

SYRHANO & NMS

NMS Meeting - Renater - 17/10/2008
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SYRHANO

Regional Network

- Regional Research and Education Network in Upper Normandy
 - connected to Renater
 - and other ISP for Internet connectivity
- Sites connected
 - Universities, Hospitals, High Schools
 - about 30 “big” sites, and around 500 sites connected through DSL lines (mainly high schools)

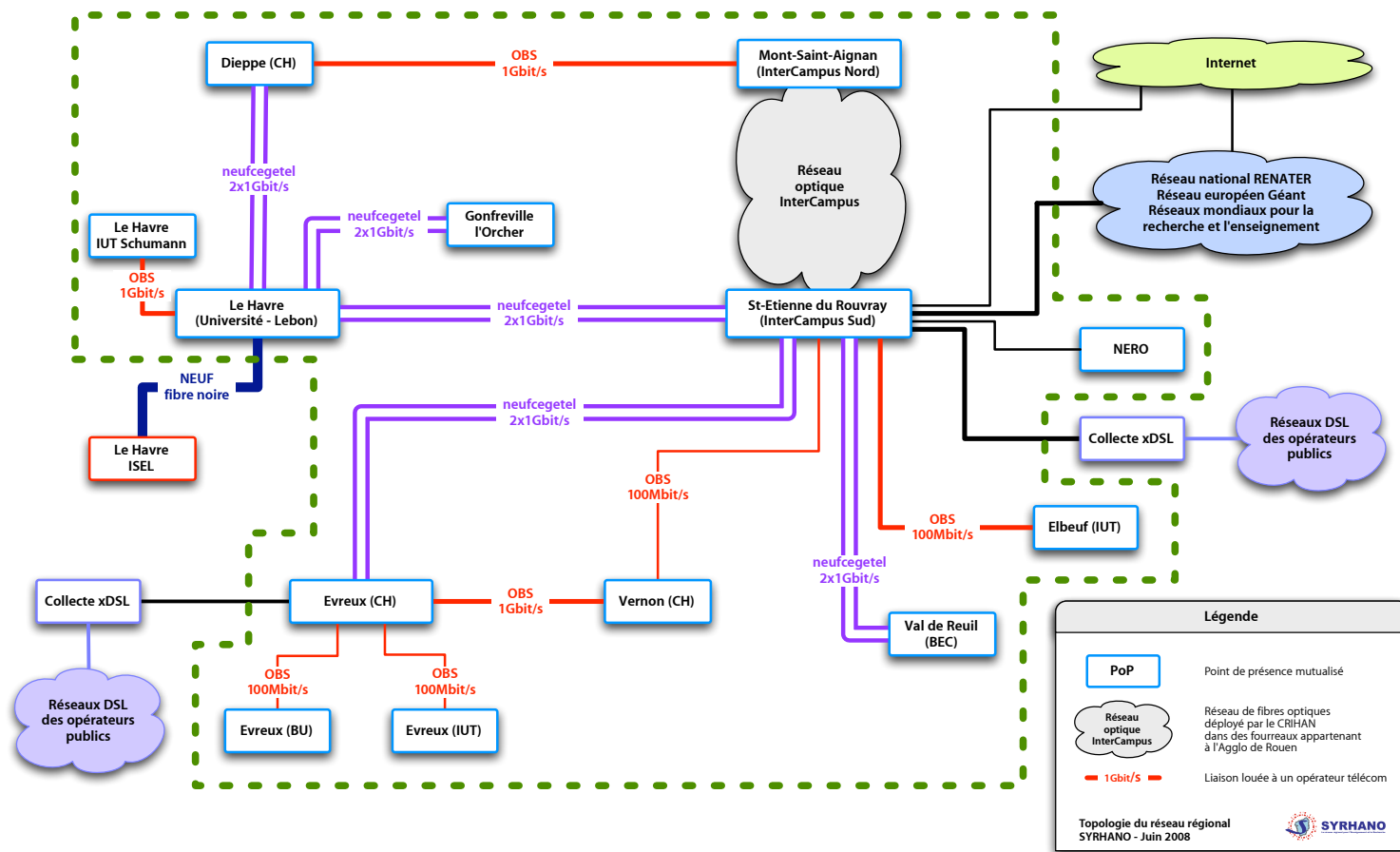
SYRHANO Services

Network and applications services

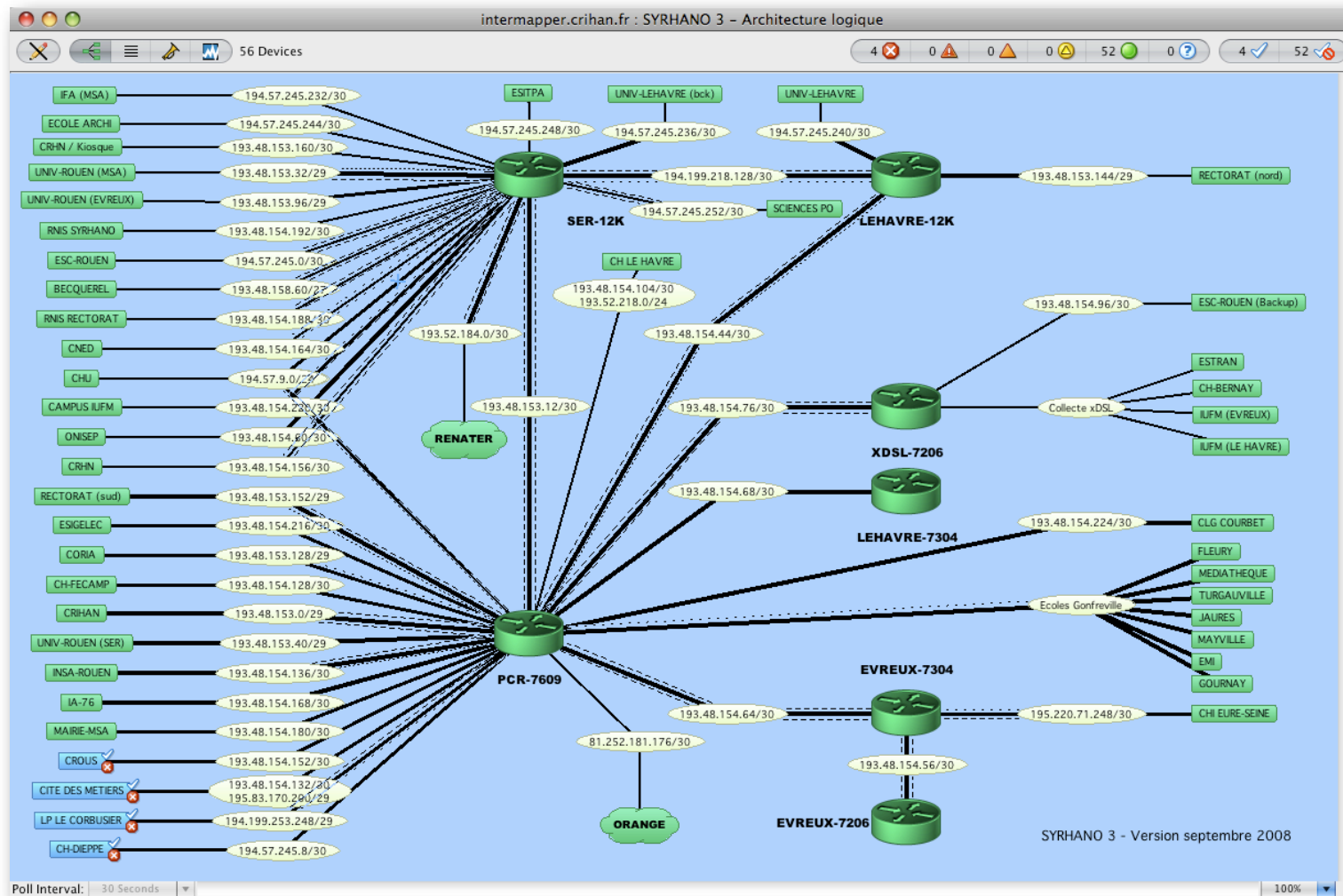
- Network services
 - IPv4 and IPv6 Unicast / Multicast connectivity
 - Ethernet VLANs
 - MPLS VPN
 - CoS
- Application services
 - Mail (spam and virus filtering)
 - Videoconferencing
 - Backup and storage

