

TP - Monitoring : Cacti

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Démarrer le firewall IPTABLES :

```
iptables -F
:INPUT ACCEPT [0:0]
:FORWARD ACCEPT [0:0]
:OUTPUT ACCEPT [0:0]
-A INPUT -m state --state RELATED,ESTABLISHED -j ACCEPT
-A INPUT -p ipv6-icmp -j ACCEPT
-A INPUT -i lo -j ACCEPT
-A INPUT -p tcp -m state --state NEW -m tcp --dport 22 -j ACCEPT
-A INPUT -p udp -s 192.168.58.0/24 --dport 161 -j ACCEPT
-A INPUT -p udp -s 192.168.58.0/24 --dport 162 -j ACCEPT
-A INPUT -d fe80::/64 -p udp -m udp --dport 546 -m state --state NEW -j ACCEPT
-A INPUT -j REJECT --reject-with icmp6-adm-prohibited
-A FORWARD -j REJECT --reject-with icmp6-adm-prohibited
COMMIT
```

Exemples d'utilisation de snmpwalk/snmpget :

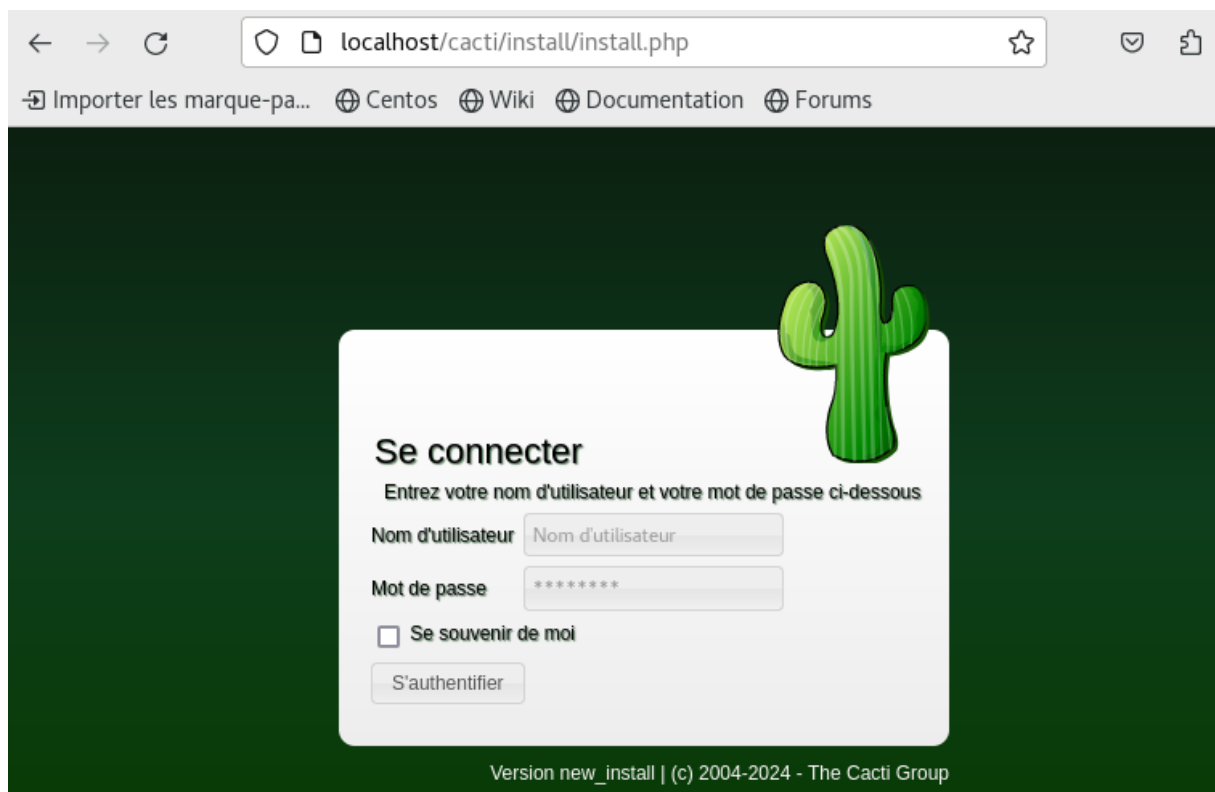
```
snmpwalk -v2c -c LPESSIR 192.168.58.133 .iso.org.dod.internet.mgmt.mib-2.system
NOTIFICATION-LOG-MIB::nlmStatsGlobalNotificationsBumped.0 = Counter32: 0 notifications
SCTP-MIB::sctpCurrEstab.0 = Gauge32: 0
SCTP-MIB::sctpActiveEstabs.0 = Counter32: 0
SCTP-MIB::sctpPassiveEstabs.0 = Counter32: 0
SCTP-MIB::sctpAbortedS.0 = Counter32: 0
SCTP-MIB::sctpShutdowns.0 = Counter32: 0
SCTP-MIB::sctpOutOfBlues.0 = Counter32: 0
SCTP-MIB::sctpChecksumErrors.0 = Counter32: 0
SCTP-MIB::sctpOutCtrlChunks.0 = Counter64: 0
SCTP-MIB::sctpOutOrderChunks.0 = Counter64: 0
SCTP-MIB::sctpOutUnorderChunks.0 = Counter64: 0
SCTP-MIB::sctpInCtrlChunks.0 = Counter64: 0
SCTP-MIB::sctpInOrderChunks.0 = Counter64: 0
SCTP-MIB::sctpInUnorderChunks.0 = Counter64: 0
SCTP-MIB::sctpFragUsrMsgs.0 = Counter64: 0
SCTP-MIB::sctpReasmUsrMsgs.0 = Counter64: 0
SCTP-MIB::sctpOutSCTPPacks.0 = Counter64: 0
SCTP-MIB::sctpInSCTPPacks.0 = Counter64: 0
SCTP-MIB::sctpDiscontinuityTime.0 = Timeticks: (0) 0:00:00.00
SCTP-MIB::sctpRtoAlgorithm.0 = INTEGER: 0
SCTP-MIB::sctpRtoMin.0 = Gauge32: 0 milliseconds
SCTP-MIB::sctpRtoMax.0 = Gauge32: 0 milliseconds
SCTP-MIB::sctpRtoInitial.0 = Gauge32: 0 milliseconds
SCTP-MIB::sctpMaxAssocs.0 = INTEGER: 0
SCTP-MIB::sctpValCookieLife.0 = Gauge32: 0 milliseconds
SCTP-MIB::sctpMaxInitRetr.0 = Gauge32: 0
[student@remote-linux ~]$
```

```
[student@remote-linux ~]$ snmpget -v2c -c LPESSIR 192.168.58.133 .iso.org.dod.internet.mgmt.mib-2.system.sysName.0
SNMPv2-MIB::sysName.0 = STRING: cacti
[student@remote-linux ~]$ snmpget -v2c -c LPESSIR 192.168.58.133 .iso.org.dod.internet.mgmt.mib-2.system.sysLocation.0
SNMPv2-MIB::sysLocation.0 = STRING: Salle 23 (edit /etc/snmp/snmpd.conf)
[student@remote-linux ~]$
```

