

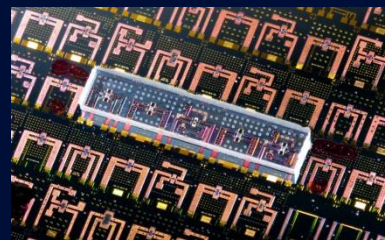
Au cœur de l'efficacité énergétique

Supervision & monitoring dans le laboratoire G2Elab

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2017**



Sommaire

- Contexte
- Besoins & objectifs
- En pratique!
- Retour d'expérience
- Questions?



Nagios®



■ Pourquoi monitorer (supervision) ?

- Mieux dormir la nuit
- Ne pas être pris au dépourvu
- Monitorer quoi ?
 - Les machines
 - Le réseau
 - Les imprimantes

■ Pourquoi mesurer (métrologie) ?

- Sert aux RSSI (mais pas que)
- Permet d'analyser les anomalies
- Peut servir à dimensionner

Contexte (2)

- **Initialement sur 2 sites géographiques**
- **Depuis juin 2015 à GreEn-ER**
- **Historiquement utilisation d'une solution « maison » en perl/php/html en utilisant l'analyse des logs avec syslog-ng**
- **Evolutions des besoins, plus de finesse au niveau des informations affichées**

Contexte (3)

Script :

```
#!/bin/bash
cd /root/bin
ligne="metrologie $HOSTNAME: "

#test=`telnet localhost 25 < quit | grep "Connected to localhost"`
#if [ "$test" = "" ] ; then ligne=$ligne" smtp:0 "; else ligne=$ligne" smtp:1 " ;fi
test=`ps -e| grep "apache"`
if [ "$test" = "" ] ; then ligne=$ligne" http:0 "; else ligne=$ligne" http:1 " ;fi
test=`ps -e| grep "sshd"`
if [ "$test" = "" ] ; then ligne=$ligne" ssh:0 "; else ligne=$ligne" ssh:1 " ;fi
test=`ps -e| grep "vmtoolsd"`
if [ "$test" = "" ] ; then ligne=$ligne" vmware:0 "; else ligne=$ligne" vmware:1 " ;fi
test=`ps -e| grep "syslogd"`
if [ "$test" = "" ] ; then ligne=$ligne" syslog:0 "; else ligne=$ligne" syslog:1 " ;fi
test=`ps -e| grep "munin"`
if [ "$test" = "" ] ; then ligne=$ligne" munin:0 "; else ligne=$ligne" munin:1 " ;fi
test=`ps -e| grep "apache2"`
if [ "$test" = "" ] ; then ligne=$ligne" http:0 "; else ligne=$ligne" http:1 " ;fi
test=`ps -e| grep "mysqld"`
if [ "$test" = "" ] ; then ligne=$ligne" sql:0 "; else ligne=$ligne" sql:1 " ;fi
#test=`telnet localhost 21 < quit | grep "Connected to localhost"`
#if [ "$test" = "" ] ; then ligne=$ligne" ftp:0 "; else ligne=$ligne" ftp:1 " ;fi
echo $ligne | logger
```

Résultat

Syslog : logger: metrologie intranet: smtp:0 apache:1 ssh:1 vmware:1 syslog:1 munin:1 http:1 sql:1 ftp:1

Contexte (4)

La préhistoire !

[Menu](#)

[Statistiques proxy1](#)

[Statistiques proxy2](#)

[Statistiques intranet](#)

[Statistiques intraleg](#)

[Licences flexlm admin](#)

[Expiration licences flexlm](#)

[Etat des licences](#)

Last Update:
Tuesday, 07-Mar-2017 12:21:15 CET

Serveurs

	vmware	squid	squidG	frox	freshclam	ftp	nfs	http	sql	syslog	ssh	ldap	openvpn	smtp
intraleg:	■	-	-	-	-	-	-	■	■	✗	■	-	-	-
intranet:	■	-	-	-	-	■	-	■	■	■	■	-	-	✗
osc2:	■	-	-	-	-	-	-	■	-	■	■	-	-	-

Mise a jour

intraleg:
Aucune mise a jour pour le moment!

intranet:
Aucune mise a jour pour le moment!

osc2:
Aucune mise a jour pour le moment!

Software Server: Apache/2.4.10 (Debian)

Besoins & objectifs

■ Garantir une remonté d'information rapide et une durée d'intervention minimale

- Connaitre l'état global et l'état d'un service
- Eviter les pannes prévisibles
- Génération de graphiques

■ Améliorer la réactivité de l'équipe informatique (curatif)

- Missions :
 - Garantir la performance et la continuité de service du réseau et des services
 - Veiller à la sécurité et au bon fonctionnement quotidien du réseau et des services

■ Objectifs

- Définition du périmètre du projet
- Les fonctionnalités offertes
- Analyse de différentes solutions
- Réalisation et mise en production : les yeux dans le réseau



■ En un mot : une solution simple, fiable, efficace et complète!!!

En pratique!

Solution choisie

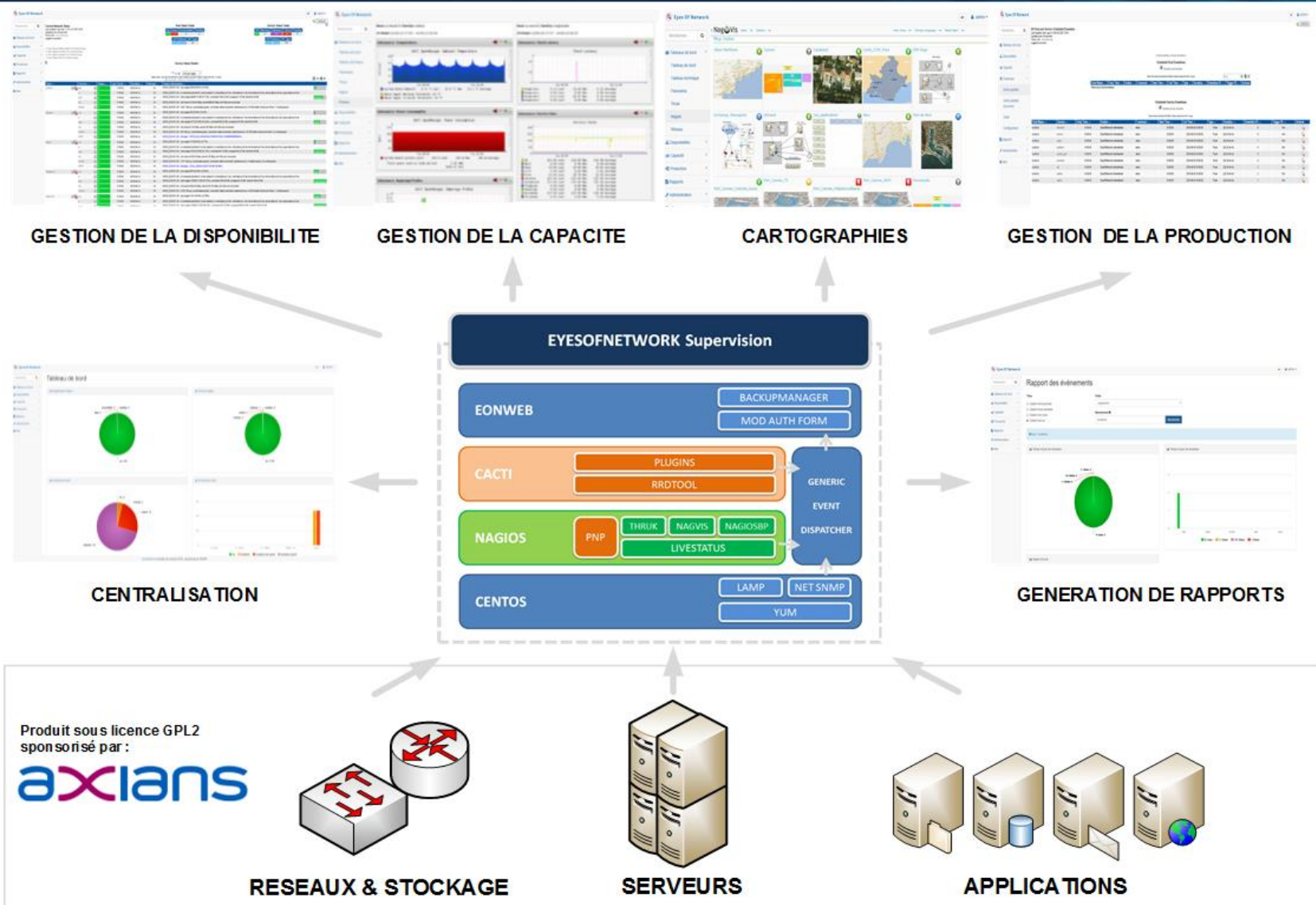
- Pourquoi EON ?



- Avantage majeur : une interface unique - dashboard
- Le bundle EON inclue un ensemble intégré d'applications répondant aux différents besoins de supervisions:

- GED (Generic Event Dispatcher) : gestion multi sites et sécurisée des évènements,
- NAGIOS / SHINKEN : gestion des incidents et des problèmes,
- THRUK : interface de supervision multibackend,
- NAGVIS : cartographie personnalisée de la disponibilité,
- NAGIOSBP : gestion de la criticité des applications,
- CACTI et PNP4NAGIOS : monitoring et gestion des performances,
- WEATHERMAP : cartographie de la bande passante,
- BACKUP MANAGER : Outil de sauvegarde de la solution,
- EONWEB : Interface Web unifiée de la solution
- EZGRAPH : Librairie d'affichage des graphiques,
- SNMPTT : Traduction des traps snmp,
- GLPI / OCS / FUSION : Gestion de parc et inventaire.

