

Sécurité des infrastructures

Monitoring

Présentation

- Monitoring
- Monitoring vs. Logging
- Protocoles
- Centreon

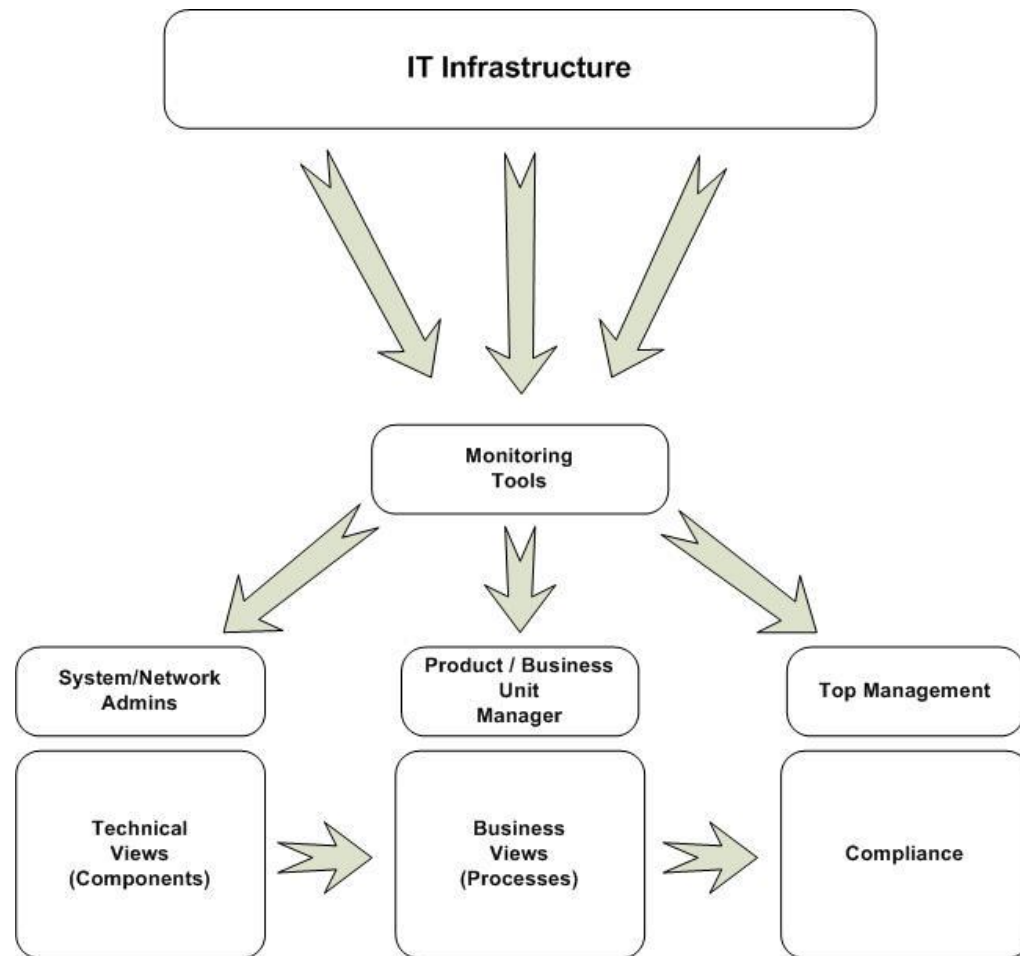
Monitoring

- Surveillance IT
- Assure la disponibilité et la performance
- Suivi en temps réel et historique des métriques
- Sécurité de l'infrastructure
 - Pics d'activité
 - Trafic réseau
 - Charges de travail élevées

Monitoring

- Quelques types de métriques
 - CPU
 - Mémoire vive
 - Espace disque
 - Processus et services
 - Accessibilité applications
 - Détection de malwares
 - Température
 - Cartes RAID
 - ...

Monitoring



Monitoring

- Challenges :
 - Pertinences des métriques
 - Mixité de technologies
 - Réseaux complexes
 - Alerting ?
 - Sécurité des communications



Monitoring

- Monitoring actif
 - Le serveur de monitoring va chercher l'information sur la machine
- Monitoring passif
 - Les équipements envoient les informations au serveur de monitoring

Monitoring



Monitoring

centreon

État des collecteurs 142 Hôtes 146 1 0 0 1748 Services 1660 31/01 34/03 1/34 0

Bienvenue Ipinhry | Déconnexion

Accueil Supervision Rapports Configuration Administration

Vues personnalisées Statistiques des collecteurs

Accueil > Vues personnalisées

VMware

Services

Host	Service	Status	Hard State	Duration	Tries	Status information
snr-clus-esx-n4	Esa-Memory	WARNING	1h 6m	3/3 0%	WARNING: 'snr-clus-esx-n4.int.centreon.com' Memor	
snr-clus-esx-n3	Esa-Memory	WARNING	3h 53m	3/3 0%	WARNING: 'snr-clus-esx-n3.int.centreon.com' Memor	
snr-clus-esx-n4	Esa-Time	CRITICAL	3h 54m	3/3 0%	CRITICAL: 'snr-clus-esx-n4.int.centreon.com' Time	
snr-clus-esx-n2	Esa-Time	CRITICAL	2d 14h	3/3 0%	CRITICAL: 'snr-clus-esx-n2.int.centreon.com' Time	
snr-clus-esx-n4	Esa-Time	CRITICAL	2d 14h	3/3 0%	CRITICAL: 'snr-clus-esx-n4.int.centreon.com' Time	
snr-clus-esx-n1	Esa-Time	CRITICAL	2d 16h	3/3 0%	CRITICAL: 'snr-clus-esx-n1.int.centreon.com' Time	
snr-clus-esx-gso	Esa-Service	CRITICAL	1M 2d	3/3 0%	CRITICAL: 'snr-esx-gso.merethis.net' services [o	