Redémarrer le service httpd.

```
[root@cacti sysconfig]# systemctl restart httpd
[root@cacti sysconfig]#
```

Mise en marche de Cacti :



A screenshot of a web browser showing the Cacti login page. The browser's address bar displays 'localhost/cacti/install/install.php'. Below the address bar, there are links for 'Importer les marque-pa...', 'Centos', 'Wiki', 'Documentation', and 'Forums'. The main content area has a dark green background with a white login box in the center. The box is titled 'Se connecter' and contains a cactus icon in the top right corner. Inside the box, there is a prompt to enter the username and password, followed by input fields for 'Nom d'utilisateur' and 'Mot de passe'. A checkbox for 'Se souvenir de moi' and a 'S'authentifier' button are also present. At the bottom of the page, the text 'Version new_install | (c) 2004-2024 - The Cacti Group' is visible.

localhost/cacti/install/install.php

Importer les marque-pa... Centos Wiki Documentation Forums

Se connecter

Entrez votre nom d'utilisateur et votre mot de passe ci-dessous

Nom d'utilisateur

Mot de passe

☐ Se souvenir de moi

Version new_install | (c) 2004-2024 - The Cacti Group

Mise à jour du mot de passe Cacti :



A screenshot of the Cacti password change page. A grey button labeled 'Mettre à jour' is in the top left. The page has a dark green background with a white form box in the center. The box is titled 'Modifier le mot de passe' and features a cactus icon in the top right corner. Below the title, there is a prompt to enter a new password. The form contains three input fields: 'Mot de passe actuel', 'Nouveau mot de passe', and 'Confirmer le nouveau mot de passe'. The first field has five dots, while the other two have eight dots. Green checkmarks are next to the last two fields. A 'Sauvegarder' button is at the bottom left of the form. A red error message at the bottom states: 'Your password must contain at least 1 special character!'.