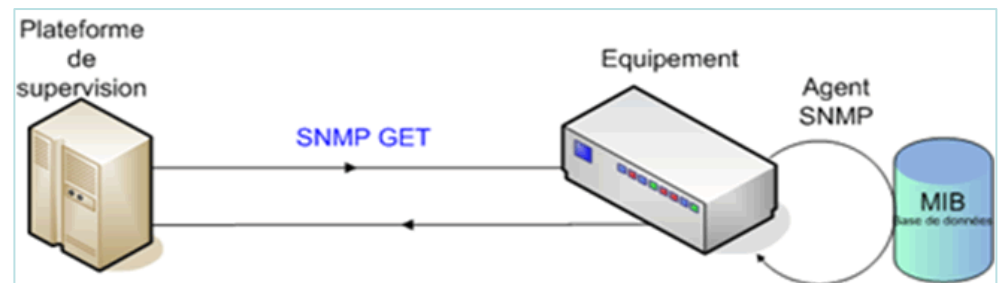
En pratique! (2)



En Pratique! (3)

- **Fonctionnement de eon avec collecte et remonté des données (schéma avec flux etc...)**
- **Récupérer des résultats de commandes et de scripts locaux ou distants**
- **Scripts en bash, perl, python, java...**
- **Parlez vous MIB ?**

- Snmp / mib
- Nrpe
- Ping



En pratique! (4)

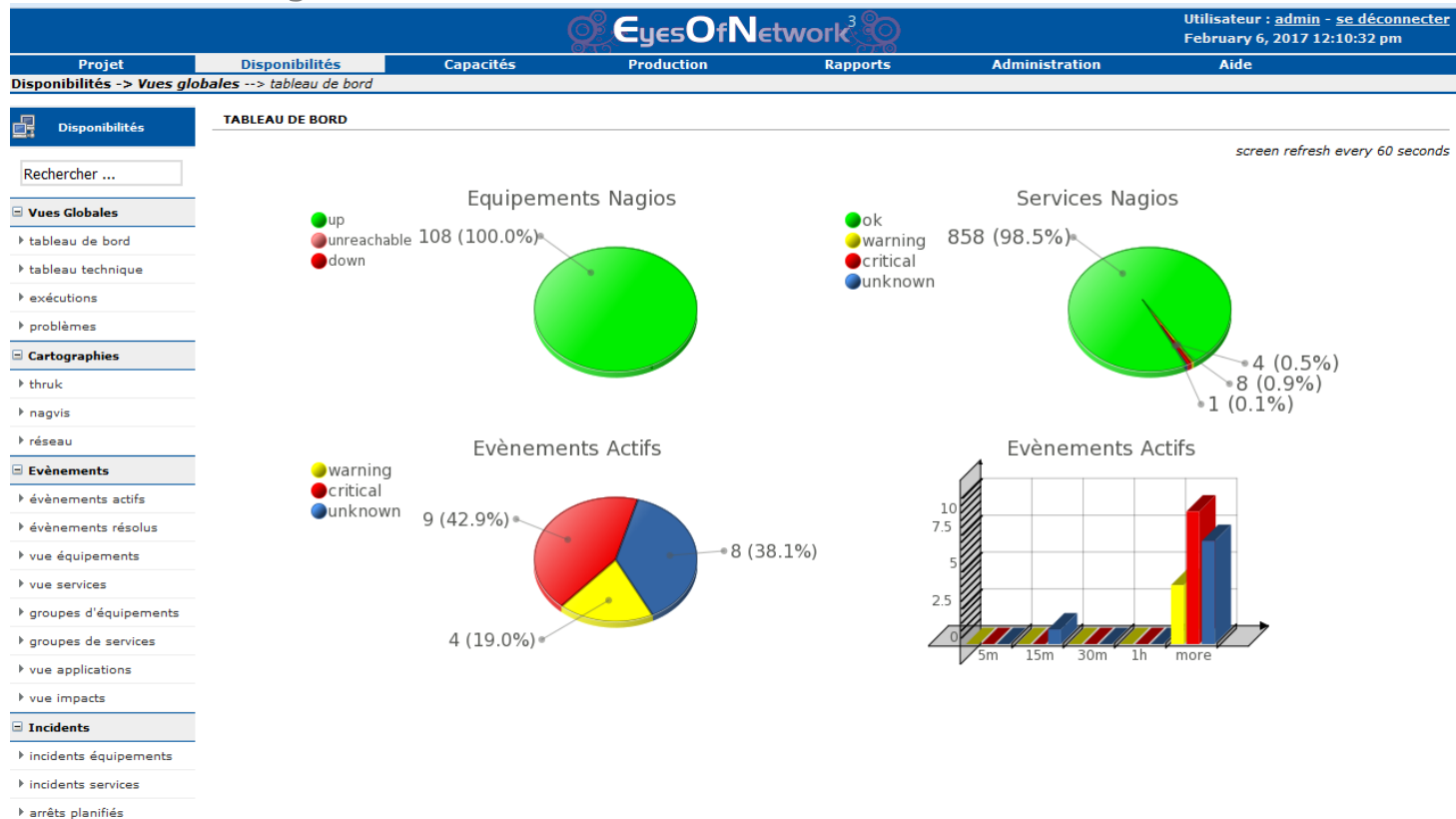
■ Les moyens matériels

- Cœur de réseau du bâtiment GreEn-ER
 - 3 stacks extreme (3x6 slots)
 - 2 Cisco 4500 - Vss
 - 2 Cisco nexus
 - 1 firewall type Cisco asa
 - 1 contrôleur wifi
 - Environs 800 microswitchs microsens en FO – réseau VDI
- Au niveau du laboratoire
 - +/- 450 machines (pc fixes, portables et instrumentation)
 - 11 imprimantes
 - Une plateforme de virtualisation avec 3 esxi VMware vsphere 6
 - +/- 50 Vms
 - Linux Debian, Centos, Windows 2008, 2012, 2016
 - Idrac
 - 3 serveurs de calculs
 - 1 baie dell compellent sc4020 45To
 - 1 serveur de sauvegarde Veeam backup and replication 9.5 de 40 To
 - 20 bornes wifi + téléphone IP
 - Environs 300 microswitchs microsens en FO – réseau VDI
- Superviser et monitorer
 - VM EON centos -dimensionnement de la plateforme
 - 8 vCpu
 - 12 Go de mémoire
 - 50 Go de disque dur

En pratique! (5)

Tableau de bord du serveur : nos indicateurs!

- Equipements Nagios : 108
- Services Nagios : 858



En pratique! (6)

EyesOfNetwork³
Utilisateur : admin - se déconnecter
February 6, 2017 12:47:27 pm

Projet
Disponibilités
Capacités
Production
Rapports
Administration
Aide

Disponibilités -> Vues globales --> tableau de bord

Disponibilités

- ▣ Vues Globales
 - tableau de bord
 - tableau technique
 - exécutions
 - problèmes
- ▣ Cartographies
 - thruk
 - nagvis
 - réseau
- ▣ Evénements
 - événements actifs
 - événements résolus
 - vue équipements
 - vue services
 - groupes d'équipements
 - groupes de services
 - vue applications
 - vue impacts
- ▣ Incidents
 - incidents équipements
 - incidents services
 - arrêts planifiés

Current Network Status
Last Updated: Mon Feb 6 12:47:52 CET 2017
 Updated every 90 seconds
 Thruk 1.34 - www.thruk.org
 Logged in as admin

Host Status Totals

Up	Down	Unreachable	Pending
77	0	0	0
All Problems		All Types	
0		77	

Service Status Totals

Ok	Warning	Unknown	Critical	Pending
857	4	0	8	2
All Problems		All Types		
12		871		

Display Filters: Detail ✔

Host Status Types: All
 Host Properties: Any
 Service Status Types: All problems
 Service Properties: Any

Host = all ✖

▼ and

select host / services with leftclick to send multiple commands. Select multiple with shift + mouse.
 select all (hosts) - unselect all - all problems - all with downtime