TOP 10 CPU

#	%	Hosts
#1	24%	snr-clus-esx-n3
#2	21%	snr-clus-esx-n1
#3	19%	snr-clus-esx-n2
#4	19%	snr-clus-esx-n4
#5	14%	snr-clus-esx-gso

TOP 10 Memory

#	%	Hosts	Remaining
#1	91%	snr-clus-esx-n3	6 GB remaining
#2	89%	snr-clus-esx-n1	16 GB remaining
#3	86%	snr-clus-esx-n4	10 GB remaining
#4	81%	snr-clus-esx-n2	20 GB remaining
#5	49%	snr-clus-esx-gso	4 GB remaining

Event Logs

Status	Object name	Date	Type	Ast.	Output
WARNING	snr-clus-esx-n4 / Esa-Memory	2017-04-24 10:39:22	HARD	3	WARNING: 'snr-clus-esx-n4.int.centreon.com' Memor
WARNING	snr-clus-esx-n4 / Esa-Memory	2017-04-24 10:38:22	SOFT	2	WARNING: 'snr-clus-esx-n4.int.centreon.com' Memor
WARNING	snr-clus-esx-n4 / Esa-Memory	2017-04-24 10:37:22	SOFT	1	WARNING: 'snr-clus-esx-n4.int.centreon.com' Memor
OK	snr-clus-esx-n3 / Esa-Alarms	2017-04-24 09:16:02	HARD	3	OK: No current alarms on host(s)
WARNING	snr-clus-esx-n3 / Esa-Alarms	2017-04-24 08:16:02	HARD	3	WARNING: 1 alarm(s) found(s)
OK	snr-clus-esx-n3 / Esa-Datastores-Latency	2017-04-24 07:55:07	HARD	3	OK: All Datastore latencies are ok
OK	snr-clus-esx-n3 / Esa-Swap	2017-04-24 07:53:27	HARD	3	OK: 'snr-clus-esx-n3.int.centreon.com' Swap In: 0
WARNING	snr-clus-esx-n3 / Esa-Memory	2017-04-24 07:52:27	HARD	3	WARNING: 'snr-clus-esx-n3.int.centreon.com' Memor
CRITICAL	snr-clus-esx-n3 / Esa-Time	2017-04-24 07:51:07	HARD	3	CRITICAL: 'snr-clus-esx-n3.int.centreon.com' Time
OK	snr-clus-esx-n3 / Esa-Cpu	2017-04-24 07:50:37	HARD	3	OK: 'snr-clus-esx-n3.int.centreon.com' Total Aver
OK	snr-clus-esx-n3 / Esa-Health	2017-04-24 07:49:47	HARD	3	OK: 'snr-clus-esx-n3.int.centreon.com' 202 health
CRITICAL	snr-clus-esx-n3 / Esa-Alarms	2017-04-24 07:46:02	HARD	3	CRITICAL: 1 alarm(s) found(s)
UNKNOWN	snr-clus-esx-n3 / Esa-Cpu	2017-04-24 07:45:37	HARD	3	UNKNOWN: Cannot get value for counters (Maybe, obj
UNKNOWN	snr-clus-esx-n3 / Esa-Datastores-Latency	2017-04-24 07:45:07	HARD	3	UNKNOWN: Host 'snr-clus-esx-n3.int.centreon.com'
CRITICAL	snr-clus-esx-n3 / Esa-Alarms	2017-04-24 07:45:02	SOFT	2	CRITICAL: 1 alarm(s) found(s)
UNKNOWN	snr-clus-esx-n3 / Esa-Health	2017-04-24 07:44:47	HARD	3	UNKNOWN: Host 'snr-clus-esx-n3.int.centreon.com'
UNKNOWN	snr-clus-esx-n3 / Esa-Cpu	2017-04-24 07:44:37	SOFT	2	UNKNOWN: Cannot get value for counters (Maybe, obj
UNKNOWN	snr-clus-esx-n3 / Esa-Datastores-Latency	2017-04-24 07:44:07	SOFT	2	UNKNOWN: Host 'snr-clus-esx-n3.int.centreon.com'
CRITICAL	snr-clus-esx-n3 / Esa-Alarms	2017-04-24 07:44:02	SOFT	1	CRITICAL: 1 alarm(s) found(s)
UNKNOWN	snr-clus-esx-n3 / Esa-Health	2017-04-24 07:43:47	SOFT	2	UNKNOWN: Host 'snr-clus-esx-n3.int.centreon.com'
UNKNOWN	snr-clus-esx-n3 / Esa-Cpu	2017-04-24 07:43:37	SOFT	1	UNKNOWN: Cannot get value for counters (Maybe, obj
UNKNOWN	snr-clus-esx-n3 / Esa-Swap	2017-04-24 07:43:27	HARD	3	UNKNOWN: Cannot get value for counters (Maybe, obj
UNKNOWN	snr-clus-esx-n3 / Esa-Memory	2017-04-24 07:43:17	HARD	3	UNKNOWN: Cannot get response (timeout received)
UNKNOWN	snr-clus-esx-n3 / Esa-Swap	2017-04-24 07:43:17	SOFT	2	UNKNOWN: Cannot get response (timeout received)
UNKNOWN	snr-clus-esx-n3 / Esa-Datastores-Latency	2017-04-24 07:43:07	SOFT	1	UNKNOWN: Host 'snr-clus-esx-n3.int.centreon.com'