Mettre à jour

Modifier le mot de passe

Please enter your new Cacti password.

Mot de passe actuel

Nouveau mot de passe ✓ ⓘ

Confirmer le nouveau mot de passe ✓

Your password must contain at least 1 special character!

Additional SNMP Options

Version de SNMP ?	Version 2 ▾
Communauté SNMP ?	LPESSIR
Port SNMP ?	161
Délai maximum pour le SNMP ?	500
Nombre maximum d'OID par requête GET ?	10 OID's ▾
Bulk Walk Maximum Repetitions ?	Auto Detect/Set on first Re-Index ▾
Tentatives SNMP ?	3

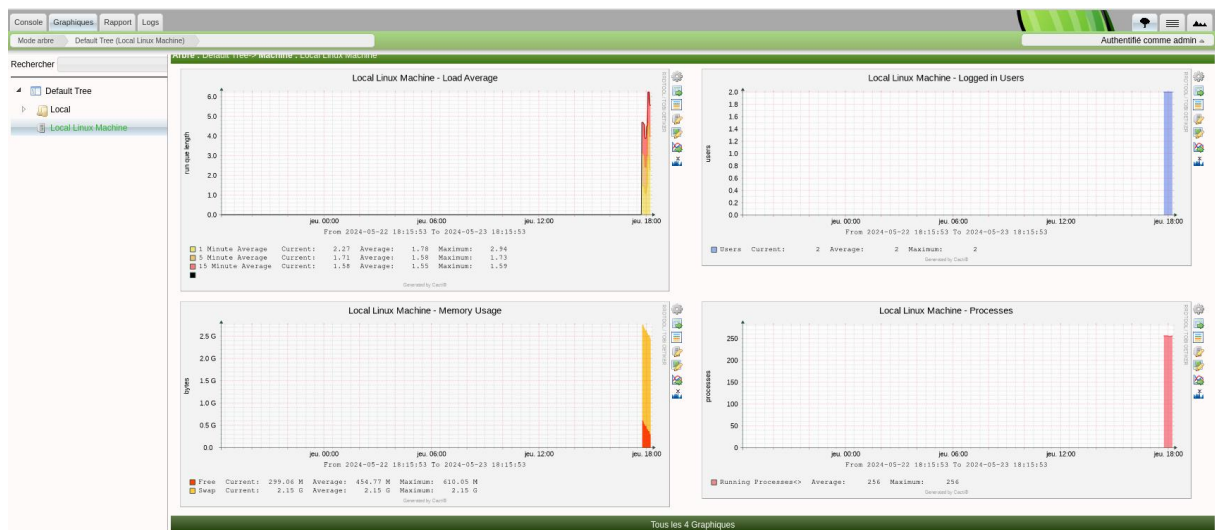
[Précédent](#)[Suivant](#)

User Management [éditer : localhost] ?

Nom d'utilisateur ?	localhost
Nom complet ?	localhost
Adresse e-mail ?	localhost@gmail.com
Mot de passe ?	***** *****
Activé ?	<input checked="" type="checkbox"/>
Verrouillé ?	<input type="checkbox"/>
Options du compte d'utilisateur ?	<input checked="" type="checkbox"/> Must Change Password at Next Login <input checked="" type="checkbox"/> Modifier le mot de passe <input checked="" type="checkbox"/> Maintain Custom Graph and User Settings
Options des graphiques ?	<input checked="" type="checkbox"/> User Has Rights to Tree View <input checked="" type="checkbox"/> User Has Rights to List View <input checked="" type="checkbox"/> User Has Rights to Preview View
Options d'authentification ?	<input checked="" type="radio"/> Show the page that user pointed their browser to. <input type="radio"/> Montrer l'écran console par défaut. <input type="radio"/> Montrer l'écran des graphiques par défaut.
Authentication Realm ?	Local ▾

[Retour](#)[Sauvegarder](#)

Ajout d'un graphique sur la machine Cacti :



Création des « user guest » (par défaut) :

User Management (éditer : guest)