Network Architecture

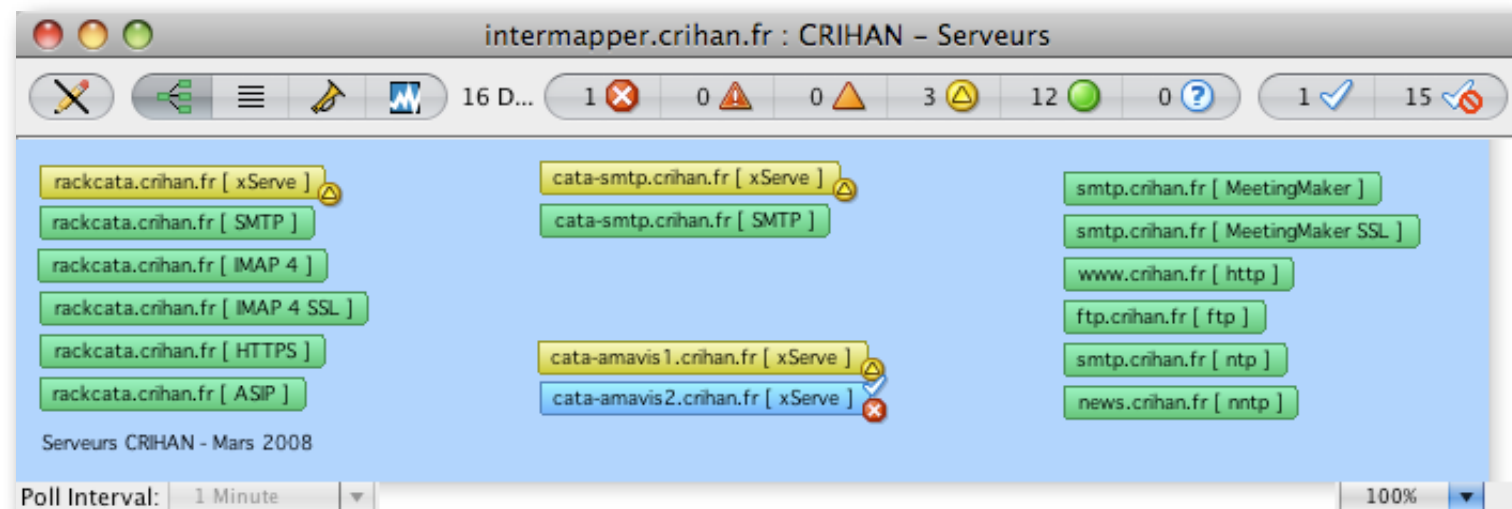
- Backbone
 - based on ethernet switches
 - from 37xx to 65xx Catalyst
- Routing infrastructure
 - two redundant 12k running IOS-XR