Généré en 0,155 secondes

Documentation | Centreon Support | Centreon | Github Project

Copyright © 2005 - 2017

Monitoring vs. Logging

- Monitoring
 - Processus continu de collecte d'informations
 - Analyse des données en temps réel
 - Proactif
 - Prise de décision immédiate | Réactions
 - Processus actif

Monitoring vs. Logging

- Logging
 - Enregistrement des événements liés aux activités d'un SI
 - Historique des événements
 - Processus passif | Examen en cas de problème

Monitoring vs. Logging

- Quelques outils de monitoring

Nagios®

solarwinds 

 **centreon**

PAESSLER
PRTG 

 **icinga**

ZABBIX

Monitoring vs. Logging

- Quelques outils de logging

splunk® >

solarwinds 



graylog 

Protocoles

- Protocoles
 - ICMP (OSI couche 3)
 - SNMP (*Simple Network Management Protocol*)
 - WMI
 - NRPE
 - SSH
 - HTTP
 - SMTP
 - ...

Protocoles

- Protocoles
 - **ICMP (OSI couche 3)**
 - **SNMP (*Simple Network Management Protocol*)**
 - **WMI**
 - **NRPE**
 - SSH
 - HTTP
 - SMTP
 - ...

Protocoles (ICMP)

- ICMP (*Internet Control Message Protocol*)
- Protocole de couche 3
- *Default host check*
- Ping check

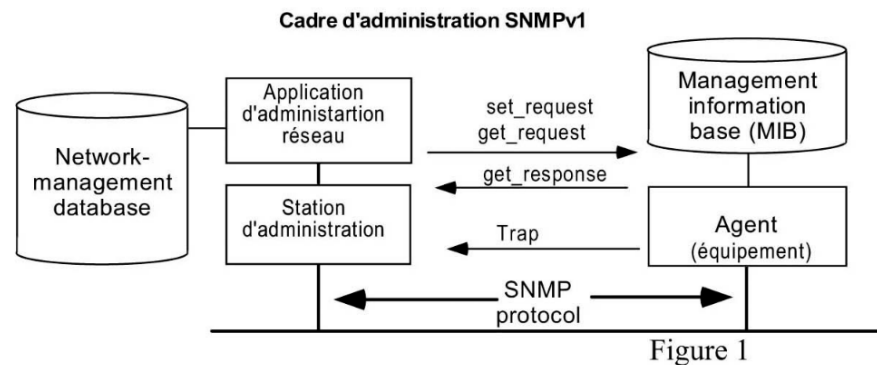
```
pierremichaux@  
$ ping google.be  
PING google.be (142.250.201.163): 56 data bytes  
64 bytes from 142.250.201.163: icmp_seq=0 ttl=59 time=23.028 ms  
64 bytes from 142.250.201.163: icmp_seq=1 ttl=59 time=21.299 ms  
64 bytes from 142.250.201.163: icmp_seq=2 ttl=59 time=22.351 ms  
64 bytes from 142.250.201.163: icmp_seq=3 ttl=59 time=23.781 ms  
64 bytes from 142.250.201.163: icmp_seq=4 ttl=59 time=16.436 ms  
64 bytes from 142.250.201.163: icmp_seq=5 ttl=59 time=17.105 ms  
^C  
--- google.be ping statistics ---  
6 packets transmitted, 6 packets received, 0.0% packet loss  
round-trip min/avg/max/stddev = 16.436/20.667/23.781/2.861 ms
```


Protocoles (SNMP)

- SNMP (*Simple Network Management Protocol*)
- RFC1157
- UDP 161 ou UDP 162 (TRAP)
- Versions v1 – v2 – v3
- SNMP vs SNMP TRAP
- MIB
- OID

