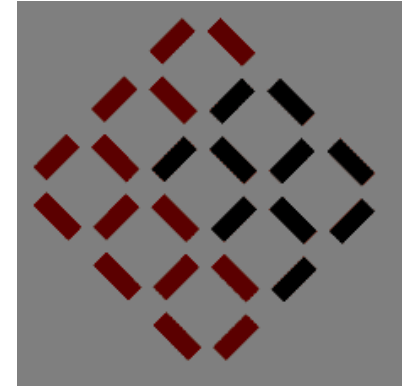


LibreNMS



All in one network
graphing and monitoring

Network Monitoring and Management

Network Startup Resource Center



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LibreNMS

- SNMP-based auto-discover network monitoring
- Derived from Observium
- Written in PHP as a web application
- Includes support for a wide range of hardware:
 - Cisco, Linux, FreeBSD, Juniper, Brocade, Foundry, HP and many more

Available metrics

- .CPU, memory and storage statistics
- .Interface traffic, packet and detailed error statistics
- .Temperature, fan speed, voltage, amperage, power humidity and frequency sensors
- .Users, processes, load average and uptime statistics

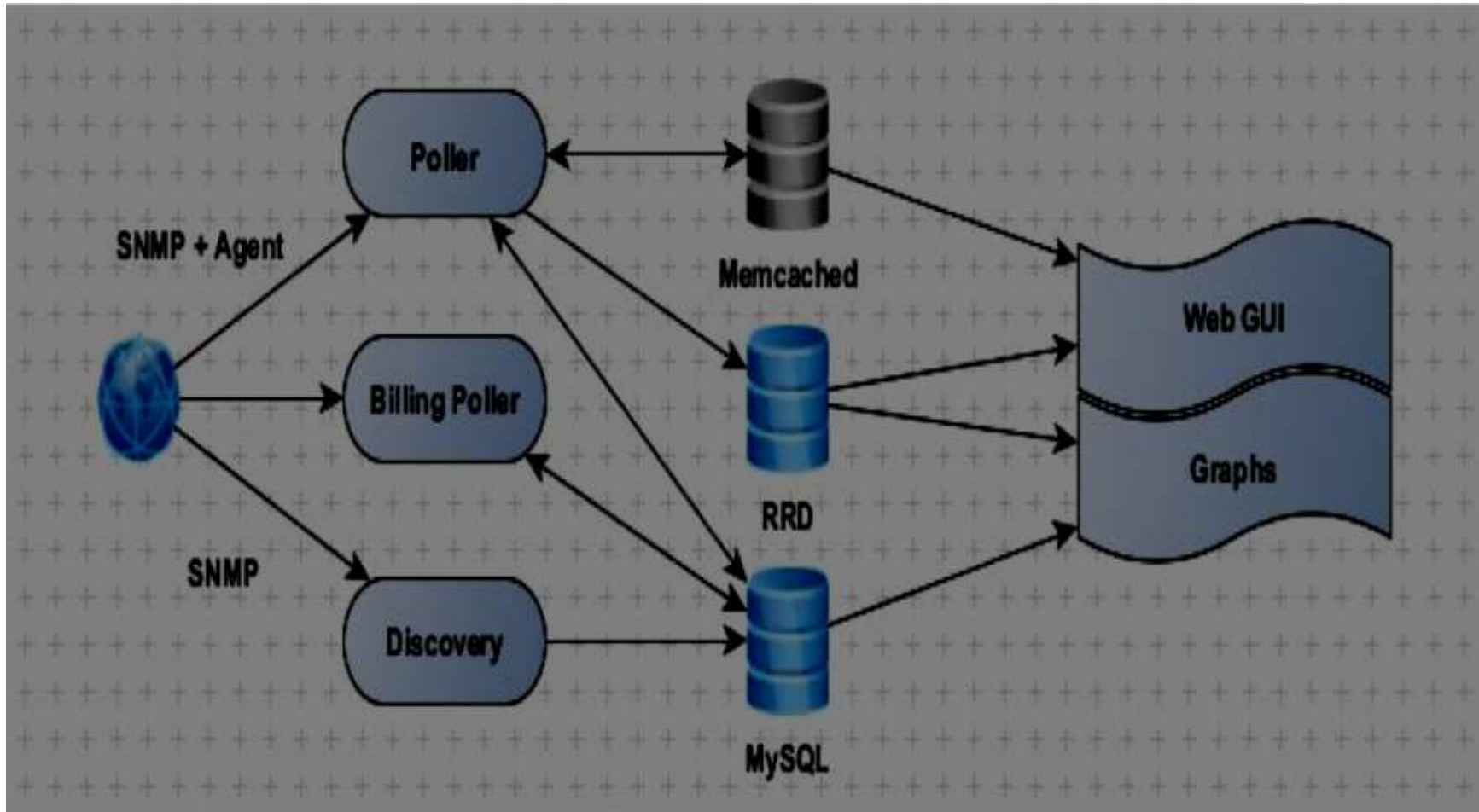
Available metrics cont.

