NeDi News

Remo Rickli

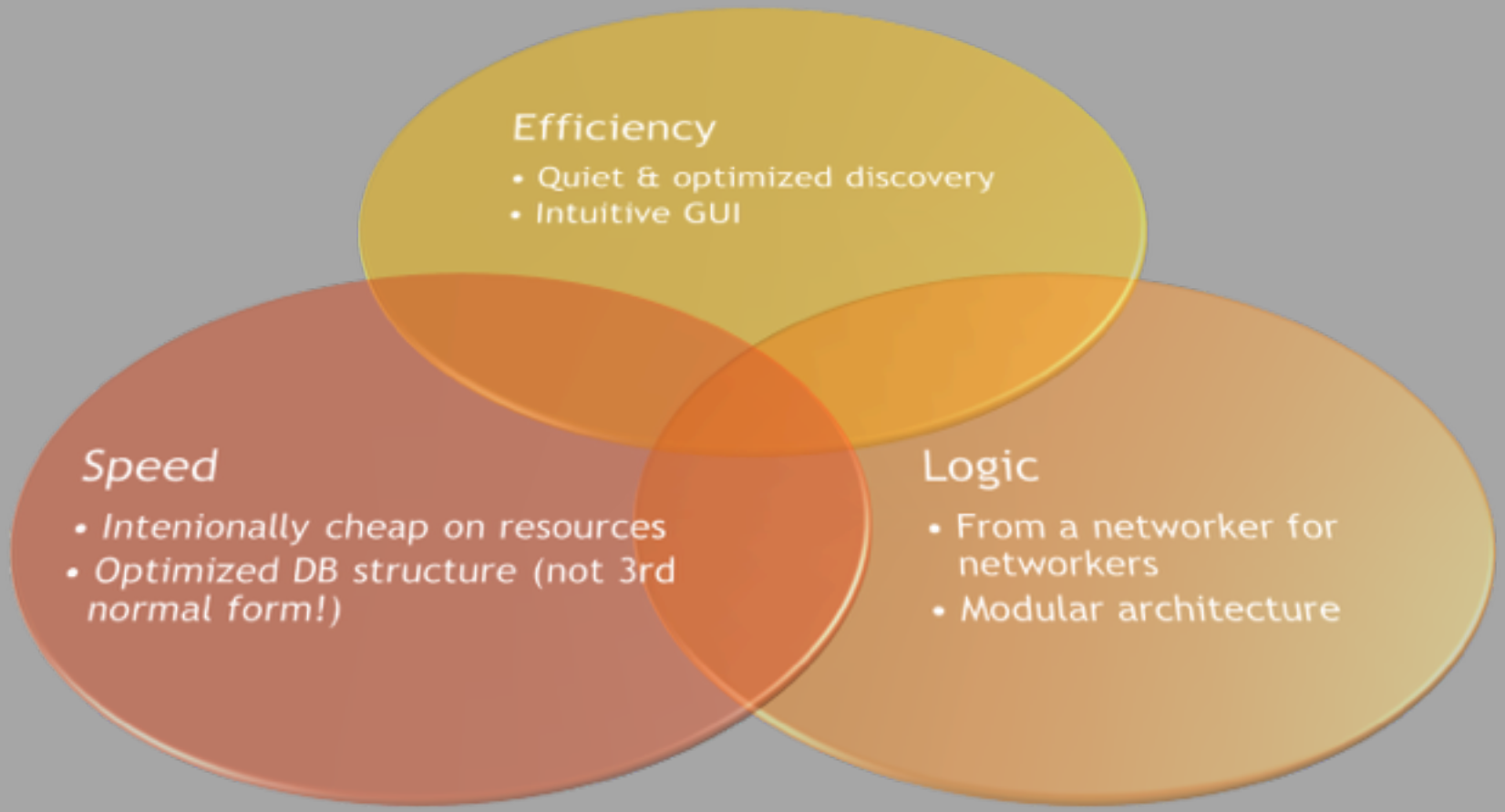
Where’s NeDi from?

Challenges we had…

What is NeDi?

- Network Discovery, management & monitoring
- Locate & Track Computers
- Security audits & more
- VM, DC management
- Printer management
- Backup Configs
- IT Inventory
- IT Reports

NeDi‘s Focus


Efficiency
• Quiet & optimized discovery
• Intuitive GUI
Speed
• Intenionally cheap on resources
• Optimized DB structure (not 3rd normal form!)
Logic
• From a networker for networkers
• Modular architecture

3MB!

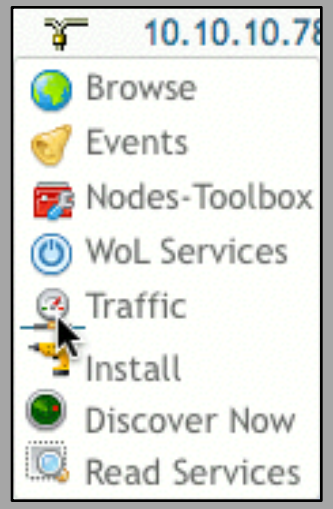
Netflow Support

NFDUMP

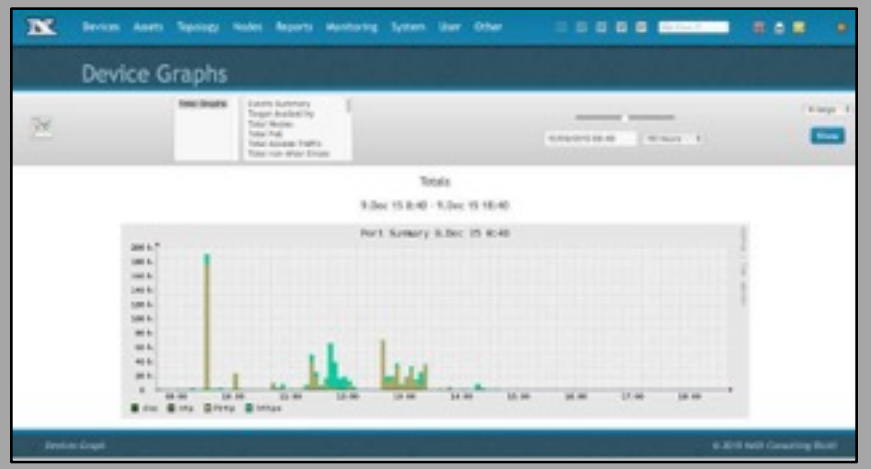
```
-rwxr-xr-x 1 root root 1017K Oct 10 20:17 /usr/local/bin/nfcapd
-rwxr-xr-x 1 root root  874K Oct 10 20:17 /usr/local/bin/nfdump
```

Thanks Peter Haag!

