

Eines per a l'administració de sistemes a gran escala

Accés remot

		SO de la màquina remota	
		Windows	GNU/Linux
SO de la màquina local	Windows	TeamViewer (GUI)	PUTTY (CLI)
	GNU/Linux	rdesktop (GUI)	ssh (CLI) vinagre (GUI)

Gestió d'incidències i control d'inventari

GLPI

<http://www.glpi-project.org/>

Instal·lació

1. apt-get update
2. apt-get install apache2 libapache2-mod-php5 php5 php5-mysql
3. apt-get install mysql-server

Configuració del paquet «mysql-server-5.5»	
New password for the MySQL "root" user:	PASSWORD
Repeat password for the MySQL "root" user:	PASSWORD

4. apt-get install glpi

Configuració del paquet «glpi»	
Configure database for glpi with dbconfig-common?	Sí
Password of the database's administrative user:	PASSWORD
MySQL application password for glpi:	PASSWORD
Confirmeu la contrasenya:	PASSWORD

5. `nano /etc/apache2/httpd.conf` afegeix la línia

`ServerName tallerXXX`

6. `service apache2 restart`

Accés

http://ip_del_servidor/glpi



OCS inventory

<http://www.ocsinventory-ng.org/en/>

Instal·lació

1. `apt-get update`
2. `apt-get install apache2 libapache2-mod-php5 php5 php5-mysql`
3. `nano /etc/apache2/httpd.conf` afegeix la línia

`ServerName tallerXXX`

4. `apt-get install mysql-server`

Configuració del paquet «mysql-server-5.5»	
New password for the MySQL "root" user:	PASSWORD
Repeat password for the MySQL "root" user:	PASSWORD

5. `apt-get install dmidecode libapache2-mod-perl2 libapache2-mod-php5 libapache-dbi-perl libdbd-mysql-perl libdbi-perl libinnodb3 libio-compress-perl libnet-ip-perl libnet-snmp-perl libnet-ssleay-perl libphp-pclzip libproc-daemon-perl libproc-pid-file-perl libsoap-lite-perl libsys-syslog-perl libwww-perl libxml-simple-perl make net-tools nmap pciutils php5-gd read-edid smartmontools`

6. `cpan -i XML:Entities`

CPAN.pm requires configuration, but most of it can be done automatically. If you answer 'no' below, you will enter an interactive dialog for each configuration option instead.	
Would you like to configure as much as possible automatically? [yes]	Prem Enter
What approach do you want? (Choose 'local::lib', 'sudo' or 'manual') [local::lib]	Prem Enter
Would you like me to automatically choose some CPAN mirror sites for you? (This means connecting to the Internet) [yes]	Prem Enter
Would you like me to append that to /root/.bashrc now? [yes]	Prem Enter

7. `wget https://launchpad.net/ocsinventory-server/stable-2.0/2.0.5/+download/OCSNG_UNIX_SERVER-2.0.5.tar.gz`
8. `tar zxvf OCSNG_UNIX_SERVER-2.0.5.tar.gz`
9. `cd OCSNG_UNIX_SERVER-2.0.5/`
10. `sh setup.sh`

Welcome to OCS Inventory NG Management server setup

Checking for Apache web server binaries

Do you wish to continue ([y]/n)?	Prem Enter
----------------------------------	------------

Checking for database server properties

Which host is running database server [localhost] ?	Prem Enter
---	------------

On which port is running database server [3306] ?	Prem Enter
---	------------

Checking for Apache web server daemon

Where is Apache daemon binary [/usr/sbin/apache2] ?	Prem Enter
---	------------

Checking for Apache main configuration file

Where is Apache main configuration file [etc/apache2/apache2.conf] ?	Prem Enter
--	------------

Checking for Apache user account

Which user account is running Apache web server [www-data] ?	Prem Enter
--	------------

Checking for Apache group

Which user group is running Apache web server [www-data] ?	Prem Enter
--	------------

Checking for Apache Include configuration directory	
Where is Apache Include configuration directory [etc/apache2/conf.d] ?	Prem Enter