Intermapper

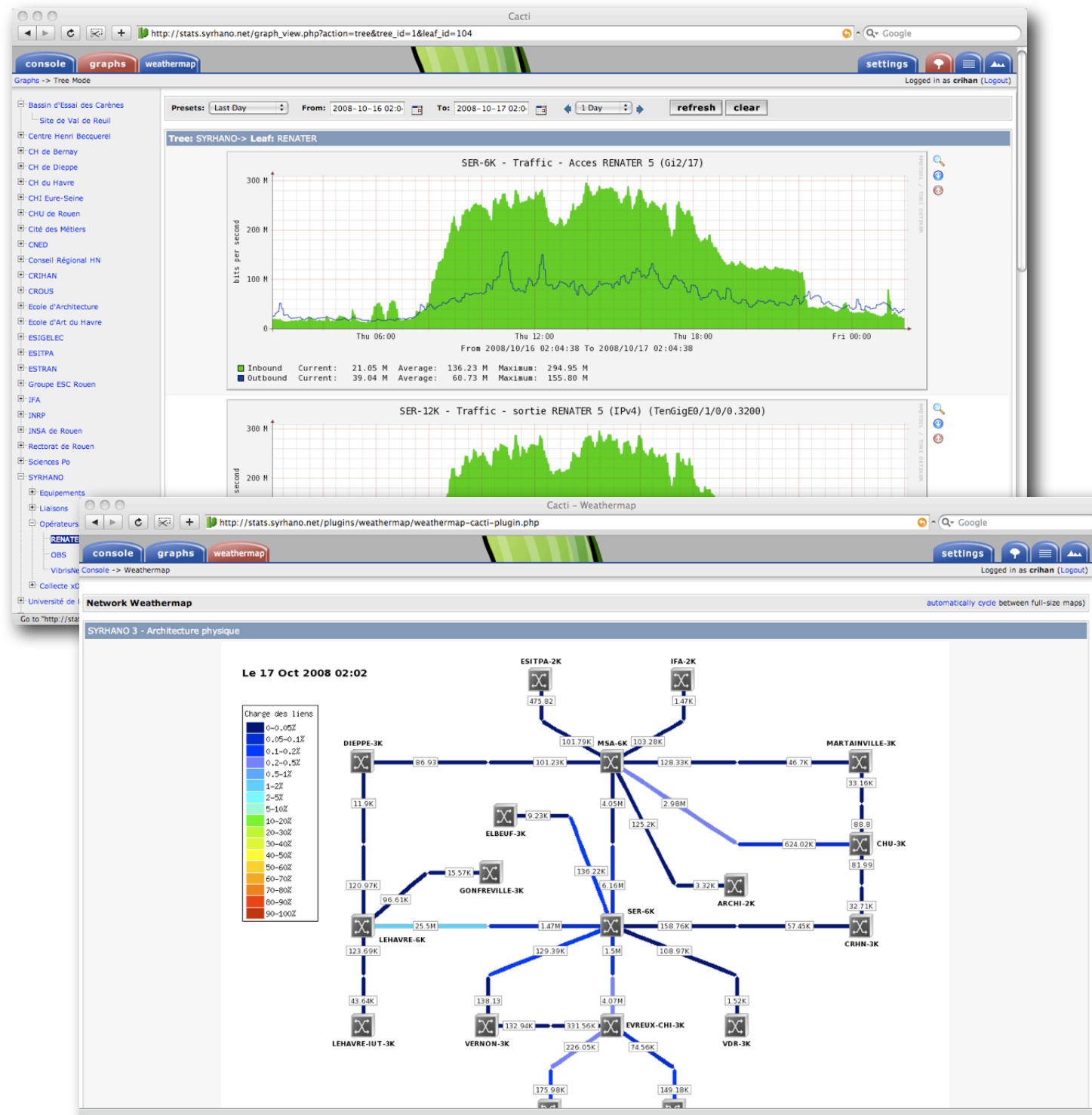


- Used to monitor
 - router and switch health
 - links usage
 - also applications availability and response time
- Can use
 - SNMP and applications probes