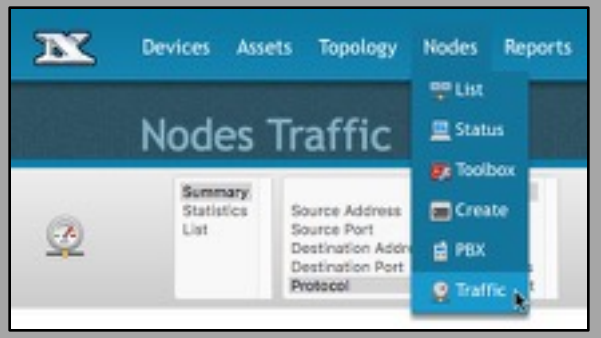
Nodes-Status



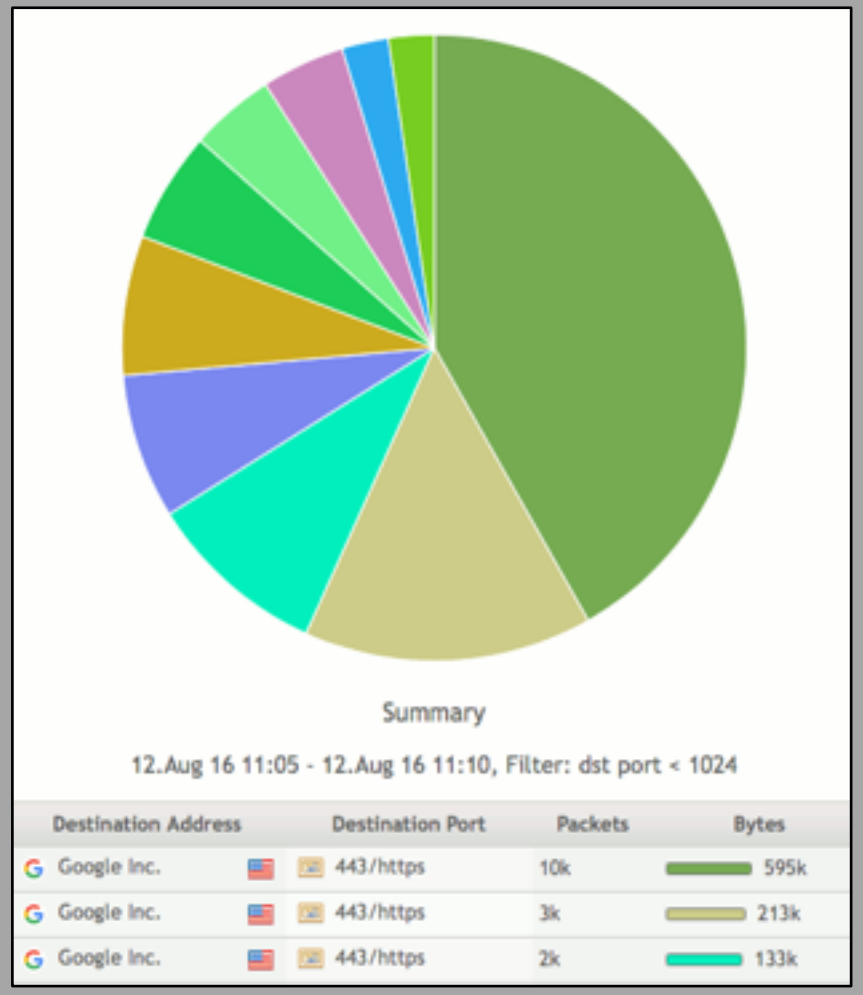
Device-GRaphs



Nodes-Traffic



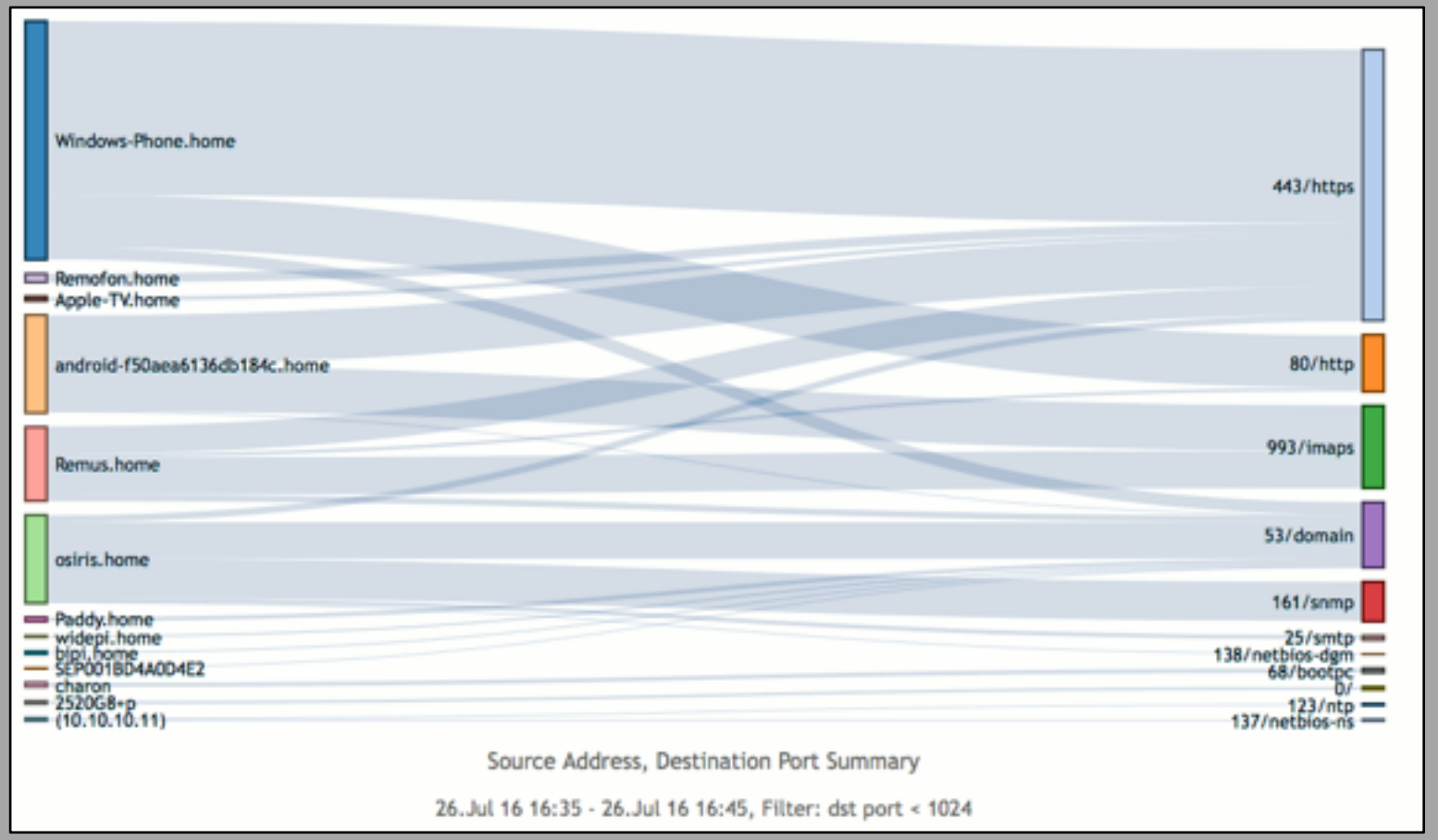
Traffic Visualization



Summary

12.Aug 16 11:05 - 12.Aug 16 11:10, Filter: dst port < 1024

Destination Address	Destination Port	Packets	Bytes
Google Inc.	443/https	10k	595k
Google Inc.	443/https	3k	213k
Google Inc.	443/https	2k	133k



Source Address, Destination Port Summary

26.Jul 16 16:35 - 26.Jul 16 16:45, Filter: dst port < 1024

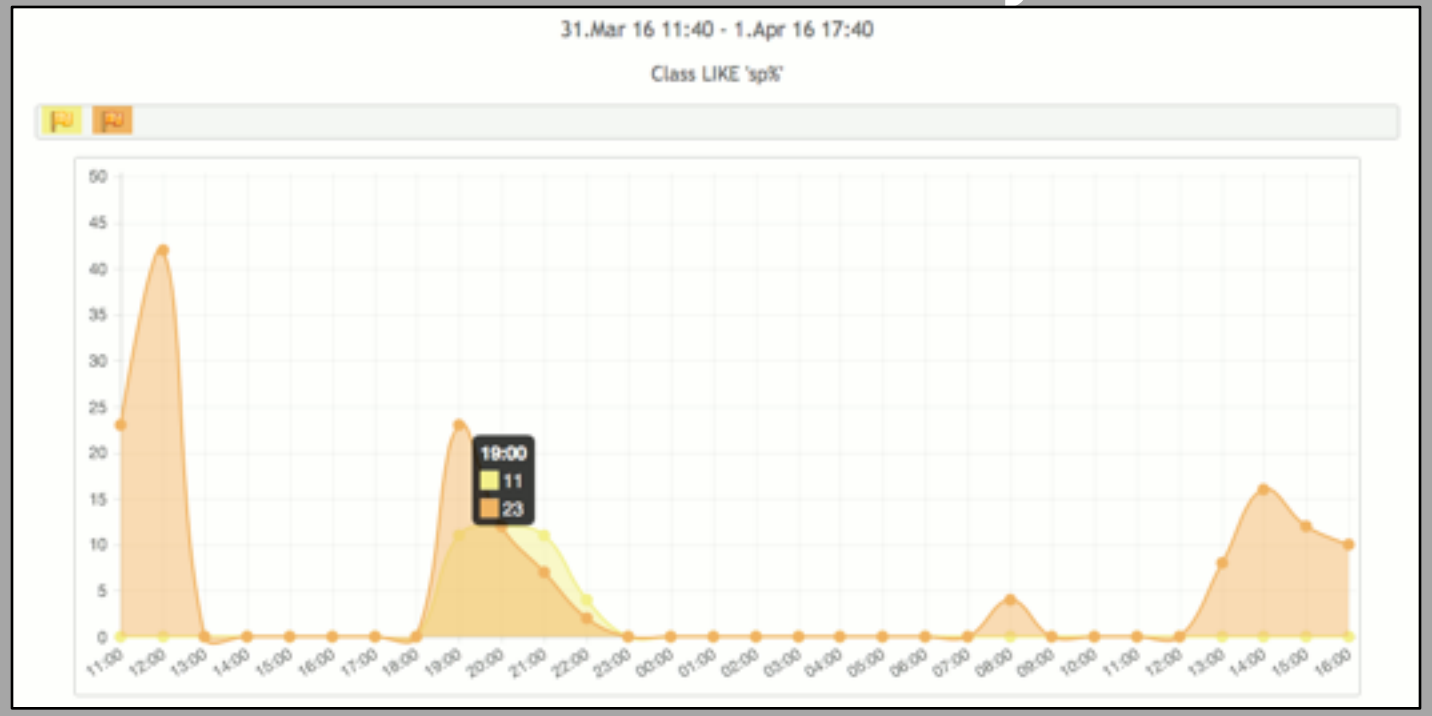
Traffic Alerts

New Policies

Id	Status	Class	Target	Device	Port	Vlan	Action	Information	User	Time	Execute
19		Bytes	> 500000	Source:charon Filter:src host 10.10.10.109 Group:sa,da					admin	31.Mar 16 12:45	
15		Bytes	< 100	Source:charon Filter:src host 10.10.10.10 and port 5060 Group:sa				SIP underrun	admin	28.Mar 16 16:02	
17		Packets	> 1000	Source:charon Filter:host 10.10.10.109 Group:				Noisy Host	admin	28.Mar 16 17:47	