Checking for PERL Interpreter	
Where is PERL Intrepreter binary [usr/bin/perl] ?	Prem Enter
Do you wish to setup Communication server on this computer ([y]/n)?	Prem Enter

Checking for Communication server log directory	
Where to put Communication server log directory [var/log/ocsinventory-server] ?	Prem Enter

Now configuring Apache web server	
Do you allow Setup renaming Communication Server Apache configuration file to 'z-ocsinventory-server.conf' ([y]/n) ?	Prem Enter

Do you wish to setup Administration Server (Web Administration Console) on this computer ([y]/n)?	Prem Enter
---	------------

Checking for Administration Server directories	
Do you wish to continue ([y]/n)?	Prem Enter
Where to copy Administration Server static files for PHP Web Console [usr/share/ocsinventory-reports] ?	Prem Enter
Where to create writable/cache directories for deployment packages, administration console logs, IPDiscover [var/lib/ocsinventory-reports] ?	Prem Enter

11. `service apache2 restart`

12. Accedeix a la consola a través d'un navegador web (`http://ip_del_servidor/ocsreports`). En "Usuari MySQL" escriu **root** i en "Contrasenya MySQL" escriu **PASSWORD**. Prem **Aceptar**

OCS-NG Inventory Installation

 DB configuration not completed. Automatic install launched

 **WARNING:** You will not be able to build any deployment package with size greater than 100MB. You must raise both `post_max_size` and `upload_max_filesize` in your `php.ini` to increase this limit.
WARNING: If you change default database name (ocsweb), don't forgot to update your ocs engine files

Usuario MySQL:

Contraseña MySQL:

Name of Database:

Nombre del servidor MySQL:

Després de prémer “Aceptar” hauràs generat la base de dades i el navegador mostrarà:

OCS-NG Inventory Installation

 DB configuration not completed. Automatic install launched

Please wait, database update may take up to 30 minutes.....

 Database successfully generated

MySQL config file successfully written (using ocs account)

Database engine checking.....

Database engine successfully updated (1 table(s) altered)

WARNING: files/ocsagent.exe missing, if you do not reinstall the DEPLOY feature won't be available

Table 'files' was empty

No subnet.csv file to import

Network netid computing. Please wait...

Network netid was computed => 0 successful, 0 were already computed, 0 were not computable

Netmap netid computing. Please wait...

Netmap netid was computed => 0 successful, 0 were already computed, 0 were not computable

Cleaning orphans.....

0 orphan lines deleted

Cleaning netmap...

0 netmap lines deleted

**Please enter the label of the windows client tag input box:
(Leave empty if you don't want a popup to be shown on each agent launch)**

13. Tanca el navegador

Seguretat de la configuració d'OCS inventory server

14. `rm /usr/share/ocsinventory-reports/ocsreports/install.php`
 15. `mysql -u root -p`

```
mysql> UPDATE mysql.user SET Password = PASSWORD('PASSWORD') WHERE User = 'ocs';
mysql> flush privileges;
mysql> quit;
```

16. `nano /usr/share/ocsinventory-reports/ocsreports/dbconfig.inc.php`
 canvia la línia

```
define("PSWD_BASE","PASSWORD");
```

17. `nano /etc/apache2/conf.d/z-ocsinventory-server.conf`
 canvia la línia

```
PerlSetVar OCS_DB_PWD PASSWORD
```

18. `service apache2 restart`

Instal·lació de l'Agent en el servidor

19. `wget https://launchpad.net/ocsinventory-unix-agent/stable-2.0/2.0.5/+download/Ocsinventory-Unix-Agent-2.0.5.tar.gz`
 20. `tar zxvf Ocsinventory-Unix-Agent-2.0.5.tar.gz`
 21. `cd Ocsinventory-Unix-Agent-2.0.5/`
 22. `perl Makefile.PL`
 23. `make`
 24. `make install`