Host	Service	Status	Last Check	Duration	Attempt	Status Information
Cisco-WiFi-GreenEr	status	CRITICAL	12:47:17	0d 0h 15m 48s	1/1	Critical! One or more APs are down or disassociated
Cisco-WiFi-Minatec	status	CRITICAL	12:44:16	0d 0h 13m 42s	1/1	Critical! One or more APs are down or disassociated
fsrv	partitions	WARNING	12:43:10	0d 0h 14m 48s	1/1	E:\Label:homedirs Serial Number a4757c3c: -398%used(4994809MB/-1253563MB) Virtual Memory: 26%used(2486MB/9472MB) D:\: 0%used(0MB/0MB) F:\Label:profilis Serial Number 14aac35a: 91%used(90920MB/99999MB) Physical Memory: 44%used(3591MB/8192MB) C:\Label: Serial Number 9a341035: 84%used(42491MB/50848MB) (>90%): WARNING
fsrvpub	partitions	CRITICAL	12:46:06	0d 0h 11m 54s	1/1	D:\: 0%used(0MB/0MB) Virtual Memory: 59%used(2838MB/4800MB) C:\Label: Serial Number b4949e47: 33%used(33843MB/102048MB) E:\Label: Serial Number a6269e22: 637%used(-7346074MB/-1153563MB) Physical Memory: 51%used(2080MB/4096MB) A:\: 0%used(0MB/0MB) (>95%): CRITICAL
impr-habitat	consumable	WARNING	12:42:59	0d 0h 15m 0s	1/1	CARTOUCHE DE TONER HP C8061A is at 10% - WARNING!
impr-hp-4100-MADEA	consumable	CRITICAL	12:43:55	0d 0h 14m 5s	1/1	Toner Cartridge HP C8061A is at CRITICAL level!
impr-Iconica-minolta-5e	consumable	WARNING	12:43:06	0d 0h 14m 55s	1/1	Toner (Cyan) is at 27% - OK! Toner (Magenta) is at 37% - OK! Toner (Yellow) is at 55% - OK! Toner (Black) is at 41% - OK! Drum Cartridge (Cyan) is at 18% - WARNING! Developer Cartridge (Cyan) is at 43% - OK! Drum Cartridge (Magenta) is at 18% - WARNING! Developer Cartridge (Magenta) is at 43% - OK! Drum Cartridge (Yellow) is at 18% - WARNING! Developer Cartridge (Yellow) is at 43% - OK! Drum Cartridge (Black) is at 40% - OK! Developer Cartridge (Black) is at 87% - OK! Waste Toner Box is OK! Fusing Unit is at 87% - OK! Image Transfer Belt Unit is at 43% - OK! Transfer Roller Unit is at 63% - OK! Ozone Filter is at 63% - OK! Toner Filter is at 34% - OK! Staple Cartridge is OK! Saddle Staple Cartridge1 is OK! Saddle Staple Cartridge2 is OK! Hole-Punch Scrap Box is OK!
impr-pole-technique	consumable	WARNING	12:45:34	0d 0h 12m 24s	1/1	Black Cartridge HP CC364A is at 20% - WARNING! Maintenance Kit HP 110V-CB388A, 220V-CB389A is at 66% - OK!
impr-syrel	jetprint	CRITICAL	12:44:28	0d 0h 13m 39s	1/1	CRITICAL - Socket timeout after 10 seconds
vcenter	cpu	CRITICAL	12:45:03	0d 0h 12m 56s	1/1	2 CPU, average load 100.0% > 90% : CRITICAL
	memory	CRITICAL	12:46:15	0d 0h 11m 46s	1/1	Real Memory: 97%used(11650MB/12042MB) (>90%) : CRITICAL

En pratique! (7)

Vue des équipements

EyesOfNetwork ³				Utilisateur : admin - se déconnecter February 6, 2017 12:40:14 pm		
Projet	Disponibilités	Capacités	Production	Rapports	Administration	Aide
Disponibilités -> Evénements --> vue équipements						
Disponibilités	AP-5-D-202-NS-17-RA-5-0-5		UP	12:37:12	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.78 ms
	calcr610		UP	12:37:05	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.52 ms
	calcr610-drac		UP	12:38:45	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.57 ms
	calcr620		UP	12:35:13	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.27 ms
	calcr620-drac		UP	12:39:12	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.44 ms
	calcr630		UP	12:39:29	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.18 ms
	calcr630-drac		UP	12:36:06	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.47 ms
	Cisco-ASA-1		UP	12:37:18	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.22 ms
	Cisco-ASA-2		UP	12:38:06	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.20 ms
	Cisco-Nexus-5600-L101-1-GreenEr		UP	12:38:40	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.63 ms
	Cisco-Nexus-5600-L101-2-GreenEr		UP	12:37:15	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.61 ms
	Cisco-Nexus-5600-L201-1-Minatec		UP	12:38:58	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 11.15 ms
	Cisco-Nexus-5600-L201-2-Minatec		UP	12:38:21	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.65 ms
	Cisco-R4500-L101-VSS1-GreenEr		UP	12:40:08	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.91 ms
	Cisco-switch-dracs		UP	12:36:24	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.48 ms
	Cisco-WLC-Wifi-GreenEr		UP	12:37:09	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 1.85 ms
	Cisco-WLC-Wifi-Minatec		UP	12:39:22	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 1.68 ms
	compellent-sc4020		UP	12:36:18	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.27 ms
	dcpub1		UP	12:38:18	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.20 ms
	dcpub2		UP	12:39:05	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.31 ms
	dhcp1		UP	12:38:43	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.36 ms
	dhcp2		UP	12:37:00	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.38 ms
	dimocode		UP	12:37:24	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.40 ms
	domainserver1		UP	12:39:12	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.30 ms
	domainserver2		UP	12:40:04	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.35 ms
	esxi1-drac		UP	12:35:28	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.52 ms
	esxi2-drac		UP	12:35:38	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.49 ms
	esxi3-drac		UP	12:38:38	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 0.51 ms
	extreme-stack-1		UP	12:39:27	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 1.56 ms
	extreme-stack-2		UP	12:36:30	0d 0h 8m 41s	PING OK - Packet loss = 0%, RTA = 2.93 ms

En pratique! (8)

Vue des services

EyesOfNetwork ³							Utilisateur : admin - se deconnecter
February 6, 2017 12:45:44 pm							
Projet	Disponibilités	Capacités	Production		Rapports	Administration	Aide
Disponibilités -> Evènements --> vue services							
<ul style="list-style-type: none"> Disponibilités Vues Globales <ul style="list-style-type: none"> tableau de bord tableau technique exécutions problèmes Cartographies <ul style="list-style-type: none"> thruk nagvis réseau Evènements <ul style="list-style-type: none"> évènements actifs évènements résolus vue équipements <ul style="list-style-type: none"> vue services groupes d'équipements groupes de services vue applications vue impacts Incidents <ul style="list-style-type: none"> incidents équipements incidents services arrêts planifiés 	impr-Xerox-Typon	consumable	OK	12:42:43	0d 0h 13m 47s	1/1	Genuine Xerox Solid Ink Cyan-PagePack-8550/8560/8560MFP, P/N 108R00705 is OK! Genuine Xerox Solid Ink Magenta-PagePack-8550/8560/8560MFP, P/N 108R00707 is OK! Genuine Xerox Solid Ink Yellow-PagePack-8550/8560/8560MFP, P/N 108R00708 is OK! Genuine Xerox Solid Ink Black-PagePack-8550/8560/8560MFP, P/N 108R00709 is OK! Standard-Capacity Maintenance Kit, Phaser 8500/8550/8560/8560MFP, P/N 108R00675 is at 90% - OK! Waste Tray, Phaser 8500 Series, P/N 109R00754 is OK!
		display	OK	12:42:05	0d 0h 13m 47s	1/1	Ready To Print
		http	OK	12:44:25	0d 0h 13m 47s	1/1	TCP OK - 0.000 second response time on port 80
		jetprint	OK	12:40:41	0d 0h 13m 47s	1/1	TCP OK - 0.000 second response time on port 9100
		model	OK	12:42:17	0d 0h 13m 47s	1/1	Xerox Phaser 8560N, OS9.82, PS4.7.0, Eng22.L0.4.7.0, Net37.54.03.02, Serial # FBT279017
		pagecount	OK	12:41:13	0d 0h 13m 47s	1/1	Pagecount is 4,645
	intranetb	cpu	OK	12:42:01	0d 0h 13m 47s	1/1	CPU used 79.0% (<80) : OK
		maj	OK	12:42:33	0d 0h 13m 47s	1/1	OK: no upgraded packages found
		memory	OK	12:40:43	0d 0h 13m 47s	1/1	Ram: 45%, Swap: 0% : OK
		ntp	OK	12:43:59	0d 0h 13m 47s	1/1	NTP OK: Offset -0.000369 secs
		partitions	OK	12:42:35	0d 0h 13m 47s	1/1	/var: 85%used(27650MB/32510MB) /mnt/Baselabo: -39%used(4995244MB/1253563MB) /home: 65%used(6625MB/10159MB) /: 37%used(2226MB/6096MB) /dev: 0%used(0MB/10MB) (<90%) : OK
		service_http	OK	12:42:43	0d 0h 13m 47s	1/1	HTTP OK: HTTP/1.1 200 OK - 31056 bytes in 0.028 second response time
		service_mysql	OK	12:43:26	0d 0h 13m 47s	1/1	Uptime: 1048857 Threads: 7 Questions: 5422852 Slow queries: 5882 Opens: 158861 Flush tables: 2 Open tables: 400 Queries per second avg: 5.170
		ssh	OK	12:43:23	0d 0h 13m 47s	1/1	SSH OK - OpenSSH_6.0p1 Debian-4+deb7u6 (protocol 2.0)
		swap	OK	12:44:41	0d 0h 13m 47s	1/1	Swap space: 0%used(0MB/0MB) (<85%) : OK
		syslog	OK	12:43:34	0d 0h 13m 47s	1/1	2 process named syslog-ng (> 0)
		system	OK	12:44:02	0d 0h 13m 47s	1/1	System Time OK - 02-06-2017, 12:44:03
		uptime	OK	12:44:22	0d 0h 13m 47s	1/1	OK: Systemuptime 13 days, 23:44:21.29.
		vmware_tools	OK	12:45:09	0d 0h 13m 47s	1/1	1 process named vmtoolsd (> 0)
	licenceserver	Altium	OK	12:41:28	0d 0h 13m 47s	1/1	1 process named DXPSecurityApp.exe (> 0)
		caedes	OK	12:43:41	0d 0h 13m 47s	1/1	1 process named lmx-serv.exe (> 0)
		comsol	OK	12:40:46	0d 0h 13m 47s	1/1	1 services active (matching "comsol") : OK
		cpu	OK	12:42:29	0d 0h 13m 47s	1/1	1 CPU, load 0.0% < 85% : OK
		dymola	OK	12:40:23	0d 0h 13m 47s	1/1	1 services active (matching "dymola") : OK
		eurostag	OK	12:43:45	0d 0h 13m 47s	1/1	1 services active (matching "eurostag") : OK
		flotherm_mentor_graphics	OK	12:41:03	0d 0h 13m 47s	1/1	1 services active (matching "Flotherm") : OK
		flux	OK	12:45:06	0d 0h 13m 47s	1/1	2 process named lmgrd_cedrat.exe (> 0)
		licences	OK	12:44:56	0d 0h 13m 47s	1/1	2 process named lmgrd.exe (> 0)
		maple	OK	12:43:16	0d 0h 13m 47s	1/1	1 services active (matching "maple") : OK
		mathcad	OK	12:41:16	0d 0h 13m 47s	1/1	1 services active (matching "Mathcad") : OK
		mathematica	OK	12:44:36	0d 0h 13m 47s	1/1	1 process named mathm.exe (> 0)
		matlab	OK	12:42:35	0d 0h 13m 47s	1/1	1 services active (matching "Matlab") : OK
		memory	OK	12:40:18	0d 0h 13m 47s	1/1	Physical Memory: 43%used(879MB/2048MB) Virtual Memory: 22%used(907MB/4095MB) (<85%) : OK
		origin	OK	12:42:56	0d 0h 13m 47s	1/1	1 process named orglab.exe (> 0)
		partitions	OK	12:43:33	0d 0h 13m 47s	1/1	D:\: 0%used(0MB/0MB) Physical Memory: 43%used(879MB/2048MB) C:\ Label: Serial Number 1a656325: 57%used(29291MB/51098MB) Virtual Memory: 22%used(906MB/4095MB) A:\: 0%used(0MB/0MB) (<90%) : OK
		plecs	OK	12:41:17	0d 0h 13m 47s	1/1	1 services active (matching "plecs") : OK
		power factory	OK	12:44:27	0d 0h 13m 47s	1/1	1 process named diglise.exe (> 0)
		SENTINEL HASP	OK	12:45:00	0d 0h 13m 47s	1/1	1 process named haspms.exe (> 0)
		simplorer	OK	12:42:11	0d 0h 13m 47s	1/1	1 services active (matching "simplorer") : OK
		solidedge	OK	12:43:19	0d 0h 13m 47s	1/1	1 process named selmd.exe (> 0)
		subnet	OK	12:44:49	0d 0h 13m 47s	1/1	12 process named subnet.exe (> 0)