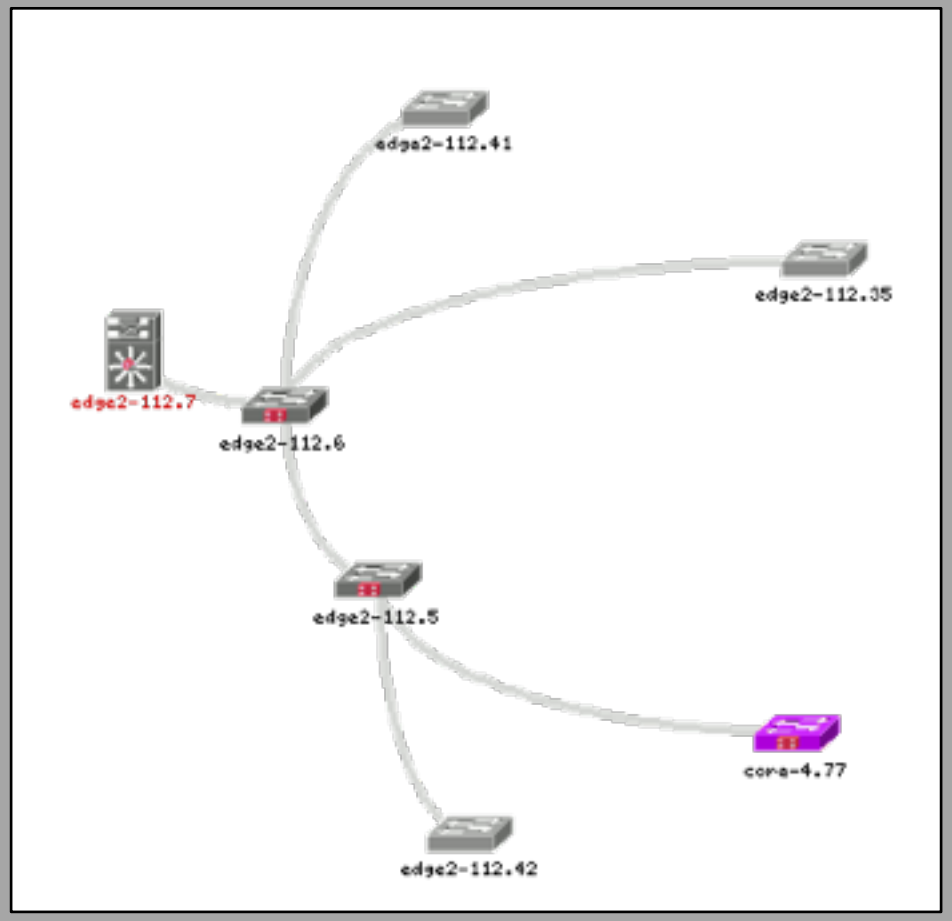
3 Values

Timeline analysis

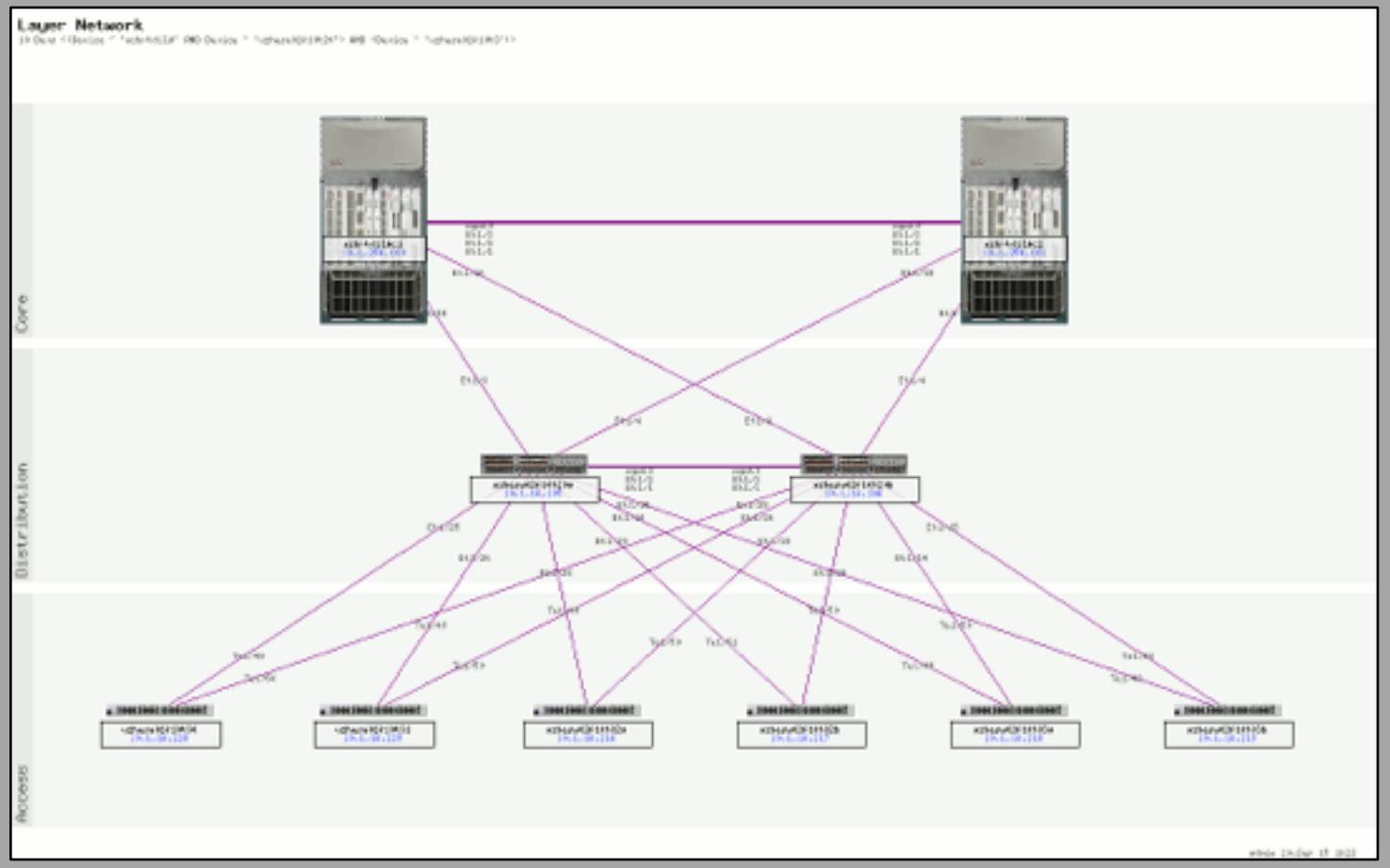


Map Enhancements

Neighbour Range



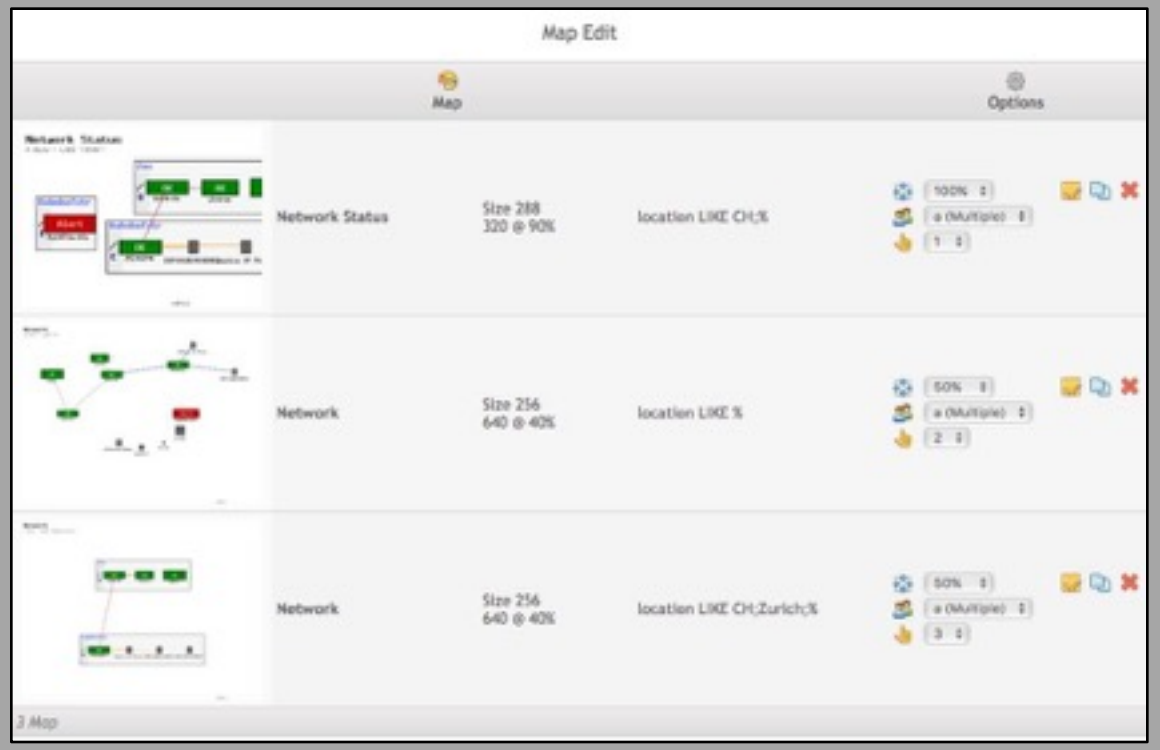
Layer Map



Monitoring Enhancements

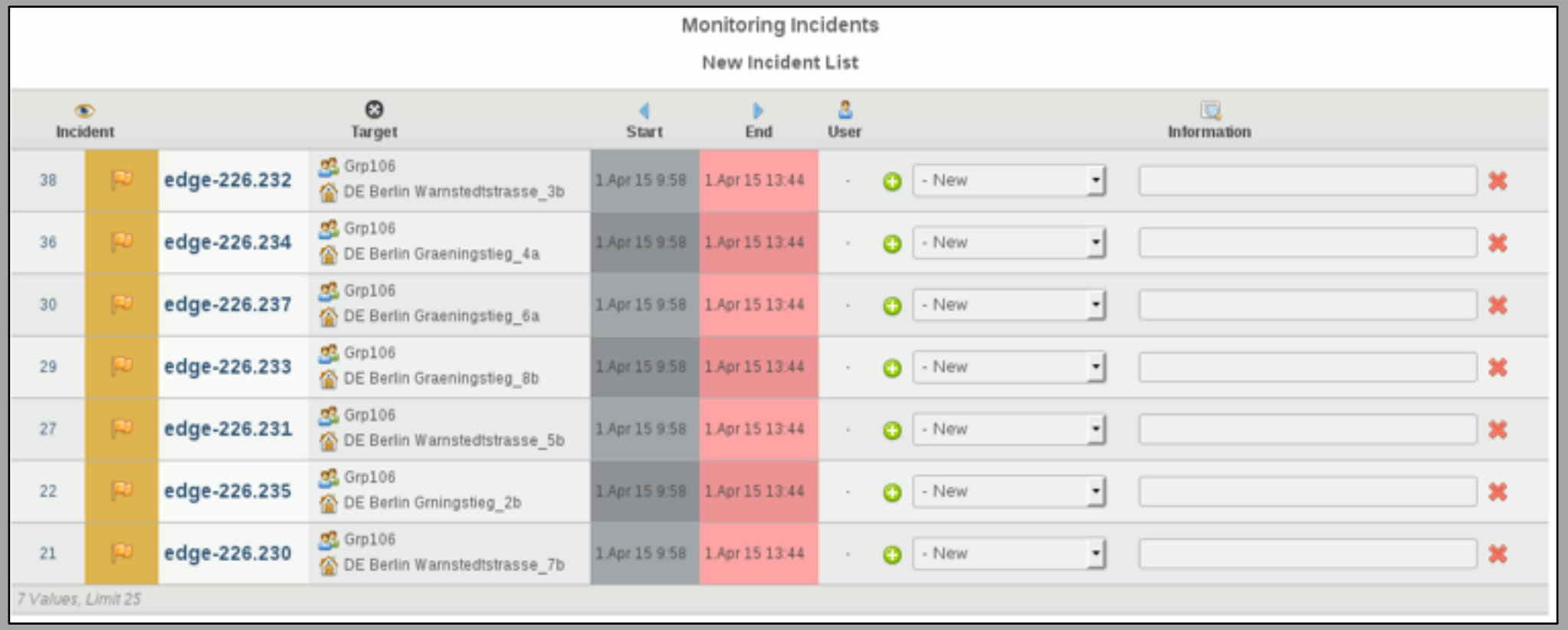
Monitoring Map

Editor