Do you want to configure the agent Please enter 'y' or 'n'?> [y]	Prem Enter
Where do you want to write the configuration file? 0 -> /etc/ocsinventory 1 -> /usr/local/etc/ocsinventory 2 -> /etc/ocsinventory-agent ?>	2
Do you want to create the directory /etc/ocsinventory-agent? Please enter 'y' or 'n'?> [y]	Prem Enter
What is the address of your ocs server?> [ocsinventory-ng]	tallerXXX
Do you need credential for the server? (You probably don't) Please enter 'y' or 'n'?> [n]	Prem Enter
Do you want to apply an administrative tag on this machine .	Prem Enter

Please enter 'y' or 'n'?> [y]	
tag?>	tallerXXX
Do yo want to install the cron task in /etc/cron.d Please enter 'y' or 'n'?> [y]	Prem Enter
Where do you want the agent to store its files? (You probably don't need to change it)?> [/var/lib/ocsinventory-agent]	Prem Enter
Do you want to create the /var/lib/ocsinventory-agent directory? Please enter 'y' or 'n'?> [y]	Prem Enter
Should I remove the old linux_agent Please enter 'y' or 'n'?> [n]	Prem Enter
Do you want to use OCS-Inventory software deployment feature? Please enter 'y' or 'n'?> [y]	Prem Enter
Do you want to use OCS-Inventory SNMP scans feature? Please enter 'y' or 'n'?> [y]	Prem Enter
Do you want to send an inventory of this machine? Please enter 'y' or 'n'?> [y]	Prem Enter

25. service apache2 restart

Accés

http://ip_del_servidor/ocsreports

Inicia la sessió amb l'usuari admin i la contrasenya admin

Apareix una alerta de seguretat que t'indica que l'usuari admin té la contrasenya predeterminada.

✖

SECURITY ALERT!

The default login/password is activate on OCS GUI

Ver. **2.0.5**

⏻
🔑



Prem a sobre la clau amb fons lila de la dreta per canviar la contrasenya.

user ID: admin

Tipo: Super administrators ▼

Grupo: ▼ +

Nombre:

LASTNAME:

E-mail:

Comentarios:

Contraseña:

✔
✖

Prem a sobre el botó verd i tanca la finestra. Actualitza la pàgina del navegador prement F5 i veuràs aquesta imatge.

Not supported

Ver. **2.0.5**

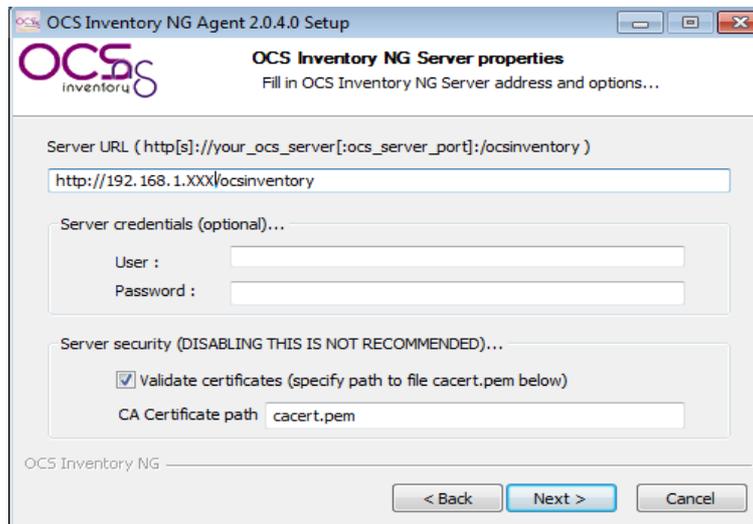
⏻
🔑

ACTIVIDAD
SOFTWARE
HARDWARE
OTROS
MESSAGES

Computadores en la base	1
Computadores vistos	1
Computadores que contactaron al servidor hoy	1
Número de computadores inventariados hoy	1
Computadores no vistos desde hace más de 30 días	0
Number of SNMP devices	0

Instal·lació de l'Agent en Windows

1. Descarrega l'arxiu <http://launchpad.net/ocsinventory-windows-agent/2.0/2.0.4/+download/OCSNG-Windows-Agent-2.0.4.0.zip>
2. Descomprimeix i instal·la. Has de tenir en compte que has de canviar l'adreça URL del servidor.