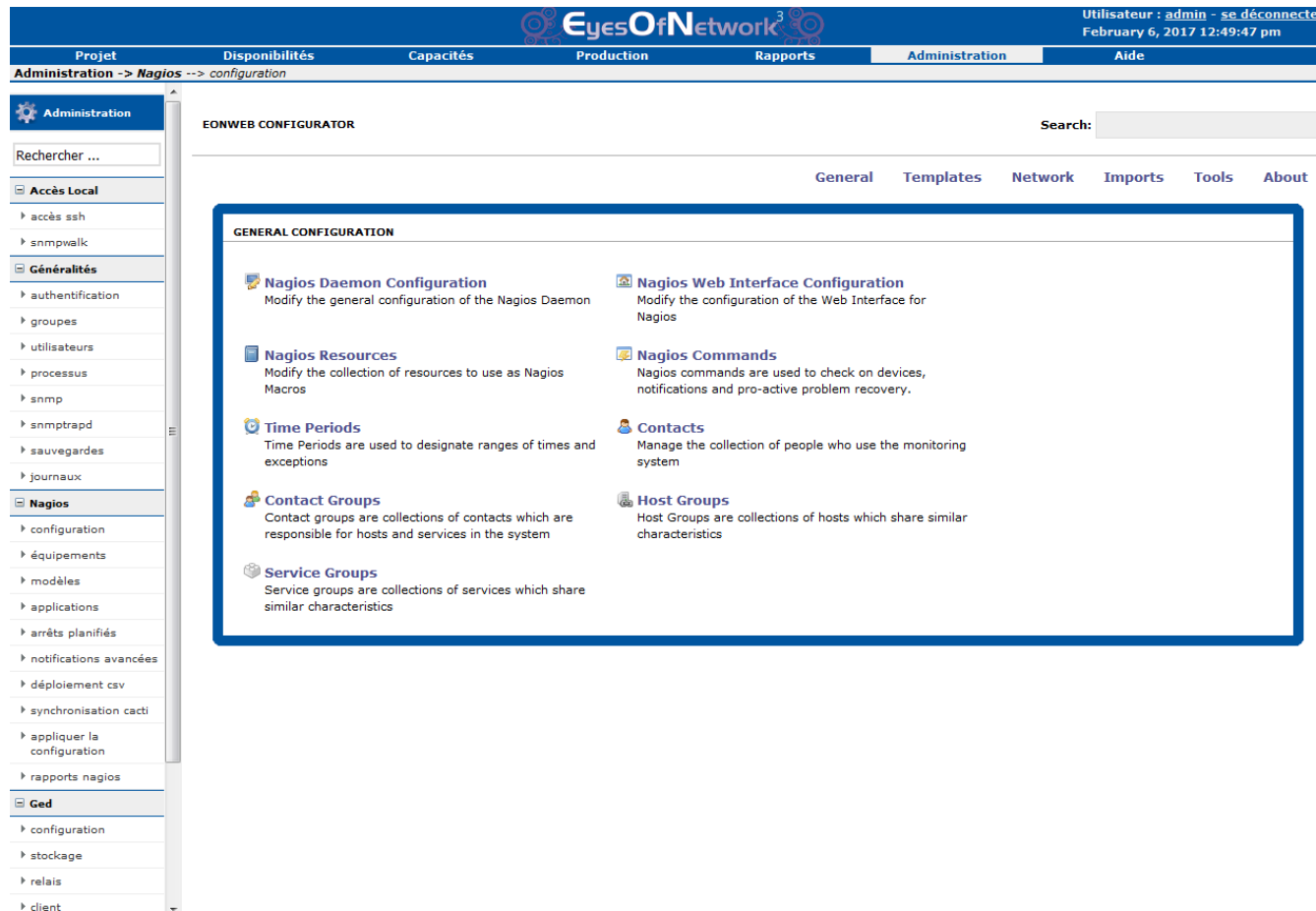
En pratique! (9)

