success] WMI - Disk I/O [new]
[success] WMI - Disk Used [new]
[success] WMI - Percentage Ratio [new]
[success] WMI - Memory [new]
[success] Surf Control 5.5 - Session Stats (WMI) [new]
[success] Enterprise Vault 2007 - Awaiting Backup (WMI) [new]
[success] IIS - Request Statistics (WMI) [new]
[success] Windows - Redirector Commands (WMI) [new]
[success] IIS - Connections (WMI) [new]
[success] Exchange 2003 - Total Mailbox Items (WMI) [new]

Device Template

[success] WMI - All [new]


General Device Options
Description
Windows Server
Hostname
192.168.44.128
Poller Association
Main Poller
Device Site Association
Kressbronn
Device Template
WMI - All
Number of Collection Threads
1 Thread (default)
Disable Device
Disable Device


SNMP Options
SNMP Version
Version 2
SNMP Community
public
SNMP Port
161
SNMP Timeout
500
Maximum OIDs Per Get Request
10


Windows Server (192.168.44.128)
SNMP Information
System: Hardware: Intel64 Family 6 Model 58 Stepping 9 AT/AT COMPATIBLE -
Software: Windows Version 6.3 (Build 9600 Multiprocessor Free
Uptime: 296087 (0days, 0hours, 49minutes)
Hostname: WIN-TNQRTLT1R42
Location: EMEA/Germany/Kressbronn/DC/+1
Contact: +49 0123 456789/IT Group

Graph Template Name	Status
1) Enterprise Vault 2007 - Awaiting Backup (WMI)	Not Being Graphed
2) Exchange 2003 - Active Client Logons (WMI)	Not Being Graphed
3) Exchange 2003 - Client RPC Latency (WMI)	Not Being Graphed
4) Exchange 2003 - Database Performance (WMI)	Not Being Graphed
5) Exchange 2003 - SMTP Performance (WMI)	Not Being Graphed
28) Windows - Process Stats - Memory (WMI)	Not Being Graphed
29) Windows - Processes (WMI)	Not Being Graphed
30) Windows - Processor Queue Length (WMI)	Not Being Graphed
31) Windows - Redirector Commands (WMI)	Not Being Graphed
32) Windows - System Calls (WMI)	Not Being Graphed

Create Graph from Windows - Available Disk Space (WMI)

Graph [Template: Windows - Available Disk Space (WMI)]

Title (--title)	|host_description| - Available Disk Space

Data Source [Template: Windows - Disk Space (WMI)]

Name	|host_description| - Windows - Disk Space

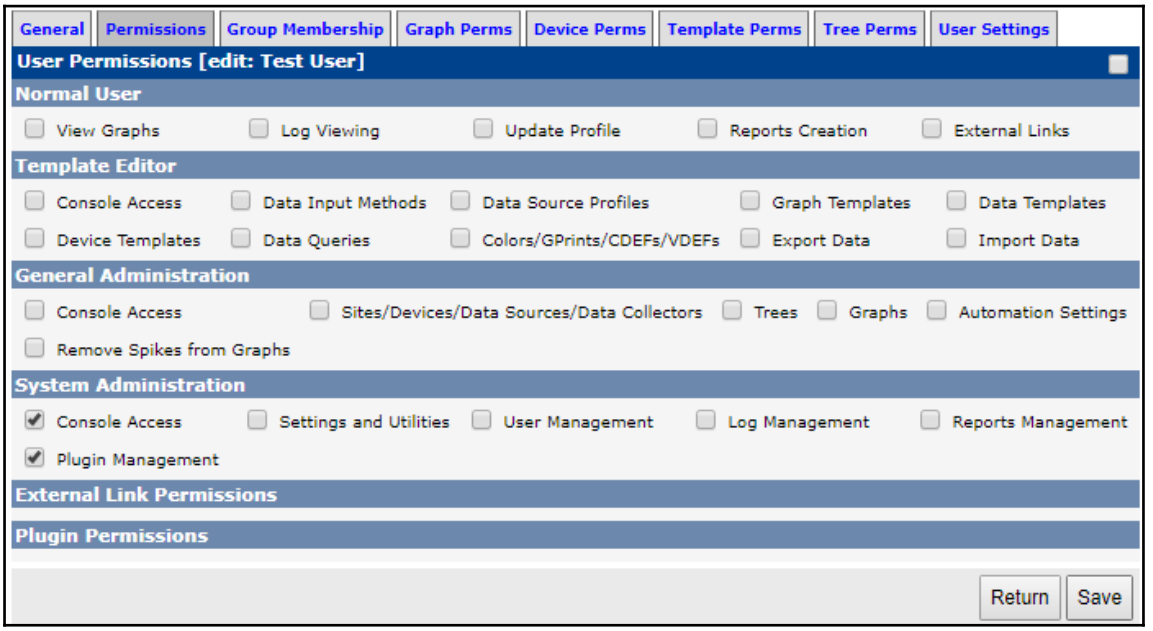
Custom Data [Template: Windows - Disk Space (WMI)]

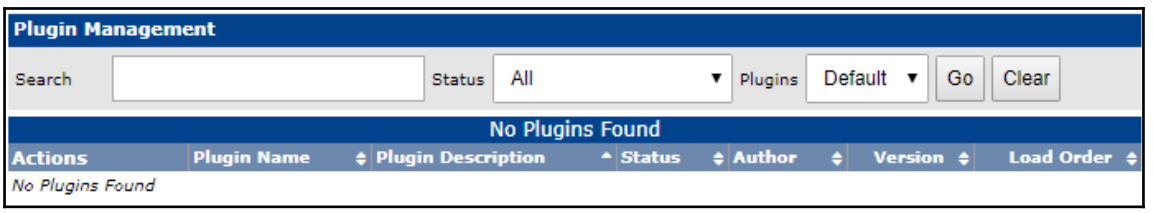
Credential	/etc/cacti/cactiwmi.pw
Filter Value	C:

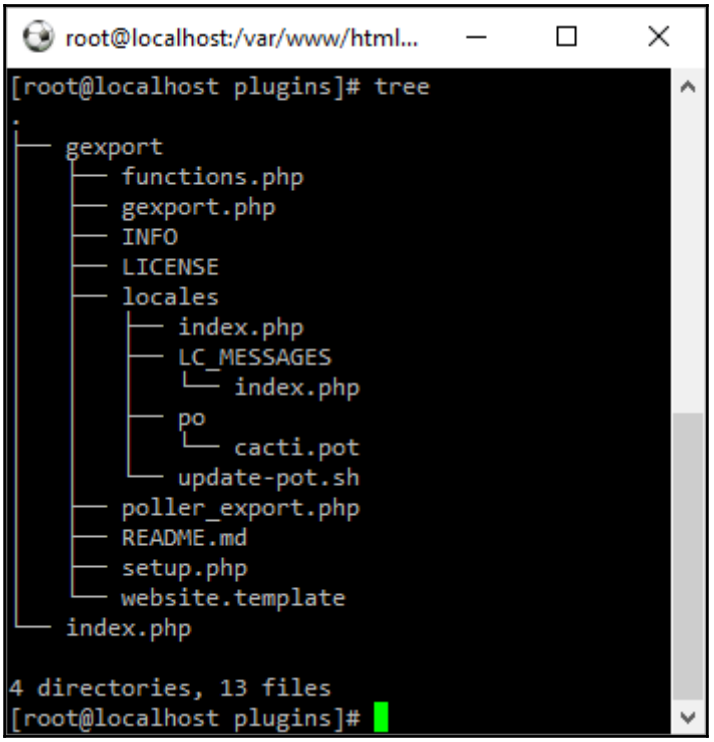
```
####
# First, map the community name "public" into a "security name"

#       sec.name  source          community
com2sec notConfigUser  default       public

####
# Second, map the security name into a group name:

#       groupName      securityModel securityName
group   notConfigGroup v1           notConfigUser
group   notConfigGroup v2c           notConfigUser

####
# Third, create a view for us to let the group have rights to:

# Make at least  snmpwalk -v 1 localhost -c public system fast again.
#       name           incl/excl     subtree         mask(optional)
view    systemview    included   .1.3.6.1.2.1.1
view    systemview    included   .1.3.6.1.2.1.25.1.1

####
# Finally, grant the group read-only access to the systemview view.

#       group          context sec.model sec.level prefix read   write  notif
access  notConfigGroup ""      any       noauth    exact  systemview none none
```

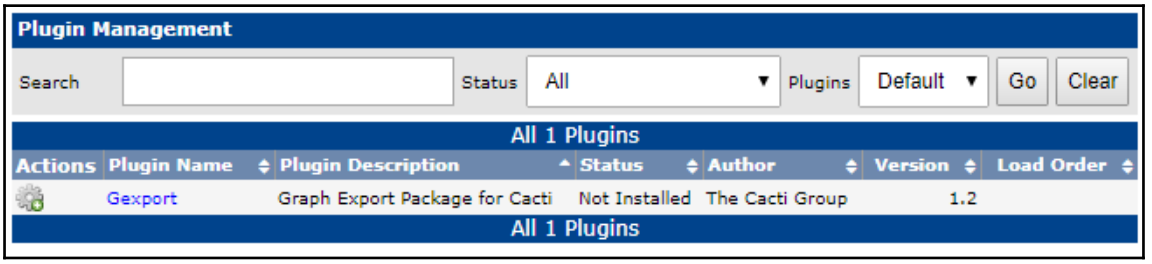
```
# Make at least  snmpwalk -v 1 localhost -c public system fast again.
#       name           incl/excl     subtree         mask(optional)
view    systemview    included   .1
#view    systemview    included   .1.3.6.1.2.1.25.1.1
```

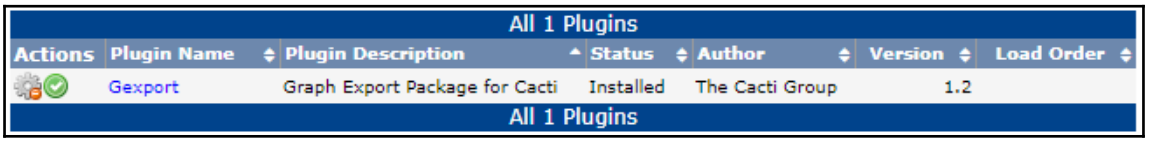
Chapter 8: Plugin Architecture

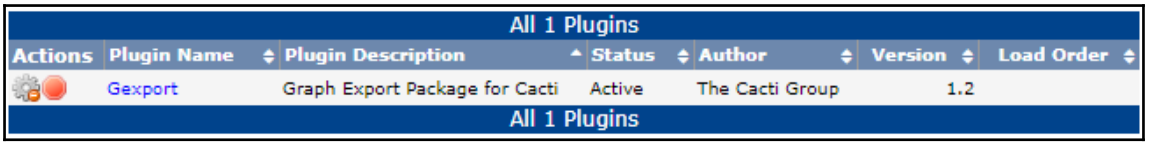





root@localhost:/var/www/html...
[root@localhost plugins]# tree
.
├── gexport
│   ├── functions.php
│   ├── gexport.php
│   ├── INFO
│   ├── LICENSE
│   ├── locales
│   │   ├── index.php
│   │   ├── LC_MESSAGES
│   │   │   └── index.php
│   │   ├── po
│   │   │   └── cacti.pot
│   │   └── update-pot.sh
│   ├── poller_export.php
│   ├── README.md
│   ├── setup.php
│   └── website.template
└── index.php
4 directories, 13 files
[root@localhost plugins]#


Plugin Management
Search
Status
All
Plugins
Default
Go
Clear
All 1 Plugins
Actions
Plugin Name
Plugin Description
Status
Author
Version
Load Order
Gexport
Graph Export Package for Cacti
Not Installed
The Cacti Group
1.2
All 1 Plugins


All 1 Plugins
Actions
Plugin Name
Plugin Description
Status
Author
Version
Load Order
Gexport
Graph Export Package for Cacti
Installed
The Cacti Group
1.2
All 1 Plugins


All 1 Plugins
Actions
Plugin Name
Plugin Description
Status
Author
Version
Load Order
Gexport
Graph Export Package for Cacti
Active
The Cacti Group
1.2
All 1 Plugins

All 1 Plugins

Actions	Plugin Name	Plugin Description	Status	Author	Version	Load Order
	Gexport	Graph Export Package for Cacti	Active	The Cacti Group	1.2	

All 1 Plugins

All 1 Plugins

Actions	Plugin Name	Plugin Description	Status	Author	Version	Load Order
	Gexport	Graph Export Package for Cacti	Installed	The Cacti Group	1.2	

All 1 Plugins

All 1 Plugins

Actions	Plugin Name	Plugin Description	Status	Author	Version	Load Order
	Gexport	Graph Export Package for Cacti	Not Installed	The Cacti Group	1.2	

All 1 Plugins

General | Permissions | Group Membership | Graph Perms | Device Perms | Template Perms | Tree Perms | User Settings

User Permissions [edit: user1]

Normal User

☐ View Graphs ☐ Log Viewing ☐ Update Profile ☐ Reports Creation ☐ External Links

Template Editor

☐ Console Access ☐ Data Input Methods ☐ Data Source Profiles ☐ Graph Templates ☐ Data Templates

☐ Device Templates ☐ Data Queries ☐ Colors/GPrints/CDEFs/VDEFs ☐ Export Data ☐ Import Data

General Administration

☐ Console Access ☐ Sites/Devices/Data Sources/Data Collectors ☐ Trees ☐ Graphs ☐ Automation Settings

☐ Remove Spikes from Graphs

System Administration

☑ Console Access ☐ Settings and Utilities ☐ User Management ☐ Log Management ☐ Reports Management

☑ Plugin Management

External Link Permissions

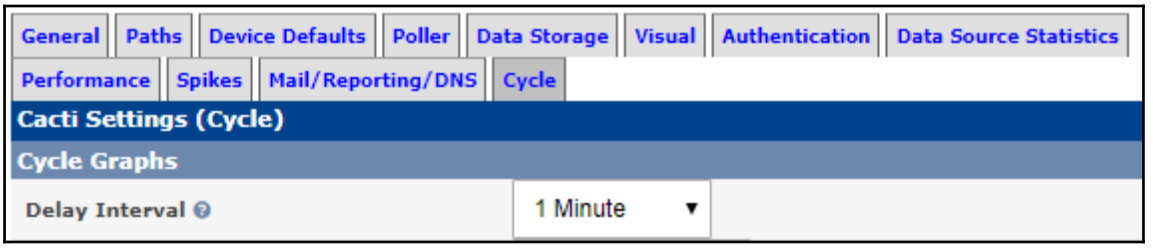
Plugin Permissions

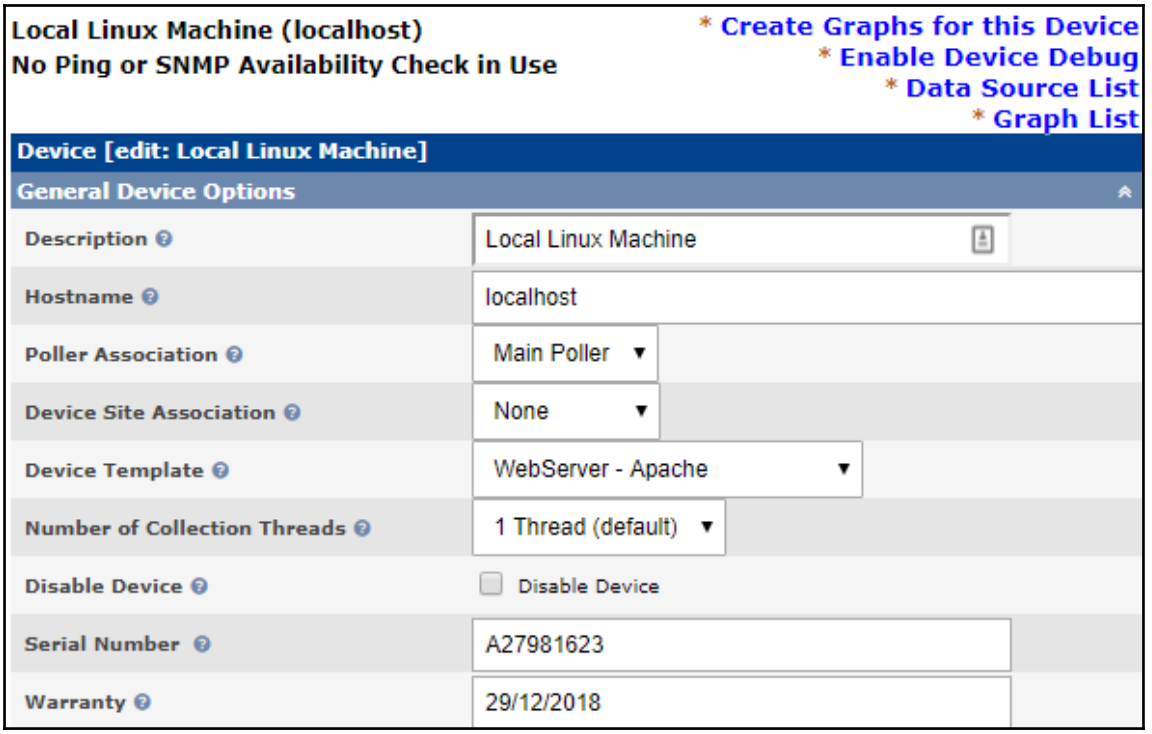
Graph Export Package for Cacti

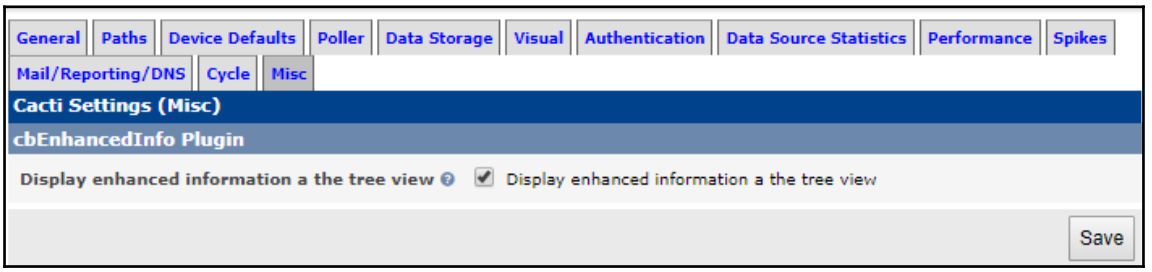
☐ Export Cacti Graphs Settings

Return Save

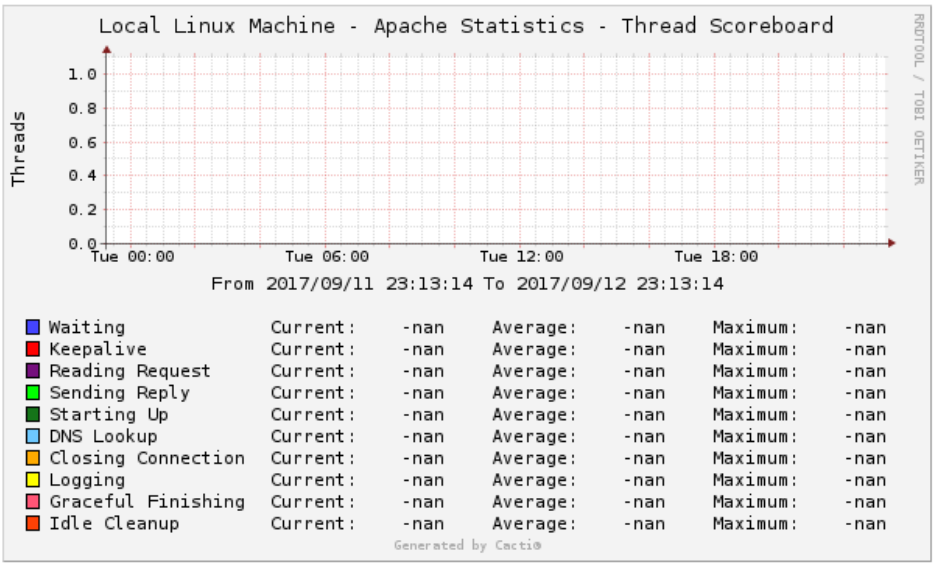
Chapter 9: Plugins




Local Linux Machine (localhost)
No Ping or SNMP Availability Check in Use
* Create Graphs for this Device
* Enable Device Debug
* Data Source List
* Graph List
Device [edit: Local Linux Machine]
General Device Options
Description
Local Linux Machine
Hostname
localhost
Poller Association
Main Poller
Device Site Association
None
Device Template
WebServer - Apache
Number of Collection Threads
1 Thread (default)
Disable Device
Disable Device
Serial Number
A27981623
Warranty
29/12/2018


General
Paths
Device Defaults
Poller
Data Storage
Visual
Authentication
Data Source Statistics
Performance
Spikes
Mail/Reporting/DNS
Cycle
Misc
Cacti Settings (Misc)
cbEnhancedInfo Plugin
Display enhanced information a the tree view
Display enhanced information a the tree view
Save

Utilities
System Utilities
External Links
CactiBook Plugins
Enhanced Info



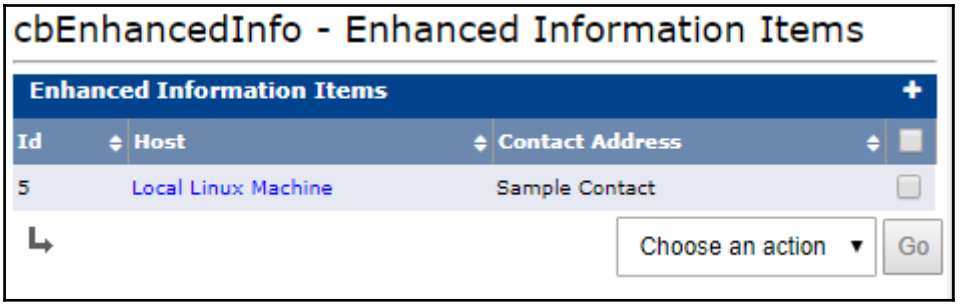
Enhanced Information

Contact Address	ThomasUrban@urban-software.de
Serial	A27981623
Warranty	29/12/2018
Aditional Information	This is an example text for this device. It's a virtual box running CentOS 7 and Cacti 1.x

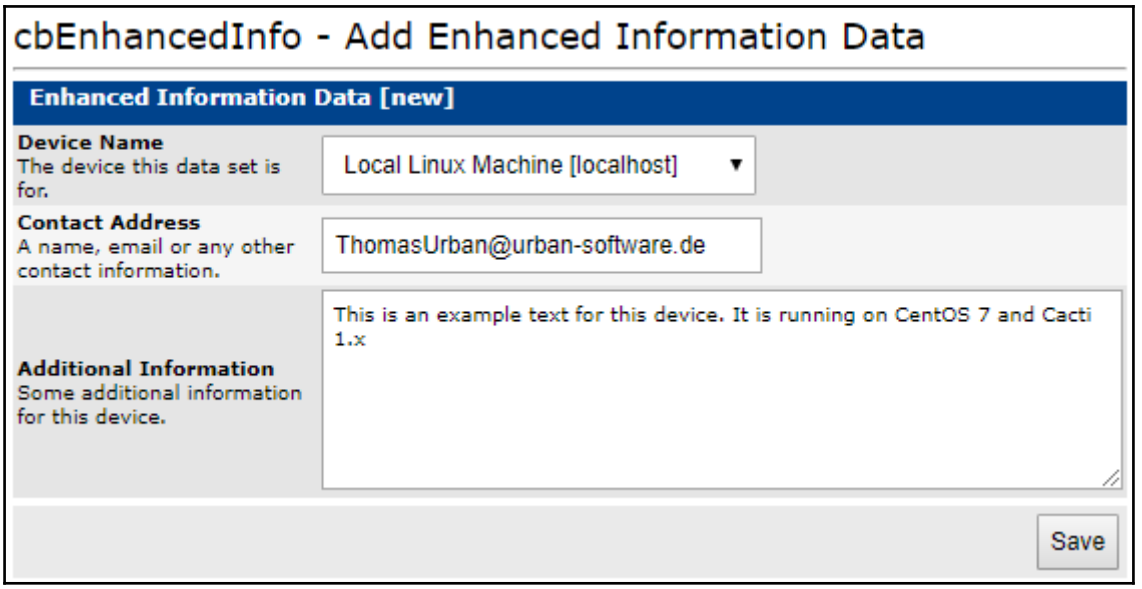
```
MariaDB [cacti]> SELECT * FROM plugin_cbEnhancedInfo_dataTable;
+----+--------+-------------------------------+-----------------------------------------------------------------------------------------+
| Id | hostId | contactAddress                | additionalInformation                                                                   |
+----+--------+-------------------------------+-----------------------------------------------------------------------------------------+
|  1 |      1 | ThomasUrban@urban-software.de | This is an example text for this device. It's a virtual box running CentOS 7 and Cacti 1.x |
+----+--------+-------------------------------+-----------------------------------------------------------------------------------------+
1 row in set (0.00 sec)
```

```
+----+--------+----------------+-----------------------+
| Id | hostId | contactAddress | additionalInformation |
+----+--------+----------------+-----------------------+
|  5 |      1 | Sample Contact | Sample Information    |
+----+--------+----------------+-----------------------+
1 row in set (0.00 sec)
```

```
+----+---------------------+----------------+-----------------------+
| Id | hostDescription     | contactAddress | additionalInformation |
+----+---------------------+----------------+-----------------------+
|  5 | Local Linux Machine | Sample Contact | Sample Information    |
+----+---------------------+----------------+-----------------------+
1 row in set (0.00 sec)
```