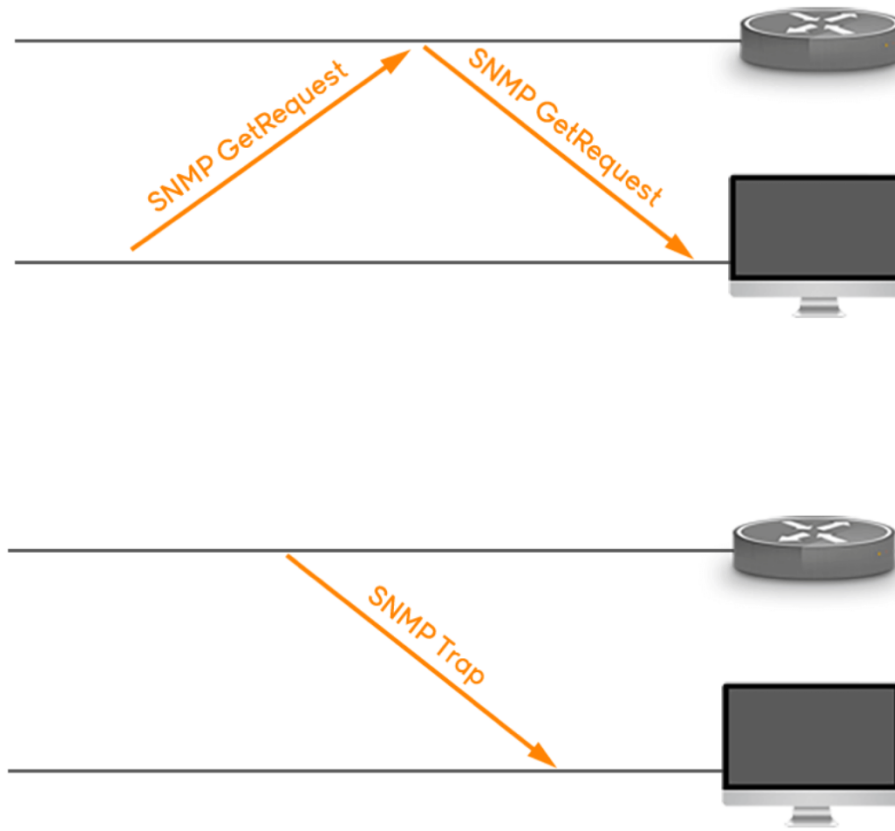
Protocoles (SNMP)

- SNMPv1 – SNMPv2
 - Versions similaires
 - v2 corrige quelques imperfections de la v1
 - String partagé agent gestionnaire → communauté
 - v2 intègre les TRAP SNMP



Protocoles (SNMP)

- SNMP vs. SNMP TRAP



Protocoles (SNMP)

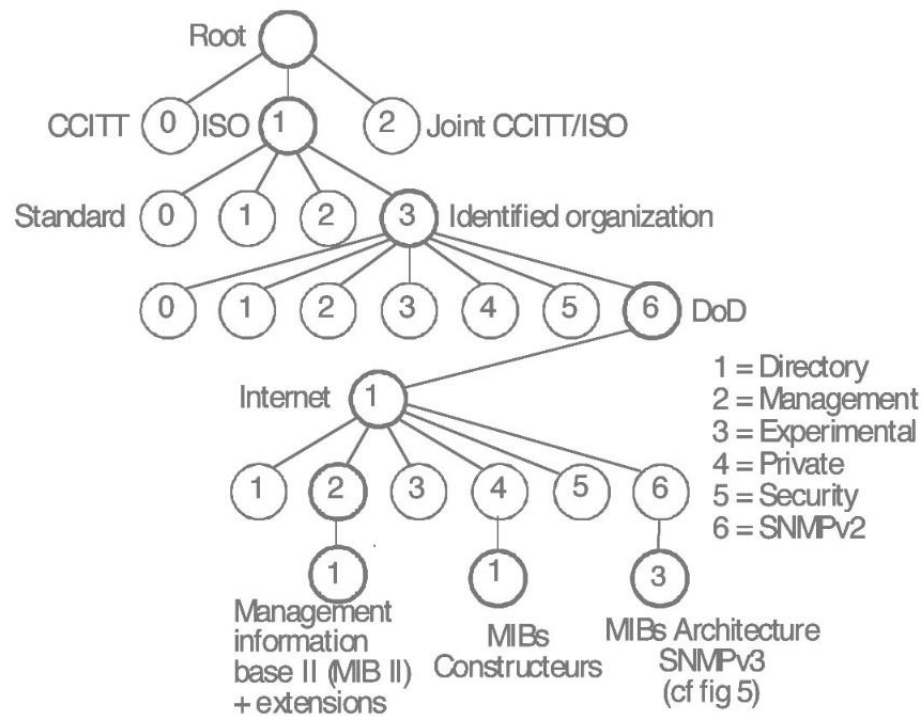
- SNMPv3
 - Amélioration du standard SNMPv2
 - Authentification
 - Chiffrement
 - DES

Protocoles (SNMP)

- MIB (Management Information Base)
 - Base de données contenant les objets gérables
 - Objet = donnée spécifique
 - Structuration hiérarchique
- OID (Object Identifier)
 - Identifiant **unique**
 - Objet contenu dans un MIB
 - Séquence de nombres séparés par des « . »
 - Séquence indique la position de l'objet dans le MIB

Protocoles (SNMP)

- MIB et OID



Protocoles (SNMP)