Exemple avec vue des services d'un serveur

EyesOfNetwork ³						Utilisateur : admin - se déconnecter February 6, 2017 5:29:21 pm																																																																																																																																																																																																																																																																																																																	
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Disponibilités -> Evènements -> vue services																																																																																																																																																																																																																																																																																																																							
<div style="display: flex;"> <div style="width: 25%; border: 1px solid #ccc; padding: 5px;"> <p>Rechercher ...</p> <ul style="list-style-type: none"> Vues Globales <ul style="list-style-type: none"> tableau de bord tableau technique exécutions problèmes Cartographies <ul style="list-style-type: none"> thruk nagvis réseau Evènements <ul style="list-style-type: none"> évènements actifs évènements résolus vue équipements vue services groupes d'équipements groupes de services vue applications vue impacts Incidents <ul style="list-style-type: none"> incidents équipements incidents services arrêts planifiés </div> <div style="width: 75%; border: 1px solid #ccc; padding: 5px;"> <table border="1"> <thead> <tr> <th>Projet</th> <th>Disponibilités</th> <th>Capacités</th> <th>Production</th> <th>Rapports</th> <th>Administration</th> <th colspan="2">Aide</th> </tr> </thead> <tbody> <tr> <td>esxi1-drac</td> <td>system</td> <td>OK</td> <td>17:27:46</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">1 process named System (> 0)</td> </tr> <tr> <td></td> <td>systeme</td> <td>OK</td> <td>17:26:24</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">System Time OK - 02-06-2017, 17:26:24</td> </tr> <tr> <td></td> <td>uptime</td> <td>OK</td> <td>17:26:59</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">OK: Systemuptime 6 days, 12:09:32.10.</td> </tr> <tr> <td></td> <td>vmware_tools</td> <td>OK</td> <td>17:25:13</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">1 services active (matching "VMware Tools"): OK</td> </tr> <tr> <td></td> <td>battery cmos</td> <td>OK</td> <td>17:28:46</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">OK - System Board CMOS Battery: ENABLED/OK [PRESENCEDETECTED]</td> </tr> <tr> <td></td> <td>battery perc</td> <td>OK</td> <td>17:27:20</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">OK - PERC1 ROMB Battery: ENABLED/OK [PRESENCEDETECTED]</td> </tr> <tr> <td></td> <td>cpu 1</td> <td>OK</td> <td>17:25:49</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">OK - CPU 1 (8 cores/16 threads): ENABLED/OK [Intel(R) Xeon(R) CPU E5-2650 v2 @ 2.60GHz]</td> </tr> <tr> <td></td> <td>cpu 2</td> <td>OK</td> <td>17:25:56</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">OK - 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OpenSSH_7.0 (protocol 2.0)</td> </tr> <tr> <td></td> <td>temperature board 1</td> <td>OK</td> <td>17:25:34</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">OK - System Board Inlet Temp: 15.0 C ENABLED/OK</td> </tr> <tr> <td></td> <td>temperature board 2</td> <td>OK</td> <td>17:29:17</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">OK - System Board Exhaust Temp: 35.0 C ENABLED/OK</td> </tr> <tr> <td></td> <td>temperature cpu 1</td> <td>OK</td> <td>17:26:57</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">OK - CPU1 Temp: 50.0 C ENABLED/OK</td> </tr> <tr> <td></td> <td>temperature cpu 2</td> <td>OK</td> <td>17:24:51</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">OK - CPU2 Temp: 47.0 C ENABLED/OK</td> </tr> <tr> <td></td> <td>vdisk 1</td> <td>OK</td> <td>17:26:39</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">OK - VDisk 1 (Virtual Disk 0): OK/ONLINE, RAID-1 (278.88 GB), BadBlock: 0 [Virtual Disk 0 on Integrated RAID Controller 1]</td> </tr> <tr> <td>esxi2-drac</td> <td>battery cmos</td> <td>OK</td> <td>17:24:50</td> <td>0d 4h 58m 3s</td> <td>1/1</td> <td colspan="2">OK - 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ENABLED/OK			fan 5	OK	17:26:04	0d 4h 58m 3s	1/1	OK - System Board Fan5: 2520 RPM - ENABLED/OK			fan 6	OK	17:27:40	0d 4h 58m 3s	1/1	OK - System Board Fan6: 2520 RPM - ENABLED/OK			http	OK	17:26:30	0d 4h 58m 3s	1/1	HTTP OK: HTTP/1.1 302 Moved Temporarily - 499 bytes in 0.256 second response time			memory 1	OK	17:26:48	0d 4h 58m 3s	1/1	OK - Memory 1 (DIMM Socket A1) 16.0 GB/1600 MHz: ENABLED/OK [DDR3, Hynix Semiconductor, S/N: 707197FF]			memory 2	OK	17:29:01	0d 4h 58m 3s	1/1	OK - Memory 2 (DIMM Socket A2) 16.0 GB/1600 MHz: ENABLED/OK [DDR3, Hynix Semiconductor, S/N: 70719823]			memory 3	OK	17:25:45	0d 4h 58m 3s	1/1	OK - Memory 3 (DIMM Socket A3) 16.0 GB/1600 MHz: ENABLED/OK [DDR3, Hynix Semiconductor, S/N: 2328B342]			memory 4	OK	17:26:54	0d 4h 58m 3s	1/1	OK - Memory 4 (DIMM Socket A4) 16.0 GB/1600 MHz: ENABLED/OK [DDR3, Hynix Semiconductor, S/N: 232CCA28]			memory 5	OK	17:27:59	0d 4h 58m 3s	1/1	OK - Memory 5 (DIMM Socket B2) 16.0 GB/1600 MHz: ENABLED/OK [DDR3, Hynix Semiconductor, S/N: 7071980D]			memory 6	OK	17:28:28	0d 4h 58m 3s	1/1	OK - 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	http	OK	17:26:30	0d 4h 58m 3s	1/1	HTTP OK: HTTP/1.1 302 Moved Temporarily - 499 bytes in 0.256 second response time																																																																																																																																																																																																																																																																																																																	
	memory 1	OK	17:26:48	0d 4h 58m 3s	1/1	OK - Memory 1 (DIMM Socket A1) 16.0 GB/1600 MHz: ENABLED/OK [DDR3, Hynix Semiconductor, S/N: 707197FF]																																																																																																																																																																																																																																																																																																																	
	memory 2	OK	17:29:01	0d 4h 58m 3s	1/1	OK - Memory 2 (DIMM Socket A2) 16.0 GB/1600 MHz: ENABLED/OK [DDR3, Hynix Semiconductor, S/N: 70719823]																																																																																																																																																																																																																																																																																																																	
	memory 3	OK	17:25:45	0d 4h 58m 3s	1/1	OK - Memory 3 (DIMM Socket A3) 16.0 GB/1600 MHz: ENABLED/OK [DDR3, Hynix Semiconductor, S/N: 2328B342]																																																																																																																																																																																																																																																																																																																	
	memory 4	OK	17:26:54	0d 4h 58m 3s	1/1	OK - Memory 4 (DIMM Socket A4) 16.0 GB/1600 MHz: ENABLED/OK [DDR3, Hynix Semiconductor, S/N: 232CCA28]																																																																																																																																																																																																																																																																																																																	
	memory 5	OK	17:27:59	0d 4h 58m 3s	1/1	OK - Memory 5 (DIMM Socket B2) 16.0 GB/1600 MHz: ENABLED/OK [DDR3, Hynix Semiconductor, S/N: 7071980D]																																																																																																																																																																																																																																																																																																																	
	memory 6	OK	17:28:28	0d 4h 58m 3s	1/1	OK - Memory 6 (DIMM Socket B3) 16.0 GB/1600 MHz: ENABLED/OK [DDR3, Hynix Semiconductor, S/N: 232CCAFF]																																																																																																																																																																																																																																																																																																																	
	memory 7	OK	17:29:00	0d 4h 58m 3s	1/1	OK - Memory 7 (DIMM Socket B4) 16.0 GB/1600 MHz: ENABLED/OK [DDR3, Hynix Semiconductor, S/N: 232CCAF0]																																																																																																																																																																																																																																																																																																																	
	memory 8	OK	17:28:54	0d 4h 58m 3s	1/1	OK - Memory 8 (DIMM Socket B1) 16.0 GB/1600 MHz: ENABLED/OK [DDR3, Hynix Semiconductor, S/N: 70719829]																																																																																																																																																																																																																																																																																																																	
	power supply 1	OK	17:25:05	0d 4h 58m 3s	1/1	OK - PS 1: OK, Volt IO: 264 V/230 V, Current: 0.2 A, Watt IO: 900.0 W/750 W																																																																																																																																																																																																																																																																																																																	
	power supply 2	OK	17:29:03	0d 4h 58m 3s	1/1	OK - PS 2: OK, Volt IO: 264 V/230 V, Current: 18.2 A, Watt IO: 900.0 W/750 W																																																																																																																																																																																																																																																																																																																	
	power unit	OK	17:26:59	0d 4h 58m 3s	1/1	PU 1: ENABLED/OK, RedundancyStatus: FULL, SystemBoard Pwr Consumption: 182 W																																																																																																																																																																																																																																																																																																																	
	ssh	OK	17:25:32	0d 4h 58m 3s	1/1	SSH OK - OpenSSH_7.0 (protocol 2.0)																																																																																																																																																																																																																																																																																																																	
	temperature board 1	OK	17:25:34	0d 4h 58m 3s	1/1	OK - System Board Inlet Temp: 15.0 C ENABLED/OK																																																																																																																																																																																																																																																																																																																	
	temperature board 2	OK	17:29:17	0d 4h 58m 3s	1/1	OK - System Board Exhaust Temp: 35.0 C ENABLED/OK																																																																																																																																																																																																																																																																																																																	
	temperature cpu 1	OK	17:26:57	0d 4h 58m 3s	1/1	OK - CPU1 Temp: 50.0 C ENABLED/OK																																																																																																																																																																																																																																																																																																																	
	temperature cpu 2	OK	17:24:51	0d 4h 58m 3s	1/1	OK - CPU2 Temp: 47.0 C ENABLED/OK																																																																																																																																																																																																																																																																																																																	
	vdisk 1	OK	17:26:39	0d 4h 58m 3s	1/1	OK - VDisk 1 (Virtual Disk 0): OK/ONLINE, RAID-1 (278.88 GB), BadBlock: 0 [Virtual Disk 0 on Integrated RAID Controller 1]																																																																																																																																																																																																																																																																																																																	
esxi2-drac	battery cmos	OK	17:24:50	0d 4h 58m 3s	1/1	OK - System Board CMOS Battery: ENABLED/OK [PRESENCEDETECTED]																																																																																																																																																																																																																																																																																																																	
	battery perc	OK	17:26:11	0d 4h 58m 3s	1/1	OK - PERC1 ROMB Battery: ENABLED/OK [PRESENCEDETECTED]																																																																																																																																																																																																																																																																																																																	
	cpu 1	OK	17:28:50	0d 4h 58m 3s	1/1	OK - CPU 1 (8 cores/16 threads): ENABLED/OK [Intel(R) Xeon(R) CPU E5-2650 v2 @ 2.60GHz]																																																																																																																																																																																																																																																																																																																	

En pratique! (10)

Administration avec EONWEB - LILAC



The screenshot displays the EONWEB configurator interface. At the top, there is a navigation bar with tabs for 'Projet', 'Disponibilités', 'Capacités', 'Production', 'Rapports', 'Administration', and 'Aide'. The 'Administration' tab is active, and the breadcrumb trail shows 'Administration -> Nagios --> configuration'. The main content area is titled 'EONWEB CONFIGURATOR' and includes a search bar and a navigation menu with options: 'General', 'Templates', 'Network', 'Imports', 'Tools', and 'About'. The 'GENERAL CONFIGURATION' section is highlighted with a blue border and contains the following items:

- Nagios Daemon Configuration**: Modify the general configuration of the Nagios Daemon
- Nagios Web Interface Configuration**: Modify the configuration of the Web Interface for Nagios
- Nagios Resources**: Modify the collection of resources to use as Nagios Macros
- Nagios Commands**: Nagios commands are used to check on devices, notifications and pro-active problem recovery.
- Time Periods**: Time Periods are used to designate ranges of times and exceptions
- Contacts**: Manage the collection of people who use the monitoring system
- Contact Groups**: Contact groups are collections of contacts which are responsible for hosts and services in the system
- Host Groups**: Host Groups are collections of hosts which share similar characteristics
- Service Groups**: Service groups are collections of services which share similar characteristics

En pratique! (11)

Exemple de modèles (schéma clair)

- Création de templates pour les hôtes et les services
 - Linux
 - Windows
 - VMware
 - BSD
 - Dell
 - Cisco
 - Extreme
 - Mikrosens
 - Firewall
 - ...
- Rattacher des services aux templates
- Passer des arguments aux services
- Analyse d'une commande check