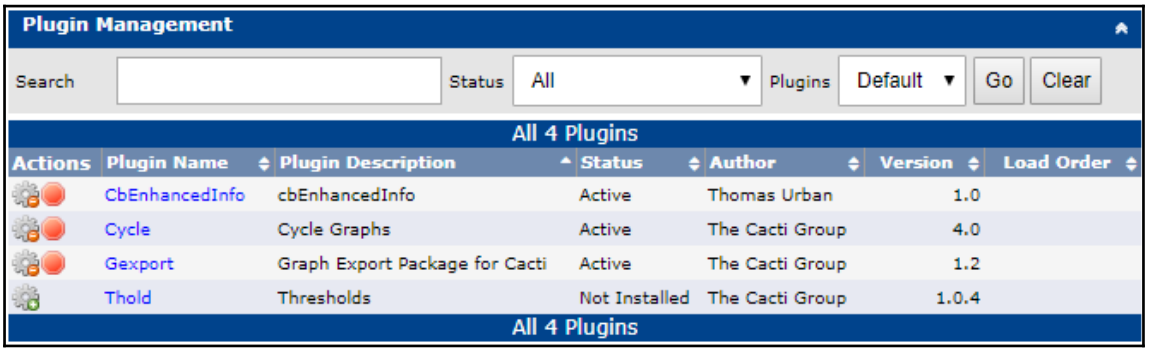
Enhanced Information Data [new]

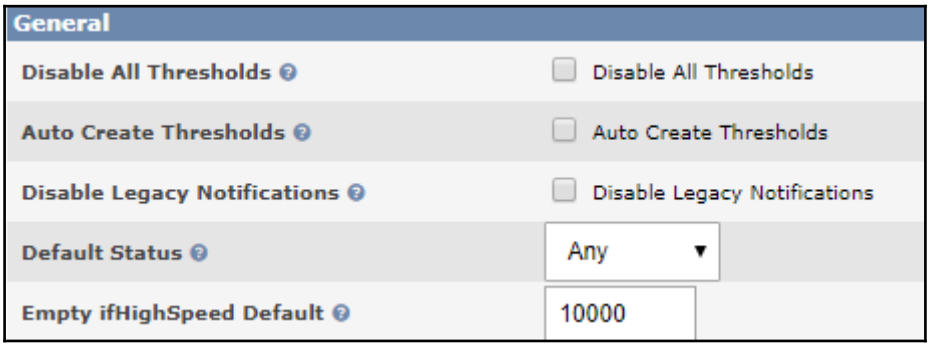


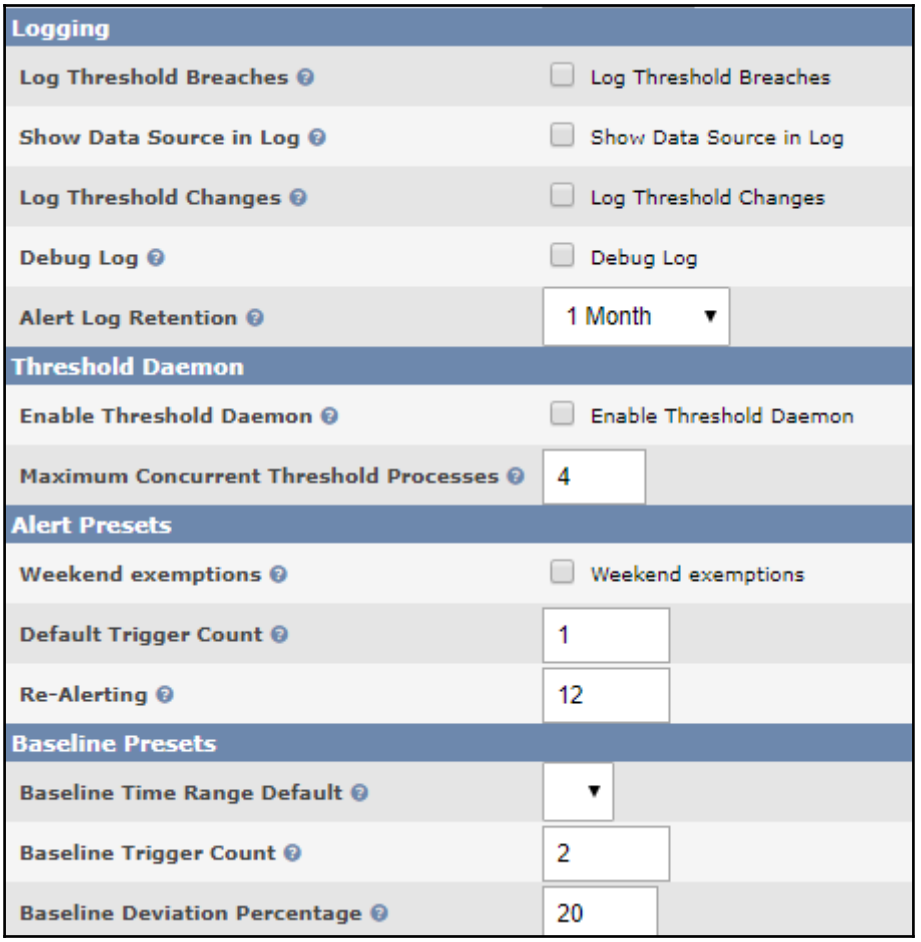

```
+----+--------+---------------------------+-----------------------+
| Id | hostId | contactAddress            | additionalInformation |
+----+--------+---------------------------+-----------------------+
|  7 |      1 | My Sample Contact Address | This is a test        |
+----+--------+---------------------------+-----------------------+
1 row in set (0.00 sec)
```

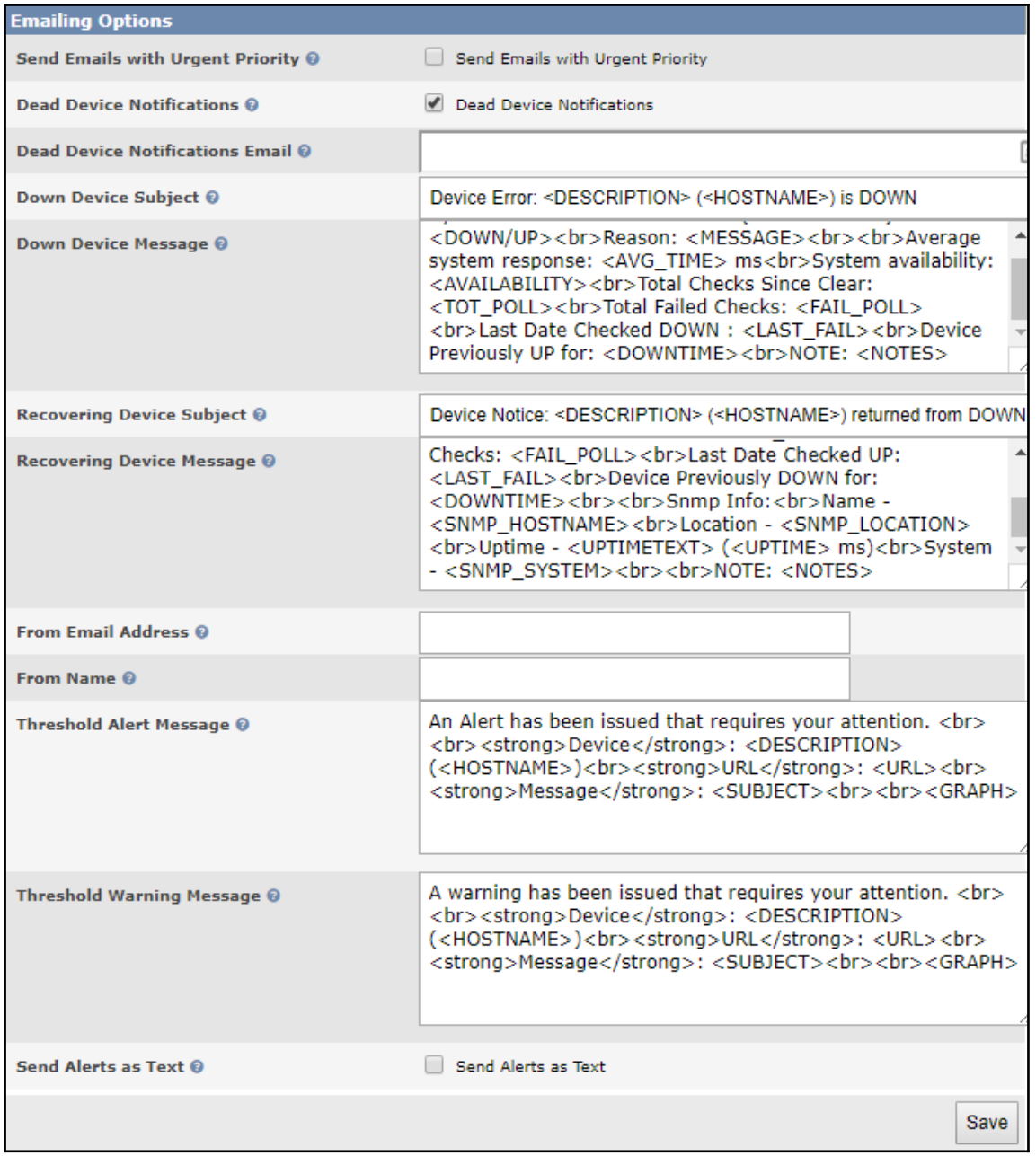
```
+----+--------+---------------------+-----------------------+
| Id | hostId | contactAddress      | additionalInformation |
+----+--------+---------------------+-----------------------+
|  7 |      1 | New Contact Address | not available         |
+----+--------+---------------------+-----------------------+
1 row in set (0.00 sec)
```

Chapter 10: Threshold Monitoring with Thold






Logging
Log Threshold Breaches
Log Threshold Breaches
Show Data Source in Log
Show Data Source in Log
Log Threshold Changes
Log Threshold Changes
Debug Log
Debug Log
Alert Log Retention
1 Month
Threshold Daemon
Enable Threshold Daemon
Enable Threshold Daemon
Maximum Concurrent Threshold Processes
4
Alert Presets
Weekend exemptions
Weekend exemptions
Default Trigger Count
1
Re-Alerting
12
Baseline Presets
Baseline Time Range Default
Baseline Trigger Count
2
Baseline Deviation Percentage
20


Emailing Options
Send Emails with Urgent Priority
Send Emails with Urgent Priority
Dead Device Notifications
Dead Device Notifications
Dead Device Notifications Email
Down Device Subject
Device Error: <DESCRIPTION> (<HOSTNAME>) is DOWN
Down Device Message
<DOWN/UP>
Reason: <MESSAGE>

Average system response: <AVG_TIME> ms
System availability: <AVAILABILITY>
Total Checks Since Clear: <TOT_POLL>
Total Failed Checks: <FAIL_POLL>
Last Date Checked DOWN : <LAST_FAIL>
Device Previously UP for: <DOWNTIME>
NOTE: <NOTES>
Recovering Device Subject
Device Notice: <DESCRIPTION> (<HOSTNAME>) returned from DOWN
Recovering Device Message
Checks: <FAIL_POLL>
Last Date Checked UP: <LAST_FAIL>
Device Previously DOWN for: <DOWNTIME>

Snmp Info:
Name - <SNMP_HOSTNAME>
Location - <SNMP_LOCATION>
Uptime - <UPTIMETEXT> (<UPTIME> ms)
System - <SNMP_SYSTEM>

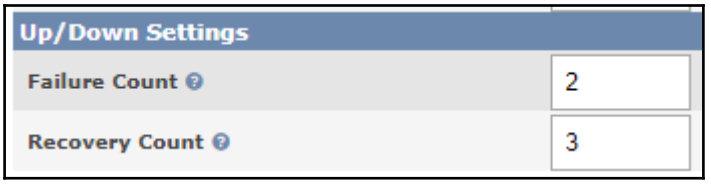
NOTE: <NOTES>
From Email Address
From Name
Threshold Alert Message
An Alert has been issued that requires your attention.

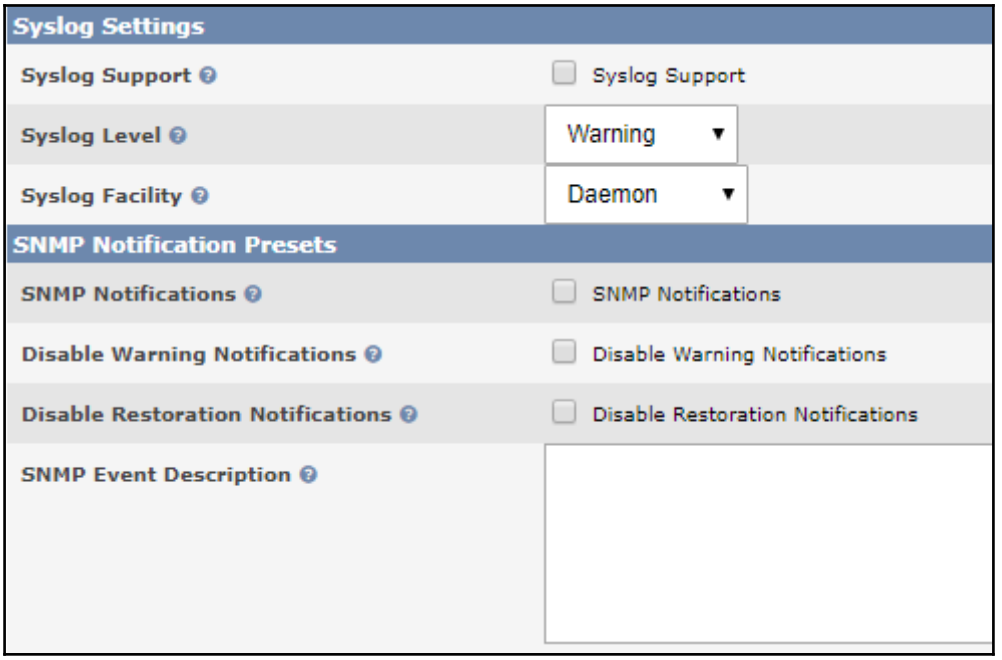
Device: <DESCRIPTION> (<HOSTNAME>)
URL: <URL>
 Message: <SUBJECT>

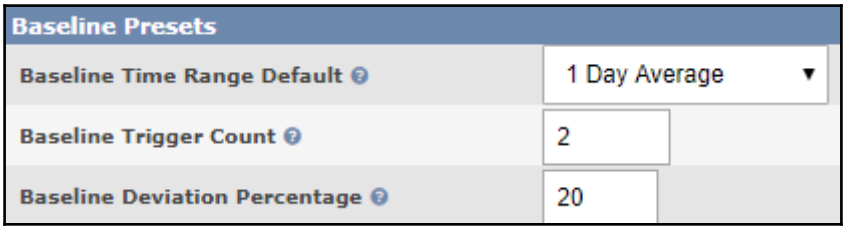
<GRAPH>
Threshold Warning Message
A warning has been issued that requires your attention.

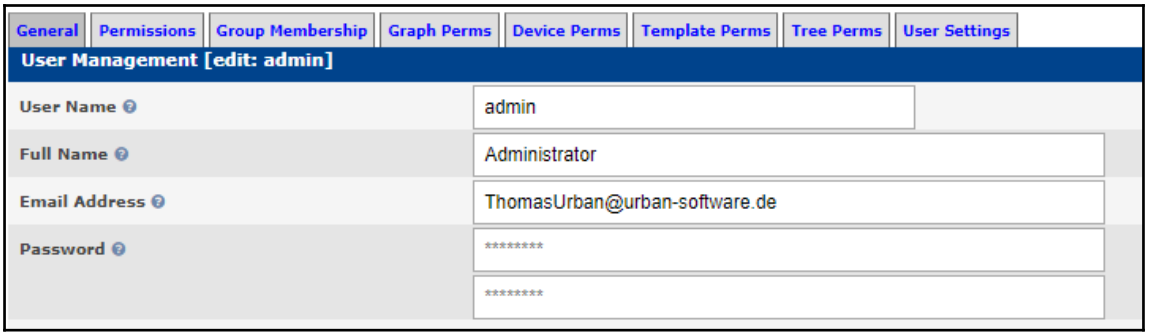
Device: <DESCRIPTION> (<HOSTNAME>)
URL: <URL>
 Message: <SUBJECT>

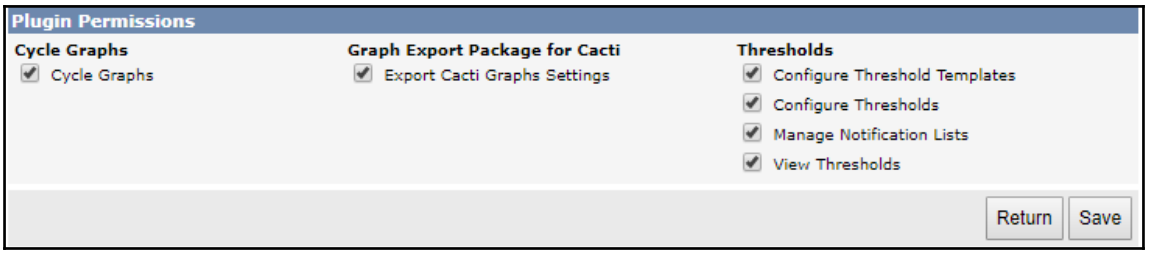
<GRAPH>
Send Alerts as Text
Send Alerts as Text
Save

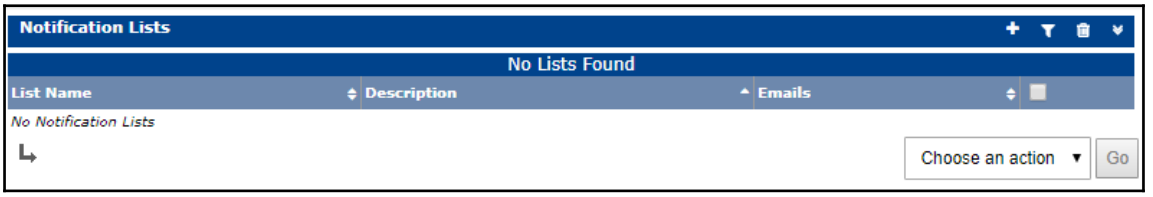

Up/Down Settings
Failure Count
2
Recovery Count
3


Syslog Settings
Syslog Support
Syslog Support
Syslog Level
Warning
Syslog Facility
Daemon
SNMP Notification Presets
SNMP Notifications
SNMP Notifications
Disable Warning Notifications
Disable Warning Notifications
Disable Restoration Notifications
Disable Restoration Notifications
SNMP Event Description


Baseline Presets
Baseline Time Range Default
1 Day Average
Baseline Trigger Count
2
Baseline Deviation Percentage
20


General
Permissions
Group Membership
Graph Perms
Device Perms
Template Perms
Tree Perms
User Settings
User Management [edit: admin]
User Name
admin
Full Name
Administrator
Email Address
ThomasUrban@urban-software.de
Password
****
****

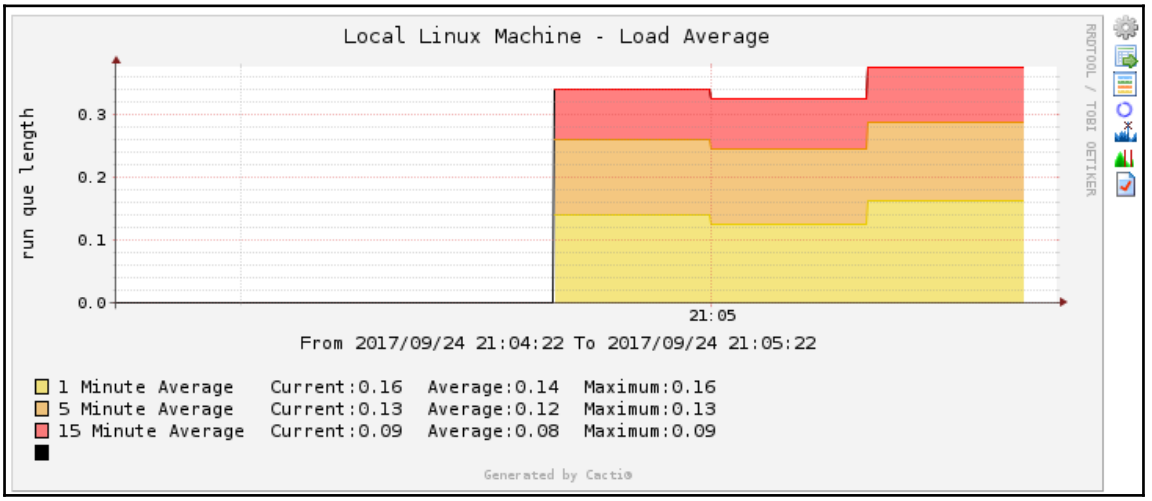

Plugin Permissions
Cycle Graphs
Cycle Graphs
Graph Export Package for Cacti
Export Cacti Graphs Settings
Thresholds
Configure Threshold Templates
Configure Thresholds
Manage Notification Lists
View Thresholds
Return
Save

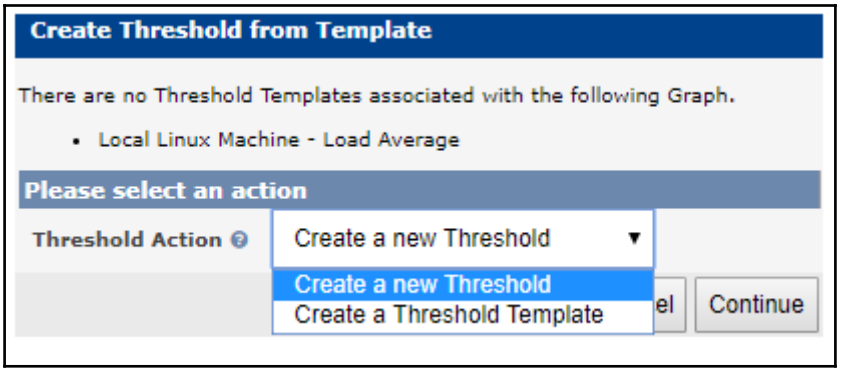

Notification Lists
No Lists Found
List Name
Description
Emails
No Notification Lists
Choose an action
Go

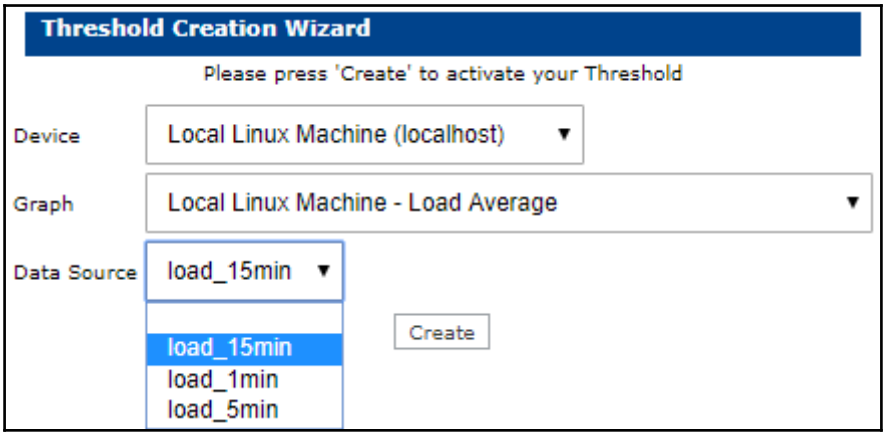
List General Settings [new]

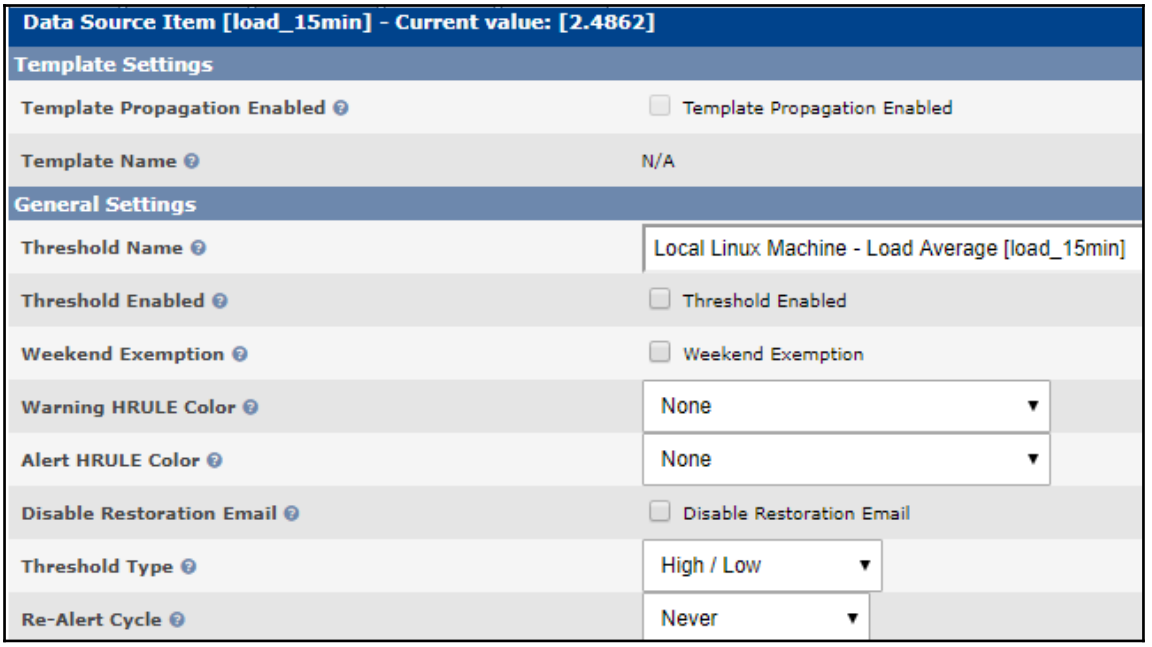
Name	Default Alert Notification
Description	The members of this list will receive all default notifiactions
Email Addresses	ThomasUrban@urban-software.de,support@urban-software.de