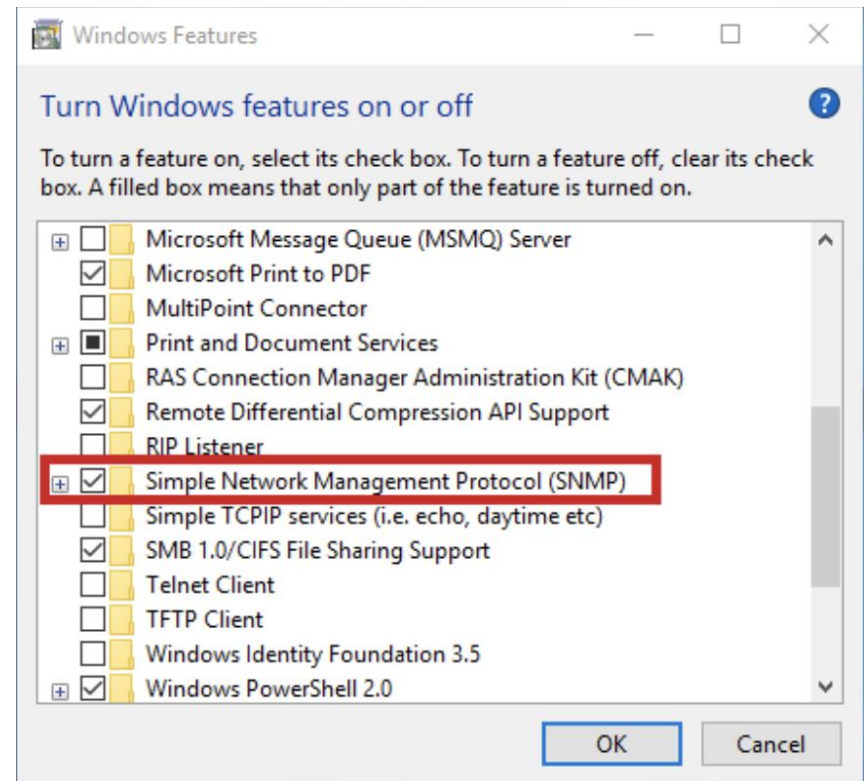
- Commandes
 - SNMPWALK
 - SNMPGET
 - SNMPBULKWALK
 - SNMPTABLE
 - SNMPSET
 - SNMPTRAPD

Protocoles (SNMP)

- Debian
 - Installation **SNMPD**
 - `/etc/snmp/snmpd.conf`
 - *agentaddress* → possibilité d'indiquer simplement le protocole:port
 - *viewssystemonly* → OID level
 - *rocommunity* → communauté pour v2c
 - SNMPv3
 - Authentification
 - Chiffrement
 - Création utilisateur
 - Création passphrase

Protocoles (SNMP)

- Windows
 - Installation dans rôles et services
 - Configuration *community string*
 - Restart service SNMP



Protocoles (SNMP)

- Commandes
 - **SNMPWALK**
 - **SNMPGET**
 - SNMPBULKWALK
 - SNMPTABLE
 - SNMPSET
 - SNMPTRAPD

```
HOST-RESOURCES-MIB::hrSWInstalledType.248 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.249 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.250 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.251 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.252 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.253 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.254 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.255 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.256 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.257 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.258 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.259 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.260 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.261 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.262 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.263 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.264 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.265 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.266 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.267 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.268 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.269 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.270 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.271 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.272 = INTEGER: application(4)
HOST-RESOURCES-MIB::hrSWInstalledType.273 = INTEGER: application(4)
^C
[root@localhost ~]#
```

[0] 0:btop 1:bash- 2:ssh* 3:ssh

Protocoles (WMI)

- WMI (*Windows Management Instrumentation*)
- Propriétaire Microsoft
- WMIC : ligne de commandes WMI (maintenant dépréciée)
- WMIC remplacé par WSMAN (*agentless*)
 - Activer WinRM
 - Configuration firewall (TCP 5986)
 - Création certificat *self-signed*
 - Création utilisateur dédié
 - Configuration WMI (ROOT/CIMv2)

Protocoles (NRPE)

- NRPE (*Nagios Remote PluginExecutor*)
- Monitoring via un agent
- Exécution de plugins sur un serveur (Linux / Windows)
- Commande *check_nrpe* sur le serveur de monitoring
- Agent **daemon nrpe** sous Linux
- Agent **NSClient++** sous Windows

Protocoles (NRPE)

- Paquet NRPE Centreon : **centreon-nrpe3-plugin**
- Paquet NRPE client Linux : **nrpe-ng**
- `/etc/nrpe/centreon-nrpe4.cfg`
- Configuration de base :
 - IP poller
 - Port
 - SSL
 - ...

```
command[check_users]=/usr/lib/nagios/plugins/check_users -w 5 -c 10
command[check_load]=/usr/lib/nagios/plugins/check_load -r -w .15,.10,.05 -c .30,.25,.20
command[check_hda1]=/usr/lib/nagios/plugins/check_disk -w 20% -c 10% -p /dev/hda1
command[check_zombie_procs]=/usr/lib/nagios/plugins/check_procs -w 5 -c 10 -s Z
command[check_total_procs]=/usr/lib/nagios/plugins/check_procs -w 150 -c 200
command[check_centreon_plugins]=/usr/lib/centreon/plugins/centreon_linux_local.pl --plugin=$ARG1$ --mode=$ARG2$ $ARG3$
```

Protocoles (NRPE)

- Agent Windows : **NSClient++**
- Directive **ssl_version=xxxxx**
- Commandes à ajouter dans le fichier .ini !