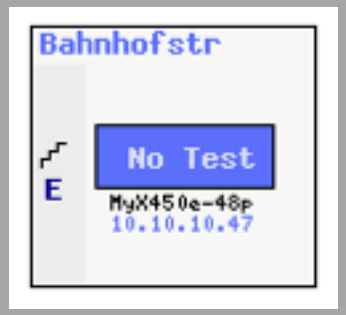
Monitoring Enhancements Too

Dynamic Incident Display



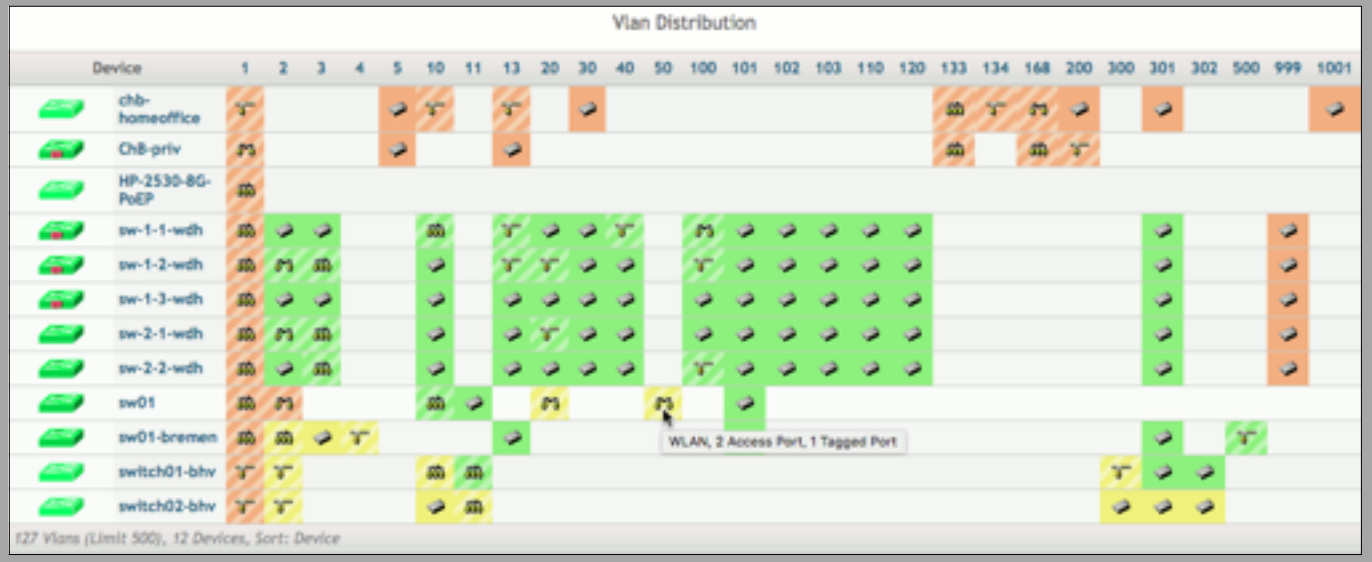
More Enhancements

Maintenance Mode



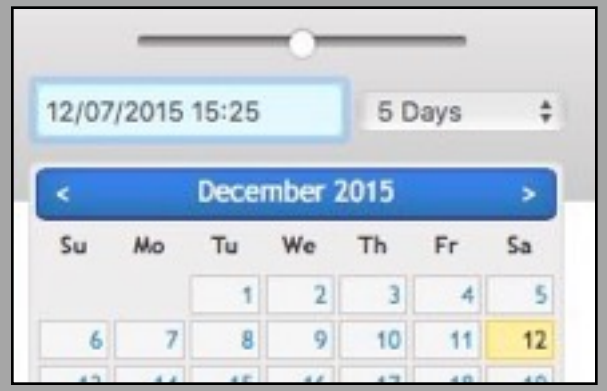
MSR20	10.10.10.2	210235A393B088000014
MyX450e-48p	10.10.10.47	0850G-80599