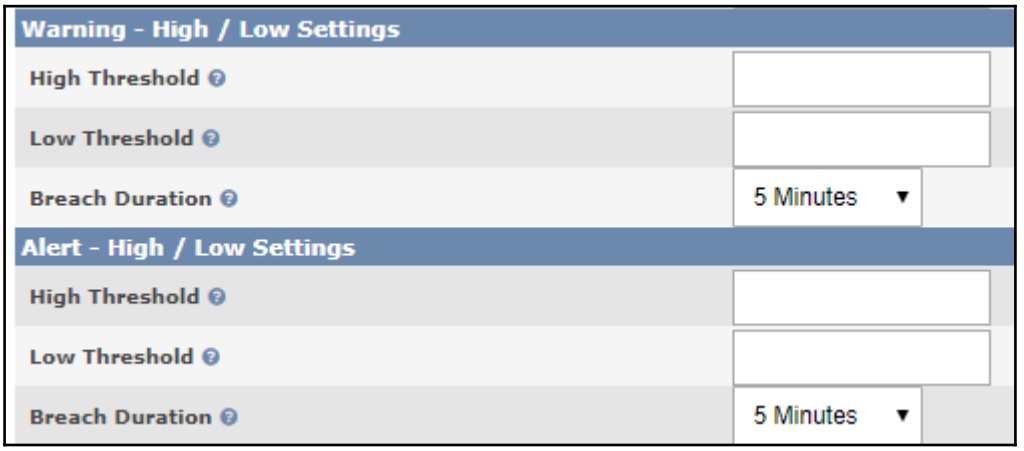
Cancel Create

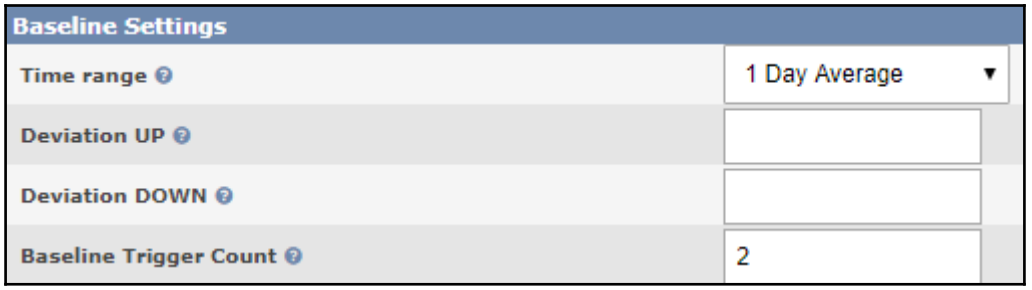


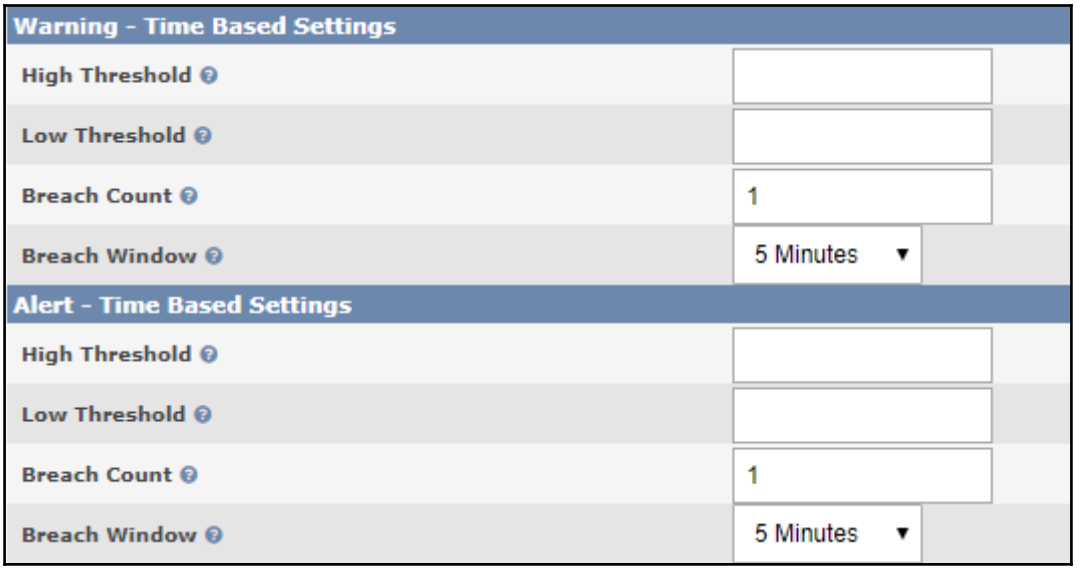

Create Threshold from Template
There are no Threshold Templates associated with the following Graph.
Local Linux Machine - Load Average
Please select an action
Threshold Action
Create a new Threshold
Create a new Threshold
Create a Threshold Template
el
Continue


Threshold Creation Wizard
Please press 'Create' to activate your Threshold
Device
Local Linux Machine (localhost)
Graph
Local Linux Machine - Load Average
Data Source
load_15min
load_15min
load_1min
load_5min
Create


Data Source Item [load_15min] - Current value: [2.4862]
Template Settings
Template Propagation Enabled
Template Propagation Enabled
Template Name
N/A
General Settings
Threshold Name
Local Linux Machine - Load Average [load_15min]
Threshold Enabled
Threshold Enabled
Weekend Exemption
Weekend Exemption
Warning HRULE Color
None
Alert HRULE Color
None
Disable Restoration Email
Disable Restoration Email
Threshold Type
High / Low
Re-Alert Cycle
Never

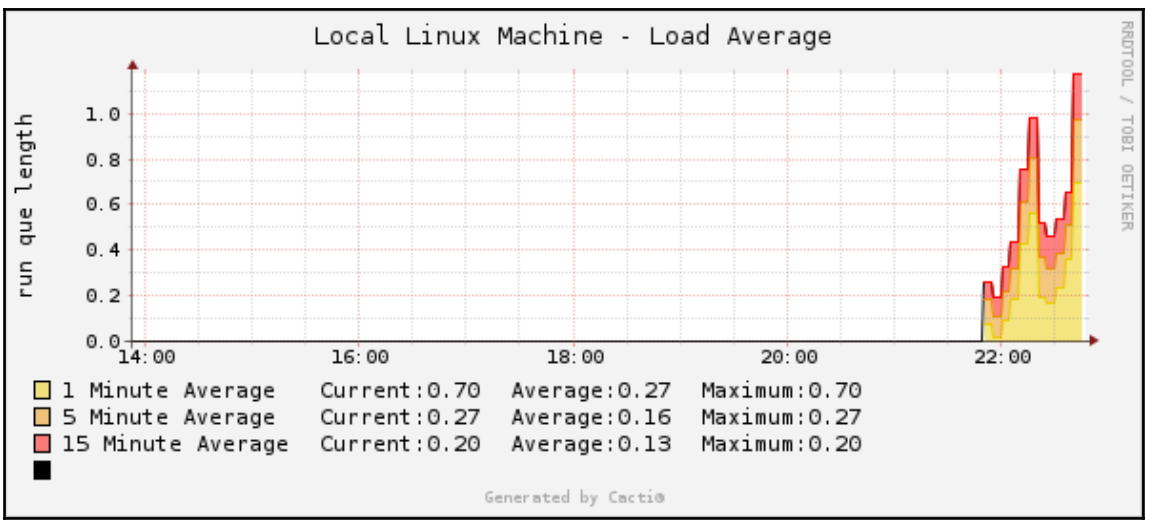

Warning - High / Low Settings
High Threshold
Low Threshold
Breach Duration
5 Minutes
Alert - High / Low Settings
High Threshold
Low Threshold
Breach Duration
5 Minutes

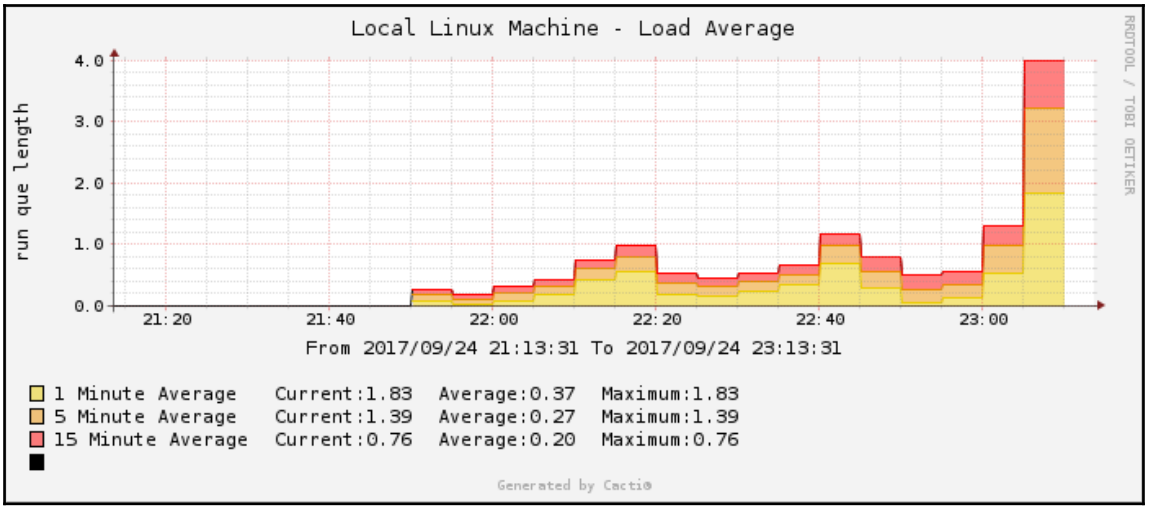

Baseline Settings
Time range
1 Day Average
Deviation UP
Deviation DOWN
Baseline Trigger Count
2

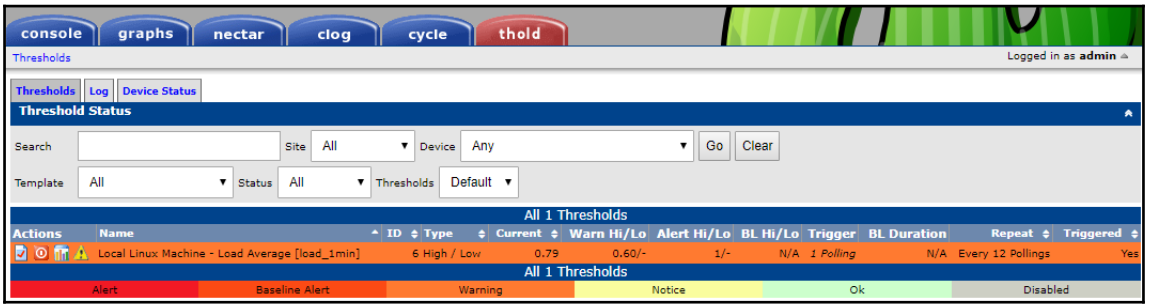

Warning - Time Based Settings
High Threshold
Low Threshold
Breach Count
1
Breach Window
5 Minutes
Alert - Time Based Settings
High Threshold
Low Threshold
Breach Count
1
Breach Window
5 Minutes

Other Settings

Warning Notification List	Default Alert Notification
Alert Notification List	Default Alert Notification
Notify accounts	1 Users Selected
Alert Emails	
Warning Emails	
Operator Notes	

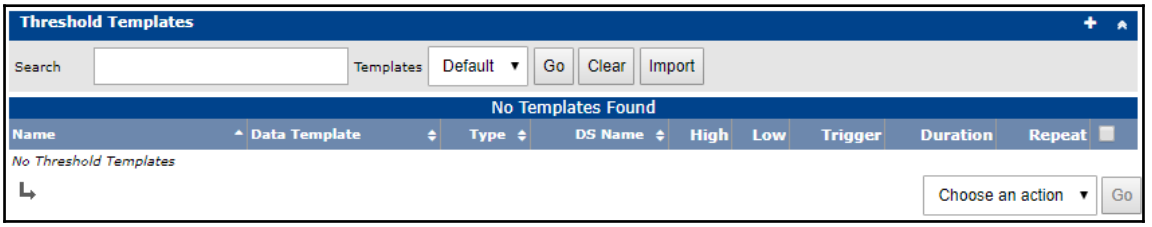


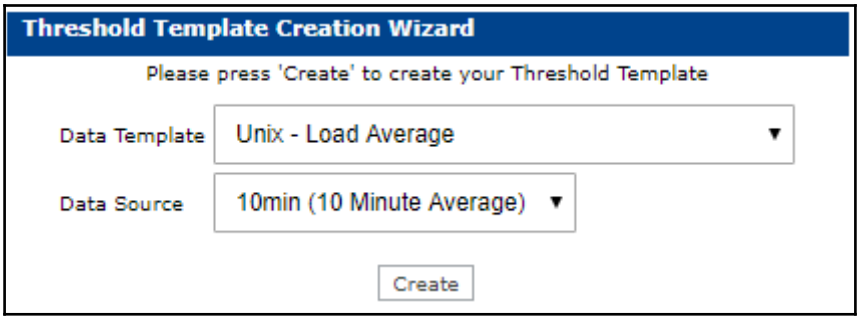

Local Linux Machine - Load Average
run que length
4.0
3.0
2.0
1.0
0.0
21:20
21:40
22:00
22:20
22:40
23:00
From 2017/09/24 21:13:31 To 2017/09/24 23:13:31
1 Minute Average Current:1.83 Average:0.37 Maximum:1.83
5 Minute Average Current:1.39 Average:0.27 Maximum:1.39
15 Minute Average Current:0.76 Average:0.20 Maximum:0.76
Generated by Cacti
RRDTOOL / TOBI OETIKER

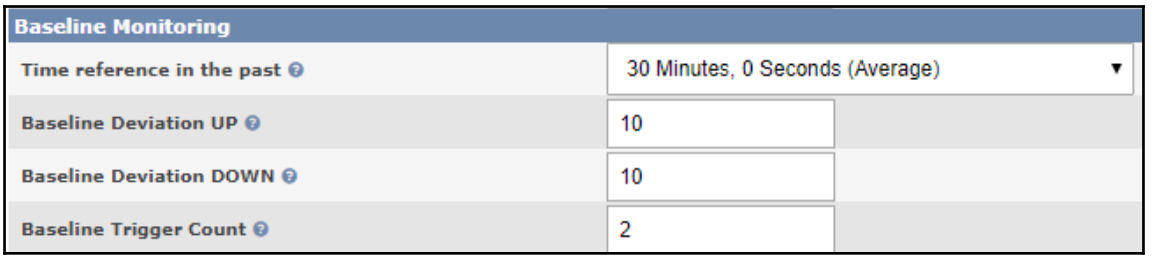

console
graphs
nectar
clog
cycle
thold
Thresholds
Logged in as admin
Thresholds
Log
Device Status
Threshold Status
Search
Site
All
Device
Any
Go
Clear
Template
All
Status
All
Thresholds
Default
All 1 Thresholds
Actions
Name
ID
Type
Current
Warn Hi/Lo
Alert Hi/Lo
BL Hi/Lo
Trigger
BL Duration
Repeat
Triggered
Local Linux Machine - Load Average [load_1min]
6 High / Low
0.79
0.60/-
1/-
N/A
1 Polling
N/A
Every 12 Pollings
Yes
All 1 Thresholds
Alert
Baseline Alert
Warning
Notice
Ok
Disabled

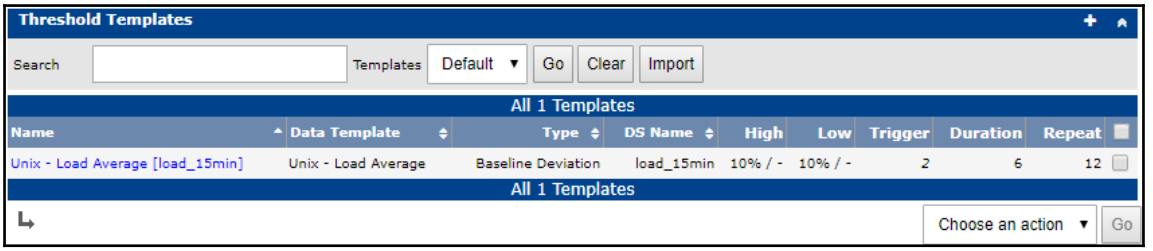
Local Linux Machine - Load Average [load_1min]
6 High / Low
0.79
0.60/-
1/-
N/A
1 Polling
N/A
Every 12 Pollings
Yes

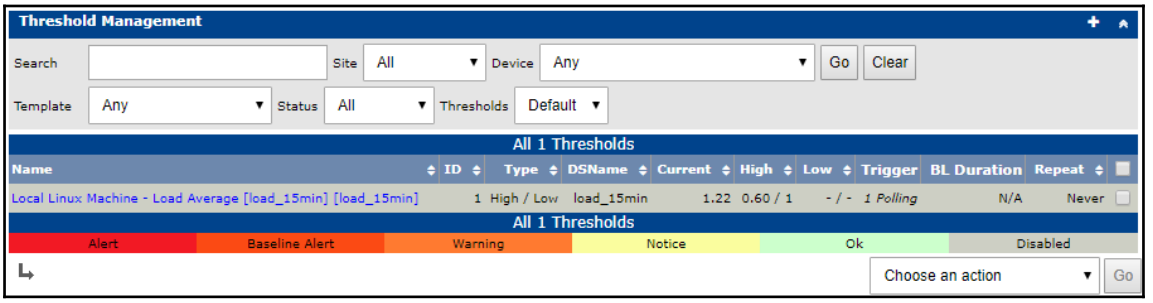
Local Linux Machine - Load Average [load_1min]
6 High / Low
0.79
0.60/-
1/-
N/A
1 Polling
N/A
Every 12 Pollings
No

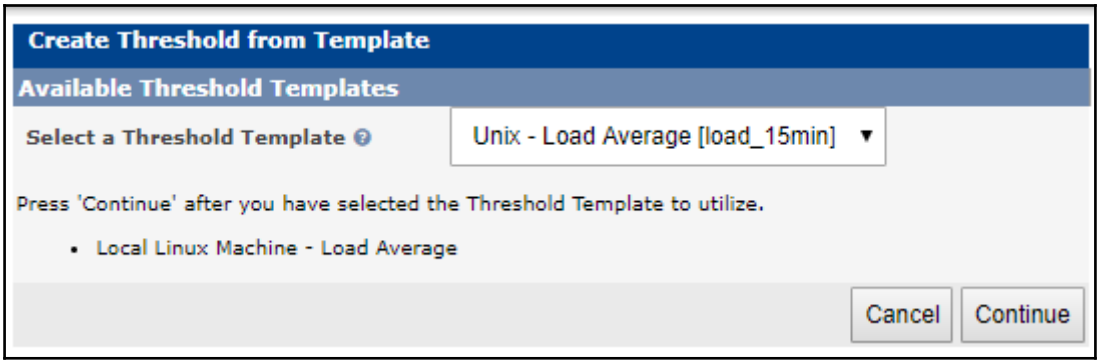

Threshold Templates
Search
Templates
Default
Go
Clear
Import
No Templates Found
Name
Data Template
Type
DS Name
High
Low
Trigger
Duration
Repeat
No Threshold Templates
Choose an action
Go

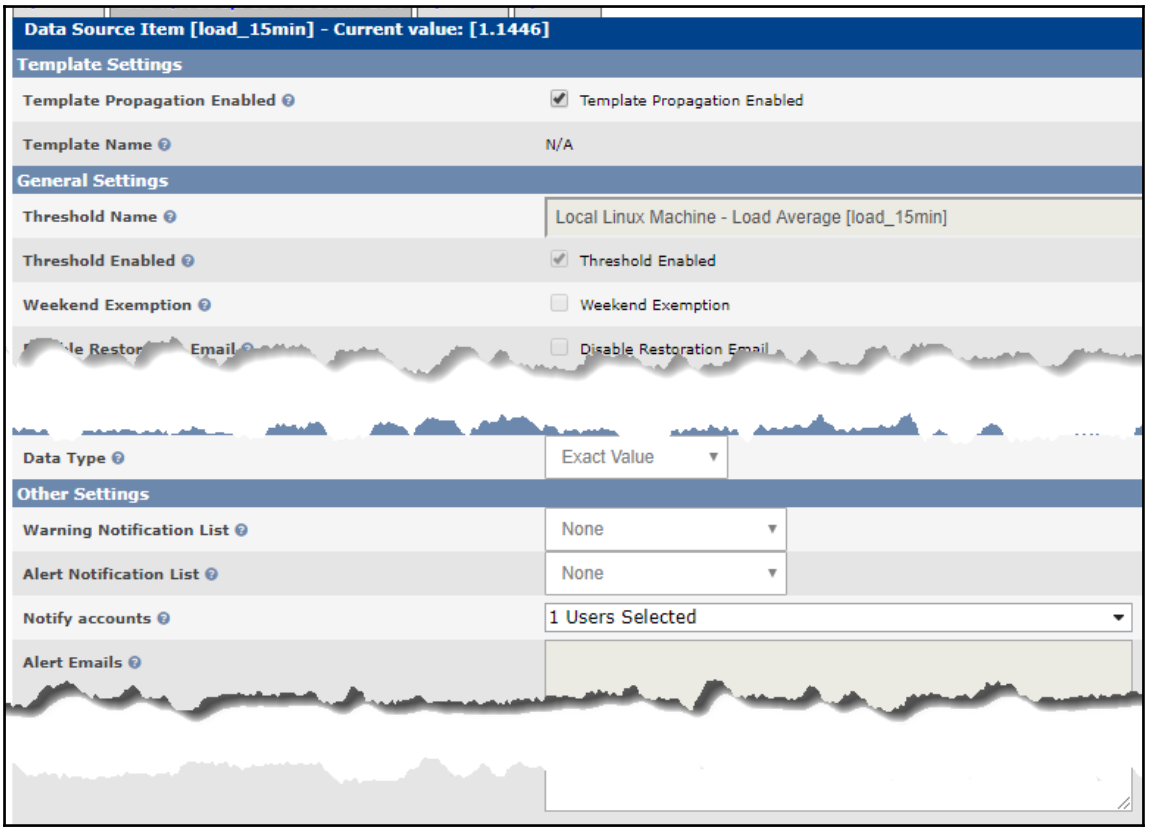

Threshold Template Creation Wizard
Please press 'Create' to create your Threshold Template
Data Template
Unix - Load Average
Data Source
10min (10 Minute Average)
Create


Baseline Monitoring
Time reference in the past
30 Minutes, 0 Seconds (Average)
Baseline Deviation UP
10
Baseline Deviation DOWN
10
Baseline Trigger Count
2

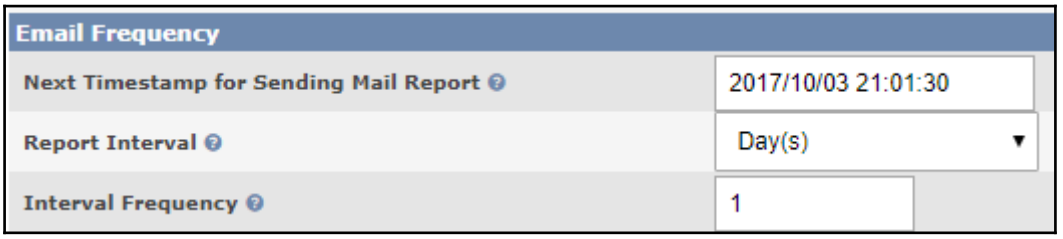

Threshold Templates
Search
Templates
Default
Go
Clear
Import
All 1 Templates
Name
Data Template
Type
DS Name
High
Low
Trigger
Duration
Repeat
Unix - Load Average [load_15min]
Unix - Load Average
Baseline Deviation
load_15min
10% / -
10% / -
2
6
12
All 1 Templates
Choose an action
Go

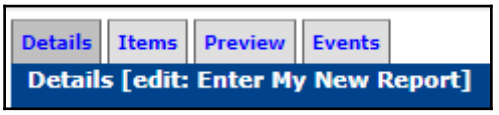

Threshold Management
Search
Site
All
Device
Any
Go
Clear
Template
Any
Status
All
Thresholds
Default
All 1 Thresholds
Name
ID
Type
DSName
Current
High
Low
Trigger
BL Duration
Repeat
Local Linux Machine - Load Average [load_15min] [load_15min]
1
High / Low
load_15min
1.22
0.60 / 1
- / -
1 Polling
N/A
Never
All 1 Thresholds
Alert
Baseline Alert
Warning
Notice
Ok
Disabled
Choose an action
Go