NSClient++ Configuration

Allowed hosts:

Password:

Modules to load:

- ☒ Enable common check plugins
- ☐ Enable nsclient server (check_nt)
- ☒ Enable NRPE server (check_nrpe)
 - ☒ Insecure legacy mode (required by old check_nrpe)
 - ☐ Safe mode (Use certificates for encryption but not authentication)
 - ☐ Secure (Use certificates for authentication)
- ☐ Enable NSCA client
- ☐ Enable Web server

Back Next Cancel

nsclient - Notepad

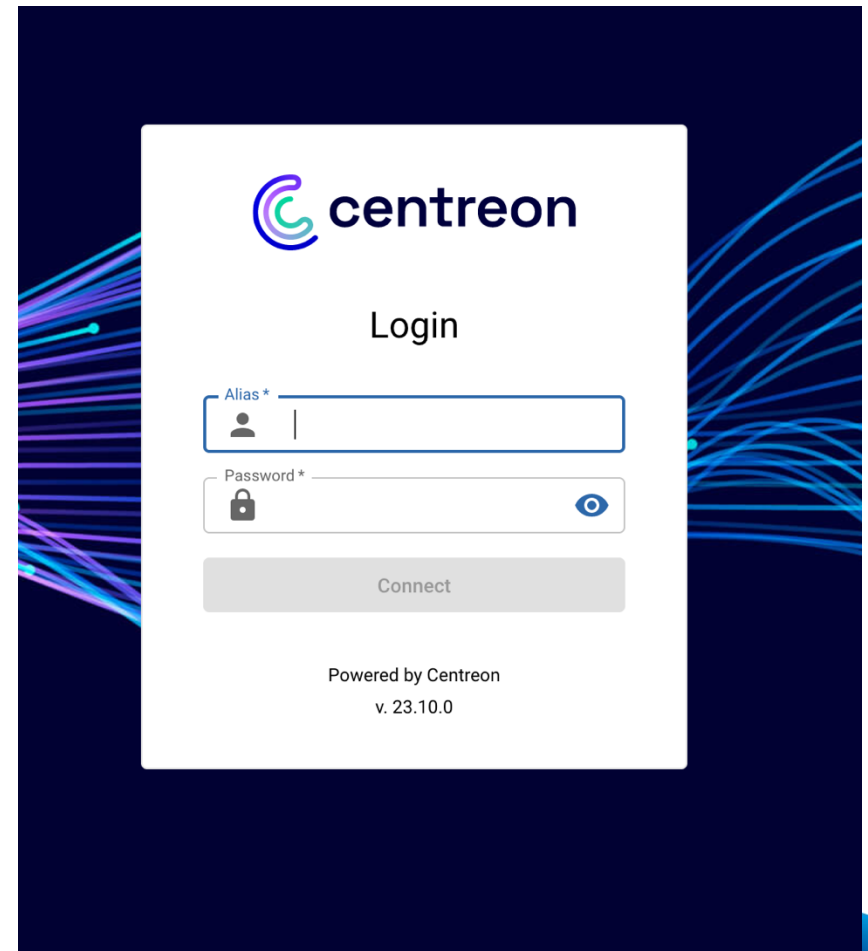
File Edit Format View Help

```
# If you want to fill this file with all available options run the following command:  
# nsclient --generate --add-defaults --load-all  
# If you want to activate a module and bring in all its options use:  
# nsclient --activate-module <MODULE NAME> --add-defaults  
# For details run: nsclient settings --help  
  
; in flight - TODO  
[/modules]  
  
; Undocumented key  
CheckNSCP = disabled  
  
; Undocumented key  
CheckEventLog = disabled  
  
; Undocumented key  
CheckHelpers = disabled  
  
; Undocumented key  
CheckDisk = disabled  
  
; Undocumented key  
NRPEserver = enabled  
  
; Undocumented key  
CheckSystem = disabled  
  
; Undocumented key  
<
```

Ln 1, Col 1

Centreon

- Monitoring / supervision
- Fork Nagios
- Licence GPL v2
- Open source
- CentOS
- Centreon Web
- Centreon Engine
- Centreon Broker



Centreon

- Home
- Monitoring
- Reporting
- Configuration
- Administration

The screenshot displays the Centreon web interface. The top navigation bar shows counts for Pollers (3), Services (0), and Hosts (13). The left sidebar contains links for Home, Monitoring, Reporting, Configuration, and Administration. The main content area is titled 'Monitoring > Resources Status'. It features a search bar with the query 'parent_name:Pierre_Nextcloud type:host'. Below the search bar are buttons for 'Acknowledge', 'Set downtime', and 'Forced check'. The 'Display view' is set to 'All'. A table lists resources with columns for Status, Resource, Parent, G, Duration, Last check, Information, and Tries. The table shows one resource with a status of 'Up' and a last check of '33s'.

Status	Resource	Parent	G	Duration	Last check	Information	Tries
Up	Pierre_Nextcloud			2w 5d	33s	OK - 10.200.20.28 rta 0.301ms lost 0%	1/3 (H)

Centreon – configuration

- Hosts
- Services
- Users
- Commands
- Notifications
- Monitoring collector manager
- Pollers
- Knowledge base (utilise MediaWiki)

Centreon – configuration

- Hosts

Host Configuration Notification Relations Data Processing Host Extended Infos

Add a Host

Host basic information

Name *	<input type="text"/>
Alias	<input type="text"/>
Address *	<input type="text"/> Resolve
SNMP Community & Version	<input type="text"/> v
Monitoring server	Central v
Timezone	Timezone v x

Templates

[?](#) A host or host template can have several templates. See help for more details.