Vlan Distribution

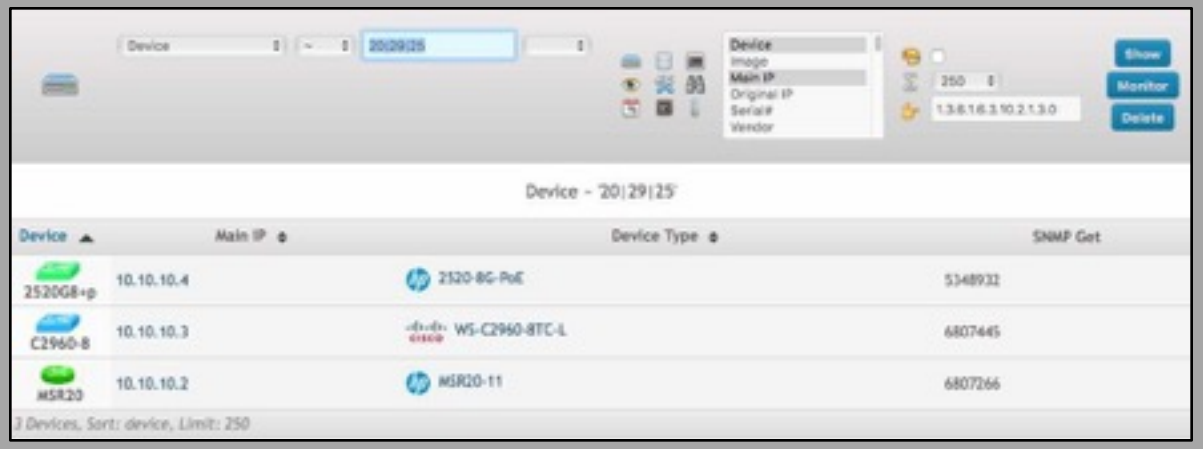


Other Enhancements

Timeframe Entry

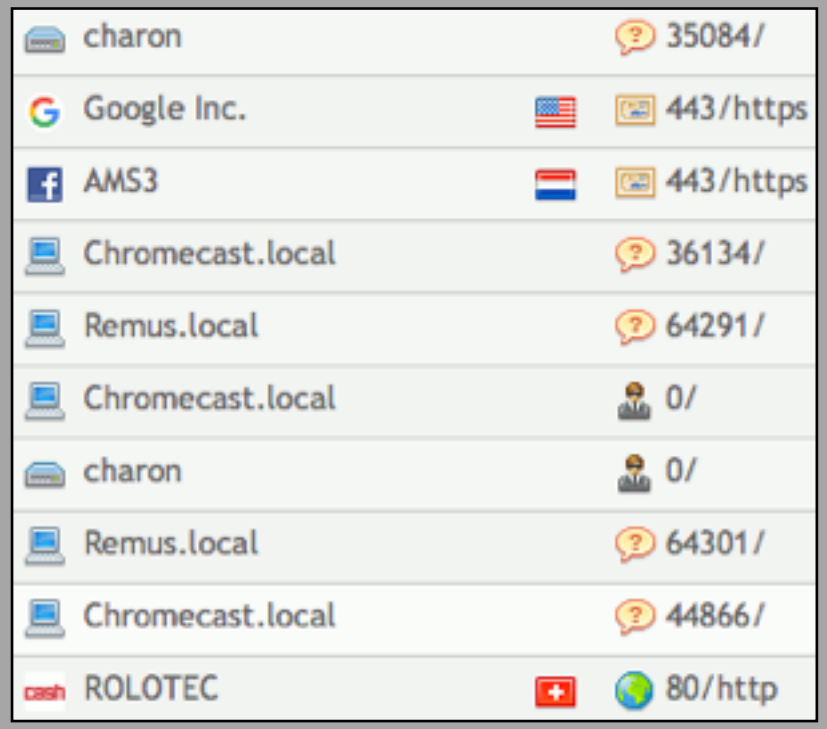


List Devices with SNMPGET

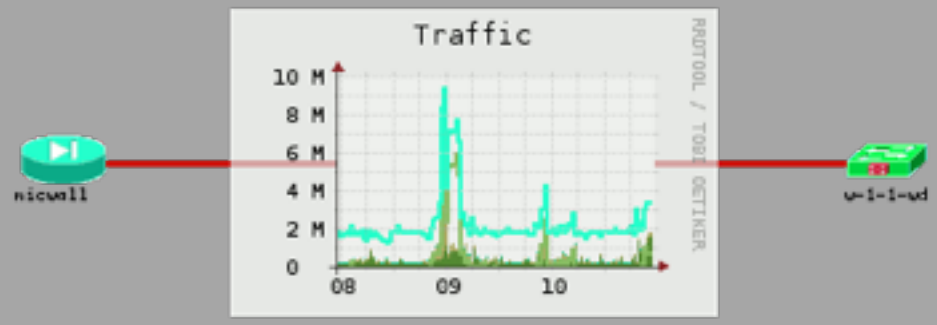


Visual Enhancements

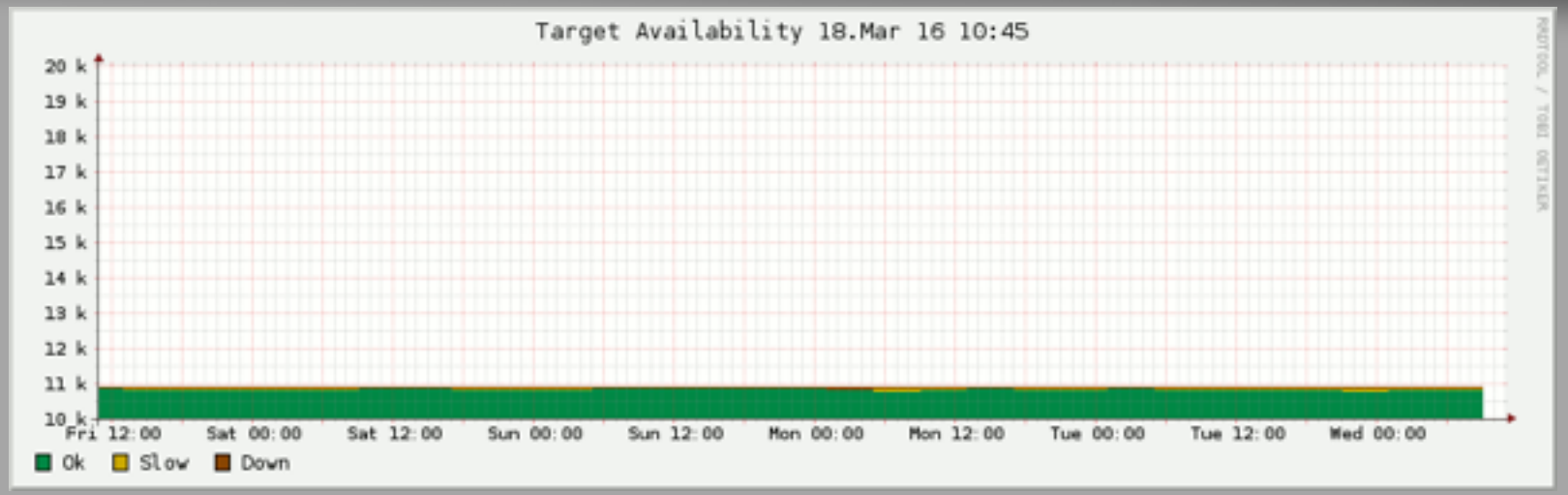
NEW ICONSET

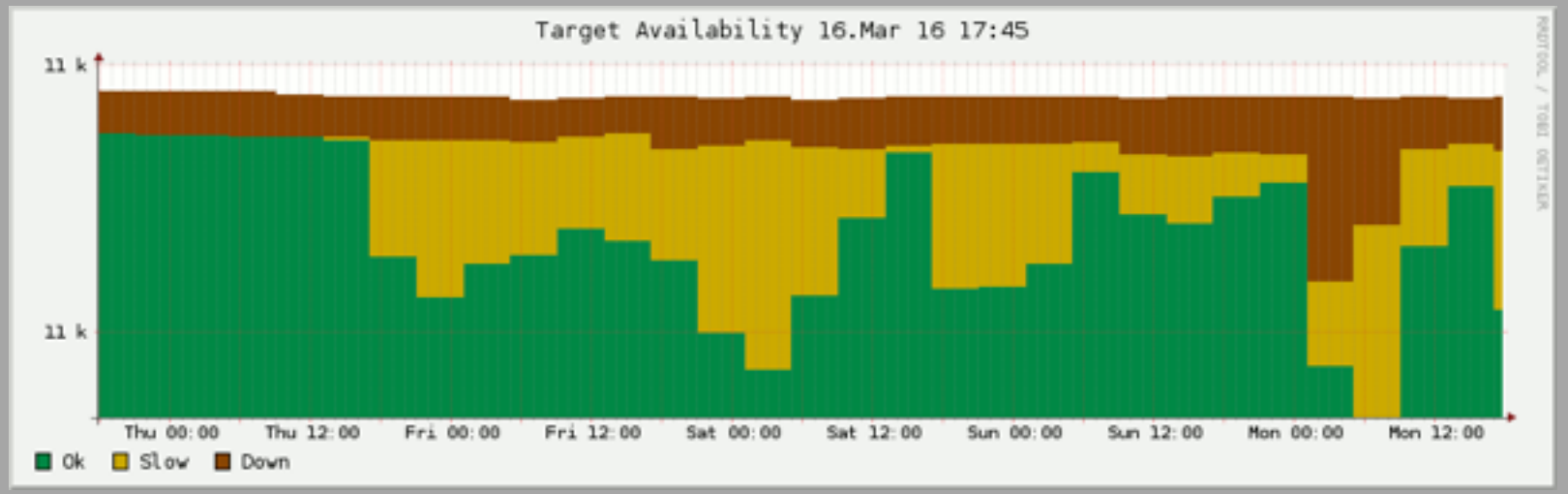


Prettier RRDs



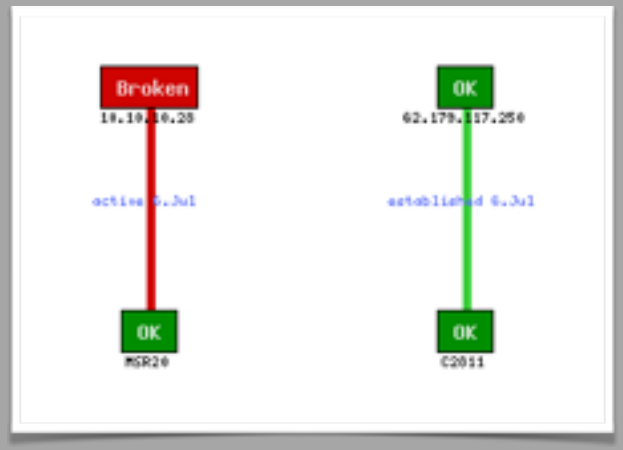
Better RRDs


Target Availability 18.Mar 16 10:45
20 k
19 k
18 k
17 k
16 k
15 k
14 k
13 k
12 k
11 k
10 k
Fri 12:00
Sat 00:00
Sat 12:00
Sun 00:00
Sun 12:00
Mon 00:00
Mon 12:00
Tue 00:00
Tue 12:00
Wed 00:00
Ok
Slow
Down


Target Availability 16.Mar 16 17:45
11 k
11 k
Thu 00:00
Thu 12:00
Fri 00:00
Fri 12:00
Sat 00:00
Sat 12:00
Sun 00:00
Sun 12:00
Mon 00:00
Mon 12:00
Ok
Slow
Down