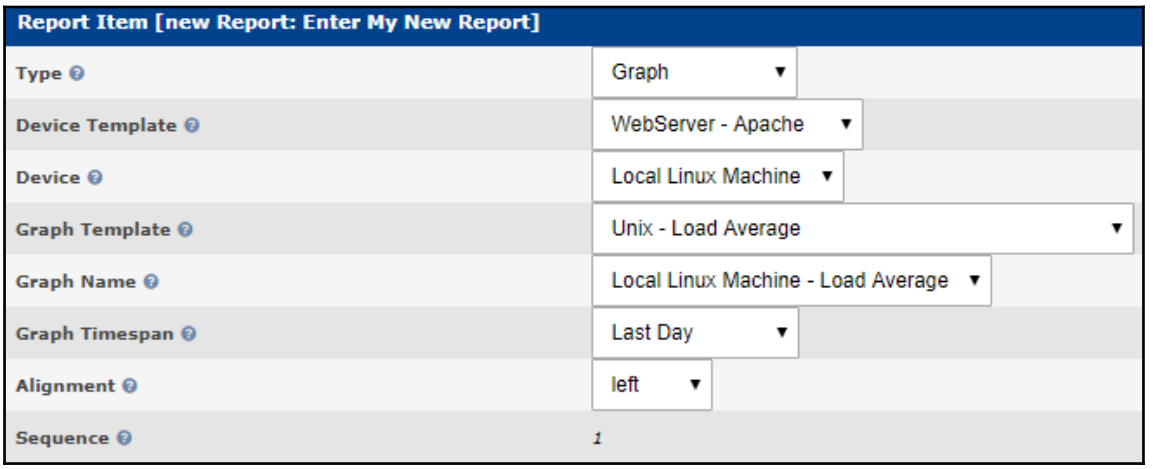

Create Threshold from Template
Available Threshold Templates
Select a Threshold Template
Unix - Load Average [load_15min]
Press 'Continue' after you have selected the Threshold Template to utilize.
Local Linux Machine - Load Average
Cancel
Continue


Data Source Item [load_15min] - Current value: [1.1446]
Template Settings
Template Propagation Enabled
Template Propagation Enabled
Template Name
N/A
General Settings
Threshold Name
Local Linux Machine - Load Average [load_15min]
Threshold Enabled
Threshold Enabled
Weekend Exemption
Weekend Exemption
Disable Restoration Email
Data Type
Exact Value
Other Settings
Warning Notification List
None
Alert Notification List
None
Notify accounts
1 Users Selected
Alert Emails

Chapter 11: Enterprise Reporting



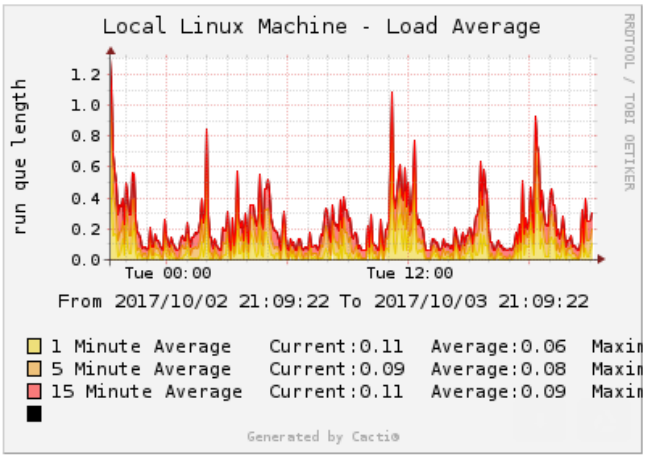




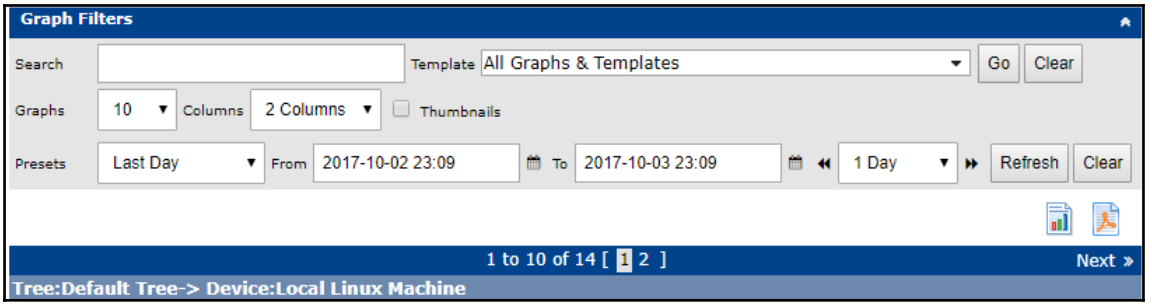
Thomas <ThomasUrban@urban-software.de> 9:09 PM (0 minutes ago)

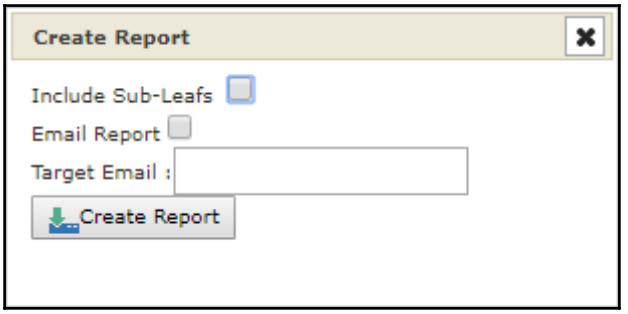
to me

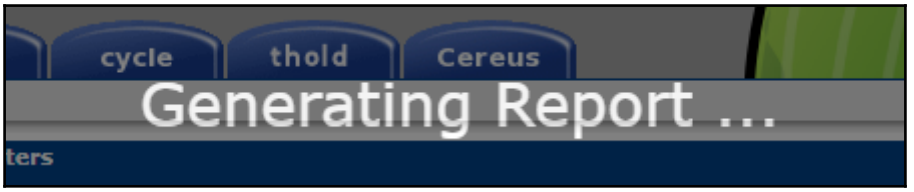
My New Report

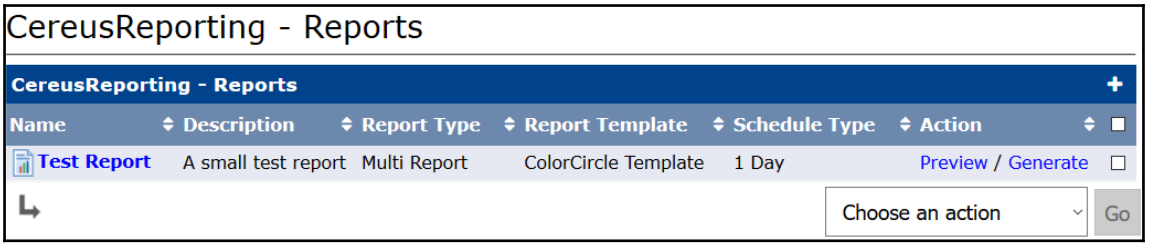


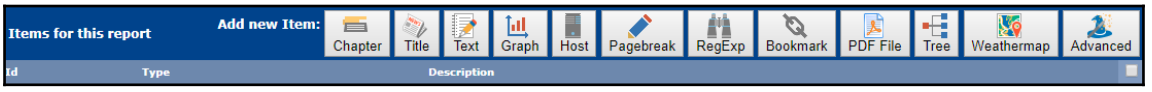
Cacti Settings (CereusReporting)
Report Design
Availability Chart Name Size
180
Report File Template
[REPORTTITLE]
CereusReporting - Availability Addon - EXPRESS Edition - License Expiry Date : never
Enable the Availability module
Enable the Availability module
CereusReporting - Report Definition
Font Name
Helvetica
Header Font Size
10
CereusReporting - General - EXPRESS Edition - License Expiry Date : never
Print Header/Footer to PDF
Print Header/Footer to PDF
Report Logo
Use "HOSTNAME(IP)" in host only reports
Use "HOSTNAME(IP)" in host only reports
Graphs link back to cacti
Graphs link back to cacti
Zip/Compress archived reports
Zip/Compress archived reports
Cacti Host/Server URL
http://10.27.4.152/
Archive Directory
/var/www/html/cacti/plugins/CereusReporting/archive
Weathermap output directory
Load JQuery Script/CSS
False
Scheduler being used
Poller
Logging mode
None
Date Format
2012-01-30 20:19
PDF Module to use
TCPDF
Use Unicode
Use Unicode
Save

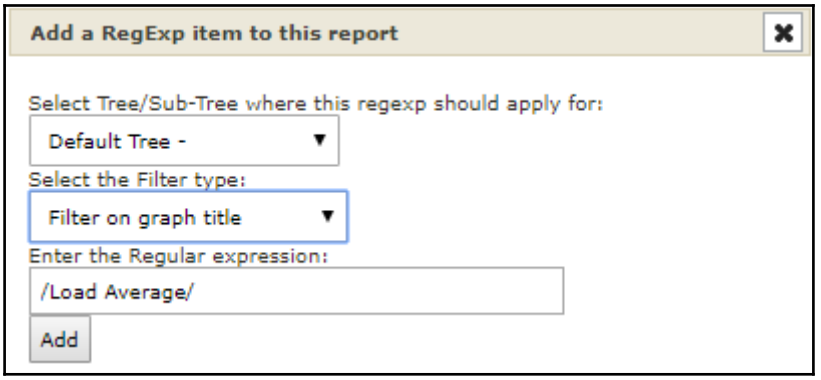

Graph Filters
Search
Template
All Graphs & Templates
Go
Clear
Graphs
10
Columns
2 Columns
Thumbnails
Presets
Last Day
From
2017-10-02 23:09
To
2017-10-03 23:09
1 Day
Refresh
Clear
1 to 10 of 14 [1 2]
Next »
Tree:Default Tree-> Device:Local Linux Machine


Create Report
Include Sub-Leafs
Email Report
Target Email :
Create Report


cycle
thold
Cereus
Generating Report ...
ters

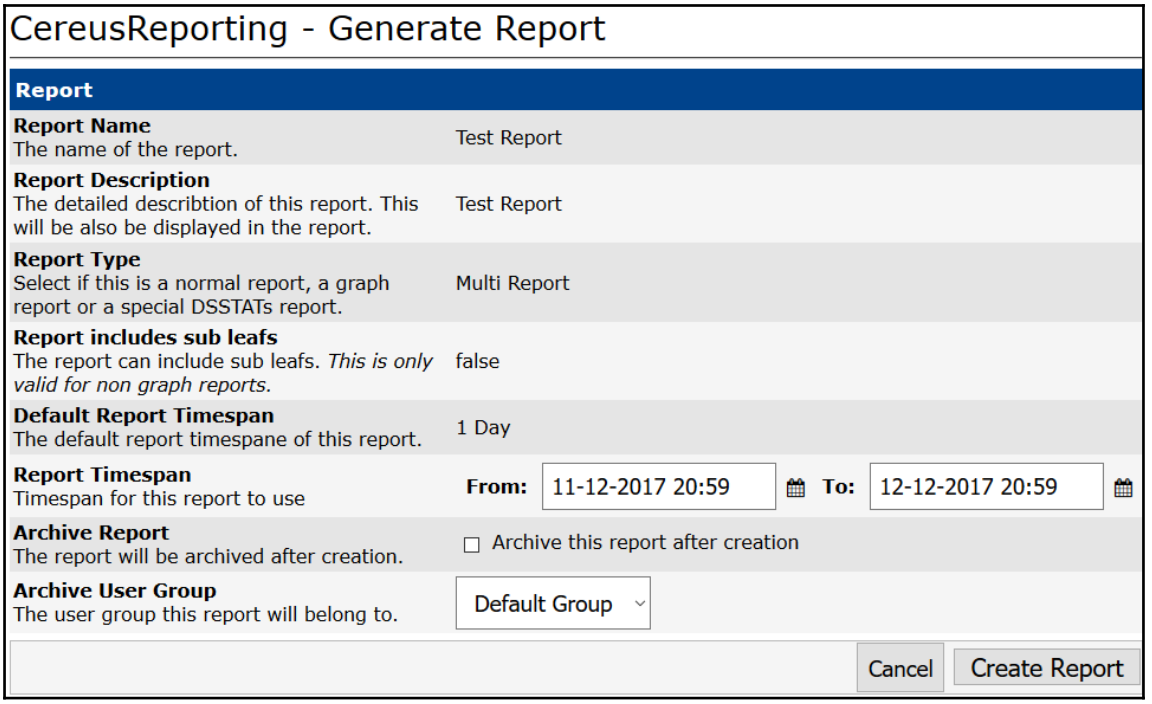

CereusReporting - Reports
CereusReporting - Reports
Name
Description
Report Type
Report Template
Schedule Type
Action
Test Report
A small test report
Multi Report
ColorCircle Template
1 Day
Preview / Generate
Choose an action
Go


Items for this report
Add new Item:
Chapter
Title
Text
Graph
Host
Pagebreak
RegExp
Bookmark
PDF File
Tree
Weathermap
Advanced
Id
Type
Description



Items for this report **Add new Item:** Chapter | Title | Text | Graph

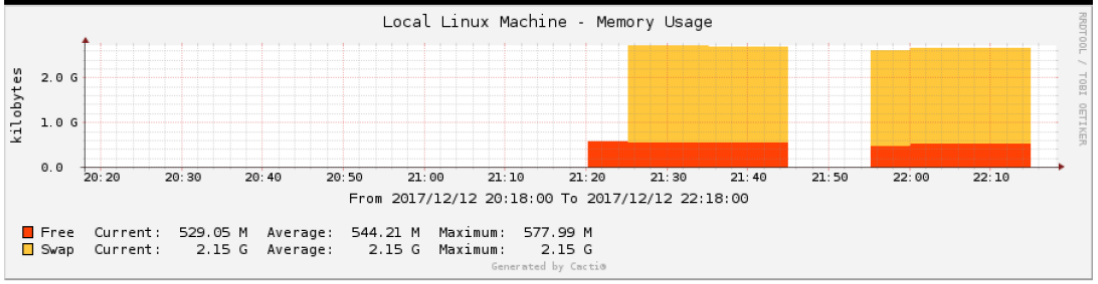
Id	Type	Description
1	chapter	(EDIT) Single Host
2	host	Device: Local Linux Machine - 127.0.0.1
3	chapter	(EDIT) Load Averages
4	regexp	Tree -> [Default Tree] | Filter Type: [graph] | RegExp: [/Load Average/]


CereusReporting - Generate Report
Report
Report Name
The name of the report.
Test Report
Report Description
The detailed describtion of this report. This will be also be displayed in the report.
Test Report
Report Type
Select if this is a normal report, a graph report or a special DSSTATs report.
Multi Report
Report includes sub leafs
The report can include sub leafs. This is only valid for non graph reports.
false
Default Report Timespan
The default report timespane of this report.
1 Day
Report Timespan
Timespan for this report to use
From:
11-12-2017 20:59
To:
12-12-2017 20:59
Archive Report
The report will be archived after creation.
Archive this report after creation
Archive User Group
The user group this report will belong to.
Default Group
Cancel
Create Report

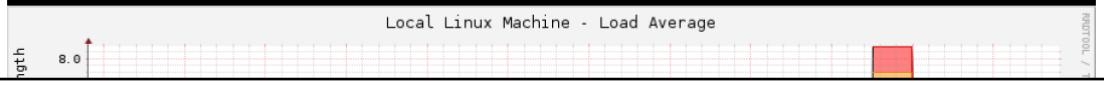
Single Host

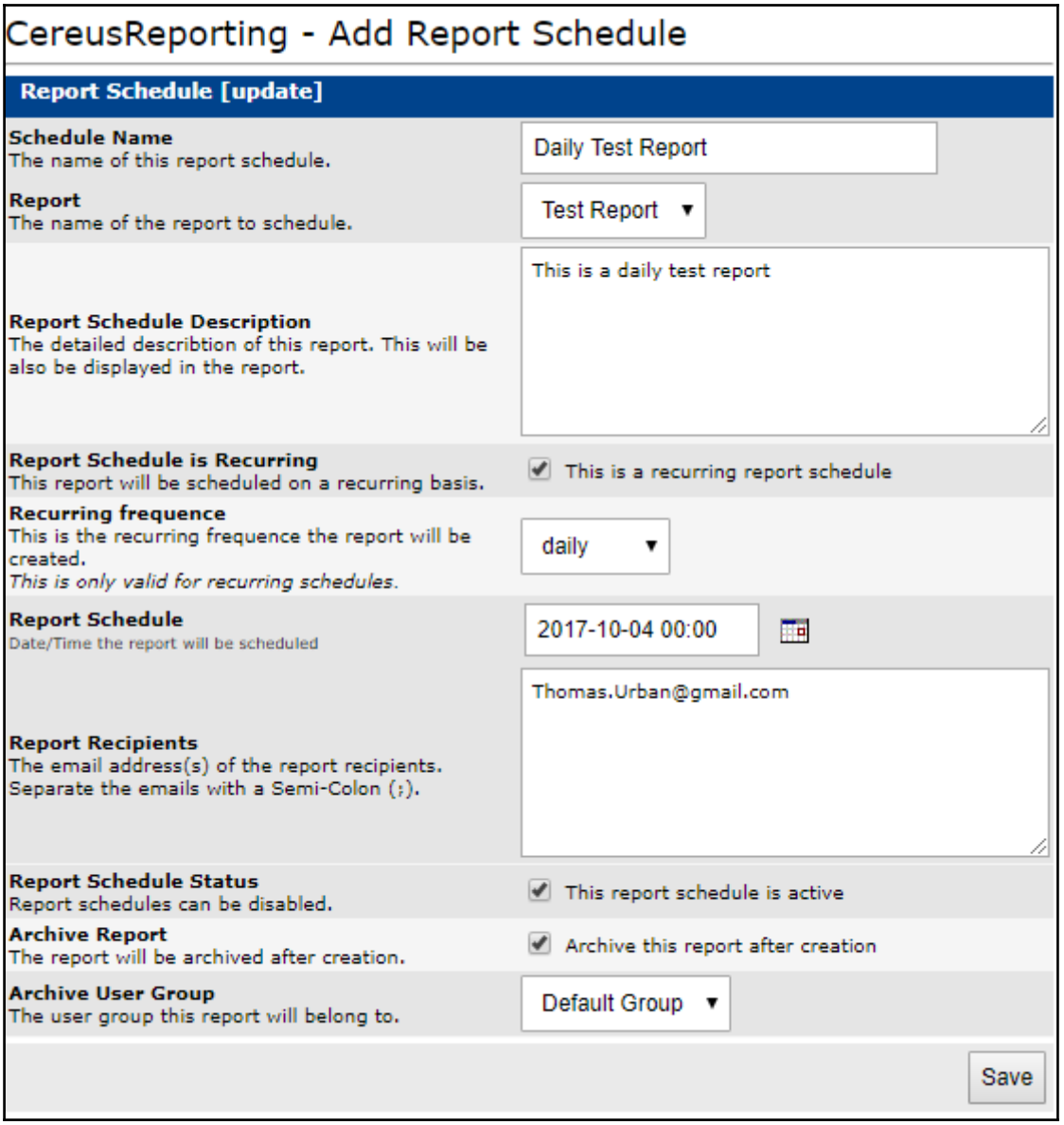
Local Linux Machine (127.0.0.1)

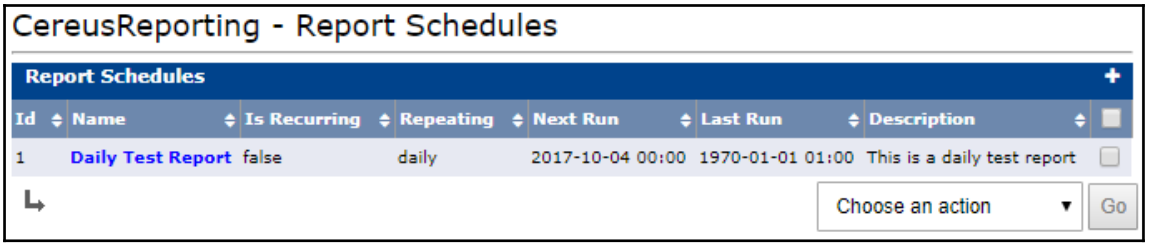
Local Linux Machine - Memory Usage

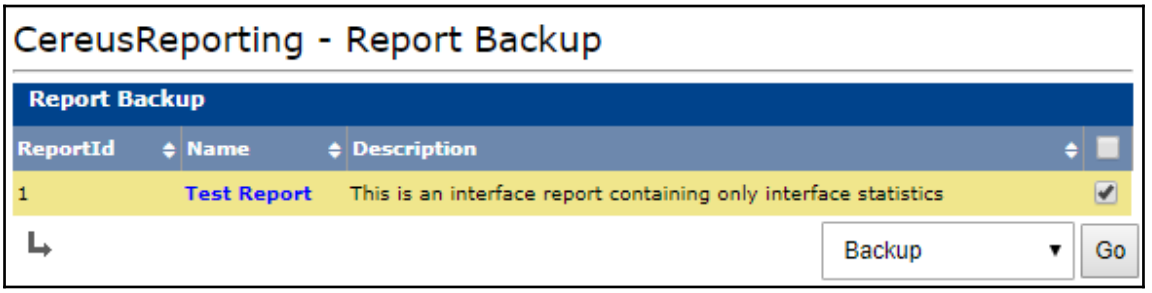


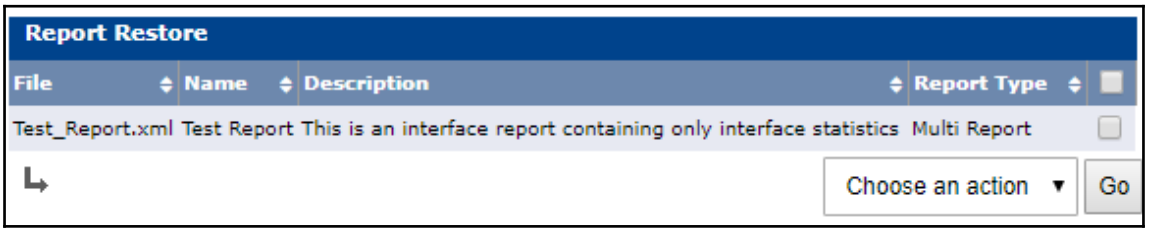
Local Linux Machine - Load Average

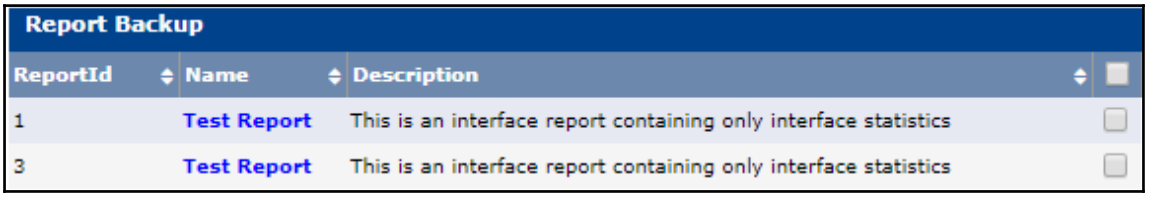


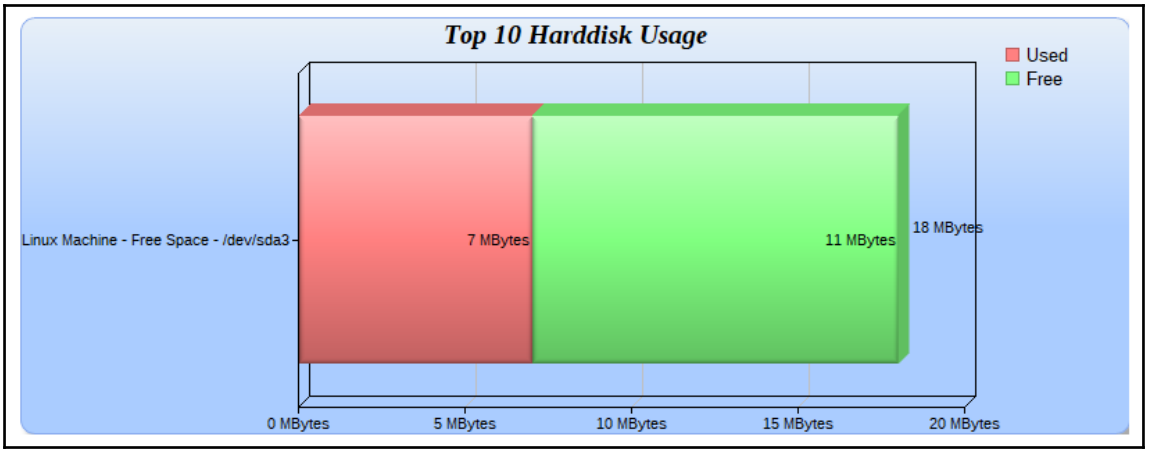

CereusReporting - Add Report Schedule
Report Schedule [update]
Schedule Name
The name of this report schedule.
Daily Test Report
Report
The name of the report to schedule.
Test Report
Report Schedule Description
The detailed describtion of this report. This will be also be displayed in the report.
This is a daily test report
Report Schedule is Recurring
This report will be scheduled on a recurring basis.
This is a recurring report schedule
Recurring frequence
This is the recurring frequence the report will be created.
This is only valid for recurring schedules.
daily
Report Schedule
Date/Time the report will be scheduled
2017-10-04 00:00
Report Recipients
The email address(s) of the report recipients.
Separate the emails with a Semi-Colon (;).
Thomas.Urban@gmail.com
Report Schedule Status
Report schedules can be disabled.
This report schedule is active
Archive Report
The report will be archived after creation.
Archive this report after creation
Archive User Group
The user group this report will belong to.
Default Group
Save