Instal·lació de l'Agent en Ubuntu

1. `apt-get install dmidecode libxml-simple-perl libio-compress-perl libnet-ip-perl libwww-perl libdigest-md5-perl libnet-ssleay-perl libcrypt-ssleay-perl libnet-snmp-perl libproc-pid-file-perl libproc-daemon-perl net-tools libsys-syslog-perl pciutils smartmontools read-edid nmap`
2. `wget https://launchpad.net/ocsinventory-unix-agent/stable-2.0/2.0.5/+download/Ocsinventory-Unix-Agent-2.0.5.tar.gz`
3. `tar zxvf Ocsinventory-Unix-Agent-2.0.5.tar.gz`
4. `cd Ocsinventory-Unix-Agent-2.0.5/`
5. `perl Makefile.PL`
6. `make`
7. `make install`

Do you want to configure the agent Please enter 'y' or 'n'?> [y]	Prem Enter
Where do you want to write the configuration file? 0 -> /etc/ocsinventory 1 -> /usr/local/etc/ocsinventory 2 -> /etc/ocsinventory-agent ?>	2
Do you want to create the directory /etc/ocsinventory-agent? Please enter 'y' or 'n'?> [y]	Prem Enter

What is the address of your ocs server?> [ocsinventory-ng]	ip_servidor
Do you need credential for the server? (You probably don't) Please enter 'y' or 'n'?> [n]	Prem Enter
Do you want to apply an administrative tag on this machine . Please enter 'y' or 'n'?> [y]	Prem Enter
tag?>	tallerXXX
Do yo want to install the cron task in /etc/cron.d Please enter 'y' or 'n'?> [y]	Prem Enter
Where do you want the agent to store its files? (You probably don't need to change it)?> [/var/lib/ocsinventory-agent]	Prem Enter
Do you want to create the /var/lib/ocsinventory-agent directory? Please enter 'y' or 'n'?> [y]	Prem Enter
Should I remove the old linux_agent Please enter 'y' or 'n'?> [n]	Prem Enter
Do you want to use OCS-Inventory software deployment feature? Please enter 'y' or 'n'?> [y]	Prem Enter
Do you want to use OCS-Inventory SNMP scans feature? Please enter 'y' or 'n'?> [y]	Prem Enter
Do you want to send an inventory of this machine? Please enter 'y' or 'n'?> [y]	Prem Enter

Monitoratge

Nagios

<http://www.nagios.org/>

Instal·lació

1. apt-get update
2. apt-get install nagios3 nagios-nrpe-plugin

Postfix Configuration	
Tipus de configuració del correu:	Lloc d'Internet
Nom del correu del sistema:	tallerXXX.dXXX.local

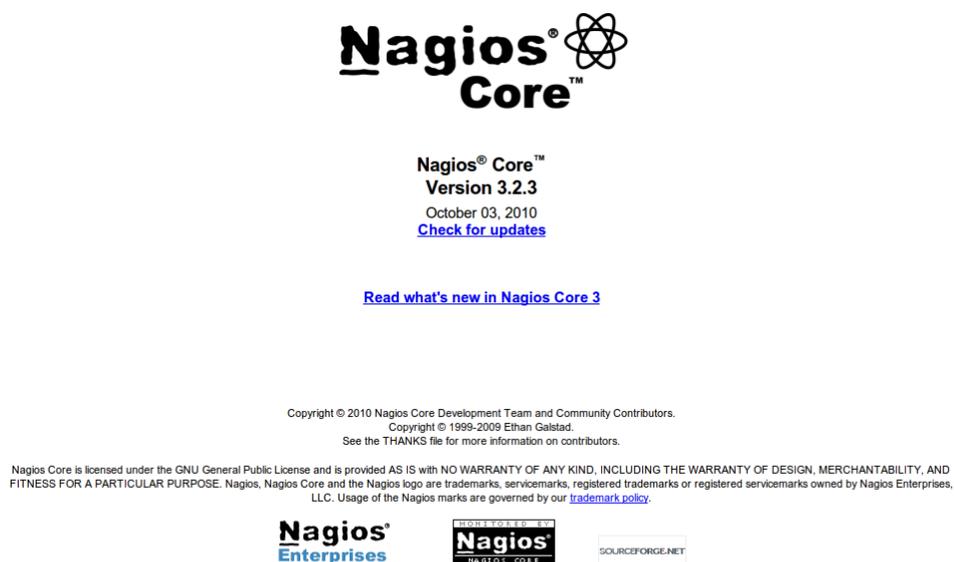
Configuració del paquet «nagios3-cgi»	
Nagios web administration password:	PASSWORD
Password confirmation:	PASSWORD