General Templates Network Imports Tools About

General Inheritance Checks Flapping Logging Notifications **Services** Group Memberships Contacts Extended Information Dependencies Escalations

Check Command Parameters Auto-Discovery Filters

TEMPLATE INFO FOR LINUX

Services Explicitly Linked to This Host Template:

[Delete]	cpu
[Delete]	maj
[Delete]	memory
[Delete]	ntp
[Delete]	partitions
[Delete]	ssh
[Delete]	swap
[Delete]	syslog
[Delete]	system
[Delete]	uptime
[Delete]	vmware_tools

[Create A New Service For This Template]

General Templates Network Imports Tools About

General Inheritance Checks Flapping Logging Notifications **Services** Group Memberships Contacts Extended Information Dependencies Escalations

Check Command Parameters Auto-Discovery Filters

TEMPLATE INFO FOR CISCO

Services Explicitly Linked to This Host Template:

[Delete]	cpu
[Delete]	fan
[Delete]	free eth interfaces
[Delete]	memory
[Delete]	power supply
[Delete]	uptime
[Delete]	version ios

[Create A New Service For This Template]

General Templates Network Imports Tools About

General Inheritance **Checks** Flapping Logging Notifications Group Membership Contacts Extended Information Dependencies Escalations

Check Command Parameters

SERVICE INFO FOR MEMORY FOR HOST TEMPLATE WIN2K

Included in Definition:

Check Command: win_smp_memory!95190

Maximum Check Attempts: 1 - Inherited From GENERIC_SERVICE

Normal Check Interval: 5 - Inherited From GENERIC_SERVICE

Retry Interval: 5 - Inherited From GENERIC_SERVICE

Active Checks: Enabled - Inherited From GENERIC_SERVICE

Passive Checks: Disabled - Inherited From GENERIC_SERVICE

Check Period: 24x7 - Inherited From GENERIC_SERVICE

Parallize Checks: Enabled - Inherited From GENERIC_SERVICE

Obsess Over Service: Disabled - Inherited From GENERIC_SERVICE

Check Freshness: Disabled - Inherited From GENERIC_SERVICE

Freshness Threshold: 0 - Inherited From GENERIC_SERVICE

Event Handler: Enabled - Inherited From GENERIC_SERVICE

Event Handler Command: event-browser-service - Inherited From GENERIC_SERVICE

[Edit]

Back To Host Template WIN2K

En pratique! (12)

Au niveau du serveur eon de nombreux plugin sont fournis par défaut

/srv/eyesofnetwork/nagios-3.4.1/plugins/

Projet		Disponibilités	Capacités	Production	Rapports	Administration	Aide
Administration -> Nagios --> configuration							
authentication		check_cisco_asa_uptime		check_cisco_asa_uptime			<input type="checkbox"/>
groups		check_cisco_cpu		check_cisco_cpu			<input type="checkbox"/>
utilisateurs		check_cisco_ips_cpu		check_cisco_ips_cpu			<input type="checkbox"/>
processus		check_cisco_ips_mem		check_cisco_ips_mem			<input type="checkbox"/>
snmp		check_cisco_nexus_hardware		check_cisco_nexus_hardware			<input type="checkbox"/>
snmptrapd		check_cisco_nexus_mem		check_cisco_nexus_mem			<input type="checkbox"/>
sauvegardes		check_cisco_status		check_cisco_status			<input type="checkbox"/>
journaux		check_cisco_version_ios		check_cisco_version_ios			<input type="checkbox"/>
Nagios		check_cisco_wlc		check_cisco_wlc			<input type="checkbox"/>
configuration		check_cisco_wlc_ap		check_cisco_wlc_ap			<input type="checkbox"/>
équipements		check_cisco_wlc_status		check_cisco_wlc_status			<input type="checkbox"/>
modèles		check_cisco_wlc_users		check_cisco_wlc_users			<input type="checkbox"/>
applications		check_esxi5_cpu		check_esxi5_cpu			<input type="checkbox"/>
arrêts planifiés		check_esxi5_hardware		check_esxi5_hardware			<input type="checkbox"/>
notifications avancées		check_esxi5_memory		check_esxi5_memory			<input type="checkbox"/>
déploiement csv		check_esxi5_nic		check_esxi5_nic			<input type="checkbox"/>
synchronisation cacti		check_esxi5_runtime		check_esxi5_runtime			<input type="checkbox"/>
appliquer la configuration		check_esxi5_vm_list		check_esxi5_vm_list			<input type="checkbox"/>
rapports nagios		check_extreme_cpu		check_extreme_cpu			<input type="checkbox"/>
Ged		check_extreme_environement		check_extreme_environement			<input type="checkbox"/>
configuration		check_extreme_memory		check_extreme_memory			<input type="checkbox"/>
stockage		check_extreme_slot1		check_extreme_slot1			<input type="checkbox"/>
relais		check_extreme_slot2		check_extreme_slot2			<input type="checkbox"/>
client		check_extreme_slot3		check_extreme_slot3			<input type="checkbox"/>
Cartographies		check_extreme_slot4		check_extreme_slot4			<input type="checkbox"/>
nagvis		check_extreme_slot5		check_extreme_slot5			<input type="checkbox"/>
weathermap		check_extreme_slot6		check_extreme_slot6			<input type="checkbox"/>
Liens Externes		check_extreme_temperature		check_extreme_temperature			<input type="checkbox"/>
thruk		check_extreme_xos		check_extreme_xos			<input type="checkbox"/>
cacti		check_ftp		check if the ftp port is opened (21)			<input type="checkbox"/>
		check_hpjd		check the state of a HP JetDirec printer			<input type="checkbox"/>
		check_http		check a HTTP URL and return the exit code of the web page			<input type="checkbox"/>
		check_http_dell		check https dell idrac 8			<input type="checkbox"/>
		check_idrac_dell		check_idrac_dell			<input type="checkbox"/>
		check_local_disk		check the used space on a locale linux machine			<input type="checkbox"/>
		check_local_load		check the load average on a local linux machine			<input type="checkbox"/>
		check_local_procs		check the state of a running process on local linux host			<input type="checkbox"/>

En pratique! (13)

Au niveau du client

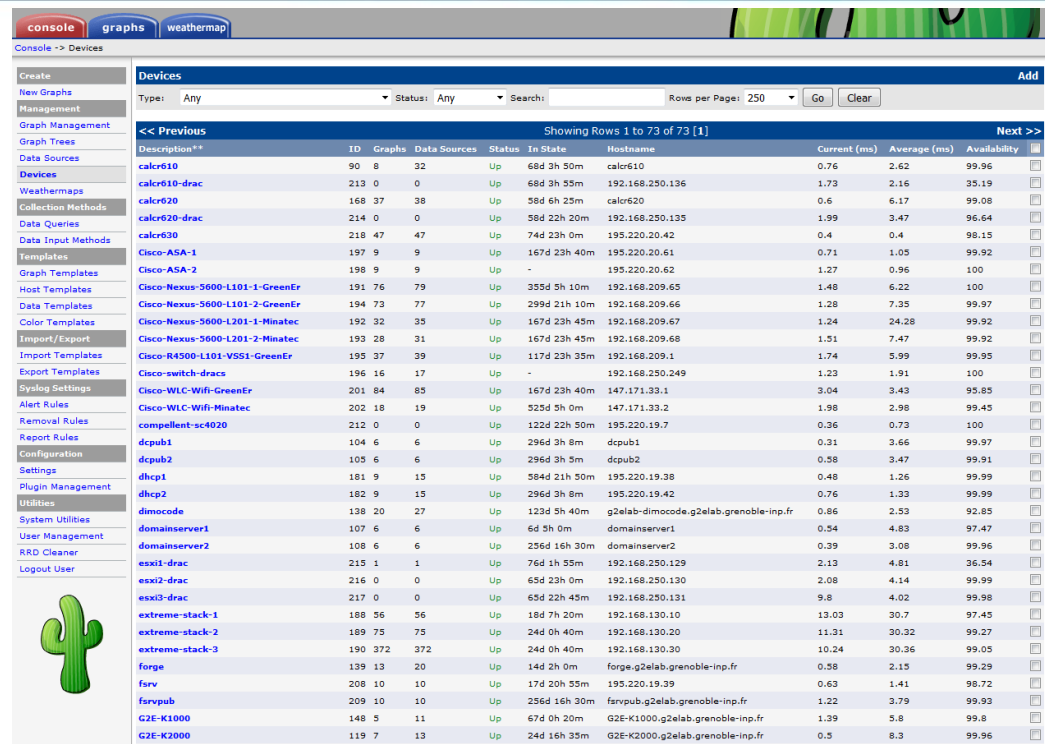
- Configurer les iptables
 - Port 161 snmp
 - Port 5666 nrpe

- Configurer snmp
 - Communauté, le serveur de supervision, location contact, ro user...