- Linux distribution detection
- Real-time interface traffic graphing
- Device inventory collection (useful!)
- Detailed IPv4, IPv6, TCP and UDP stack statistics
- BGP And OSPF information
- Mac and IP address information

Features

- Many already supported devices
- Host monitoring well supported using check_mk and support scripts
- Application monitoring using SNMP
- Billing module
- Integration with other tools:
 - Smokeping, collectd, syslog (receive logs from devices)

Architecture



Availability

Librenms

• Fork of Observium. Open Source, Free and GPL

• <https://github.com/librenms/librenms>

• https://github.com/librenms/librenms/blob/master/doc/Observium_Welcome.md

Availability

Observium

Open Source (free) vs. “Professional” (paid) versions

• <http://www.observium.org/>

• http://www.observium.org/wiki/Edition_Split

Screen shots

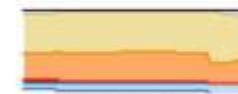
These are from the LibreNMS installed in our class noc and will be similar to the install you will do.

**rtr.ws.nsrc.org**

NSRC workshop



Storage Usage



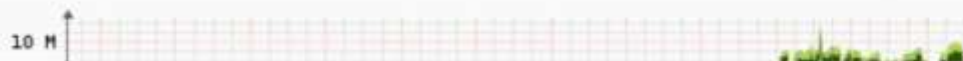
Memory Usage



Processor Usage

**Linux kit1 3.13.0-52-generic #86-Ubuntu SMP Mon May 4 04:32:59 UTC 2015 x86_64**

Hardware	Generic x86 64-bit
Operating System	Linux 3.13.0-52-generic
Contact	nobody@nsrc.org
Location	NSRC workshop
Uptime	2 days, 20h 4m 1s

Overall Traffic**Processors**

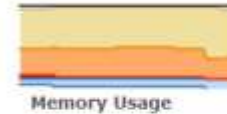
Intel Core i7-3720QM @ 2.60GHz		29%
Intel Core i7-3720QM @ 2.60GHz		29%
Intel Core i7-3720QM @ 2.60GHz		29%
Intel Core i7-3720QM @ 2.60GHz		31%
Intel Core i7-3720QM @ 2.60GHz		18%
Intel Core i7-3720QM @ 2.60GHz		21%

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Overview

Graphs

Health

Ports

Inventory

Logs

Alerts

Alert Stats



Linux kit1 3.13.0-52-generic #86-Ubuntu SMP Mon May 4 04:32:59 UTC 2015 x86_64

Hardware	Generic x86 64-bit
Operating System	Linux 3.13.0-52-generic
Contact	nobody@nsrc.org
Location	NSRC workshop
Uptime	2 days, 18h 54m 1s