Per defecte Nagios està configurat per comprovar el servei HTTP, l'espai en disc, l'SSH, els usuaris actuals, els processos, i la càrrega del host local.

Accés

`http://ip_del_servidor/nagios3`

Inicia la sessió amb l'usuari **nagiosadmin** i la contrasenya **PASSWORD**



Modificacions

Si, per exemple, vols afegir la comprovació del servei FTP:

```
3. nano /etc/nagios3/conf.d/localhost_nagios2.cfg
```

afegeix les línies

```
# FTP

define service{
    use                generic-service
    host_name          localhost
    service_description FTP
    check_command      check_vsftp
```

}

4. `nano /etc/nagios3/commands.cfg` afegeix les línies

```
# FTP
define command{
    command_name      check_vsftp
    command_line      $USER1$/check_ftp -H $HOSTADDRESS$ $ARG1$
}
```

Documentació

<http://www.nagios.org/documentation>

Cacti

<http://www.cacti.net/>

Instal·lació

1. `apt-get update`
2. `apt-get install apache2 libapache2-mod-php5 php5 php5-mysql`
3. `apt-get install mysql-server`

Configuració del paquet «mysql-server-5.5»	
New password for the MySQL "root" user:	PASSWORD
Repeat password for the MySQL "root" user:	PASSWORD

4. `apt-get install cacti`

Configuració del paquet «cacti»	
Webserver type	Apache2
Configure database for cacti with dbconfig-common?	Sí
Password of the database's administrative user:	PASSWORD
MySQL application password for cacti:	PASSWORD
Confirmeu la contrasenya:	PASSWORD

5. `service apache2 restart`

Accés

http://ip_del_servidor/cacti

Cacti Installation Guide

Thanks for taking the time to download and install cacti, the complete graphing solution for your network. Before you can start making cool graphs, there are a few pieces of data that cacti needs to know.

Make sure you have read and followed the required steps needed to install cacti before continuing. Install information can be found for [Unix](#) and [Win32](#)-based operating systems.

Also, if this is an upgrade, be sure to reading the [Upgrade](#) information file.

Cacti is licensed under the GNU General Public License, you must agree to its provisions before continuing:

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This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

[Next >>](#)

Cacti Installation Guide

Please select the type of installation

The following information has been determined from Cacti's configuration file. If it is not correct, please edit 'include/config.php' before continuing.

Database User: cacti
 Database Hostname:
 Database: cacti
 Server Operating System Type: unix

[Next >>](#)

Cacti Installation Guide

Make sure all of these values are correct before continuing.

[FOUND] RRDTool Binary Path: The path to the rrdtool binary.

 [OK: FILE FOUND]

[FOUND] PHP Binary Path: The path to your PHP binary file (may require a php recompile to get this file).

 [OK: FILE FOUND]

[FOUND] snmpwalk Binary Path: The path to your snmpwalk binary.

 [OK: FILE FOUND]

[FOUND] snmpget Binary Path: The path to your snmpget binary.

 [OK: FILE FOUND]

[FOUND] snmpbulkwalk Binary Path: The path to your snmpbulkwalk binary.