Under Investigation

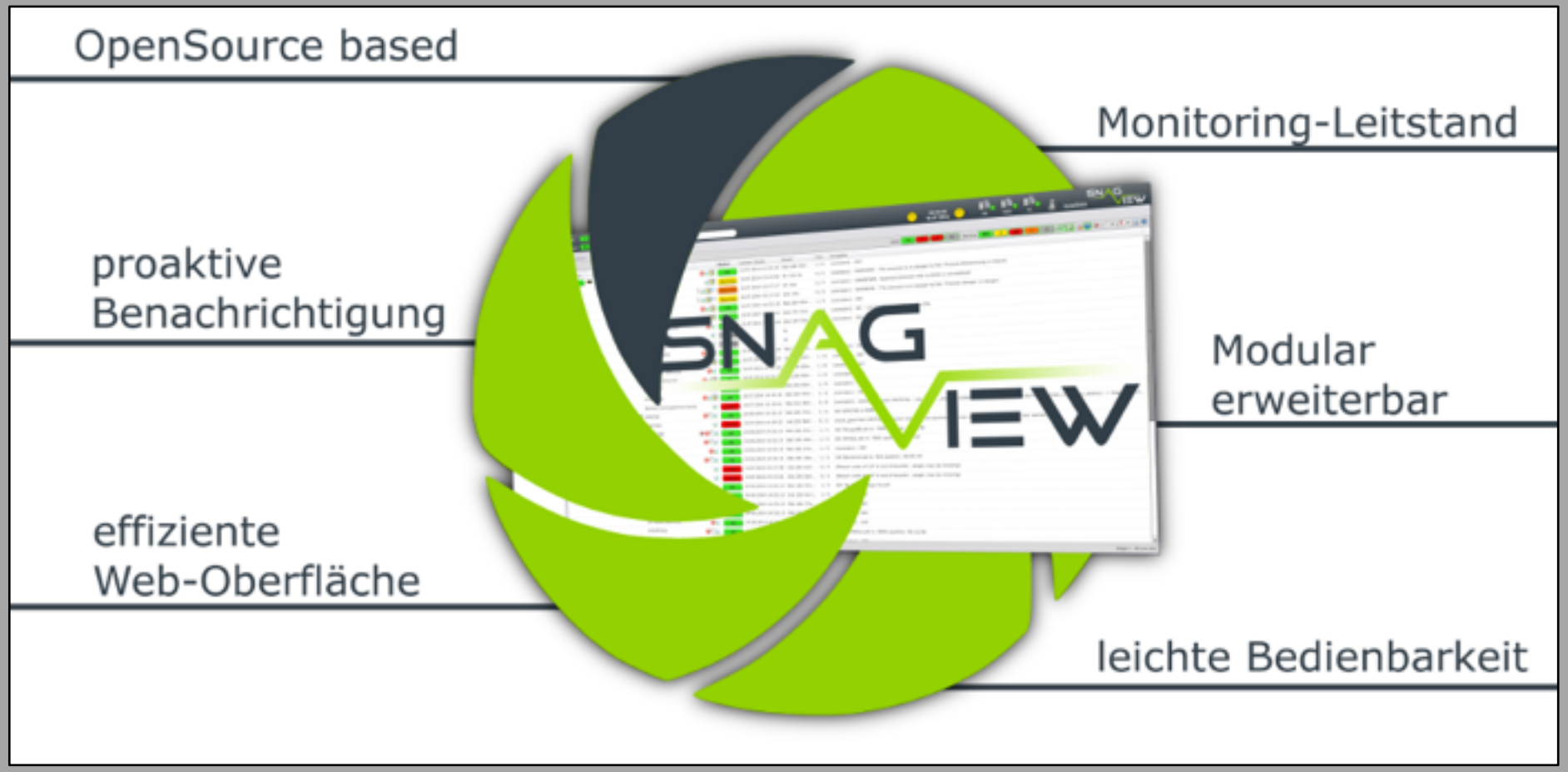
BGP Peer Monitoring



Id	Level	Time	Source	Class	
289		7.Jul 16 15:57	C2811		BGP peer status is established
286		7.Jul 16 15:53	C2811		BGP peer status is active
285		7.Jul 16 15:53	C2811		BGP peer status is idle
280		7.Jul 16 15:39	C2811		BGP peer status is active

Leaflet Heatmaps

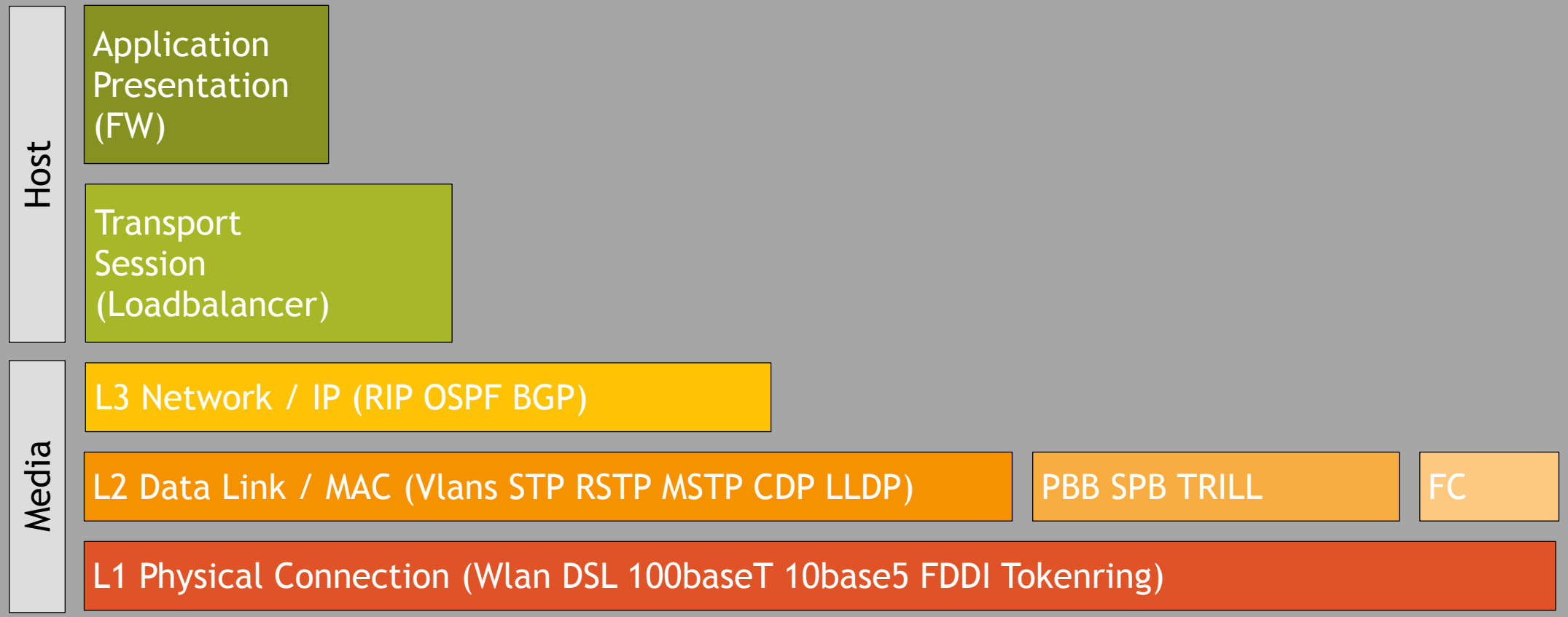
NeDi & SNAG View



NeDi 4 Nerds

Remo Rickli

A little OSI Exursion



What HW vendors sell

- Solutions!
- Best in class, best of breed…
- SDN, NFV with or without Openflow
- Automation with everything
- No expensive know-how required anymore

What you want

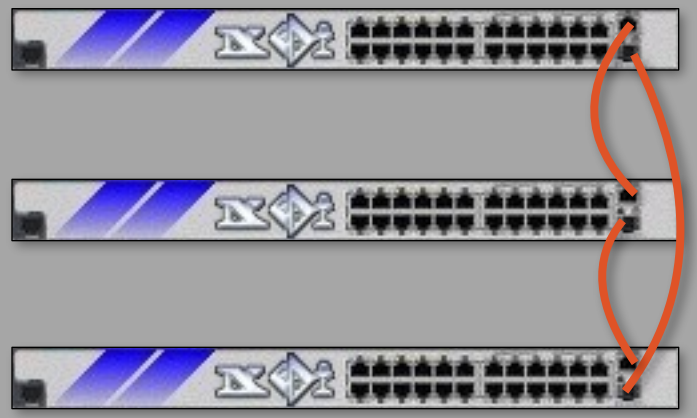
1. A stable solution!
2. Adress actual needs
3. Scalable for future needs
4. Open & “standard” mgmt
5. Easy operation (Debug, ISSU)
6. Not end of development

```
Image              Size (bytes) Date     Version
------------------ ------------ -------- --------------
Primary Image    :     7649429 02/25/13 J.15.09.0014
Secondary Image  :     6052873 07/27/09 J.14.01

Boot ROM Version : J.14.05
Default Boot     : Primary
```

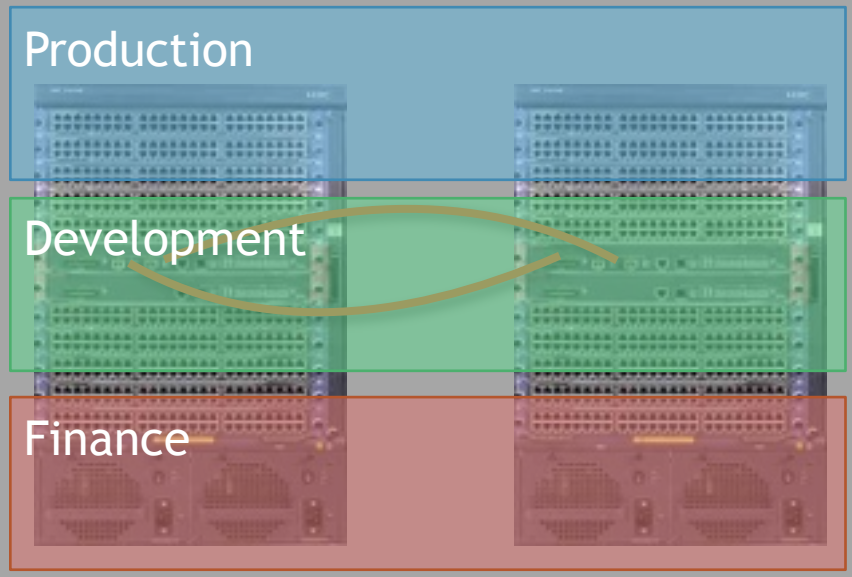
```
Device ID: SEP001BD4A0D4E2
Entry address(es):
  IP address: 10.10.10.69
Platform: Cisco IP Phone 7970,  Capabilities: Host Phone
Interface: FastEthernet0/1,  Port ID (outgoing port): Port 2
Holdtime : 123 sec

Version :
SIP70.8-5-2S

advertisement version: 2
Duplex: full
Management address(es):
```