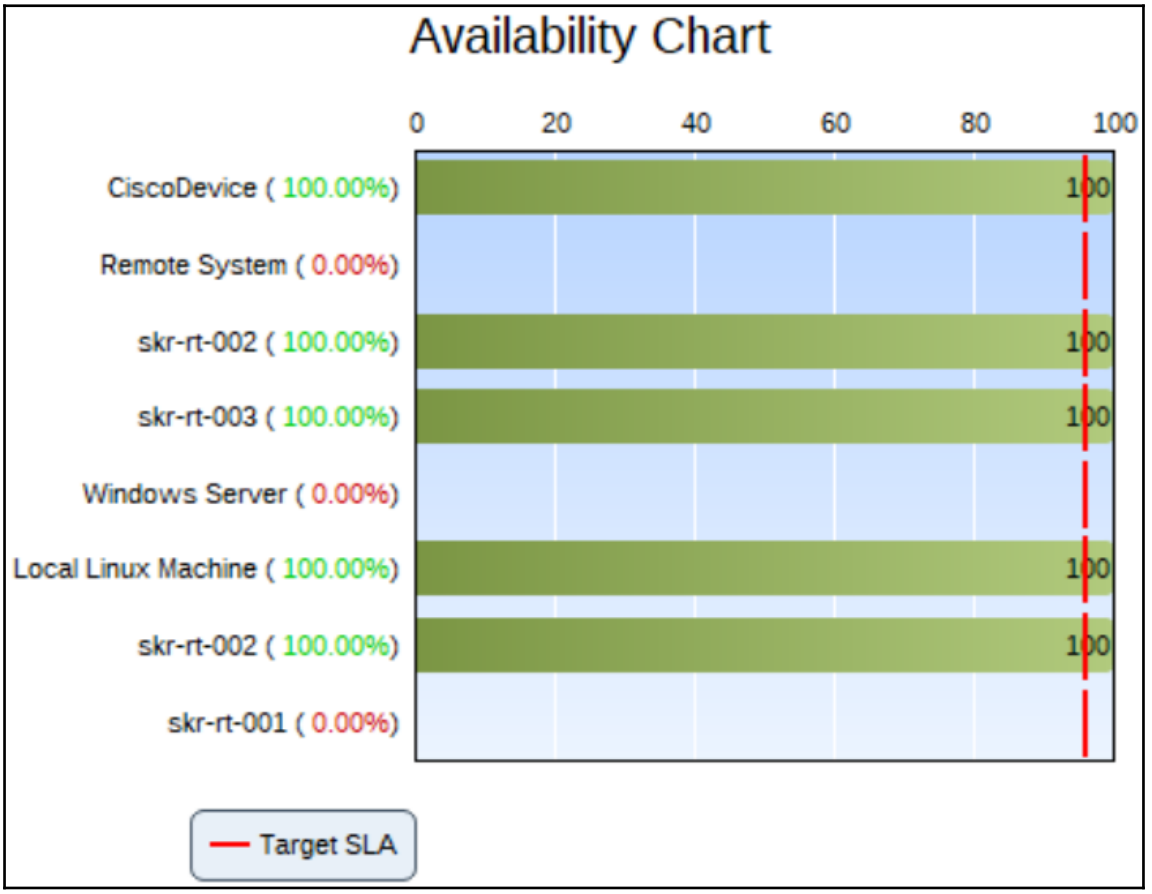

CereusReporting - Report Schedules
Report Schedules
Id
Name
Is Recurring
Repeating
Next Run
Last Run
Description
1
Daily Test Report
false
daily
2017-10-04 00:00
1970-01-01 01:00
This is a daily test report
Choose an action
Go

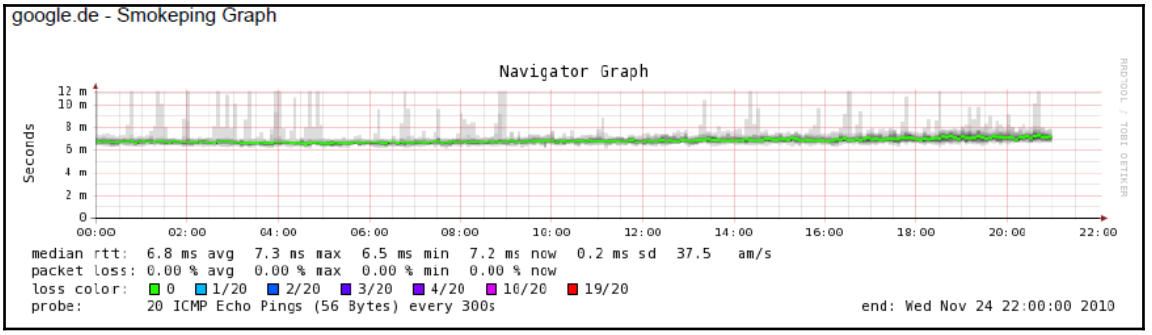

CereusReporting - Report Backup
Report Backup
ReportId
Name
Description
1
Test Report
This is an interface report containing only interface statistics
Backup
Go


Report Restore
File
Name
Description
Report Type
Test_Report.xml
Test Report
This is an interface report containing only interface statistics
Multi Report
Choose an action
Go

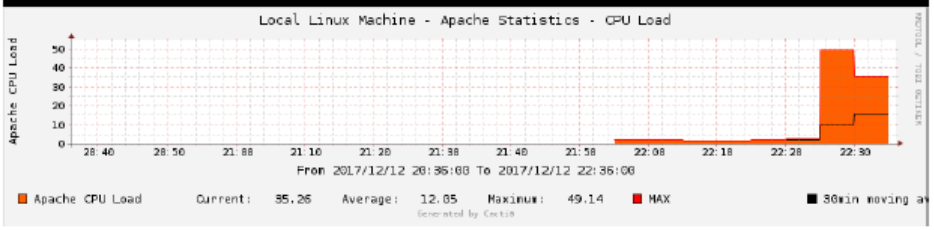

Report Backup
ReportId
Name
Description
1
Test Report
This is an interface report containing only interface statistics
3
Test Report
This is an interface report containing only interface statistics


Top 10 Harddisk Usage
Used
Free
Linux Machine - Free Space - /dev/sda3
7 MBytes
11 MBytes
18 MBytes
0 MBytes
5 MBytes
10 MBytes
15 MBytes
20 MBytes

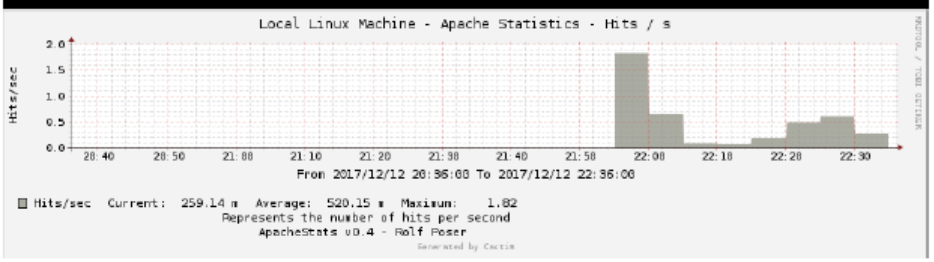

Availability Chart
0
20
40
60
80
100
CiscoDevice (100.00%)
Remote System (0.00%)
skr-rt-002 (100.00%)
skr-rt-003 (100.00%)
Windows Server (0.00%)
Local Linux Machine (100.00%)
skr-rt-002 (100.00%)
skr-rt-001 (0.00%)
100
Target SLA


google.de - Smokeping Graph
Navigator Graph
Seconds
12 m
10 m
8 m
6 m
4 m
2 m
0
00:00
02:00
04:00
06:00
08:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
median rtt: 6.8 ms avg 7.3 ms max 6.5 ms min 7.2 ms now 0.2 ms sd 37.5 am/s
packet loss: 0.00 % avg 0.00 % max 0.00 % min 0.00 % now
loss color: 0 1/20 2/20 3/20 4/20 10/20 19/20
probe: 20 ICMP Echo Pings (56 Bytes) every 300s
end: Wed Nov 24 22:00:00 2010

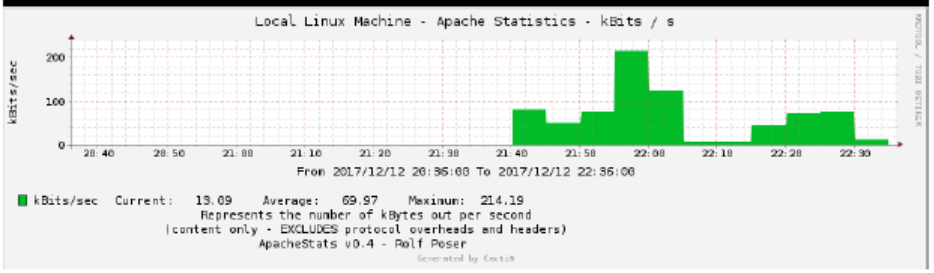
Local Linux Machine - Apache Statistics - CPU Load

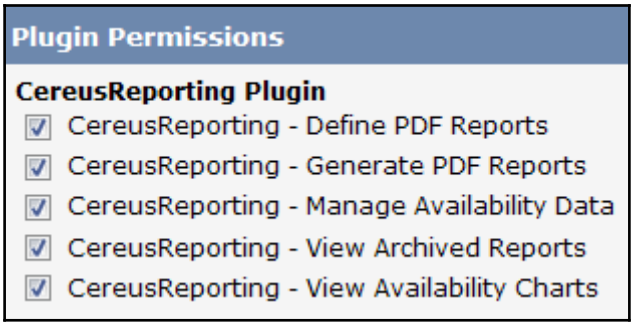


Local Linux Machine - Apache Statistics - Hits / s



Local Linux Machine - Apache Statistics - kBits / s




Plugin Permissions
CereusReporting Plugin
CereusReporting - Define PDF Reports
CereusReporting - Generate PDF Reports
CereusReporting - Manage Availability Data
CereusReporting - View Archived Reports
CereusReporting - View Availability Charts

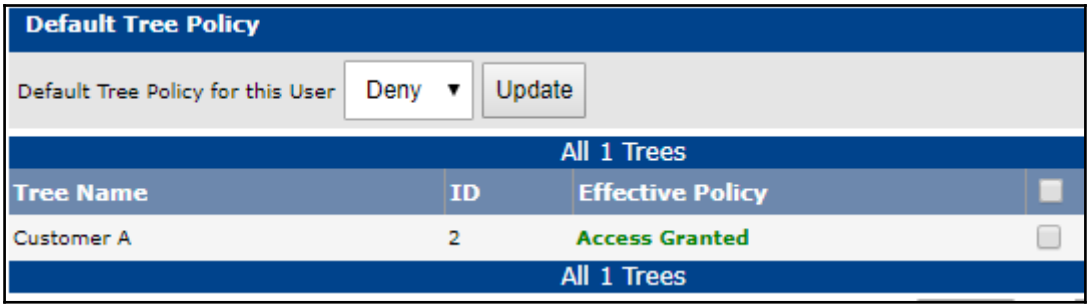
Chapter 12: Cacti Automation for NOC

```
[root@localhost cli]# php add_perms.php
Cacti Add Permissions Utility, Version 1.1.23, Copyright (C) 2004-2017 The Cacti Group

usage: add_perms.php [ --user-id=[ID] ]
    --item-type=[graph|tree|host|graph_template]
    --item-id [--quiet]

Where item-id is the id of the object of type item-type

List Options:
    --list-users
    --list-trees
    --list-graph-templates
    --list-graphs --host-id=[ID]
```

```
[root@localhost cli]# php add_perms.php --list-users
Known Users:
id      username        full_name
1       admin   Administrator
3       guest   Guest Account
4       turban  Thomas Urban
6       _CustomerA_user Template User for Customer A
7       Test User
13      user1   User Name1
14      user2   User Name2
15      user3   User Name3
16      user4   User Name4
```

```
[root@localhost cli]# php add_perms.php --list-trees
Known Trees:
id      sort method                     name
1       Manual Ordering (No Sorting)    Default Tree
2       Manual Ordering (No Sorting)    Customer A
```

```
# php add_perms.php --user-id=13 --item-type=tree --item-id=2
#
```




```
Cacti Add Tree Utility, Version 1.1.23, Copyright (C) 2004-2017 The Cacti Group

usage: add_tree.php  --type=[tree|node] [type-options] [--quiet]

Tree options:
    --name=[Tree Name]
    --sort-method=[manual|alpha|natural|numeric]

Node options:
    --node-type=[header|host|graph]
    --tree-id=[ID]
    [--parent-node=[ID] [Node Type Options]]

Header node options:
    --name=[Name]

Host node options:
    --host-id=[ID]
    [--host-group-style=[1|2]]
    (host group styles:
     1 = Graph Template,
     2 = Data Query Index)

Graph node options:
    --graph-id=[ID]

List Options:
    --list-hosts
    --list-trees
    --list-nodes --tree-id=[ID]
    --list-graphs --host-id=[ID]
```

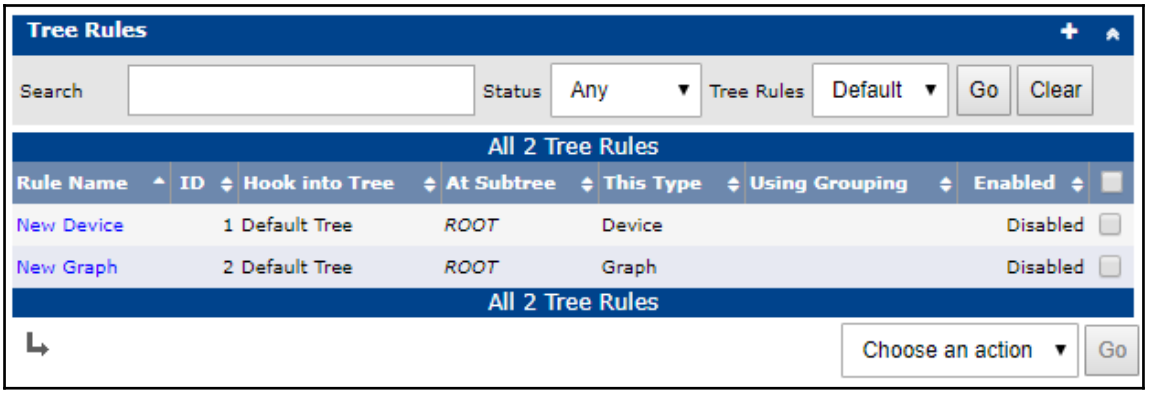
```
[root@localhost cli]# php add_tree.php --list-trees
Known Trees:
id      sort method                     name
1       Manual Ordering (No Sorting)    Default Tree
2       Manual Ordering (No Sorting)    Customer A

[root@localhost cli]# php add_tree.php --tree-id=2 --list-nodes
Known Tree Nodes:
type    id      parentid        title   attribs
Header  1       N/A     Country A       Manual Ordering (No Sorting)
Header  2       1       Site A  Manual Ordering (No Sorting)
Device  9       2       192.168.44.131  Graph Template
Device  6       2       192.168.178.43  Graph Template
Device  3       2       192.168.178.161 Graph Template
Device  7       2       192.168.44.137  Graph Template
```

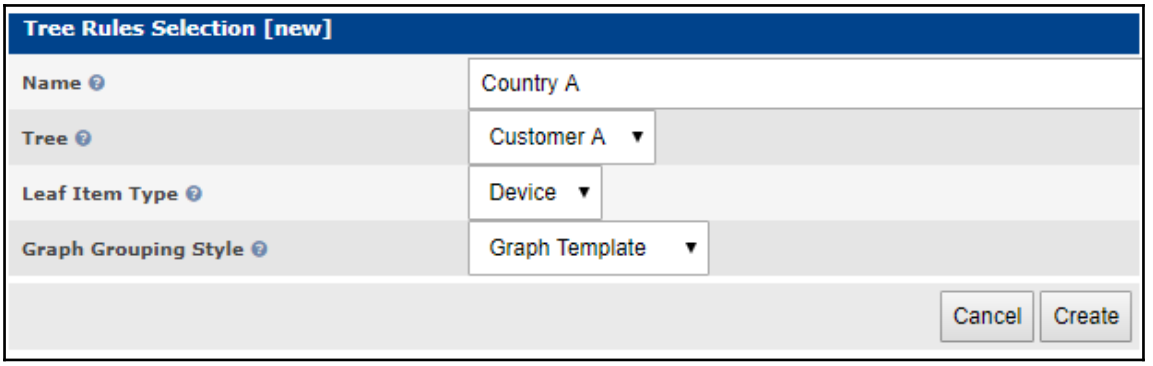
```
[root@localhost cli]# php add_tree.php --type=node -
Added Node node-id: (11)
```

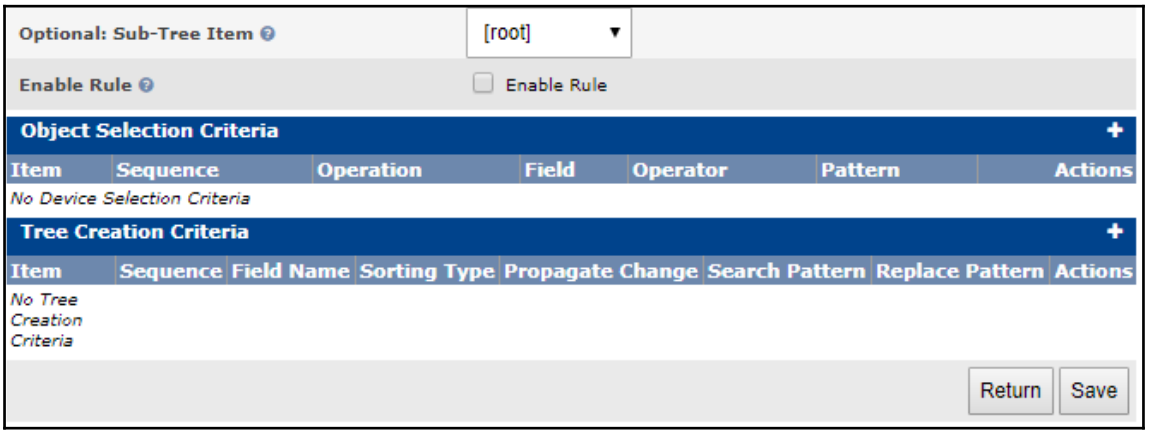
```
[root@localhost cli]# php add_device.php
Cacti Add Device Utility, Version 1.1.23, Copyright (C) 2004-2017 The Cacti Group

usage: add_device.php --description=[description] --ip=[IP] --template=[ID] [--notes="[]"] [--disable]
    [--poller=[id]] [--site=[id] [--external-id=[S]] [--proxy] [--threads=[1]
    [--avail=[ping]] --ping_method=[icmp] --ping_port=[N/A, 1-65534] --ping_timeout=[N] --ping_retries=[2]
    [--version=[0|1|2|3]] [--community=] [--port=161] [--timeout=500]
    [--username= --password=] [--authproto=] [--privpass= --privproto=] [--context=] [--engineid=]
    [--quiet]
```

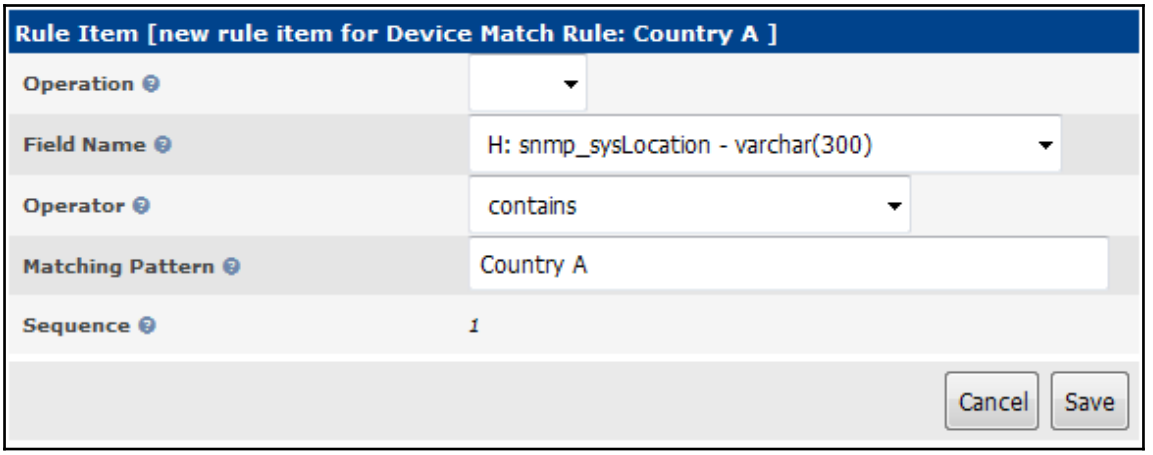
```
[root@localhost cli]# php add_device.php --ip="192.168.178.53" --description="myCLIDevice" --template=2
Adding myCLIDevice (192.168.178.53) as "Generic SNMP Device" using SNMP v2 with community "public"
Success - new device-id: (9)
```

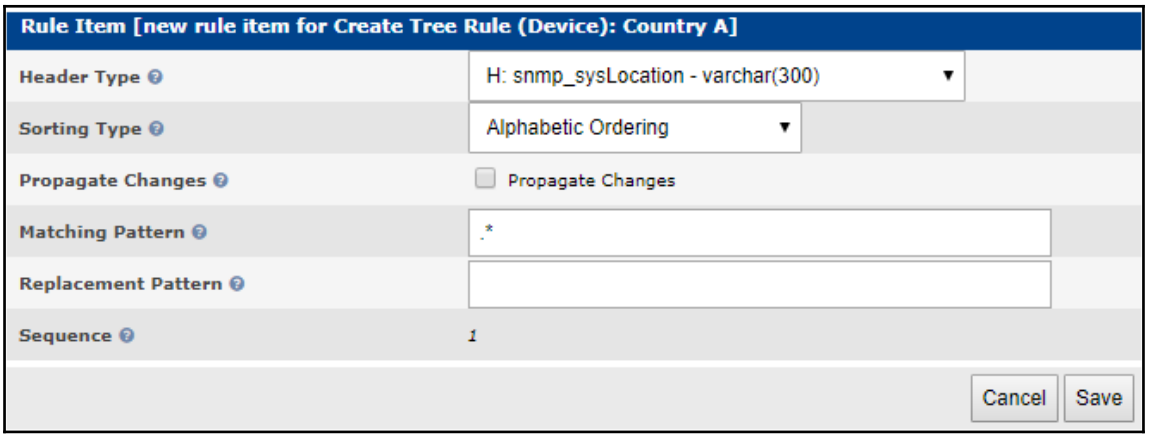
```
[root@localhost cli]# php import_devices.php devicelist.txt
Cacti Device Import Utility
Import File: devicelist.txt

Importing Devices...
Adding myCiscoRouter (192.168.0.11) as "Cisco Router" using SNMP v2 with community "public"
Success - new device-id: (10)
Adding myOtherDevice (192.168.0.12) as "Generic SNMP Device" using SNMP v2 with community "public"
Success - new device-id: (11)
```

