



MTU LUG
GENERAL MEETING 3/26/15

T-SHIRTS!!!



You must have filled out the survey!

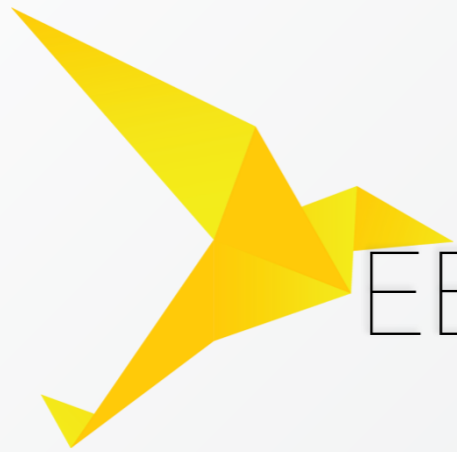
\$9 per shirt

Come get 'em!





LUG BOOKSHELF



EBOARD NOMINATIONS

Officially open!

Email lug-l@mtu.edu

Include their name and the position

Nominee's MUST reply accepting or declining the position

You may nominate yourself



EBOARD POSTIONS

- President
 - ▶ Runs Org, Meetings, and etc.
- Vice President
 - ▶ Backup to the President
- Treasurer
 - ▶ Manage the money. Budget.
- Secretary
 - ▶ Meeting Minutes
- Public Relations
 - ▶ Advertising, promoting LUG
- Server Admin Team (3)
 - ▶ Servers, Servers, and more Servers



SERVER STATUS :: STATUS.LUG.MTU.EDU

Tier 1 ArchLinux Mirror!

MTU Email Relay - Whitelist

KVM Upgrade Cable was wrong

New one sent out

Replacement 3TB has been delivered

Migrating Data - EXT4 32bit Limit

Reinstalling Kibana/Logstash/ElasticSearch



LINUX NEWS

New SteamOS Beta - Kernel 3.15, Nvidia Drivers 346

pfsense 2.2.1 - Mostly bug fixes

<https://telegram.org> - Secure Messaging App, Cross Platform



WHAT DID YOU
BREAK THIS WEEK ?



WEEKLY PRESENTATION

MONITORING @ MTU LUG

By: Jared Ledvina

STATUS.LUG.MTU.EDU



Hosted on StatusPage.io

Free from the CEO!

Linux/UNIX Users' Group @ Michigan Tech

[SUBSCRIBE TO UPDATES](#)