Cacti

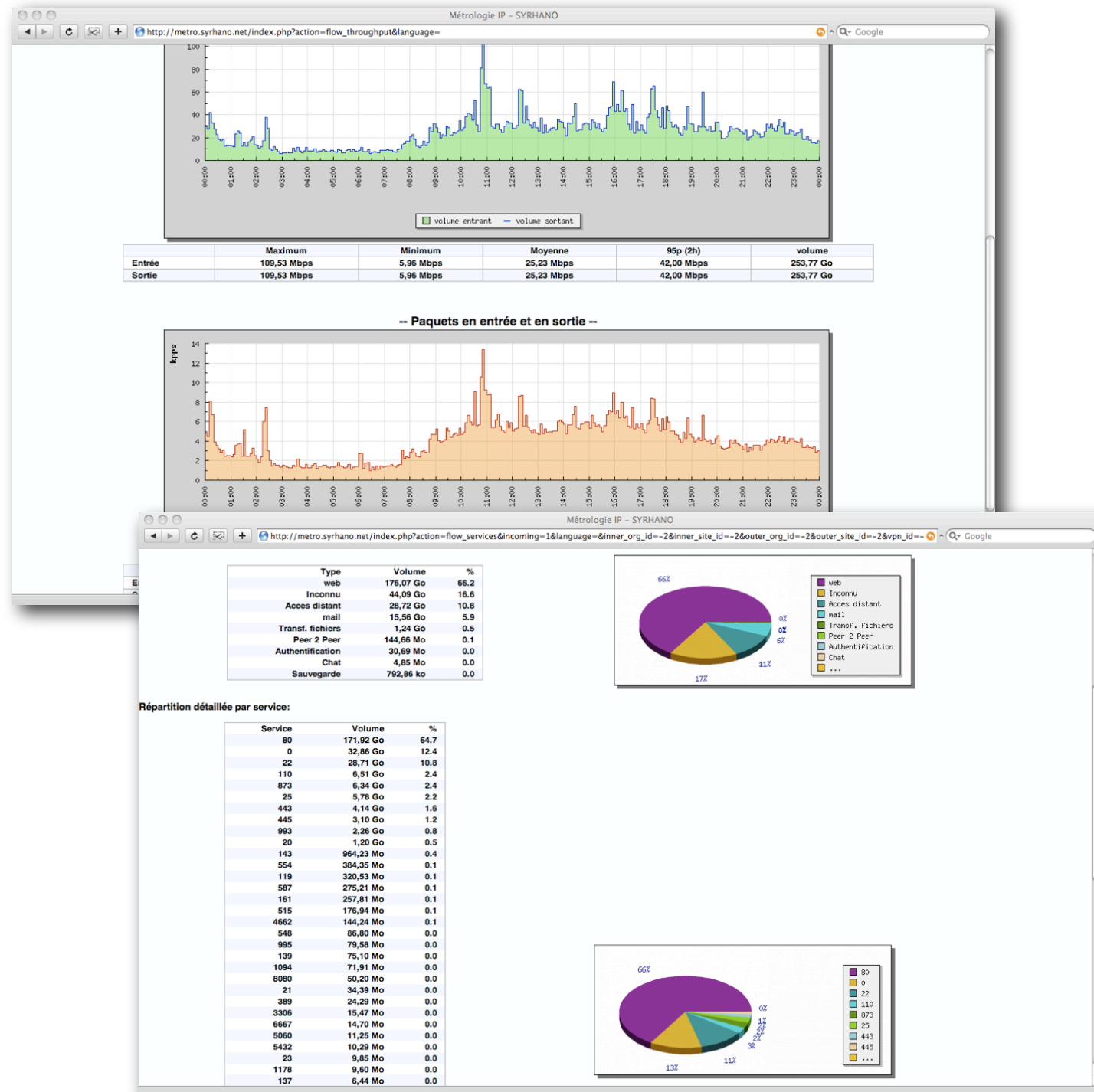
- Used to monitor and graph
 - bandwidth usage
 - CPU load and memory usage on network devices
- Weathermaps
- Uses SNMP probes to fetch information



NetFix / FlowFix

Netflow

- Netfix
 - “homemade” netflow collector
- FlowFix
 - “homemade” netflow post-processing tools and web interface
- Gives detailed services usage
 - by sites
 - by VRF



What we need to do

in a near future

- NMS over IPv6
 - every management and monitoring software we use today has IPv6 connectivity and supports IPv6 probes but not all our network devices
- Limitations
 - équipements réseaux supportant IPv6 (routage) mais interrogeables uniquement en v4 pour la supervision / métrologie (SNMP, Syslog, NTP)
 - manque d'information au niveau du trafic spécifique IPv6
 - informations agrégées, MIB incomplètes
 - implémentation de NetFlow pour les flux IPv6

Formations IPv6

CRIHAN

- Sessions de formations IPv6 au CRIHAN
 - objectifs : appréhender IPv6 de manière théorique et pratique
 - public : administrateurs réseaux et systèmes
 - formation sur 4 jours
- Informations
 - <http://www.crihan.fr/formation/ipv6>



SYstème Réseau de HAute-NOrmandie