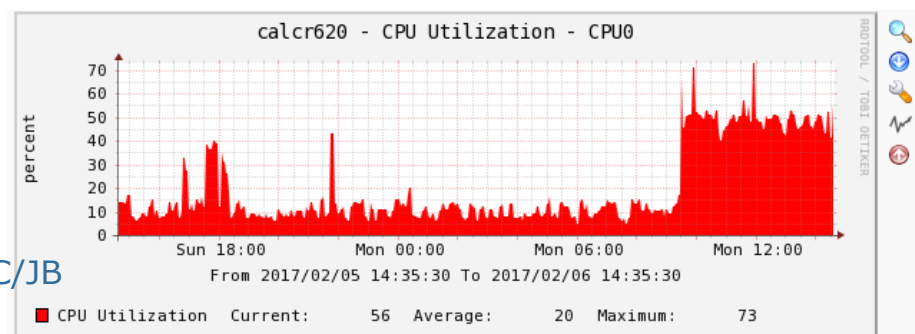
- Configurer nrpe et les nagios plugin
 - /etc/nagios/nrpe.cfg
 - IP serveur supervision
 - Exemple :
 - `command[check_ssh]=/usr/lib/nagios/plugins/check_ssh -H gmr.g2elab.grenoble-inp.fr -p 22`
 - `command[check_maj]=/usr/lib/nagios/plugins/nagios-apt-watch.py`
 - `command[check_ntp]=/usr/lib/nagios/plugins/check_ntp_peer -H ntp.ampere.inpg.fr -w 1 -c 2`
 - `command[check_mysql]=/usr/lib/nagios/plugins/check_mysql -H localhost -u root -p password`

En pratique! (14)

- **Métrologie**
- **Synchroniser les équipements Nagios avec Cacti**
- **Importer les templates**
- **Configurer l'équipement : hostname, snmp, associated graph template et associated data queries**

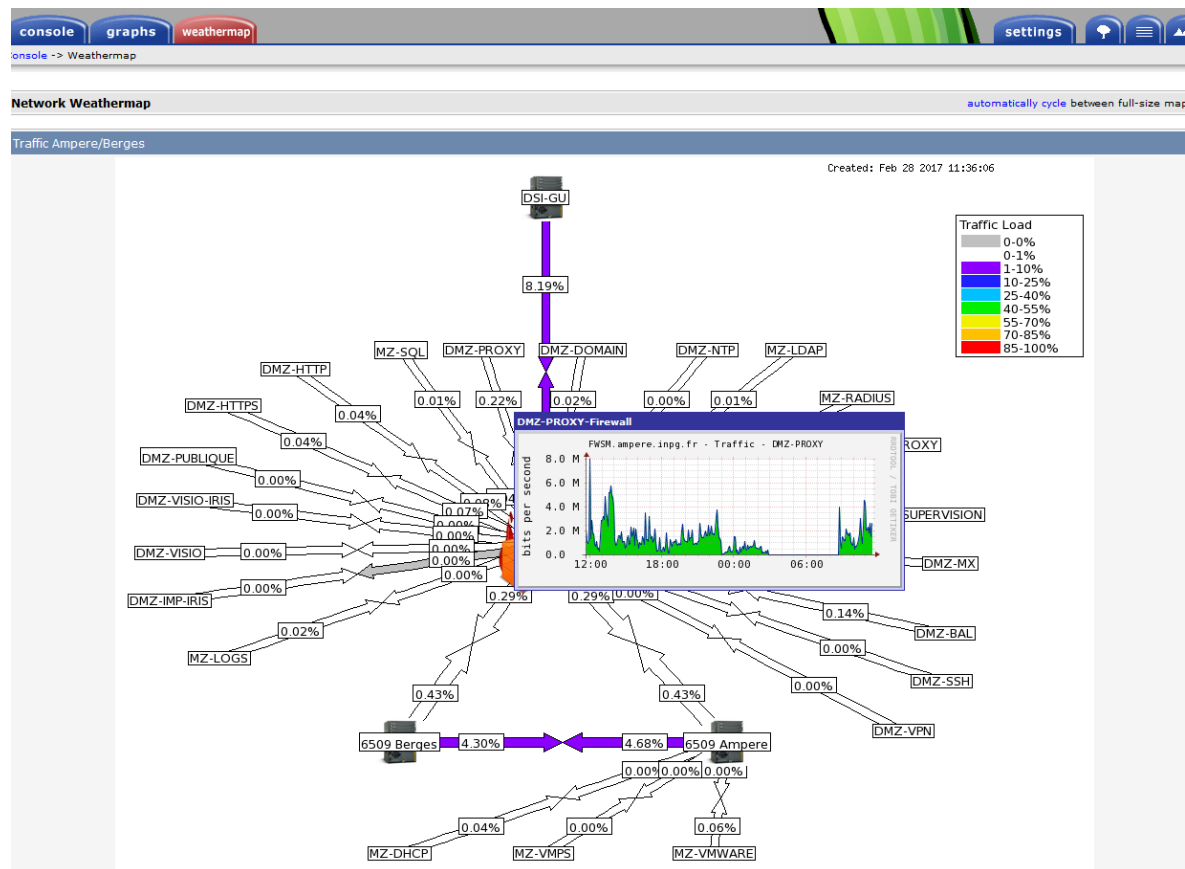


Description**	ID	Graphs	Data Sources	Status	In State	Hostname	Current (ms)	Average (ms)	Availability
calcr610	90	8	32	Up	68d 3h 50m	calcr610	0.76	2.62	99.96
calcr610-drac	213	0	0	Up	68d 2h 55m	192.168.250.136	1.73	2.16	25.19
calcr620	168	37	38	Up	56d 6h 25m	calcr620	0.6	6.17	99.08
calcr620-drac	214	0	0	Up	58d 22h 20m	192.168.250.135	1.99	3.47	96.64
calcr630	218	47	47	Up	74d 23h 0m	195.220.20.42	0.4	0.4	98.15
Cisco-ASA-1	197	9	9	Up	167d 23h 40m	195.220.20.61	0.71	1.05	99.92
Cisco-ASA-2	198	9	9	Up	-	195.220.20.62	1.27	0.96	100
Cisco-Nexus-5600-L101-1-GreenEr	191	76	79	Up	355d 5h 10m	192.168.209.65	1.48	6.22	100
Cisco-Nexus-5600-L101-2-GreenEr	194	73	77	Up	299d 21h 10m	192.168.209.66	1.28	7.35	99.97
Cisco-Nexus-5600-L201-1-Minatec	192	32	35	Up	167d 23h 45m	192.168.209.67	1.24	24.28	99.92
Cisco-Nexus-5600-L201-2-Minatec	193	28	31	Up	167d 23h 45m	192.168.209.68	1.51	7.47	99.92
Cisco-R4500-L101-VSSI-GreenEr	195	37	39	Up	117d 23h 35m	192.168.209.1	1.74	5.99	99.95
Cisco-switch-dracs	196	16	17	Up	-	192.168.250.249	1.23	1.91	100
Cisco-WLC-Wifi-GreenEr	201	84	85	Up	167d 23h 40m	147.171.33.1	3.04	3.43	95.85
Cisco-WLC-Wifi-Minatec	202	18	19	Up	525d 5h 0m	147.171.33.2	1.98	2.98	99.45
compellent-sc4020	212	0	0	Up	122d 22h 50m	195.220.19.7	0.36	0.73	100
dcpub1	104	6	6	Up	296d 3h 8m	dcpub1	0.31	3.66	99.97
dcpub2	105	6	6	Up	296d 3h 5m	dcpub2	0.58	3.47	99.91
dhcp1	181	9	15	Up	584d 21h 50m	195.220.19.38	0.48	1.26	99.99
dhcp2	182	9	15	Up	296d 3h 8m	195.220.19.42	0.76	1.33	99.99
dimocode	138	20	27	Up	123d 5h 40m	g2elab-dimocode.g2elab.grenoble-inp.fr	0.86	2.53	92.85
domainserver1	107	6	6	Up	6d 5h 0m	domainserver1	0.54	4.83	97.47
domainserver2	108	6	6	Up	256d 16h 30m	domainserver2	0.39	3.08	99.96
esxi1-drac	215	1	1	Up	76d 1h 55m	192.168.250.129	2.13	4.81	36.54
esxi2-drac	216	0	0	Up	65d 23h 0m	192.168.250.130	2.08	4.14	99.99
esxi3-drac	217	0	0	Up	65d 22h 45m	192.168.250.131	9.8	4.02	99.98
extreme-stack-1	188	56	56	Up	18d 7h 20m	192.168.130.10	13.03	30.7	97.45
extreme-stack-2	189	75	75	Up	24d 0h 40m	192.168.130.20	11.31	30.32	99.27
extreme-stack-3	190	372	372	Up	24d 0h 40m	192.168.130.30	10.24	30.36	99.05
forge	139	13	20	Up	14d 2h 0m	forge.g2elab.grenoble-inp.fr	0.58	2.15	99.29
fsrv	208	10	10	Up	17d 20h 55m	195.220.19.39	0.63	1.41	98.72
fsrvpub	209	10	10	Up	256d 16h 30m	fsrvpub.g2elab.grenoble-inp.fr	1.22	3.79	99.93
G2E-K1000	148	5	11	Up	67d 0h 20m	G2E-K1000.g2elab.grenoble-inp.fr	1.39	5.8	99.8
G2E-K2000	119	7	13	Up	24d 16h 35m	G2E-K2000.g2elab.grenoble-inp.fr	0.5	8.3	99.96



En pratique! (15)

- Contient de nombreux plugins !
- Ntop et Weathermap en natif



En pratique! (16)

- **Génération de graph en XML via import ou en création directe**
- **Mode debug du graph ou de la collect (snmp, php, perl...)**
- **Template de graph, host, data**
- **Avoir les bonnes MIB dans le template**

En pratique! (17)

Cartographie nagvis

EyesOfNetwork Utilisateur : admin - se déconnecter

Projet Disponibilités Capacités Production Rapports Administration Aide

Disponibilités -> Cartographies --> nagvis

NagVis Open Actions User menu Choose Language Need Help?