Interesting Concepts

Stacking, FEX

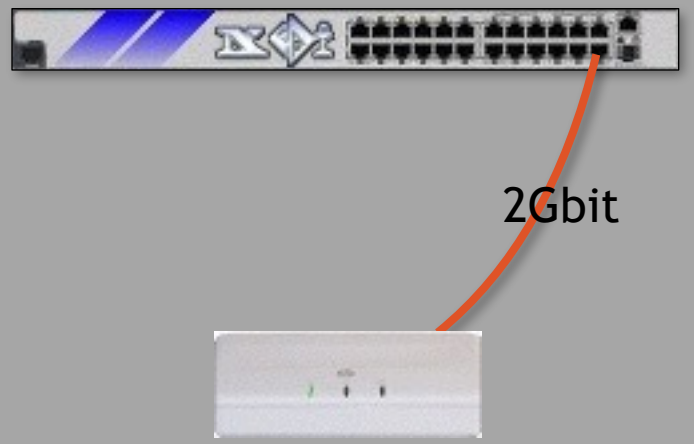


Partitioning

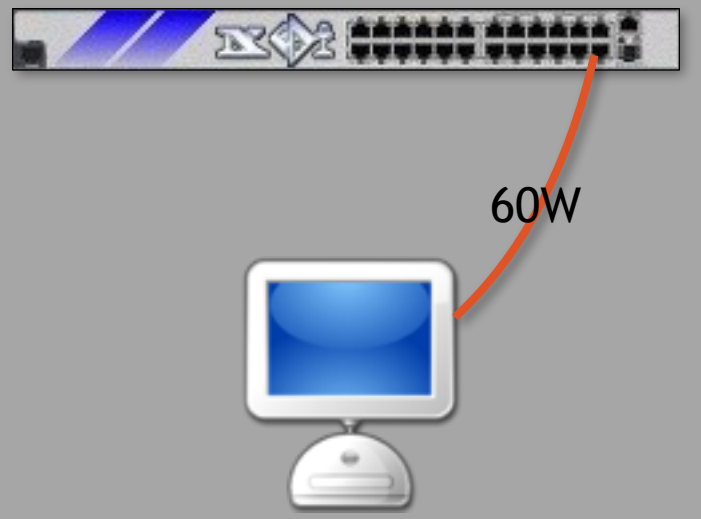


More Interesting Concepts

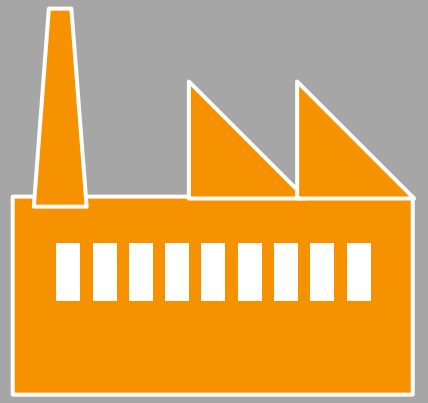
xG baseT

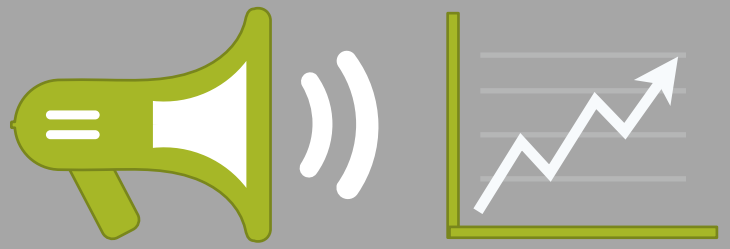


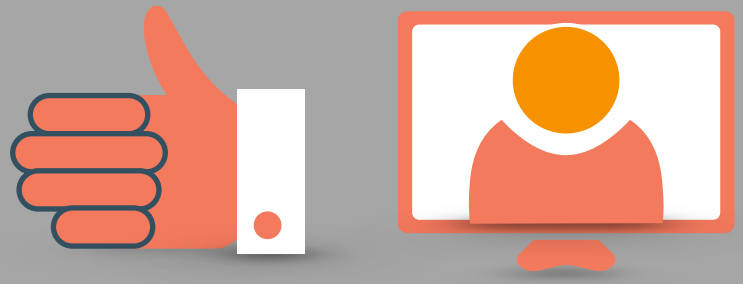
PoE++



Vendor Management

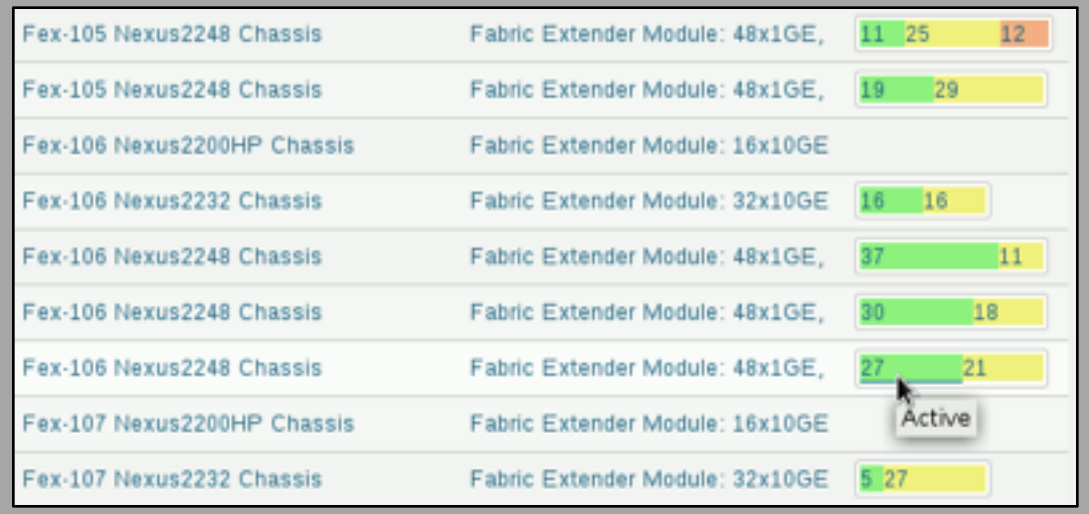




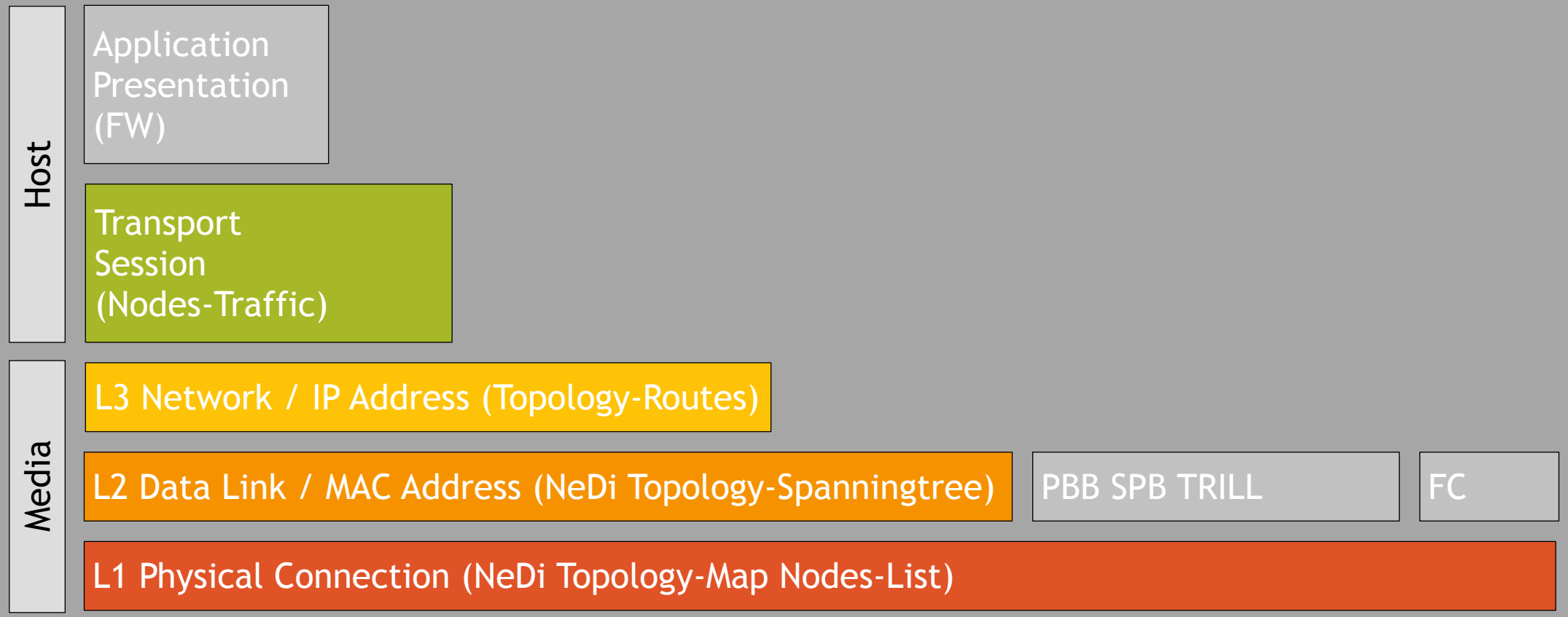


Real Management Needs

- SW Management
- Lifecycle Management
- Maintenance Management
- Topology Development
- Simple & usable Reporting