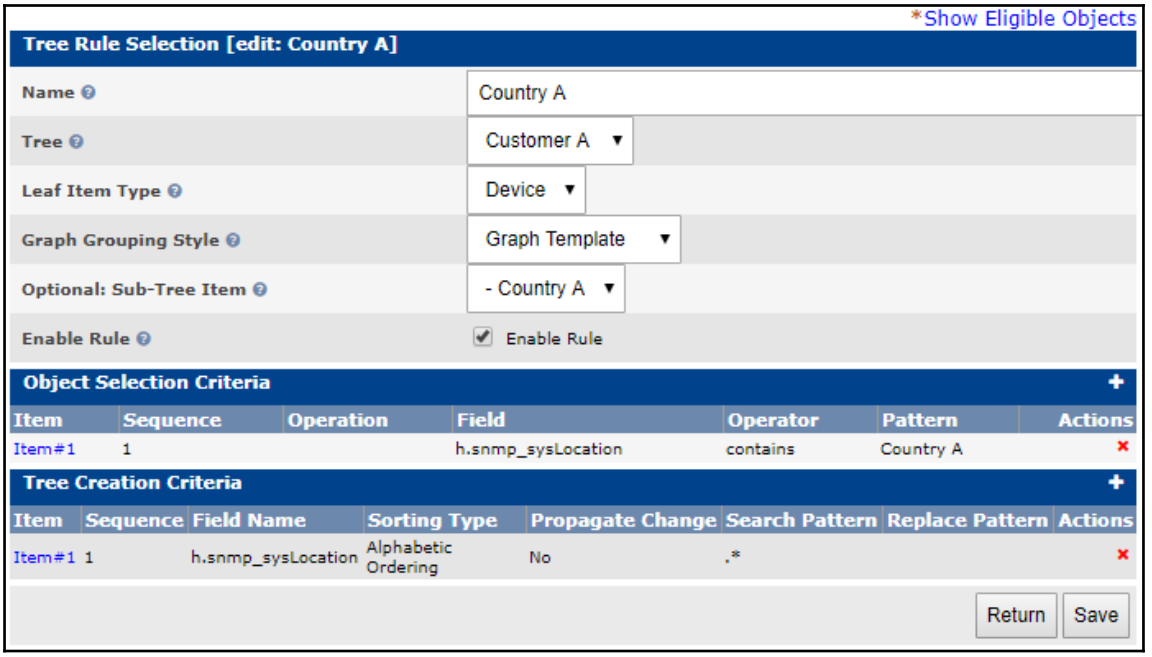

Tree Rules
Search
Status
Any
Tree Rules
Default
Go
Clear
All 2 Tree Rules
Rule Name
ID
Hook into Tree
At Subtree
This Type
Using Grouping
Enabled
New Device
1 Default Tree
ROOT
Device
Disabled
New Graph
2 Default Tree
ROOT
Graph
Disabled
All 2 Tree Rules
Choose an action
Go

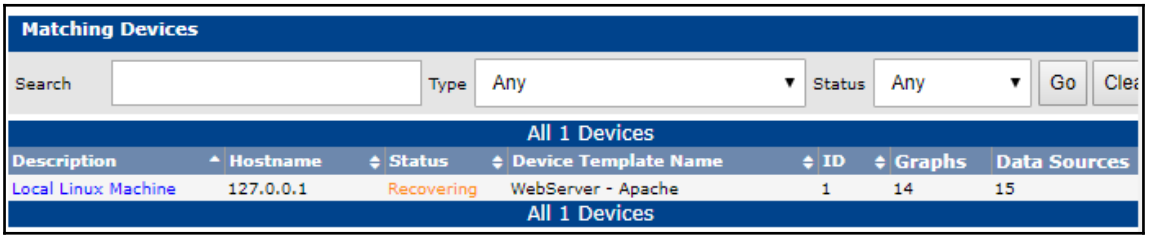

Tree Rules Selection [new]
Name
Country A
Tree
Customer A
Leaf Item Type
Device
Graph Grouping Style
Graph Template
Cancel
Create

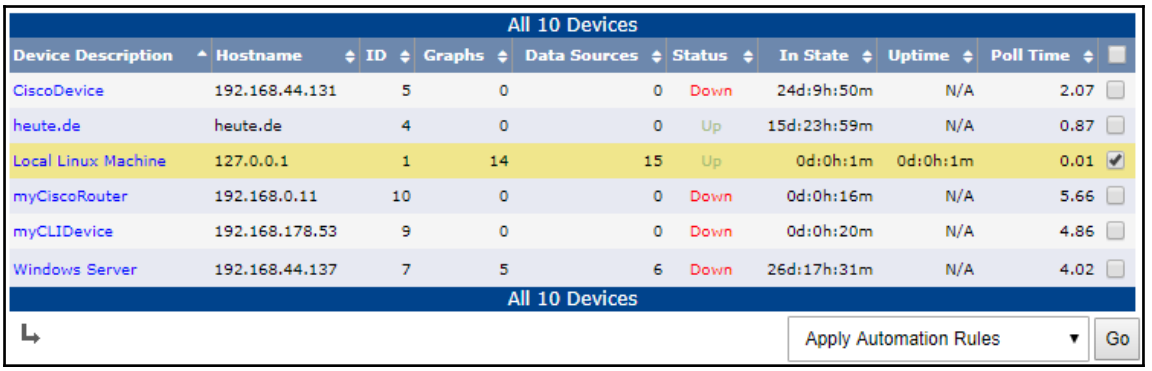

Optional: Sub-Tree Item
[root]
Enable Rule
Enable Rule
Object Selection Criteria
Item
Sequence
Operation
Field
Operator
Pattern
Actions
No Device Selection Criteria
Tree Creation Criteria
Item
Sequence
Field Name
Sorting Type
Propagate Change
Search Pattern
Replace Pattern
Actions
No Tree Creation Criteria
Return
Save

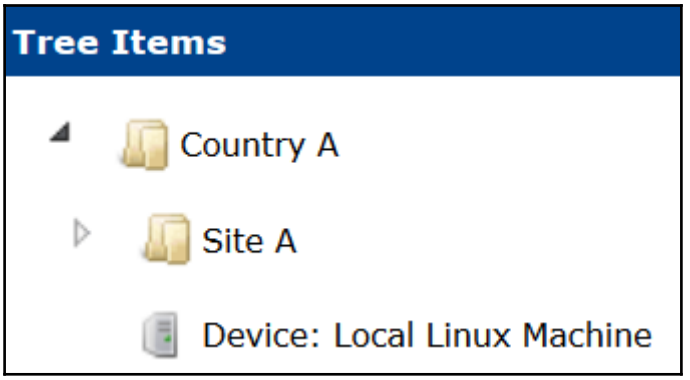

Rule Item [new rule item for Device Match Rule: Country A]
Operation
Field Name
H: snmp_sysLocation - varchar(300)
Operator
contains
Matching Pattern
Country A
Sequence
1
Cancel
Save


Rule Item [new rule item for Create Tree Rule (Device): Country A]
Header Type
H: snmp_sysLocation - varchar(300)
Sorting Type
Alphabetic Ordering
Propagate Changes
Propagate Changes
Matching Pattern
.*
Replacement Pattern
Sequence
1
Cancel
Save


*Show Eligible Objects
Tree Rule Selection [edit: Country A]
Name
Country A
Tree
Customer A
Leaf Item Type
Device
Graph Grouping Style
Graph Template
Optional: Sub-Tree Item
- Country A
Enable Rule
Enable Rule
Object Selection Criteria
Item Sequence Operation Field Operator Pattern Actions
Item#1 1 h.snmp_sysLocation contains Country A
Tree Creation Criteria
Item Sequence Field Name Sorting Type Propagate Change Search Pattern Replace Pattern Actions
Item#1 1 h.snmp_sysLocation Alphabetic Ordering No .*
Return
Save


Matching Devices
Search
Type
Any
Status
Any
Go
All 1 Devices
Description Hostname Status Device Template Name ID Graphs Data Sources
Local Linux Machine 127.0.0.1 Recovering WebServer - Apache 1 14 15
All 1 Devices


All 10 Devices
Device Description Hostname ID Graphs Data Sources Status In State Uptime Poll Time
CiscoDevice 192.168.44.131 5 0 0 Down 24d:9h:50m N/A 2.07
heute.de heute.de 4 0 0 Up 15d:23h:59m N/A 0.87
Local Linux Machine 127.0.0.1 1 14 15 Up 0d:0h:1m 0d:0h:1m 0.01
myCiscoRouter 192.168.0.11 10 0 0 Down 0d:0h:16m N/A 5.66
myCLIDevice 192.168.178.53 9 0 0 Down 0d:0h:20m N/A 4.86
Windows Server 192.168.44.137 7 5 6 Down 26d:17h:31m N/A 4.02
All 10 Devices
Apply Automation Rules
Go



Device Selection Criteria +

Item	Sequence	Operation	Field	Operator	Pattern	Actions
Item#1	1		h.snmp_version	is greater than or equal	2	▼ ✖
Item#2	2		h.status	contains	3	▲ ✖

Rule Selection [edit: IfOperStatus - UP - 64bit]

Name	IfOperStatus - UP - 64bit
Data Query	SNMP - Interface Statistics ▼
Graph Type	In/Out Bits (64-bit Counters) ▼
Enable Rule	☑ Enable Rule

Device Selection Criteria +

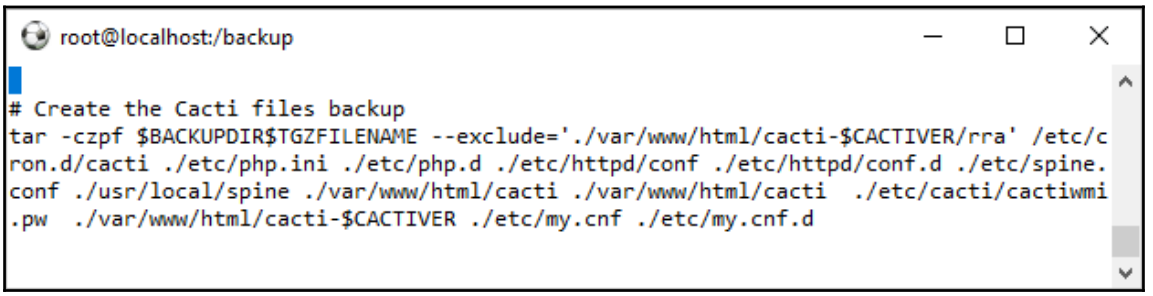
Item	Sequence	Operation	Field	Operator	Pattern	Actions
Item#1	1		h.snmp_version	is greater than or equal	2	▼ ✖
Item#2	2		h.status	contains	3	▲ ✖

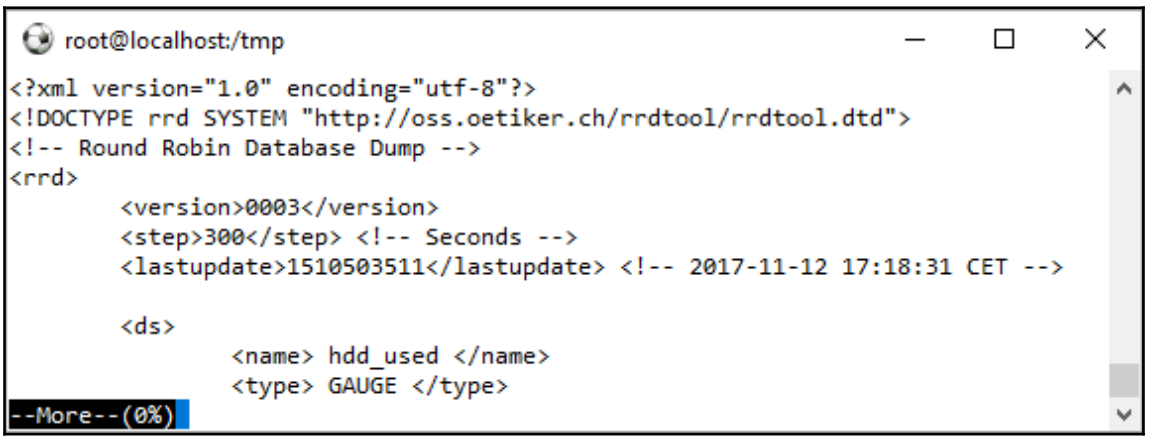
Graph Creation Criteria +

Item	Sequence	Operation	Field	Operator	Pattern	Actions
Item#1	1		ifOperStatus	contains	up	✖

Return Save

Chapter 13: Migrating Cacti to a New Server



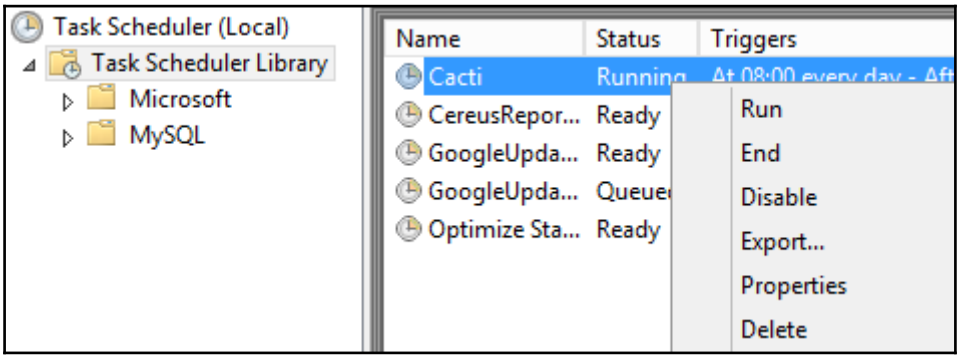


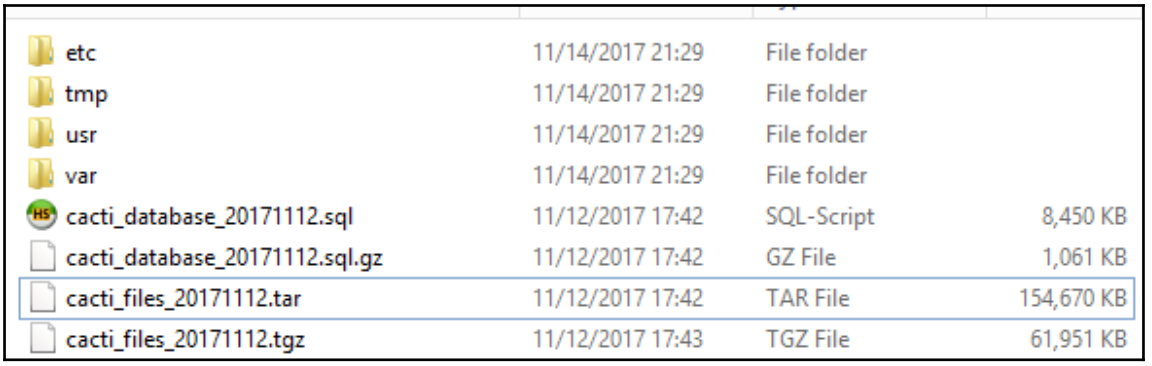
root@localhost:/tmp

```
filename = "local_linux_machine_hdd_used_16.rrd"
rrd_version = "0003"
step = 300
last_update = 1510503511
header_size = 5216
ds[hdd_used].index = 0
ds[hdd_used].type = "GAUGE"
ds[hdd_used].minimal_heartbeat = 600
ds[hdd_used].min = 0.0000000000e+00
ds[hdd_used].max = NaN
ds[hdd_used].last_ds = "8459564"
--More--
```

root@localhost:/backup

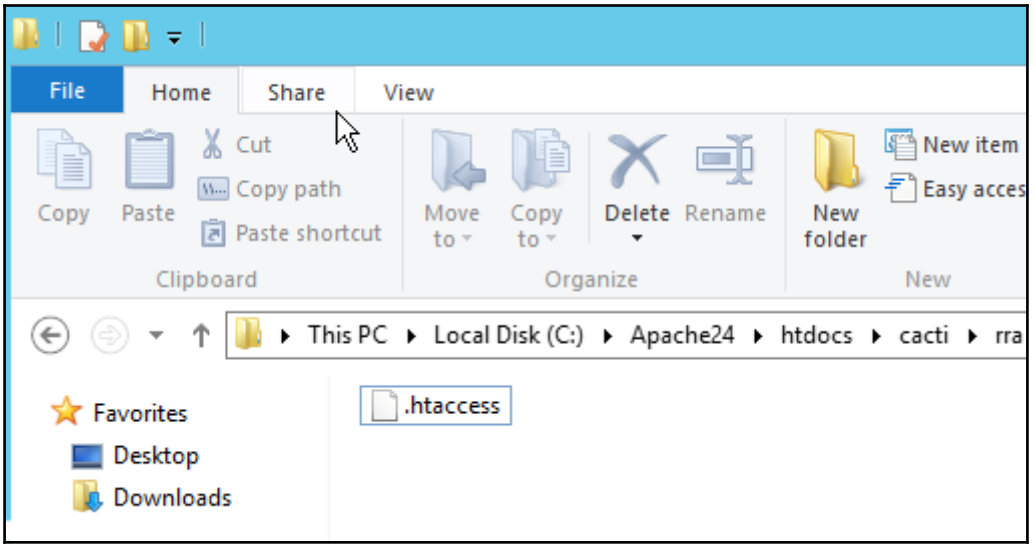
```
# Dump the rrd files to xml files
mkdir /tmp/xml
cd /var/www/html/cacti/rra
for i in `find -name "*.rrd"` ; do rrdtool dump $i > /tmp/xml/$i.xml; done
cd /

# Create the Cacti files backup
tar -czpf $BACKUPDIR$TGZFILENAME --exclude='./var/www/html/cacti-$CACTIVER/rra'
 /etc/cron.d/cacti ./etc/php.ini ./etc/php.d ./etc/httpd/conf ./etc/httpd/conf.
d ./etc/spine.conf ./usr/local/spine ./var/www/html/cacti ./var/www/html/cacti
 ./etc/cacti/cactiwmi.pw  ./var/www/html/cacti-$CACTIVER ./etc/my.cnf ./etc/my.
cnf.d ./tmp/xml
```

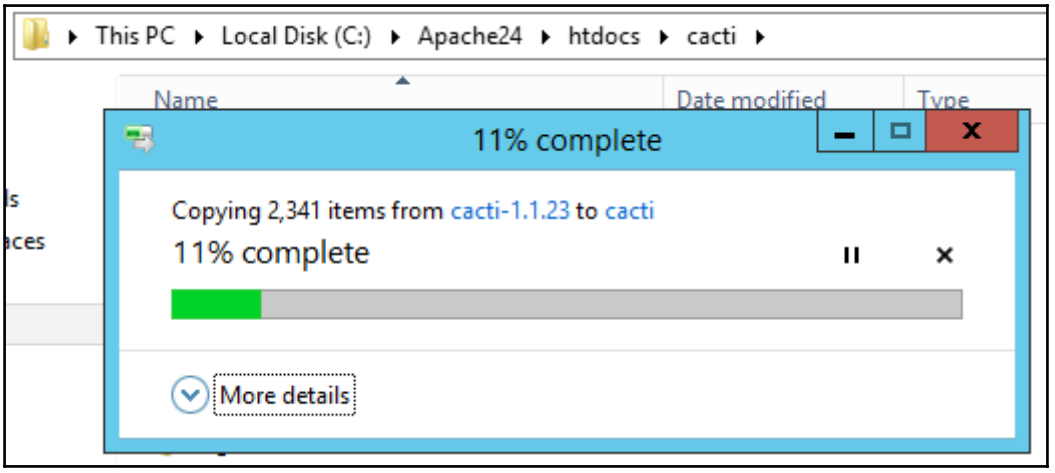


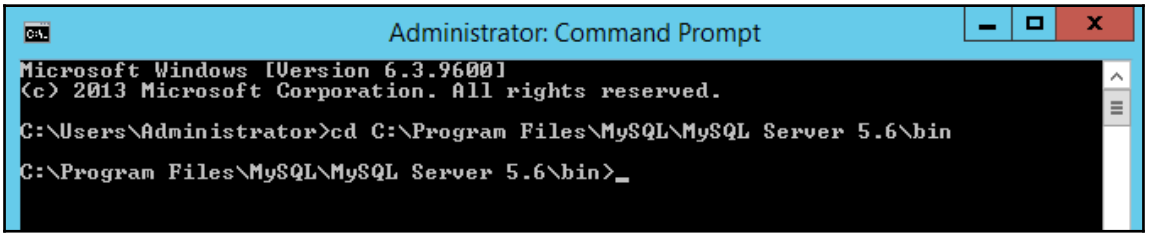


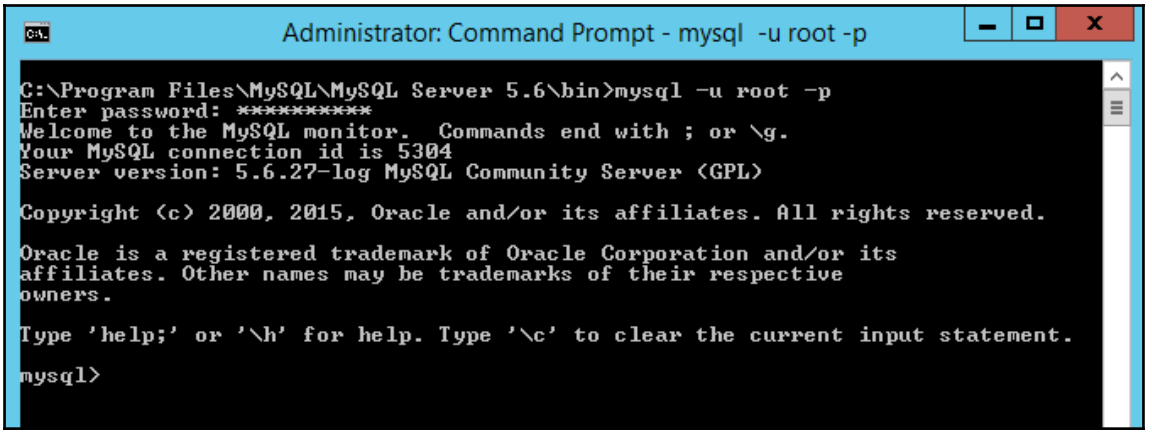
etc	11/14/2017 21:29	File folder	
tmp	11/14/2017 21:29	File folder	
usr	11/14/2017 21:29	File folder	
var	11/14/2017 21:29	File folder	
cacti_database_20171112.sql	11/12/2017 17:42	SQL-Script	8,450 KB
cacti_database_20171112.sql.gz	11/12/2017 17:42	GZ File	1,061 KB
cacti_files_20171112.tar	11/12/2017 17:42	TAR File	154,670 KB
cacti_files_20171112.tgz	11/12/2017 17:43	TGZ File	61,951 KB

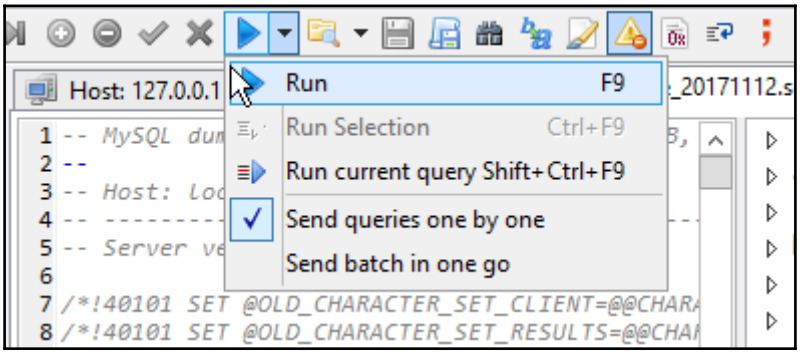
```
/* make sure these values refect your actual database/host/user/password */
$database_type = "mysql";
$database_default = "cacti";
$database_hostname = "localhost";
$database_username = "cactiuser";
$database_password = "DcdPwfnYlK";
$database_port = "3306";
$database_ssl = false;

/*
   Edit this to point to the default URL of your Cacti install
   ex: if your cacti install as at http://serverip/cacti/ this
   would be set to /cacti/
*/
//$url_path = "/cacti/";

/* Default session name - Session name must contain alpha characters */
//$cacti_session_name = "Cacti";
```

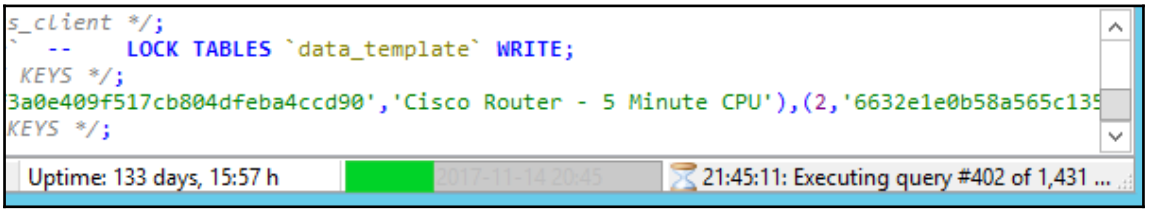

File
Home
Share
View
Copy
Paste
Cut
Copy path
Paste shortcut
Clipboard
Move to
Copy to
Delete
Rename
Organize
New folder
New item
Easy acces
New
This PC
Local Disk (C:)
Apache24
htdocs
cacti
rra
Favorites
Desktop
Downloads
.htaccess

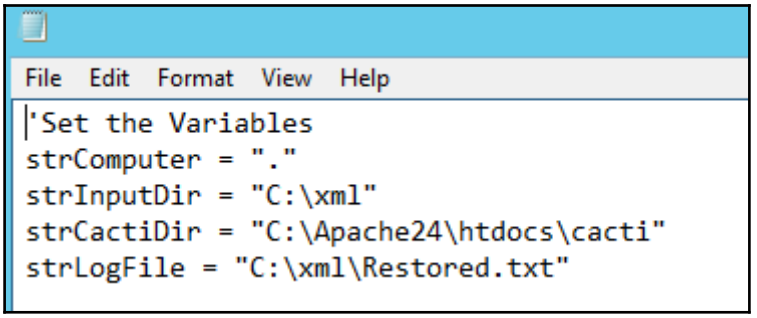

This PC
Local Disk (C:)
Apache24
htdocs
cacti
Name
Date modified
Type
11% complete
Copying 2,341 items from cacti-1.1.23 to cacti
11% complete
More details