All Systems Operational

Refreshed less than one minute ago

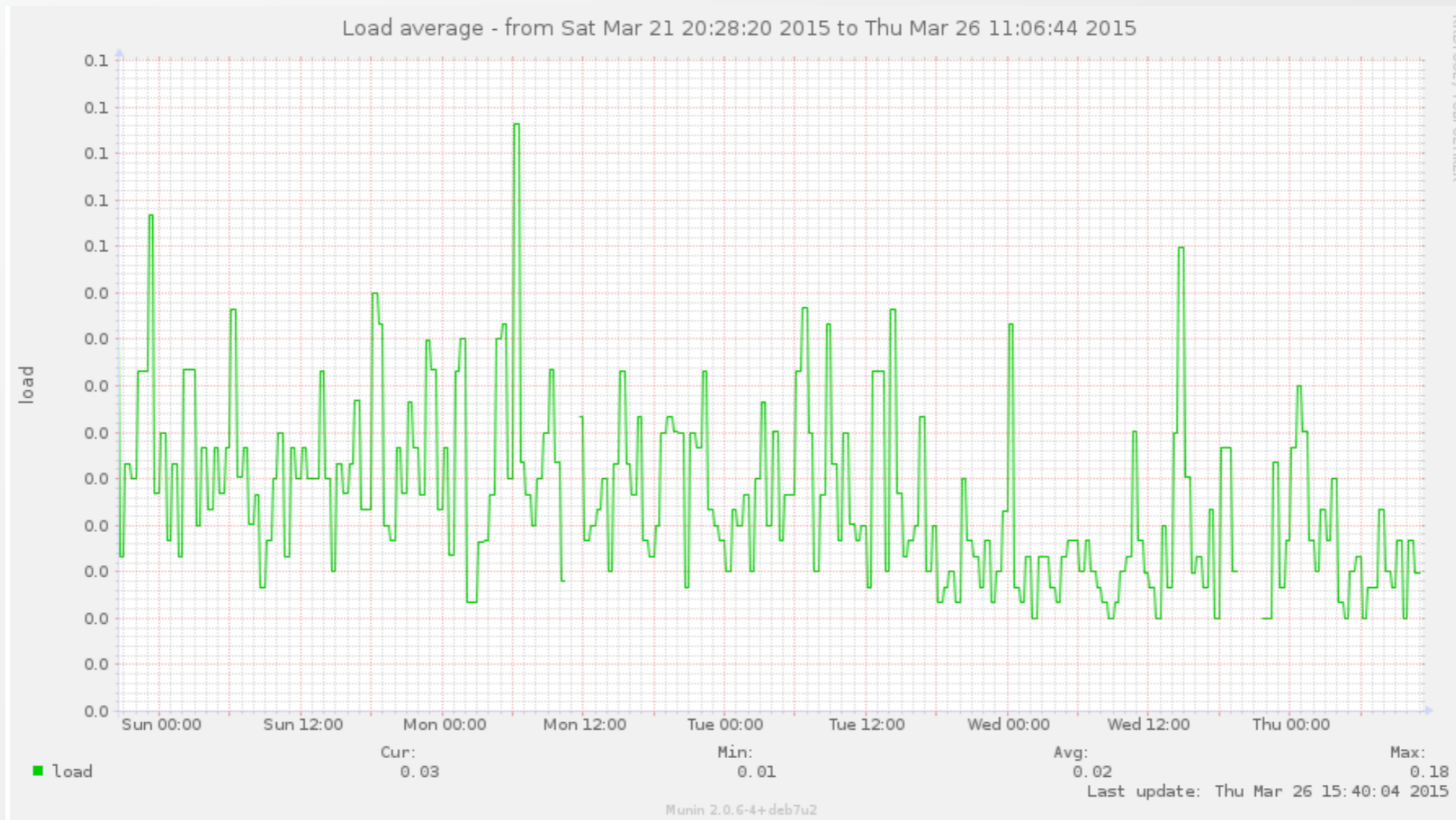
About This Site

Welcome to the MTU Linux/UNIX Users' Group's status page. We will update this page with any scheduled maintenance that might affect MTU LUG's accessibility.

Website	Operational
FTP	Operational
RSYNC	Operational
IRC	Operational
IRC Services	Operational
Shell Server	Operational
Software Mirrors	Operational



LUG.MTU.EDU/MUNIN



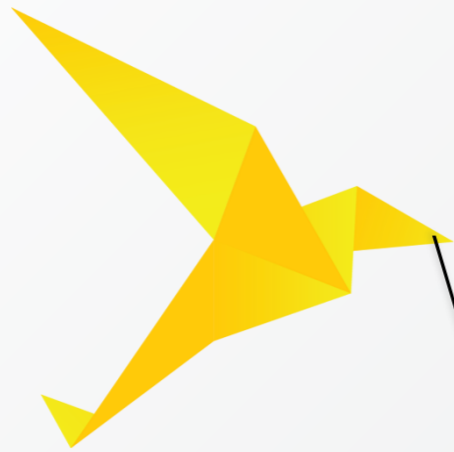
SENSU



sensu

SensuApp.org





WHAT IS SENSU?

Open Source Monitoring 'Router'

Written in Ruby

Can use existing Nagios Checks

Omnibus packages available for quick installation

Companies using Sense: Yelp, DNSimple, Paperless Post,
Pantheon, and many others



HOW IS SENSU DIFFERENT?