Nom d'utilisateur	guest
Nom complet	Guest Account
Adresse e-mail	
Mot de passe	*****
Activé	<input checked="" type="checkbox"/>
Verrouillé	<input type="checkbox"/>
Options du compte d'utilisateur	<input checked="" type="checkbox"/> Must Change Password at Next Login <input checked="" type="checkbox"/> Modifier le mot de passe <input checked="" type="checkbox"/> Maintain Custom Graph and User Settings
Options des graphiques	<input checked="" type="checkbox"/> User Has Rights to Tree View <input checked="" type="checkbox"/> User Has Rights to List View <input checked="" type="checkbox"/> User Has Rights to Preview View
Options d'authentification	<input checked="" type="checkbox"/> Show the page that user pointed their browser to. <input type="checkbox"/> Montrer l'écran console par défaut. <input type="checkbox"/> Montrer l'écran des graphiques par défaut.
Authentication Realm	Local

Création des « noc » :

Général Permissions Adhésion au groupe Graph Perms Device Perms Template Perms

Tree Perms Paramètres de l'utilisateur

User Management (éditer : noc)

Nom d'utilisateur	noc
Nom complet	noc
Adresse e-mail	noc@gmail.com
Mot de passe	*****
Activé	<input checked="" type="checkbox"/>
Verrouillé	<input type="checkbox"/>
Options du compte d'utilisateur	<input type="checkbox"/> Must Change Password at Next Login <input checked="" type="checkbox"/> Modifier le mot de passe <input checked="" type="checkbox"/> Maintain Custom Graph and User Settings
Options des graphiques	<input checked="" type="checkbox"/> User Has Rights to Tree View <input checked="" type="checkbox"/> User Has Rights to List View <input checked="" type="checkbox"/> User Has Rights to Preview View
Options d'authentification	<input checked="" type="checkbox"/> Show the page that user pointed their browser to. <input type="checkbox"/> Montrer l'écran console par défaut. <input type="checkbox"/> Montrer l'écran des graphiques par défaut.
Authentication Realm	Local

Retour Sauvegarder

Configuration du fichier « iptables » de la machine « remote-linux » :

```
# sample configuration for iptables service
# you can edit this manually or use system-config-firewall
# please do not ask us to add additional ports/services to this default configura$
*filter
:INPUT ACCEPT [0:0]
:FORWARD ACCEPT [0:0]
:OUTPUT ACCEPT [0:0]
-A INPUT -m state --state RELATED,ESTABLISHED -j ACCEPT
-A INPUT -p icmp -j ACCEPT
-A INPUT -i lo -j ACCEPT
-A INPUT -p tcp -m state --state NEW -m tcp --dport 22 -j ACCEPT
-A INPUT -p udp -s 192.168.58.0/24 --dport 161 -j ACCEPT
-A INPUT -p udp -s 192.168.58.0/24 --dport 161 -j ACCEPT
-A INPUT -j REJECT --reject-with icmp-host-prohibited
-A FORWARD -j REJECT --reject-with icmp-host-prohibited
COMMIT
```

Snmppwal depuis cacti vers 192.168.58.134 :

```
SCTP-MIB::sctpCurrEstab.0 = Gauge32: 0
SCTP-MIB::sctpActiveEstabs.0 = Counter32: 0
SCTP-MIB::sctpPassiveEstabs.0 = Counter32: 0
SCTP-MIB::sctpAbortedS.0 = Counter32: 0
SCTP-MIB::sctpShutdowns.0 = Counter32: 0
SCTP-MIB::sctpOutOfBlues.0 = Counter32: 0
SCTP-MIB::sctpChecksumErrors.0 = Counter32: 0
SCTP-MIB::sctpOutCtrlChunks.0 = Counter64: 0
SCTP-MIB::sctpOutOrderChunks.0 = Counter64: 0
SCTP-MIB::sctpOutUnorderChunks.0 = Counter64: 0
SCTP-MIB::sctpInCtrlChunks.0 = Counter64: 0
SCTP-MIB::sctpInOrderChunks.0 = Counter64: 0
SCTP-MIB::sctpInUnorderChunks.0 = Counter64: 0
SCTP-MIB::sctpFragUsrMsgs.0 = Counter64: 0
SCTP-MIB::sctpReasmUsrMsgs.0 = Counter64: 0
SCTP-MIB::sctpOutSCTPPacks.0 = Counter64: 0
SCTP-MIB::sctpInSCTPPacks.0 = Counter64: 0
SCTP-MIB::sctpDiscontinuityTime.0 = Timeticks: (0) 0:00:00.00
SCTP-MIB::sctpRtoAlgorithm.0 = INTEGER: 0
SCTP-MIB::sctpRtoMin.0 = Gauge32: 0 milliseconds
SCTP-MIB::sctpRtoMax.0 = Gauge32: 0 milliseconds
SCTP-MIB::sctpRtoInitial.0 = Gauge32: 0 milliseconds
SCTP-MIB::sctpMaxAssocs.0 = INTEGER: 0
SCTP-MIB::sctpValCookieLife.0 = Gauge32: 0 milliseconds
SCTP-MIB::sctpMaxInitRetr.0 = Gauge32: 0
[root@cacti sysconfig]#
```