[+](#) Add a new entry
Nothing here, use the "Add" button

[?](#) Create Services linked to the Template too ☒ Yes ☐ No

Host check options

? Check Command	Check Command i x
? Args	<input type="text"/> ← <input type="text"/>
? Custom macros	+ Add a new entry Nothing here, use the "Add" button

☐ Template inheritance
☐ Command inheritance

Scheduling options

? Check Period	Check Period v x
? Max Check Attempts	<input type="text"/>
? Normal Check Interval	<input type="text"/> * 60 seconds
? Retry Check Interval	<input type="text"/> * 60 seconds
? Active Checks Enabled	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Default
? Passive Checks Enabled	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Default

Centreon – configuration

Host Configuration **Notification** Relations Data Processing Host Extended Infos

I Add a Host

Notification

☐ Notification Enabled ☐ Yes ☐ No ☒ Default

Notification receivers

☐ Linked Contacts

☐ Linked Contact Groups

Notification options

☐ Notification Options ☐ Down ☐ Unreachable ☐ Recovery ☐ Flapping ☐ Downtime Scheduled ☐ None

☐ Notification Interval * 60 seconds

☐ Notification Period

☐ First notification delay * 60 seconds

☐ Recovery notification delay * 60 seconds

Save Reset

Centreon – configuration



- Services




General Information Notifications Relations Data Processing Extended Info

Add a Service



Service Basic Information

Name *

Hosts *  

Template   

Service Check Options

Check Command *  



Custom macros

☐ Template inheritance ☐ Command inheritance

[+ Add a new entry](#)
Nothing here, use the "Add" button

Args	Argument	Value	Example
	No argument found for this command		

Service Scheduling Options

Check Period  

Max Check Attempts

Normal Check Interval * 60 seconds

Retry Check Interval * 60 seconds

Active Checks Enabled ☐ Yes ☐ No ☒ Default

Passive Checks Enabled ☐ Yes ☐ No ☒ Default

Is Volatile ☐ Yes ☐ No ☒ Default

Save **Reset**

Centreon – configuration

- Users

General Information Centreon Authentication Additional Information

I Modify a User

General Information

? Alias / Login *

? Full Name *

? Email *

? Pager

? Contact template used

Group Relations

? Linked to Contact Groups

Notification

? Enable Notifications ☒ Yes ☐ No ☐ Default

Host

? Host Notification Options ☐ Down ☐ Unreachable ☐ Recovery ☐ Flapping ☐ Downtime Scheduled ☒ None

? Host Notification Period

? Host Notification Commands

Service

? Service Notification Options ☐ Warning ☐ Unknown ☐ Critical ☐ Recovery ☐ Flapping ☐ Downtime Scheduled ☒ None

? Service Notification Period

? Service Notification Commands

Centreon – configuration

- Commands

<input type="checkbox"/> Name	Command Line	Type	Host Uses	Services Uses	Status	Options
<input type="checkbox"/> App-Centreon-MySQL-Partitioning	\$CENTREONPLUGINS\$/centreon_centreon_database.pl --...	Check	0 (0)	0 (1)	ENABLED	⊗
<input type="checkbox"/> App-DB-MySQL	\$CENTREONPLUGINS\$/centreon_mysql.pl --plugin=datab...	Check	0 (0)	0 (6)	ENABLED	⊗
<input type="checkbox"/> App-DB-MySQL-Database-Size	\$CENTREONPLUGINS\$/centreon_mysql.pl --plugin=datab...	Check	0 (0)	0 (1)	ENABLED	⊗
<input type="checkbox"/> App-DB-MySQL-Long-Queries	\$CENTREONPLUGINS\$/centreon_mysql.pl --plugin=datab...	Check	0 (0)	0 (1)	ENABLED	⊗
<input type="checkbox"/> App-DB-MySQL-MariaDB-Replication	\$CENTREONPLUGINS\$/centreon_mysql.pl --plugin=datab...	Check	0 (0)	0 (1)	ENABLED	⊗
<input type="checkbox"/> App-DB-MySQL-Qcache-Hitrate	\$CENTREONPLUGINS\$/centreon_mysql.pl --plugin=datab...	Check	0 (0)	0 (1)	ENABLED	⊗
<input type="checkbox"/> App-DB-MySQL-Queries	\$CENTREONPLUGINS\$/centreon_mysql.pl --plugin=datab...	Check	0 (0)	0 (1)	ENABLED	⊗
<input type="checkbox"/> App-DB-MySQL-Sql	\$CENTREONPLUGINS\$/centreon_mysql.pl --plugin=datab...	Check	0 (0)	0 (1)	ENABLED	⊗
<input type="checkbox"/> App-DB-MySQL-Sql-String	\$CENTREONPLUGINS\$/centreon_mysql.pl --plugin=datab...	Check	0 (0)	0 (1)	ENABLED	⊗
<input type="checkbox"/> App-DB-MySQL-Threads-Connected	\$CENTREONPLUGINS\$/centreon_mysql.pl --plugin=datab...	Check	0 (0)	0 (1)	ENABLED	⊗
<input type="checkbox"/> App-Monitoring-Centreon-Central-Broker-Stats	\$CENTREONPLUGINS\$/centreon_centreon_central.pl --p...	Check	0 (0)	0 (1)	ENABLED	⊗
<input type="checkbox"/> App-Monitoring-Centreon-Host-Dummy	\$CENTREONPLUGINS\$/centreon_centreon_poller.pl --pl...	Check	0 (2)	0 (0)	ENABLED	⊗
<input type="checkbox"/> App-Monitoring-Centreon-Service-Dummy	\$CENTREONPLUGINS\$/centreon_centreon_poller.pl --pl...	Check	0 (0)	0 (1)	ENABLED	⊗