Easy scaling

Separate parts all doing '1' thing well

Dynamic nodes and master hosts

Designed for modular and changing environments

BASIC COMPONENTS



Core

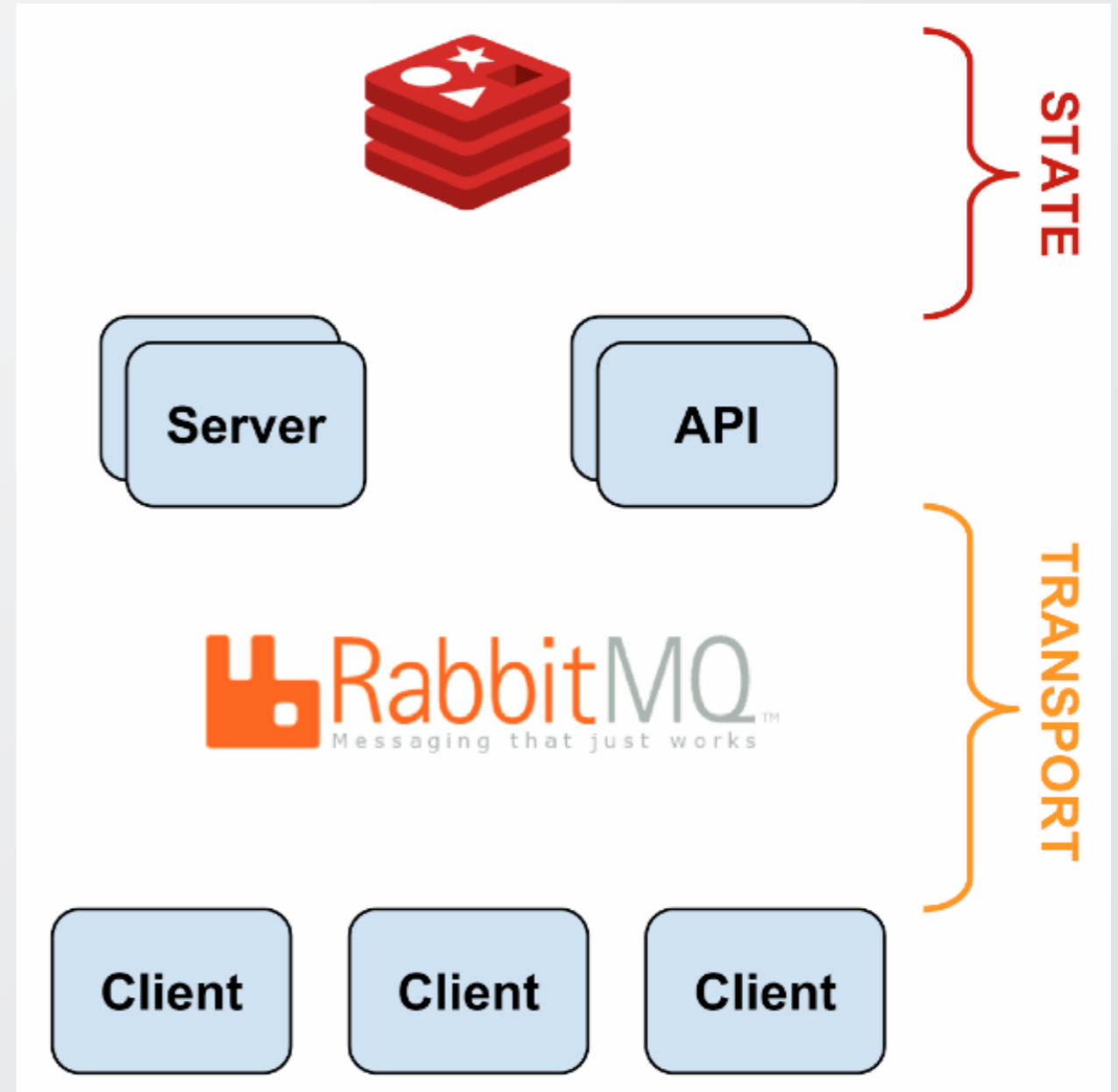
API

Messaging Queue

Client

UI

Graphs





UCHIWA

The screenshot shows the Uchiwa web interface. At the top, there is a navigation bar with the 'uchima' logo on the left and several notification icons on the right: a megaphone with a red '4', a server rack with a red '2', a cloud with a red '2', a checkmark with a red '6', and a briefcase with a red '0'. Below the navigation bar is a dark sidebar with icons for home, notifications, settings, and other functions. The main content area is titled 'Events' and features a filter bar with 'ALL DATACENTERS', '0.12.6', and '0.14.0'. A search box and a 'Show 50' dropdown are also present. The events are displayed in a table with columns for Source, Check, Output, a gear icon, a cloud icon, and a clock icon.

Source	Check	Output	⚙️	☁️	🕒
server-0-12-6	check_critical	CheckReturn CRITICAL: Error	2378	0.12.6	2014-10-26 17:14:20
server-0-14-0	check_critical	CheckReturn CRITICAL: Error	2993	0.14.0	2014-10-26 17:13:55
server-0-12-6	check_warning	CheckReturn WARNING: Warning	2378	0.12.6	2014-10-26 17:14:22
server-0-14-0	check_warning	CheckReturn WARNING: Warning	2990	0.14.0	2014-10-26 17:13:57