Overall Traffic



Processors

Intel Core i7-3720QM @ 2.60GHz		28%
Intel Core i7-3720QM @ 2.60GHz		29%
Intel Core i7-3720QM @ 2.60GHz		28%
Intel Core i7-3720QM @ 2.60GHz		30%
Intel Core i7-3720QM @ 2.60GHz		25%
Intel Core i7-3720QM @ 2.60GHz		21%

From 2015-05-26 06:05

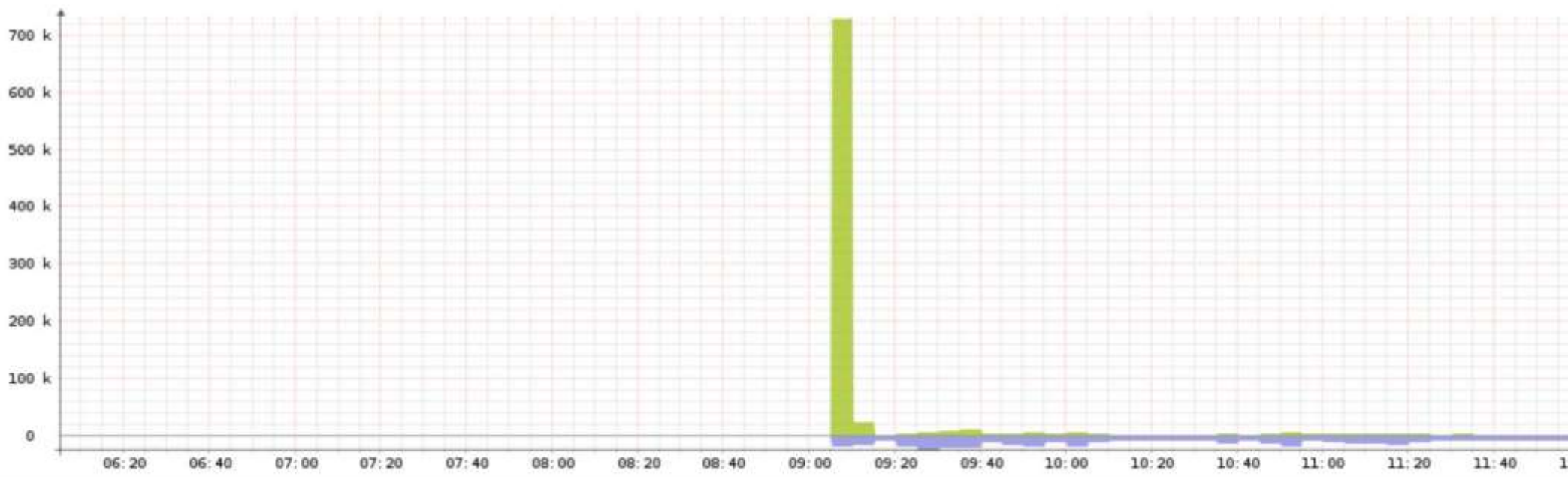
To 2015-05-26 12:05

Update

PC 1

Show Legend | Show Previous

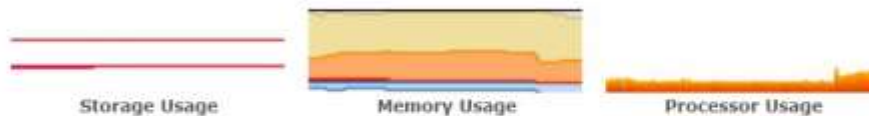
Show RRD Command



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**s1.ws.nsrc.org**

NSRC workshop



196608	GenuineIntel: Intel(R) Core(TM) i7-3720QM CPU @ 2.60GHz		hrDeviceProcessor	running	0 26
196609	GenuineIntel: Intel(R) Core(TM) i7-3720QM CPU @ 2.60GHz		hrDeviceProcessor	running	0 22
196610	GenuineIntel: Intel(R) Core(TM) i7-3720QM CPU @ 2.60GHz		hrDeviceProcessor	running	0 26
196611	GenuineIntel: Intel(R) Core(TM) i7-3720QM CPU @ 2.60GHz		hrDeviceProcessor	running	0 24
196612	GenuineIntel: Intel(R) Core(TM) i7-3720QM CPU @ 2.60GHz		hrDeviceProcessor	running	0 13