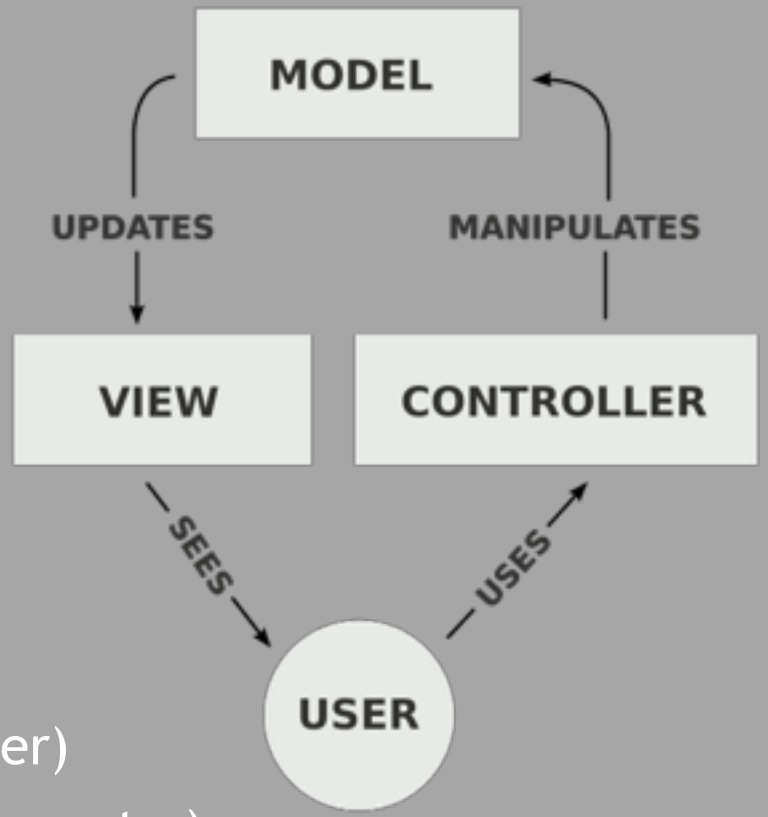


How NeDi sees IT

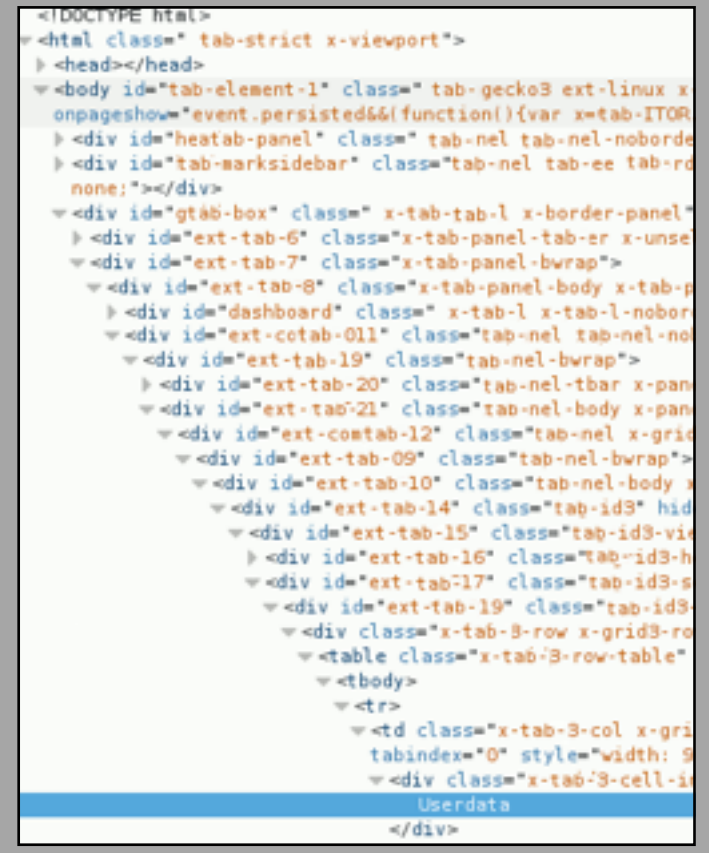


Coding these Days

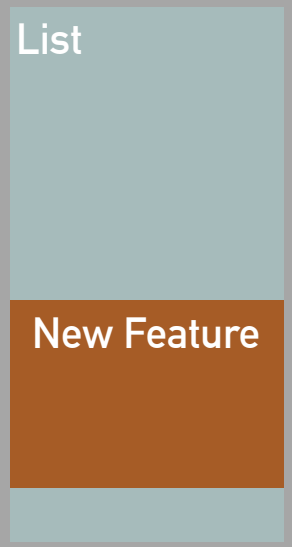
- Object oriented
- Interactive AJAX
- Responsive CSS (Bootstrap)
- MVC (Model, View, Controller)
- Javascript Framework (jQuery etc.)

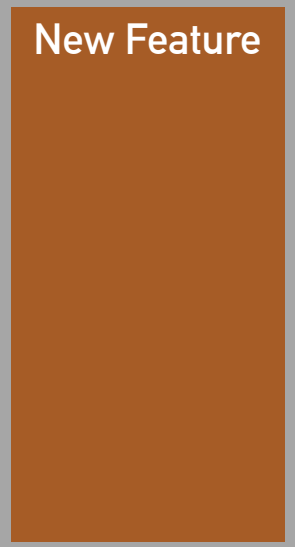


from Wikipedia

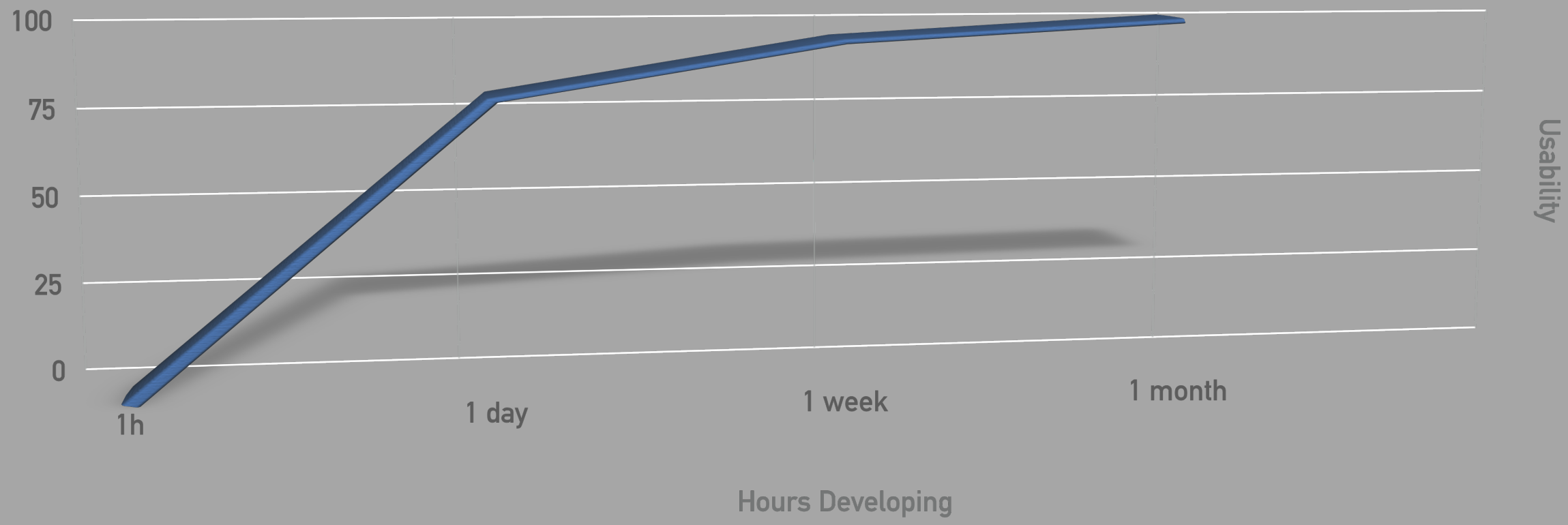


Integrating new Features

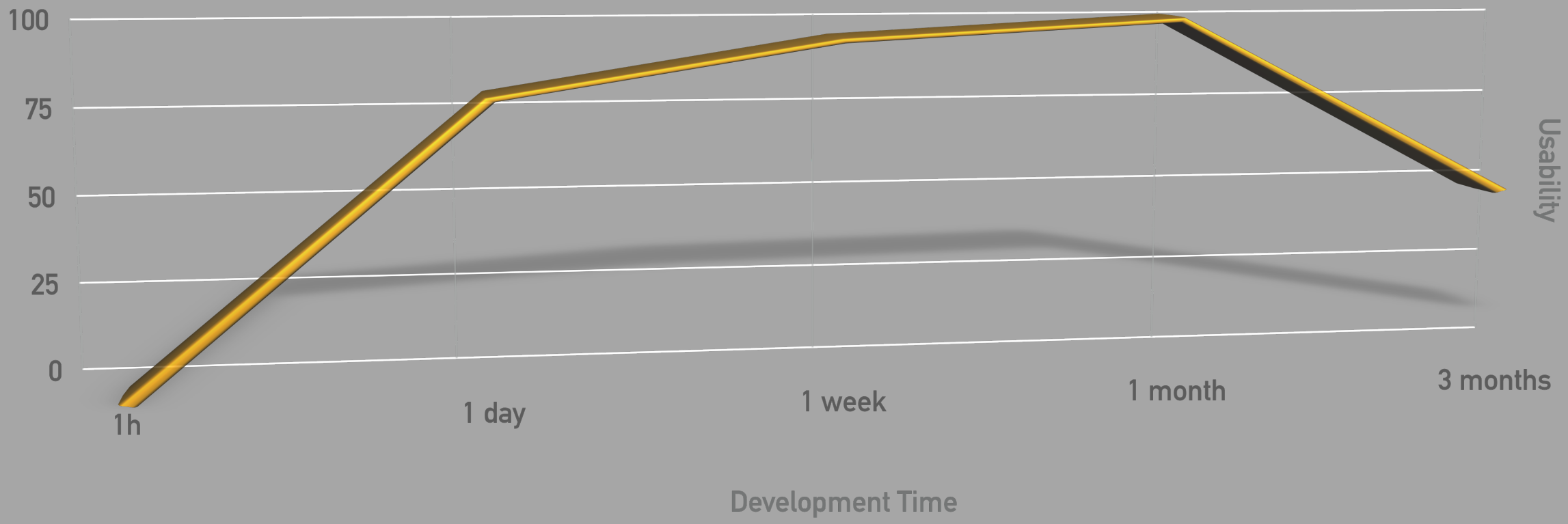




My Experience



Often Observed



Thank you...

NeDi Consulting Remo Rickli +41 41 511 9841 rickli@nedi.ch