HOW THEY TIE TOGETHER

Sensu Server - Schedules and Manages Checks

Sensu API - End Point for retrieving check data

Sensu Client - Contacts Server to get checks

Uchiwa - Simple dashboard to see current check's status

RabbitMQ - Handles messaging and communication

Redis - Stores all check/metric results



SENSU @ MTU LUG

MASTER SERVER



eddie.lug.mtu.edu

Runs: Uchiwa, Sensu Server, Sensu API,
Redis, and RabbitMQ

```
1 [ ] Tasks: 38, 41 thr; 1 running
2 [||] Load average: 0.01 0.05
Mem[|||||] Uptime: 5 days, 17:28:00
Swp[ ]

  PID USER   PRI  NI  VIRT   RES   SHR  S  CPU% MEM%   TIME+  Command
 4007 root     20   0 24140  2604  1380  R   0.0  0.1   0:00.45 htop
30724 root     20   0 25328  3784  1384  S   0.0  0.1 53:52.57 htop
    1 root     20   0 10648   824   688  S   0.0  0.0   0:05.46 init [2]
    257 root     20   0 21228  1176   780  S   0.0  0.0   0:00.03 udevd --daemon
    1206          20   0 10836   332   212  S   0.0  0.0   0:04.31 /usr/lib/erlang/erts-5.9.1/
    1520 root     20   0 18972   884   624  S   0.0  0.0   0:00.68 /sbin/rpcbind -w
    1551          20   0 23344  1348   888  S   0.0  0.0   0:00.00 /sbin/rpc.statd
    1565 root     20   0 25296   428   208  S   0.0  0.0   0:00.00 /usr/sbin/rpc.idmapd
    1844          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1850          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1854          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1855          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1856          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1857          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1858          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1859          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1860          20   0 119M 38976  3176  S   0.0  0.9   0:00.01 /usr/lib/erlang/erts-5.9.1/
    1861          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1862          20   0 119M 38976  3176  S   0.0  0.9   0:00.01 /usr/lib/erlang/erts-5.9.1/
    1863          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1864          20   0 119M 38976  3176  S   0.0  0.9   0:00.01 /usr/lib/erlang/erts-5.9.1/
    1865          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1866          20   0 119M 38976  3176  S   0.0  0.9   0:00.01 /usr/lib/erlang/erts-5.9.1/
    1867          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1868          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1869          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1870          20   0 119M 38976  3176  S   0.0  0.9   0:00.01 /usr/lib/erlang/erts-5.9.1/
    1871          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1872          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1873          20   0 119M 38976  3176  S   0.0  0.9   0:00.01 /usr/lib/erlang/erts-5.9.1/
    1874          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1875          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1876          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1877          20   0 119M 38976  3176  S   0.0  0.9   0:00.00 /usr/lib/erlang/erts-5.9.1/
    1878          20   0 119M 38976  3176  S   0.0  0.9   0:00.02 /usr/lib/erlang/erts-5.9.1/
    1879          20   0 119M 38976  3176  S   0.0  0.9   0:00.01 /usr/lib/erlang/erts-5.9.1/
F1Help F2Setup F3Search F4Filter F5Tree F6SortBy F7Vice F8Vice +F9Kill F10Quit
```




NODES

Zaphod

Agrajag

Marvin

Trillian?



CHECKS CURRENTLY IN PLACE

keep_alive

See the problem?



PHASE 2

Write more checks!

Integrate with StatusPage.io

Setup Flapjack.io

Setup Graphs

"Documentation, Documentation, Documentation..." ~ Todd Arney



PHASE 3

Split out components

Ensure some HA

Every StatusPage.io component is automatically updated

PROFIT????



STRETCH GOALS

Monitor individual syncs

Complete Redundancy

Automated repair



COMMUNITY OUTREACH



MONITORING CHECKS

- We need help writing the checks!
- Any language, compatible with the stable release on Debian 7 Wheezy
- Email them to the Server Admins
- <http://sensuapp.org/docs/0.16/checks>

Exit Status

0 - Unknown

1 - Ok

2 - Error

3 - Critical



WEBSITE IMPROVEMENTS

Available on Github

Make pull requests!

<https://github.com/lug-mtu/Website>



CONCLUSION

Involvement Link - <https://www.involvement.mtu.edu/organization/lug>

IRC - <irc://lug.mtu.edu/#mtu>

Email List - <https://lists.mtu.edu/sympa/subscribe/lug-l>

Something not working? Check status.lug.mtu.edu before emailing!

Want to give a presentation? Email jfledvin@mtu.edu

Thanks for coming!



Hope to see you next week. Same place, same time.