Commande avec « sysName »

```
[root@cacti sysconfig]# snmpget -v2c -c LPESSIR 192.168.58.134 .iso.org.dod.intern
et.mgmt.mib-2.system.sysName.0
```

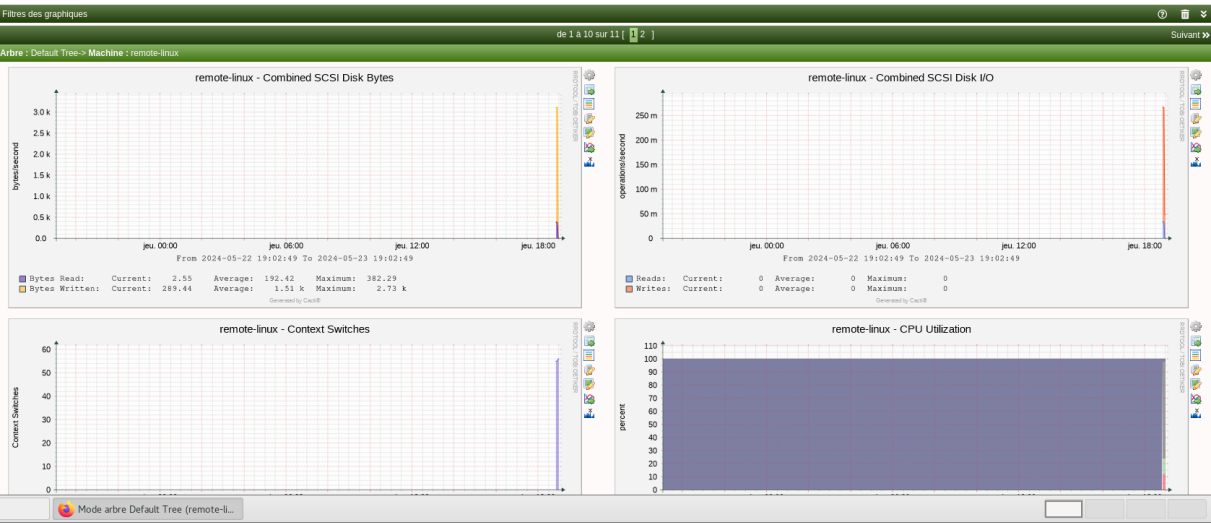
Commande avec « SysLoaction »

```
[root@cacti sysconfig]# snmpget -v2c -c LPESSIR 192.168.58.134 .iso.org.dod.intern
et.mgmt.mib-2.system.sysLocation.0
SNMPv2-MIB::sysLocation.0 = STRING: Salle 22 (edit /etc/snmp/snmpd.conf)
```

Aperçu de l’ajout de l’équipement remote-linux

remote-linux (192.168.58.134)
Information SNMP

Système: Linux remote-linux 3.10.0-1160.118.1.el7.x86_64 #1 SMP Wed Apr 24 16:01:50 UTC 2024 x86_64
Temps d'activation & #160;; 128200 (0jours, 0heures, 21minutes)
Nom de machine : remote-linux
Lieu : Salle 22 (edit /etc/snmp/snmpd.conf)
Contact : Root root@localhost (configure /etc/snmp/snmp.local.conf)



IMPORTANT : Pour ajouter le graphique, il faut aller dans Gestion > équipement et l’ajouter comme ceci et cliquer sur « Go » :

Equipements

Tous les 3 Equipements

Description de l'équipement	Nom d'ôte	ID	Graphiques	Sources de données	État	Actif depuis	Durée de fonctionnement	Temps de collecte	Actuel (ms)	Moyen (ms)	Disponibilité
Local Linux Machine	localhost	1	4	5	Up	N/A	N/A	0.29	0	0	62.07 %
localhost	localhost	2	4	5	Up	2h:25m	N/A	2.02	0	0	62.07 %
remote-linux	192.168.58.134	3	11	18	Up	25m	39m	0.24	15.37	4.27	100 %

Tous les 3 Equipements

Placer sur un arbre (Default Tree)

Go