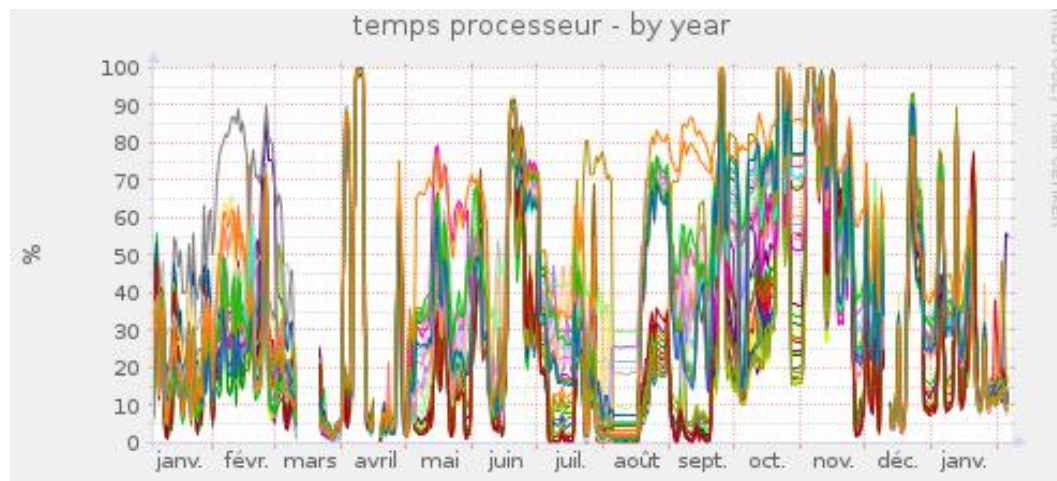
Réseau Ampère / Bergès

Host (Last state refresh: 2017-02-28 11:51:21)		
Host Name	6509-ampere.interne.ampere.inpg.fr	
Alias	Le 6509 du site Ampere	
State (State Type)	OK (OK)	
Output	PING OK - Paquets perdus = 0%, RTA = 1.11 ms	
Perfdata	rta=1.07000ms;3000.000000;5000.000000;0.000000 pl=0%;80;100;0	
Current attempt	1/1	
Last Check	2017-02-28 11:48:45	
Next Check	2017-02-28 11:53:55	
Last State Change	2017-02-08 15:03:51	
Summary State	OK	
Summary Output	The Host is UP, There are 8 OK Services.	
Service Name	State	Output
POWER_SUPPLY	OK	PS: OK - 2 PS are running all good
TEMPERATURE	OK	Temperature: OK - Temperature is 36 Celsius
VERSION_IOS	OK	12.2(18)SXD7b
MODULE	OK	Modules: OK - 6 Modules are running all good
MEMOIRE	OK	I/O:19%;Processor:14% : 15% : OK
FAN	OK	Fans: OK - 3 Fans are running all good
FREE_INTERFACE	OK	Free Interfaces: OK - 100/152 free interfaces for 14 days
CPU_IOS	OK	CPU : 10 8 8 : OK

En pratique! (18)

■ Et l'utilisateur dans tout ça?

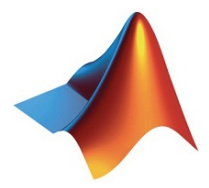
- Le programme open source munin pour les serveurs de calcul
- Graphique cpu & mémoire par jour semaine mois et année
- Simple, synthétique et efficace pour l'utilisateur



En pratique! (19)

■ Pour les utilisateurs ?

- Affichage en temps réel de l'état des 16 licences scientifiques du laboratoire avec Imutil Imstat



Etat des licences

Etat des licences Matlab le 06-02-2017 14:49. La page est rafraichie toutes les 60 secondes

Users of MATLAB: (Total of 46 licenses issued; Total of 28 licenses in use)
 Users of SIMULINK: (Total of 16 licenses issued; Total of 6 licenses in use)
 Users of Control_Toolbox: (Total of 9 licenses issued; Total of 0 licenses in use)
 Users of Data_Acq_Toolbox: (Total of 2 licenses issued; Total of 0 licenses in use)
 Users of RTW_Embedded_Coder: (Total of 4 licenses issued; Total of 0 licenses in use)
 Users of Fixed_Point_Toolbox: (Total of 4 licenses issued; Total of 0 licenses in use)
 Users of Instr_Control_Toolbox: (Total of 4 licenses issued; Total of 2 licenses in use)
 Users of MATLAB_Coder: (Total of 6 licenses issued; Total of 0 licenses in use)
 Users of MATLAB_Builder_for_Java: (Total of 2 licenses issued; Total of 0 licenses in use)
 Users of Compiler: (Total of 2 licenses issued; Total of 0 licenses in use)
 Users of Neural_Network_Toolbox: (Total of 3 licenses issued; Total of 0 licenses in use)
 Users of OPC_Toolbox: (Total of 3 licenses issued; Total of 0 licenses in use)
 Users of Optimization_Toolbox: (Total of 8 licenses issued; Total of 1 license in use)
 Users of Distrib_Computing_Toolbox: (Total of 7 licenses issued; Total of 1 license in use)
 Users of PDE_Toolbox: (Total of 3 licenses issued; Total of 0 licenses in use)
 Users of Robust_Toolbox: (Total of 2 licenses issued; Total of 0 licenses in use)
 Users of Signal_Toolbox: (Total of 10 licenses issued; Total of 1 license in use)
 Users of Power_System_Blocks: (Total of 13 licenses issued; Total of 3 licenses in use)
 Users of Simscape: (Total of 13 licenses issued; Total of 3 licenses in use)
 Users of Real-Time_Workshop: (Total of 6 licenses issued; Total of 0 licenses in use)
 Users of Simulink_Control_Design: (Total of 2 licenses issued; Total of 0 licenses in use)
 Users of Simulink_Design_Optim: (Total of 4 licenses issued; Total of 0 licenses in use)
 Users of XPC_Target: (Total of 4 licenses issued; Total of 0 licenses in use)
 Users of Stateflow: (Total of 2 licenses issued; Total of 0 licenses in use)
 Users of Statistics_Toolbox: (Total of 4 licenses issued; Total of 2 licenses in use)
 Users of Symbolic_Toolbox: (Total of 3 licenses issued; Total of 1 license in use)
 Users of Identification_Toolbox: (Total of 4 licenses issued; Total of 1 license in use)
 Users of Vehicle_Network_Toolbox: (Total of 4 licenses issued; Total of 0 licenses in use)
 Users of Embedded_IDE_Link: (Total of 4 licenses issued; Total of 0 licenses in use)
 Users of Target_Support_Package: (Total of 4 licenses issued; Total of 0 licenses in use)

Les licences disponibles sur le serveur sont " flottantes ". Vous n'utilisez qu'une licence lorsque vous ouvrez votre logiciel. Lorsque vous refermez celui-ci, la licence est disponible pour une autre personne.

Voici la liste des logiciels disponibles ainsi que le nombre de licences correspondant :

Logiciels	Plateformes	Nombre total de licences
- Cedrat Flux	Windows 7, 10, 2008	41
- Cedrat Got-It	Windows 7, 10, 2008	41
- Cedrat Inca3D	Windows 7, 10, 2008	40
- Comsol	Windows 7, 10, 2008	4
- Dymola	Windows 7, 10, 2008	2
- Eurostag	Windows 7, 10, 2008	27
- Maple	Windows 7, 10, 2008	5
- Mathcad	Windows 7, 10, 2008	15
- Mathematica	Windows 7, 10, 2008	5
- Matlab	Windows 7, 10, 2008	46
- Mentor Graphics - Flotherm	Windows 7, 10, 2008	4
- Orcad	Windows 7, 10, 2008	3
- Origin 8	Windows 7, 10, 2008	5
- Plects	Windows 7, 10, 2008	10
- Simplorer	Windows 7, 10, 2008	11
- Solidedge	Windows 7, 10, 2008	5



Retour d'expérience

■ Eon répond globalement à nos attentes depuis fin 2010

- Baisse des délais de détections
- Traitement rapide des incidents et anticipation de certains problèmes
- Point d'entrée unique clair : tableau de bord
- Graphiques utiles dans le temps
- Bien définir les modèles d'équipements et les services associés

■ Problèmes rencontrés

- Trouver les bonnes MIB de certains équipements dans Nagios et cacti
- Dans nagvis problème avec les maps trop grandes
- Implémentation de certains templates cacti
- Ouverture des filtres réseau
- Difficulté pour monitorer certains équipements
- Mise à jour de la solution EON 3
- Utilisation unique de Nagios. Abandon de shinken
- Solution packagé -> points positifs et négatifs
- Traiter et exploiter certaines informations dans les graphiques avec cacti
- Bug avec notre version de shinken
- Gestion des alertes par mails peut devenir pénible pour l'admin
- Quelques faux positifs

Retour d'expérience (2)

■ Perspectives et évolutions – axe de progression - améliorations

- Superviser et monitorer les microswitchs de l'ensemble du bâtiment GreEn-ER
- Etude de nouvelles solutions (en vrac centreon, netdata, graphana...)
- Orientation vers nagios et plus vers shinken pour eon?
- Passer à la version 5 de EON ou autre chose!!!
- Utiliser une solution non packagé?

Retour d'expérience (3)

- **Supervision en IPv6? Qui a déjà fait?**
- **Demande pas mal de temps et d'investissement**
- **Gestion des rapports à approfondir – disponibilité, tendances, performances, volumes d'incidents...**
- **Backup manager : sauvegarde des configurations à voir**
- **Démarche qualité / ITIL ?**

Merci !