196613	GenuineIntel: Intel(R) Core(TM) i7-3720QM CPU @ 2.60GHz		hrDeviceProcessor	running	0 12
196614	GenuineIntel: Intel(R) Core(TM) i7-3720QM CPU @ 2.60GHz		hrDeviceProcessor	running	0 12
196615	GenuineIntel: Intel(R) Core(TM) i7-3720QM CPU @ 2.60GHz		hrDeviceProcessor	running	0 16
262145	lo		hrDeviceNetwork	running	0
262146	eth0		hrDeviceNetwork	running	0
262147	wlan0		hrDeviceNetwork	down	0
262148	eth0.255		hrDeviceNetwork	running	0
262149	br-svc		hrDeviceNetwork	running	0
262150	tap-lan0		hrDeviceNetwork	running	0
262151	tap-lan1		hrDeviceNetwork	running	0

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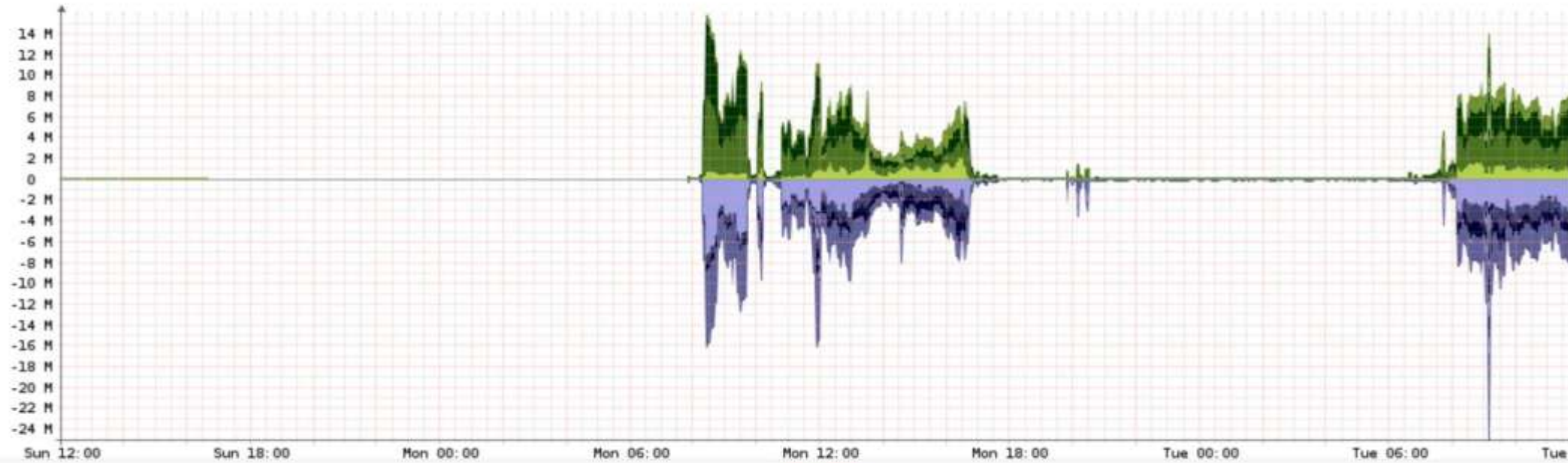
From 2015-05-24 12:00

To 2015-05-26 12:00

Update

[Hide Legend](#) | [Show Previous](#)

[Show RRD Command](#)



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Online Librenms demo

Is available at:

<https://demo.librenms.org/>

Workshop installation is at:

<http://librenms.ws.nsrc.org>

Questions

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