Centreon – configuration

- Commands

Check	
? Command Name	base_host_alive
? Command Type	<input type="radio"/> Notification <input checked="" type="radio"/> Check <input type="radio"/> Misc <input type="radio"/> Discovery
? Command Line	<code>\$USER1\$/check_icmp -H \$HOSTADDRESS\$ -w 3000.0,80% -c 5000.0,100% -p 1</code>
? Enable shell	<input type="checkbox"/>
? Argument Example	
? Argument Descriptions	
? Macros Descriptions	Describe macros
Additional Information	
? Connectors	Select a connector...
? Graph template	
? Status	<input checked="" type="checkbox"/> Enabled <input type="checkbox"/> Disabled
? Comment	

Centreon – configuration

- Macro (<https://assets.nagios.com/downloads/nagioscore/docs/nagioscore/3/en/macrolist.html>)

Legend:

No	The macro is not available
Yes	The macro is available

Macro Name	Service Checks	Service Notifications	Host Checks	Host Notifications	Service Event Handlers and OSCP	Host Event Handlers and OSCP	Service Perf Data	Host Perf Data
Host Macros: ³								
\$HOSTNAME\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTDISPLAYNAME\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTALIAS\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTADDRESS\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTSTATE\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTSTATEID\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$LASTHOSTSTATE\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$LASTHOSTSTATEID\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTSTATETYPE\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTATTEMPT\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$MAXHOSTATTEMPTS\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTEVENTID\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$LASTHOSTEVENTID\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTPROBLEMID\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$LASTHOSTPROBLEMID\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTLATENCY\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTEXECUTIONTIME\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTDURATION\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTDURATIONSEC\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTDOWNTIME\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTPERCENTCHANGE\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTGROUPNAME\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTGROUPNAMES\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$LASTHOSTCHECK\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$LASTHOSTSTATECHANGE\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$LASTHOSTUP\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$LASTHOSTDOWN\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$LASTHOSTUNREACHABLE\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTOUTPUT\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$LONGHOSTOUTPUT\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTPERFDATA\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTCHECKCOMMAND\$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
\$HOSTACKAUTHOR\$ ⁸	No	No	No	Yes	No	No	No	No
\$HOSTACKAUTHORNAME\$ ⁸	No	No	No	Yes	No	No	No	No
\$HOSTACKAUTHORALIAS\$ ⁸	No	No	No	Yes	No	No	No	No
\$HOSTACKCOMMENT\$ ⁸	No	No	No	Yes	No	No	No	No

Centreon – configuration

- Custom macro
 - Host : `$_HOST****`
 - Service : `$_SERVICE****`





The screenshot shows a web interface for configuring custom macros. It contains two rows of input fields. The first row has 'Macro name' set to 'USERLOGIN', 'Macro value' set to 'john-doe', and a 'Mot de passe' (Password) checkbox that is unchecked. The second row has 'Macro name' set to 'USERPASSWORD', 'Macro value' set to a masked password '.....', and a 'Mot de passe' checkbox that is checked. To the right of each row are icons for clearing the password (a red circle with a white 'x') and a crosshair icon.

Macro name : <input type="text" value="USERLOGIN"/>	Macro value : <input type="text" value="john-doe"/>	Mot de passe : <input type="checkbox"/>	 
Macro name : <input type="text" value="USERPASSWORD"/>	Macro value : <input type="text" value="....."/>	Mot de passe : <input checked="" type="checkbox"/>	 

- Cas spéciaux
 - SNMP communauté → `$_HOSTSNMPCOMMUNITY$`
 - SNMP version → `$_HOSTSNMPVERSION$`

Centreon – configuration



- Pollers
 - Serveurs équipés avec un *scheduler* et un *broker module* (serveur de monitoring)

<input type="checkbox"/> Name	IP Address	Server type	Is running ?	Conf Changed *	PID	Uptime	Last Update	Version	Default	Status	Actions	Options
<input type="checkbox"/> Central	127.0.0.1	Central	YES	NO	19303	19 days	April 16, 2024 1:47:37 PM	Centreon Engine 23.10.0	Yes	ENABLED	 	1 <div>30</div>

- Recharge configuration

I Configuration Files Export

Polling instances

 Pollers 

Actions

 ☒ Generate Configuration Files

 ☒ Run monitoring engine debug (-v)

 ☒ Move Export Files

 ☒ Restart Monitoring Engine Method

 ☐ Post generation command

Export

Centreon – administration

- Pour aller plus loin...
 - Configuration authentication (// LDAP)
 - Restrictions visions via ACL
 - Backup configuration
 - Images personnalisées
 - Extensions (gratuites et payantes)
 - Logging
 - ...