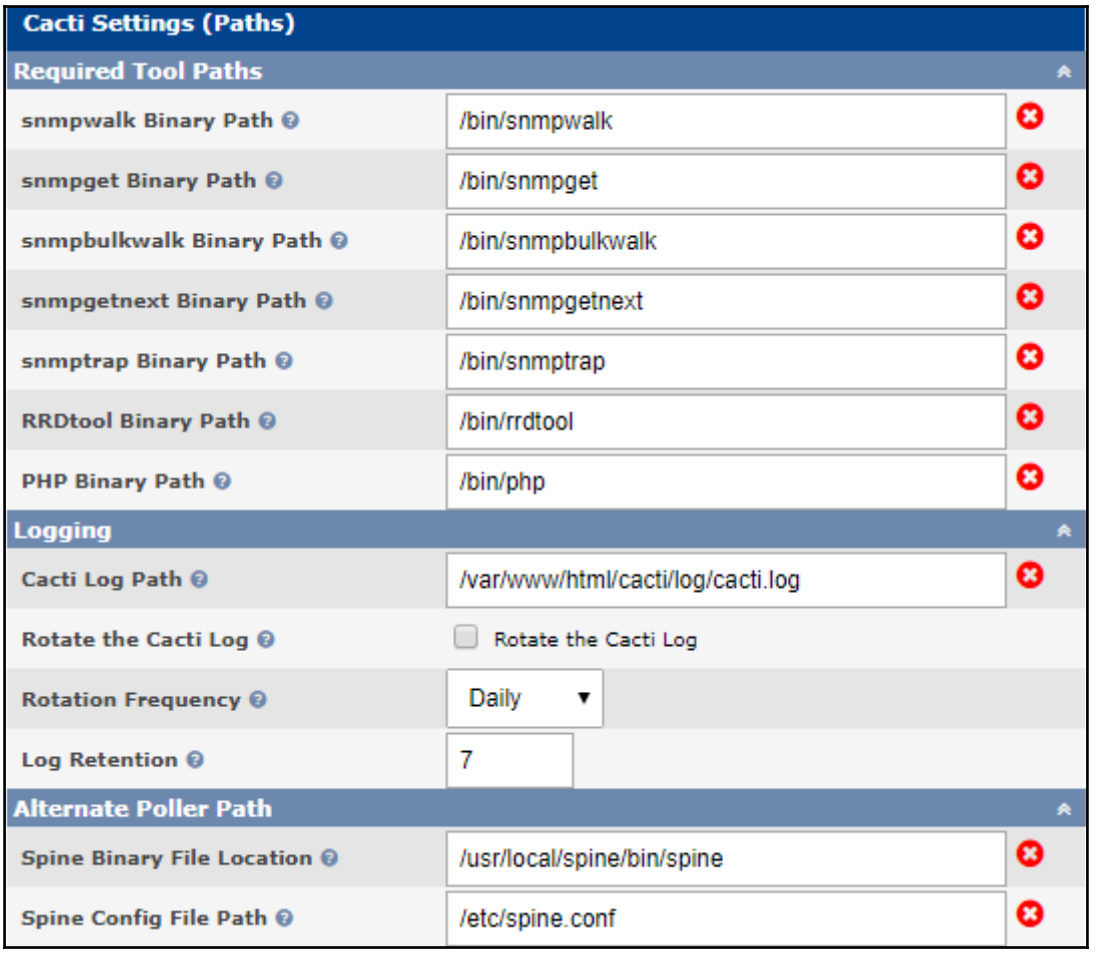

Administrator: Command Prompt
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.
C:\Users\Administrator>cd C:\Program Files\MySQL\MySQL Server 5.6\bin
C:\Program Files\MySQL\MySQL Server 5.6\bin>

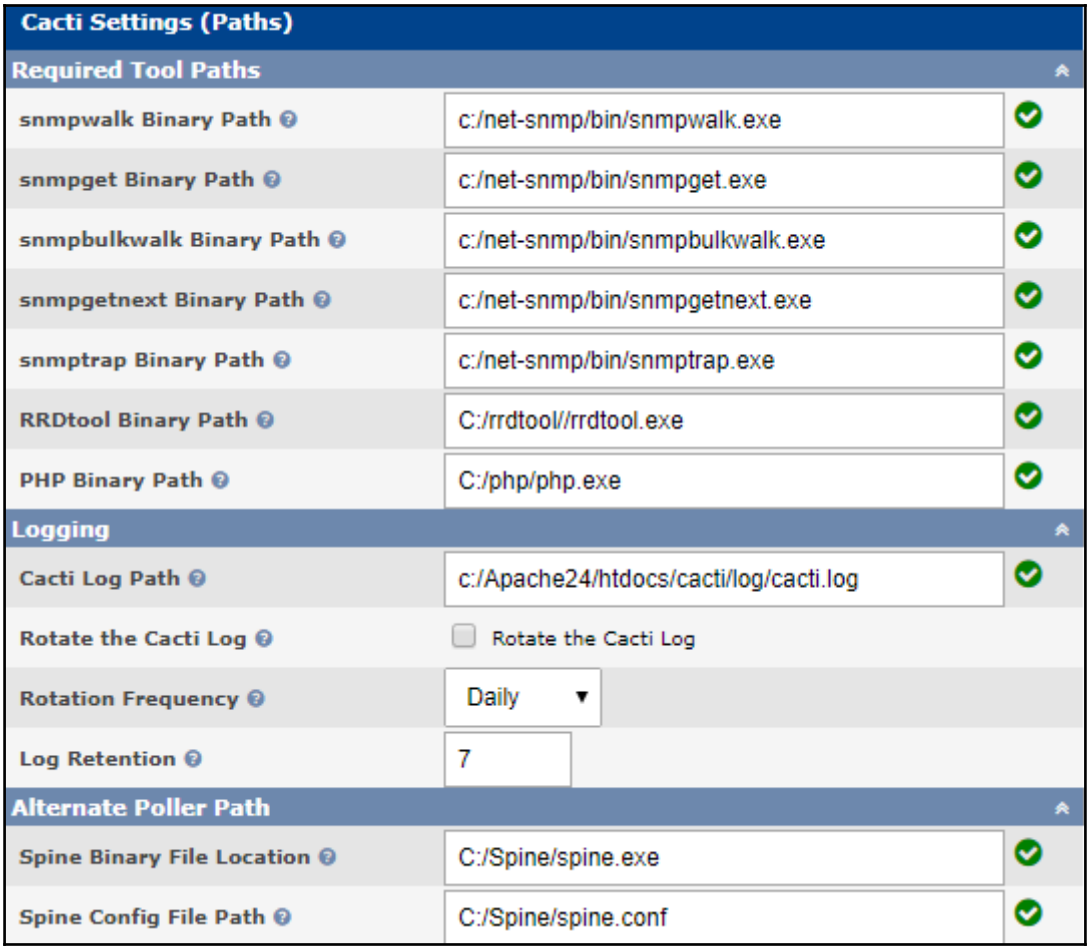

Administrator: Command Prompt - mysql -u root -p
C:\Program Files\MySQL\MySQL Server 5.6\bin>mysql -u root -p
Enter password: **********
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 5304
Server version: 5.6.27-log MySQL Community Server (GPL)
Copyright (c) 2000, 2015, Oracle and/or its affiliates. All rights reserved.
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql>

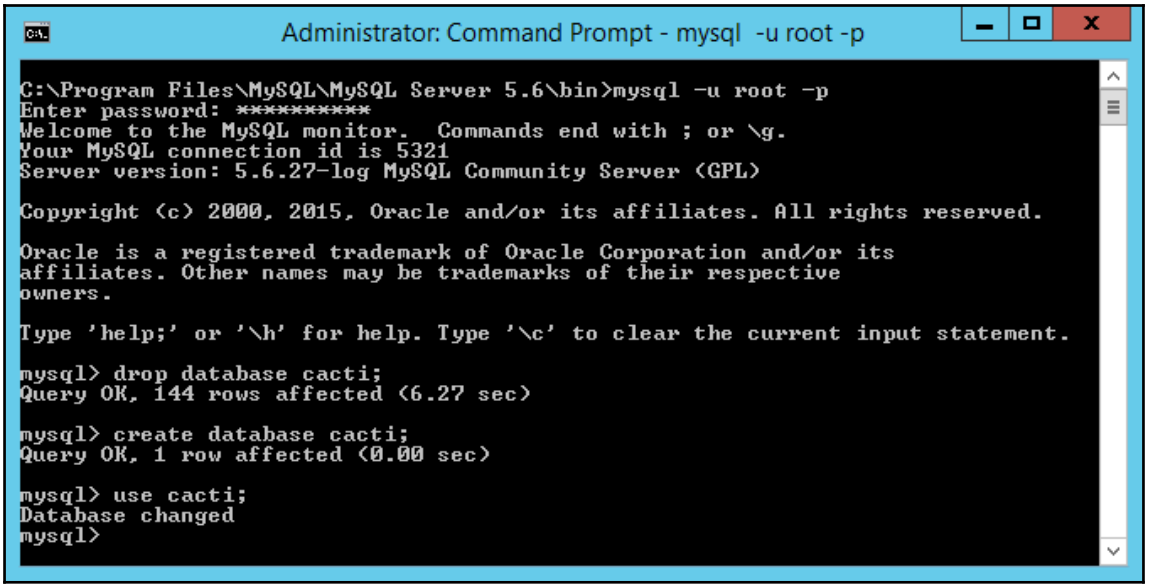

Host: 127.0.0.1
Run F9
Run Selection Ctrl+F9
Run current query Shift+Ctrl+F9
Send queries one by one
Send batch in one go
1 -- MySQL dum
2 --
3 -- Host: Loc
4 -- ---------
5 -- Server ve
6
7 /*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARA
8 /*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHAR

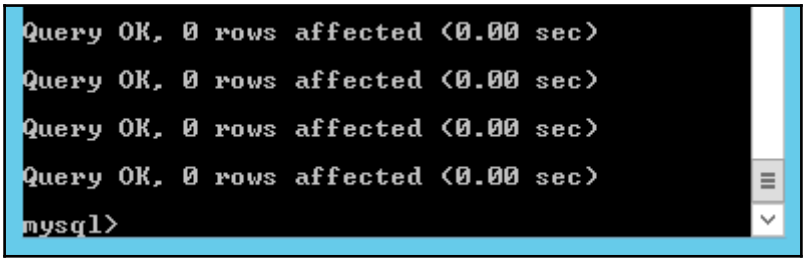

s_client */;
-- LOCK TABLES `data_template` WRITE;
KEYS */;
3a0e409f517cb804dfeba4ccd90','Cisco Router - 5 Minute CPU'),(2,'6632e1e0b58a565c13
KEYS */;
Uptime: 133 days, 15:57 h
21:45:11: Executing query #402 of 1,431 ...

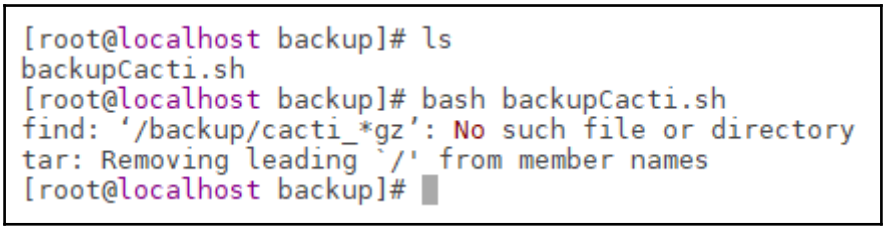

File Edit Format View Help
'Set the Variables
strComputer = "."
strInputDir = "C:\xml"
strCactiDir = "C:\Apache24\htdocs\cacti"
strLogFile = "C:\xml\Restored.txt"


Cacti Settings (Paths)
Required Tool Paths
snmpwalk Binary Path
/bin/snmpwalk
snmpget Binary Path
/bin/snmpget
snmpbulkwalk Binary Path
/bin/snmpbulkwalk
snmpgetnext Binary Path
/bin/snmpgetnext
snmptrap Binary Path
/bin/snmptrap
RRDtool Binary Path
/bin/rrdtool
PHP Binary Path
/bin/php
Logging
Cacti Log Path
/var/www/html/cacti/log/cacti.log
Rotate the Cacti Log
Rotate the Cacti Log
Rotation Frequency
Daily
Log Retention
7
Alternate Poller Path
Spine Binary File Location
/usr/local/spine/bin/spine
Spine Config File Path
/etc/spine.conf


Cacti Settings (Paths)
Required Tool Paths
snmpwalk Binary Path
c:/net-snmp/bin/snmpwalk.exe
snmpget Binary Path
c:/net-snmp/bin/snmpget.exe
snmpbulkwalk Binary Path
c:/net-snmp/bin/snmpbulkwalk.exe
snmpgetnext Binary Path
c:/net-snmp/bin/snmpgetnext.exe
snmptrap Binary Path
c:/net-snmp/bin/snmptrap.exe
RRDtool Binary Path
C:/rrdtool//rrdtool.exe
PHP Binary Path
C:/php/php.exe
Logging
Cacti Log Path
c:/Apache24/htdocs/cacti/log/cacti.log
Rotate the Cacti Log
Rotate the Cacti Log
Rotation Frequency
Daily
Log Retention
7
Alternate Poller Path
Spine Binary File Location
C:/Spine/spine.exe
Spine Config File Path
C:/Spine/spine.conf


Administrator: Command Prompt - mysql -u root -p
C:\Program Files\MySQL\MySQL Server 5.6\bin>mysql -u root -p
Enter password: **********
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 5321
Server version: 5.6.27-log MySQL Community Server (GPL)
Copyright (c) 2000, 2015, Oracle and/or its affiliates. All rights reserved.
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> drop database cacti;
Query OK, 144 rows affected (6.27 sec)
mysql> create database cacti;
Query OK, 1 row affected (0.00 sec)
mysql> use cacti;
Database changed
mysql>

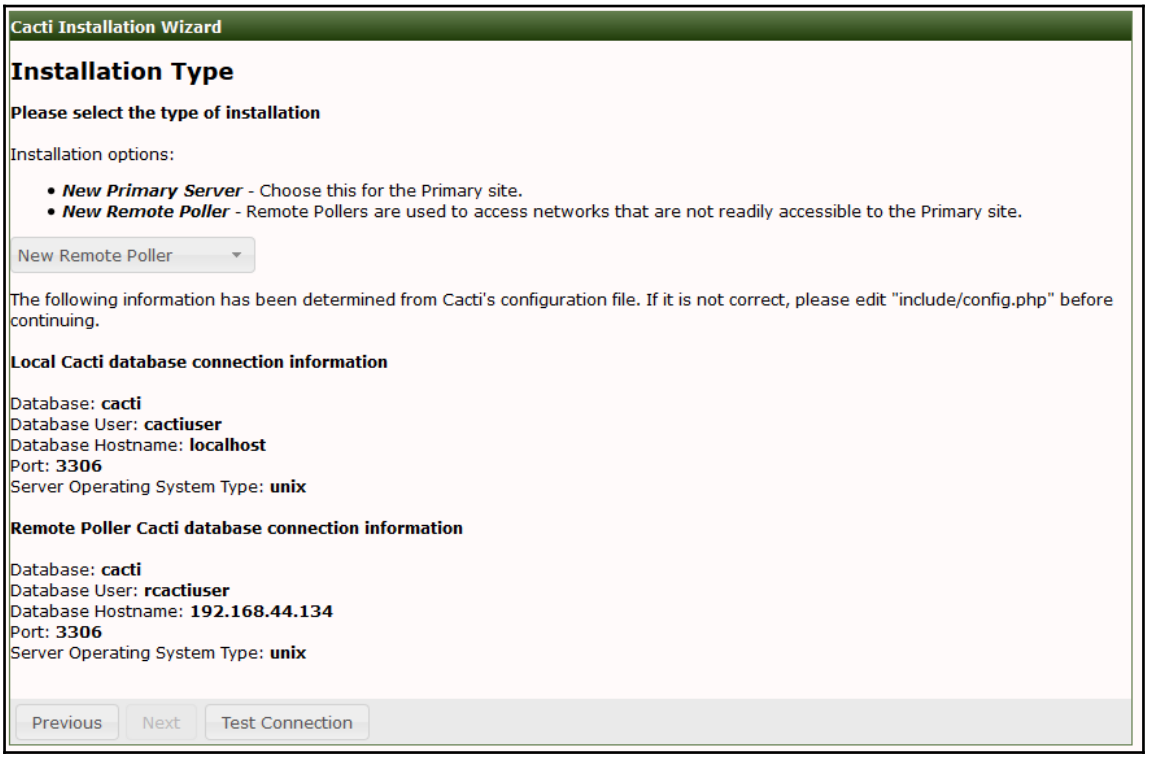

Query OK, 0 rows affected (0.00 sec)
Query OK, 0 rows affected (0.00 sec)
Query OK, 0 rows affected (0.00 sec)
Query OK, 0 rows affected (0.00 sec)
mysql>

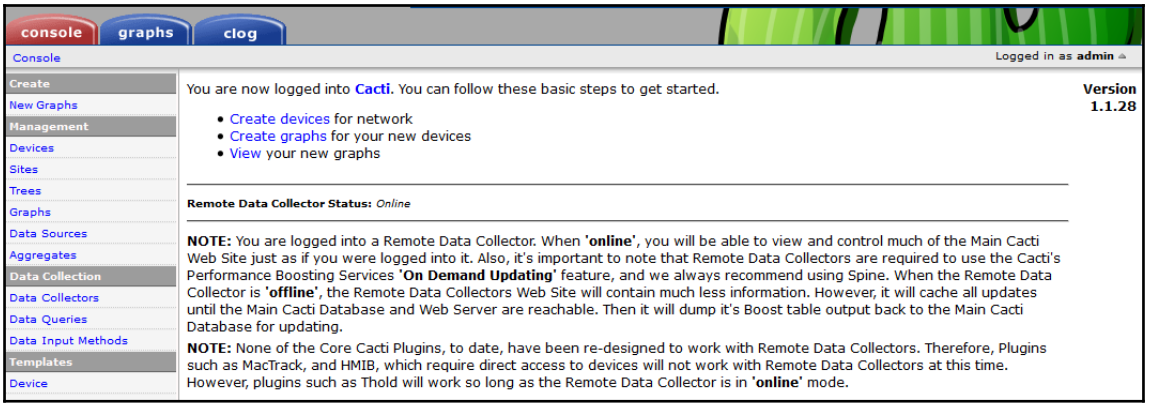

[root@localhost backup]# ls
backupCacti.sh
[root@localhost backup]# bash backupCacti.sh
find: '/backup/cacti_*gz': No such file or directory
tar: Removing leading `/' from member names
[root@localhost backup]#

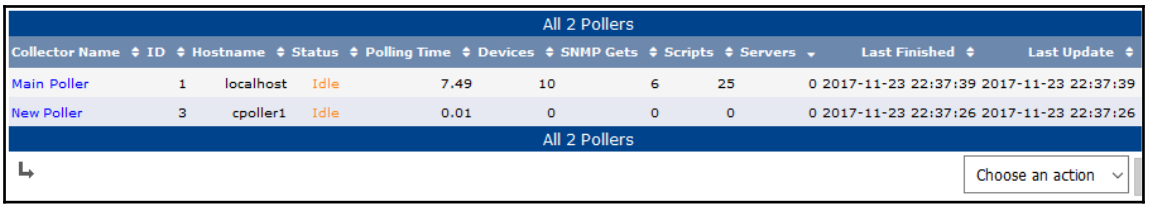
Chapter 14: Multiple Poller with Cacti

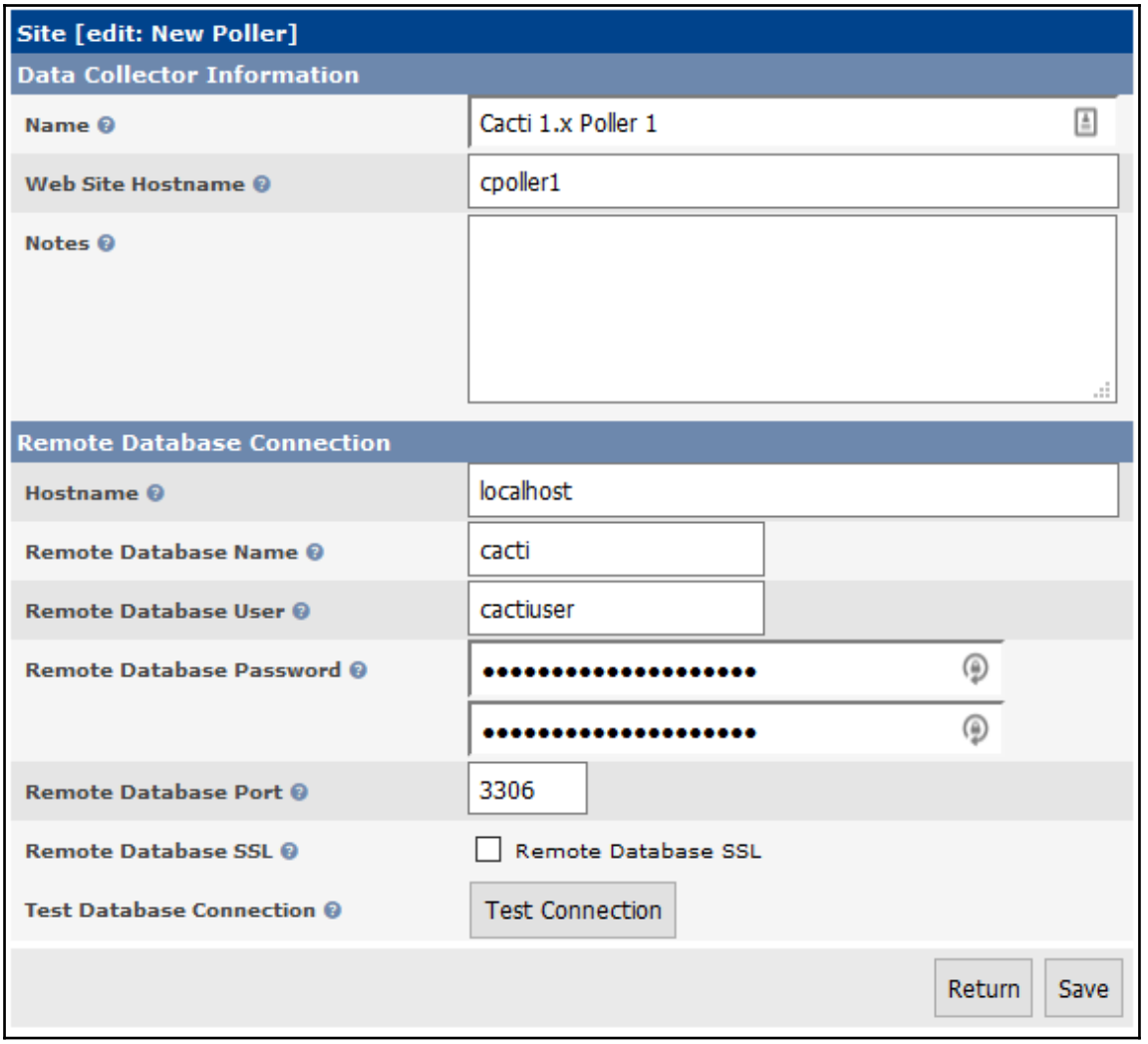
```
RDB_Host                192.168.44.134
RDB_Database            cacti
RDB_User                cactiuser
RDB_Pass                MyV3ryStr0ngPassword
RDB_Port                3306
```

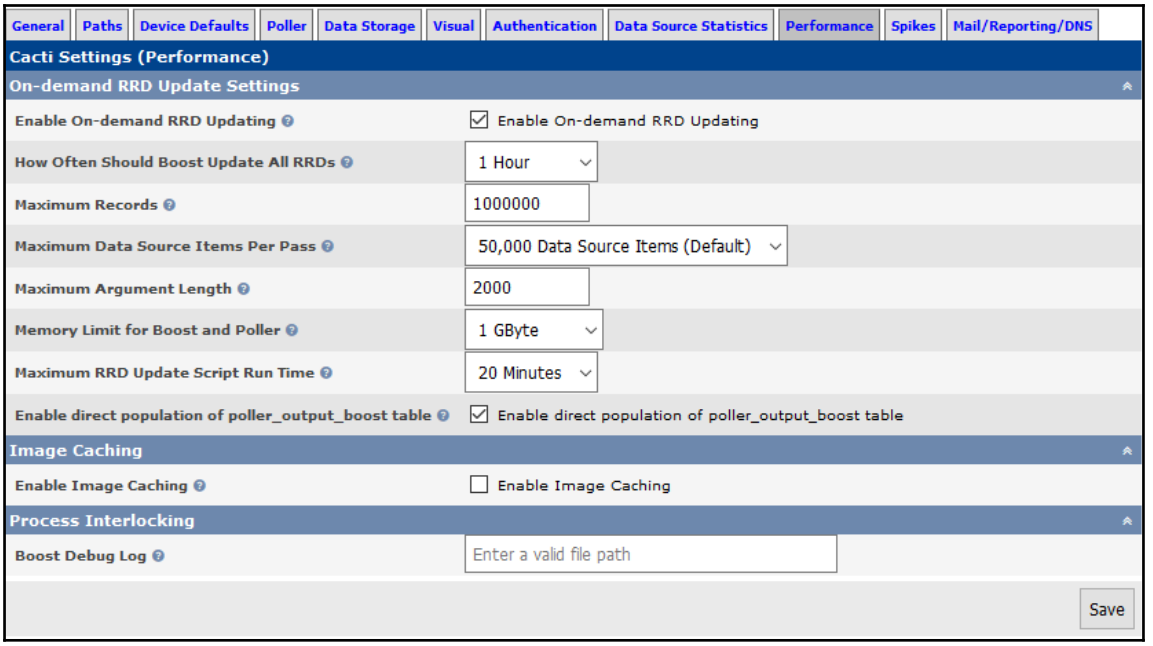
```
$rdatabase_type     = 'mysql';
$rdatabase_default  = 'cacti';
$rdatabase_hostname = '192.168.44.134';
$rdatabase_username = 'rcactiuser';
$rdatabase_password = 'MyV3ryStr0ngRemotePassword';
$rdatabase_port     = '3306';
$rdatabase_ssl      = false;
```

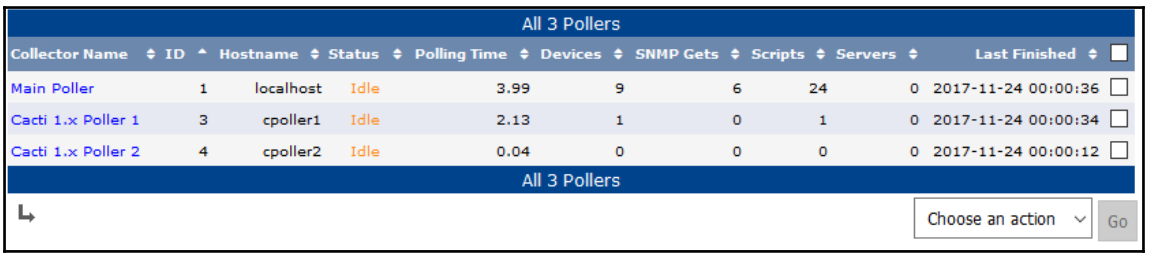


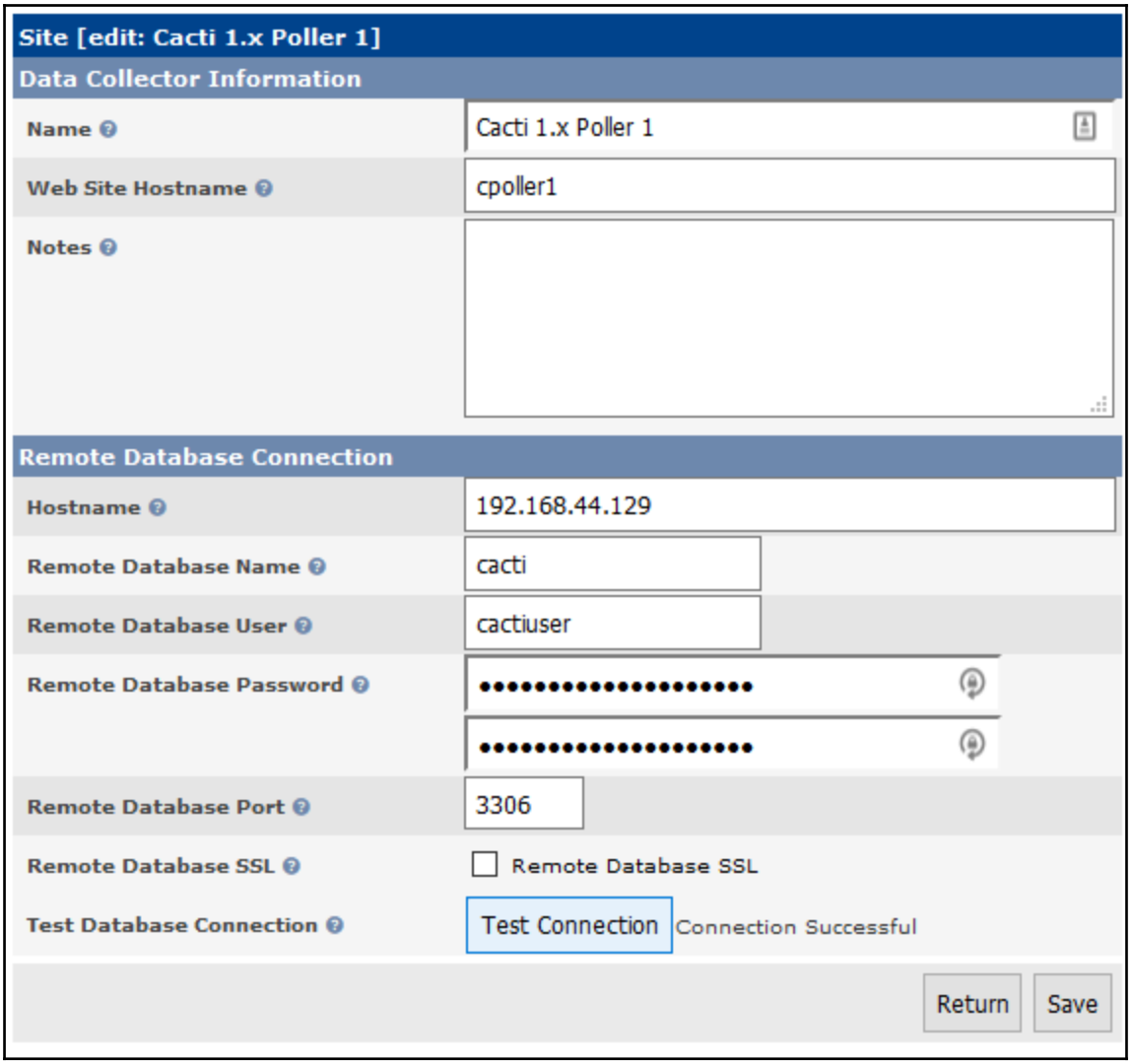

console
graphs
clog
Console
Logged in as admin
Create
New Graphs
Management
Devices
Sites
Trees
Graphs
Data Sources
Aggregates
Data Collection
Data Collectors
Data Queries
Data Input Methods
Templates
Device
You are now logged into Cacti. You can follow these basic steps to get started.
Create devices for network
Create graphs for your new devices
View your new graphs
Version 1.1.28
Remote Data Collector Status: Online
NOTE: You are logged into a Remote Data Collector. When 'online', you will be able to view and control much of the Main Cacti Web Site just as if you were logged into it. Also, it's important to note that Remote Data Collectors are required to use the Cacti's Performance Boosting Services 'On Demand Updating' feature, and we always recommend using Spine. When the Remote Data Collector is 'offline', the Remote Data Collectors Web Site will contain much less information. However, it will cache all updates until the Main Cacti Database and Web Server are reachable. Then it will dump it's Boost table output back to the Main Cacti Database for updating.
NOTE: None of the Core Cacti Plugins, to date, have been re-designed to work with Remote Data Collectors. Therefore, Plugins such as MacTrack, and HMIB, which require direct access to devices will not work with Remote Data Collectors at this time. However, plugins such as Thold will work so long as the Remote Data Collector is in 'online' mode.

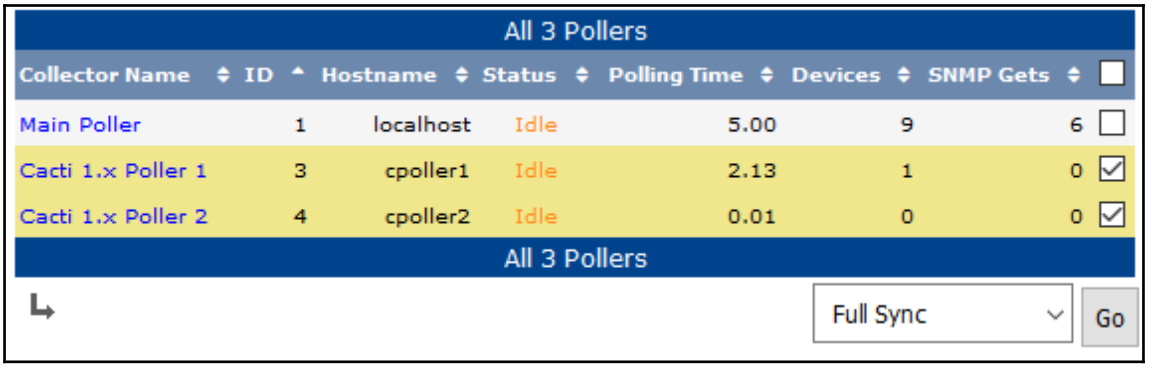

All 2 Pollers
Collector Name
ID
Hostname
Status
Polling Time
Devices
SNMP Gets
Scripts
Servers
Last Finished
Last Update
Main Poller 1 localhost Idle 7.49 10 6 25 0 2017-11-23 22:37:39 2017-11-23 22:37:39
New Poller 3 cpoller1 Idle 0.01 0 0 0 0 2017-11-23 22:37:26 2017-11-23 22:37:26
All 2 Pollers
Choose an action

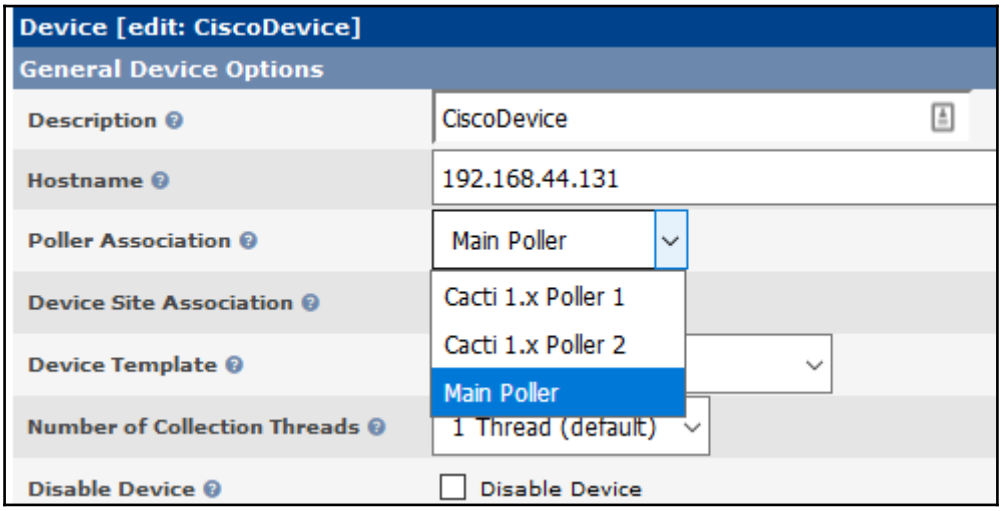

Site [edit: New Poller]
Data Collector Information
Name
Cacti 1.x Poller 1
Web Site Hostname
cpoller1
Notes
Remote Database Connection
Hostname
localhost
Remote Database Name
cacti
Remote Database User
cactiuser
Remote Database Password
Remote Database Port
3306
Remote Database SSL
Remote Database SSL
Test Database Connection
Test Connection
Return
Save

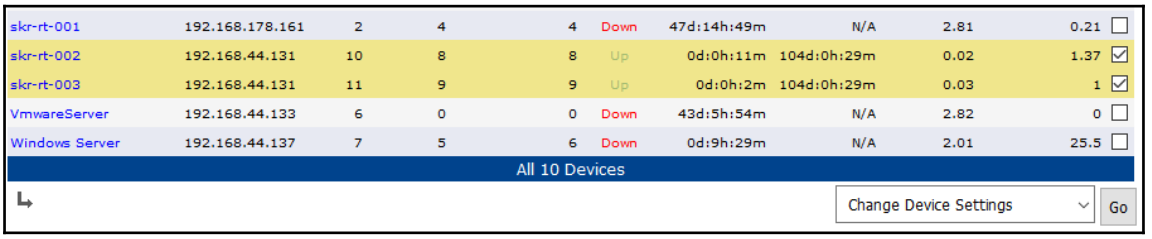

General
Paths
Device Defaults
Poller
Data Storage
Visual
Authentication
Data Source Statistics
Performance
Spikes
Mail/Reporting/DNS
Cacti Settings (Performance)
On-demand RRD Update Settings
Enable On-demand RRD Updating
Enable On-demand RRD Updating
How Often Should Boost Update All RRDs
1 Hour
Maximum Records
1000000
Maximum Data Source Items Per Pass
50,000 Data Source Items (Default)
Maximum Argument Length
2000
Memory Limit for Boost and Poller
1 GByte
Maximum RRD Update Script Run Time
20 Minutes
Enable direct population of poller_output_boost table
Enable direct population of poller_output_boost table
Image Caching
Enable Image Caching
Enable Image Caching
Process Interlocking
Boost Debug Log
Enter a valid file path
Save


All 3 Pollers
Collector Name
ID
Hostname
Status
Polling Time
Devices
SNMP Gets
Scripts
Servers
Last Finished
Main Poller 1 localhost Idle 3.99 9 6 24 0 2017-11-24 00:00:36
Cacti 1.x Poller 1 3 cpoller1 Idle 2.13 1 0 1 0 2017-11-24 00:00:34
Cacti 1.x Poller 2 4 cpoller2 Idle 0.04 0 0 0 0 2017-11-24 00:00:12
All 3 Pollers
Choose an action
Go

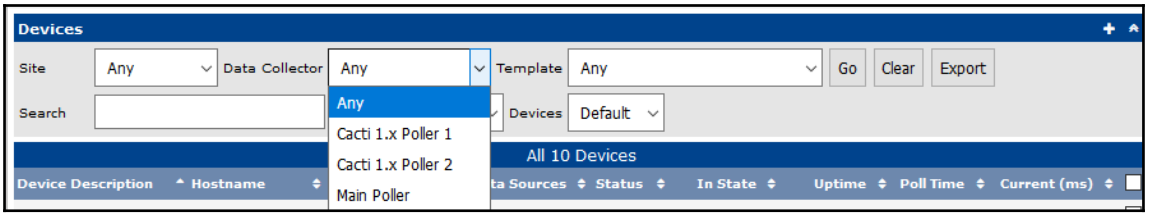

Site [edit: Cacti 1.x Poller 1]
Data Collector Information
Name
Cacti 1.x Poller 1
Web Site Hostname
cpoller1
Notes
Remote Database Connection
Hostname
192.168.44.129
Remote Database Name
cacti
Remote Database User
cactiuser
Remote Database Password
Remote Database Port
3306
Remote Database SSL
Remote Database SSL
Test Database Connection
Test Connection
Connection Successful
Return
Save

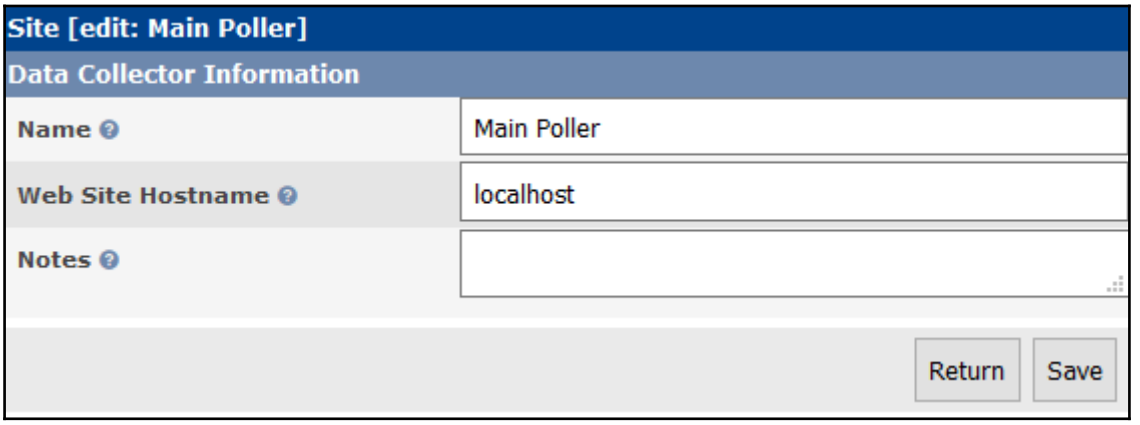

All 3 Pollers
Collector Name
ID
Hostname
Status
Polling Time
Devices
SNMP Gets
Main Poller 1 localhost Idle 5.00 9 6
Cacti 1.x Poller 1 3 cpoller1 Idle 2.13 1 0
Cacti 1.x Poller 2 4 cpoller2 Idle 0.01 0 0
All 3 Pollers
Full Sync
Go

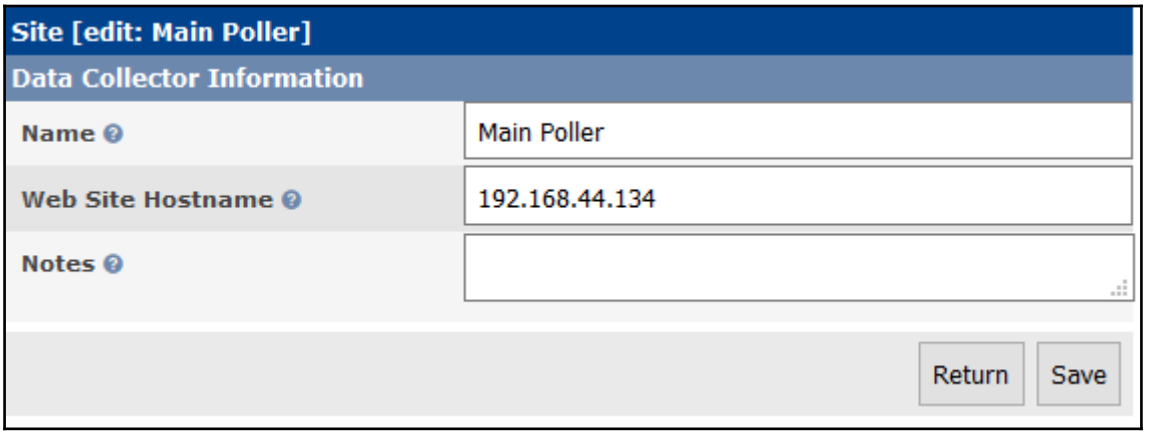

Device [edit: CiscoDevice]
General Device Options
Description
CiscoDevice
Hostname
192.168.44.131
Poller Association
Main Poller
Cacti 1.x Poller 1
Cacti 1.x Poller 2
Main Poller
Device Site Association
Device Template
Number of Collection Threads
1 Thread (default)
Disable Device
Disable Device


skr-rt-001 192.168.178.161 2 4 4 Down 47d:14h:49m N/A 2.81 0.21
skr-rt-002 192.168.44.131 10 8 8 Up 0d:0h:11m 104d:0h:29m 0.02 1.37
skr-rt-003 192.168.44.131 11 9 9 Up 0d:0h:2m 104d:0h:29m 0.03 1
VmwareServer 192.168.44.133 6 0 0 Down 43d:5h:54m N/A 2.82 0
Windows Server 192.168.44.137 7 5 6 Down 0d:9h:29m N/A 2.01 25.5
All 10 Devices
Change Device Settings
Go

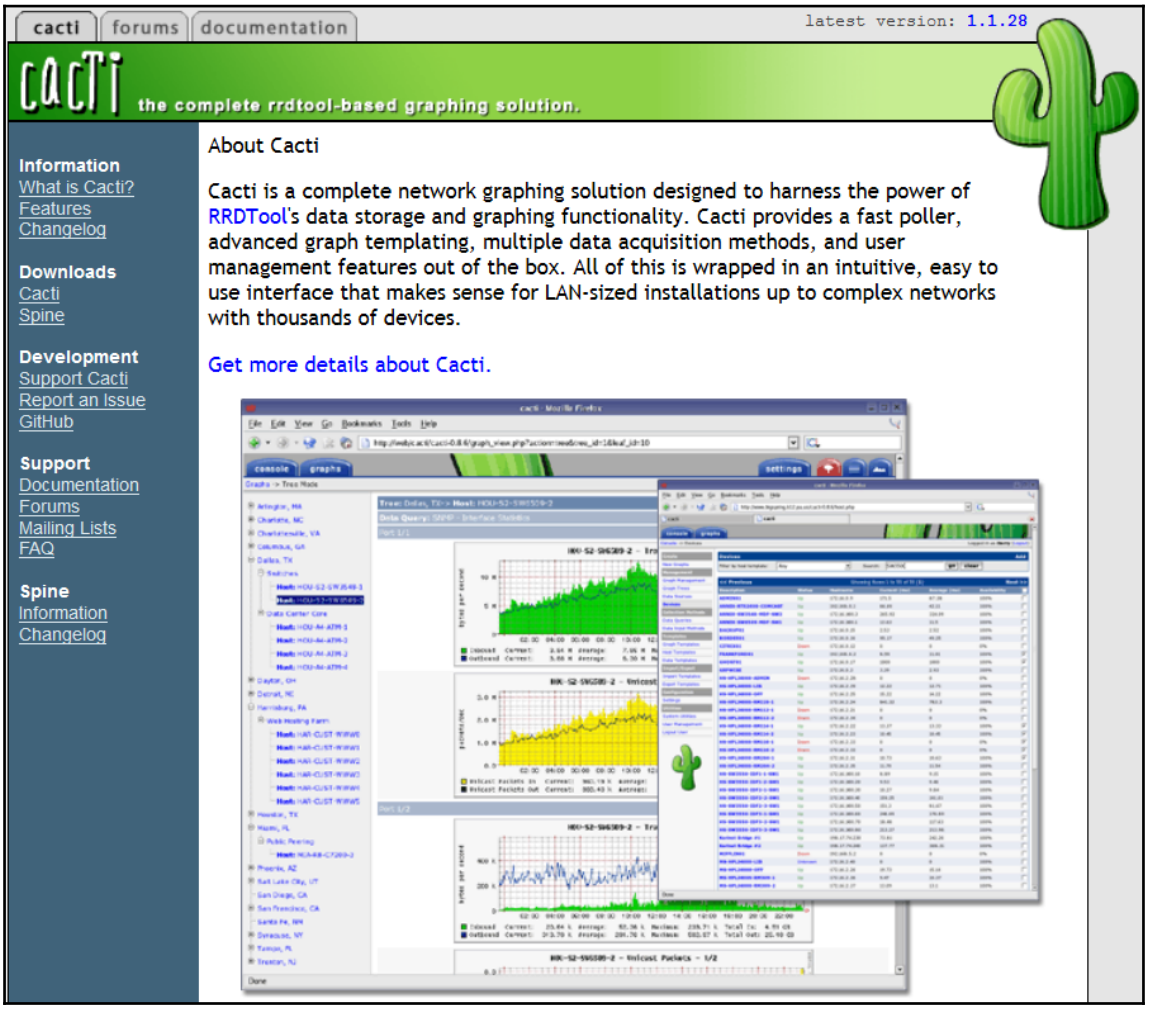
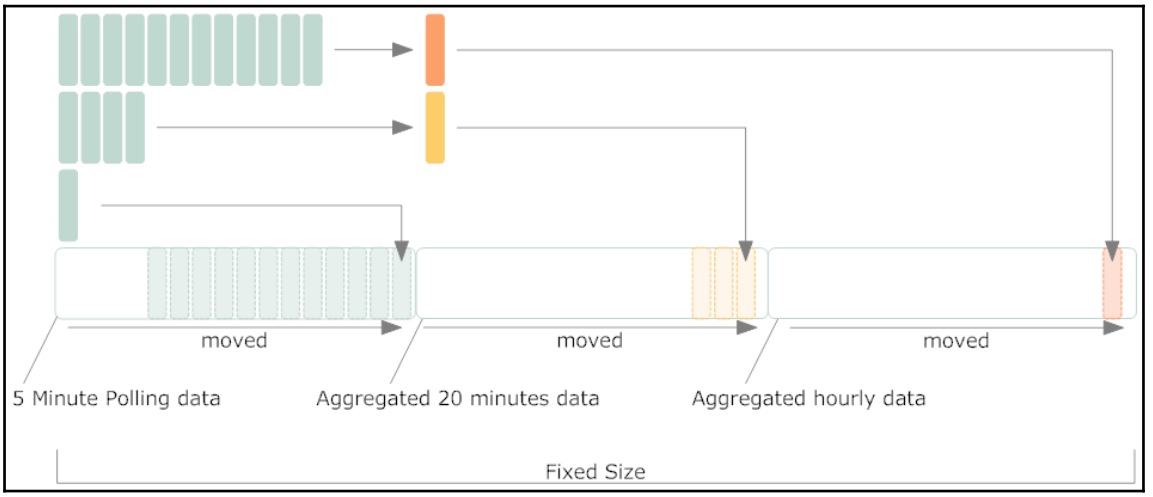
Change Device Settings
Poller Association
Cacti 1.x Poller 2
Update this Field


Devices
Site
Any
Data Collector
Any
Template
Any
Go
Clear
Export
Search
Devices
Default
Any
Cacti 1.x Poller 1
Cacti 1.x Poller 2
Main Poller
All 10 Devices
Device Description
Hostname
Status
In State
Uptime
Poll Time
Current (ms)


Site [edit: Main Poller]
Data Collector Information
Name
Main Poller
Web Site Hostname
localhost
Notes
Return
Save


Site [edit: Main Poller]
Data Collector Information
Name
Main Poller
Web Site Hostname
192.168.44.134
Notes
Return
Save

Appendix A: Online Resources



Appendix B: Further Information