 [OK: FILE FOUND]

[FOUND] snmpgetnext Binary Path: The path to your snmpgetnext binary.

 [OK: FILE FOUND]

[FOUND] Cacti Log File Path: The path to your Cacti log file.

 [OK: FILE FOUND]

SNMP Utility Version: The type of SNMP you have installed. Required if you are using SNMP v2c or don't have embedded SNMP support in PHP.

RRDTool Utility Version: The version of RRDTool that you have installed.

NOTE: Once you click "Finish", all of your settings will be saved and your database will be upgraded if this is an upgrade. You can change any of the settings on this screen at a later time by going to "Cacti Settings" from within Cacti.

[Finish](#)

Inicia la sessió amb l'usuari **admin** i la contrasenya **admin**



User Login

Please enter your Cacti user name and password below:

User Name:

Password:

Et demanarà que canviïs la contrasenya



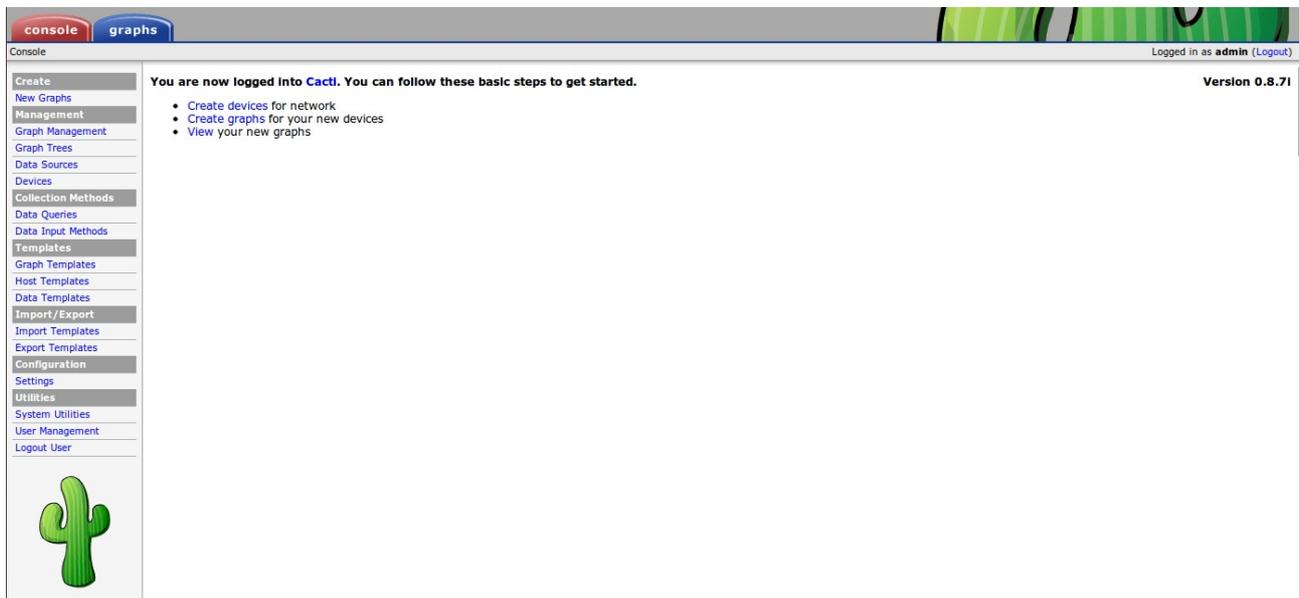
User Login

***** Forced Password Change *****

Please enter a new password for cacti:

Password:

Confirm:



The screenshot shows the Cacti console interface. At the top, there are tabs for 'console' and 'graphs'. Below the tabs, the user is logged in as 'admin'. The main content area displays a welcome message: 'You are now logged into Cacti. You can follow these basic steps to get started.' followed by a list of steps: 'Create devices for network', 'Create graphs for your new devices', and 'View your new graphs'. The left sidebar contains a navigation menu with categories like 'Create', 'Management', 'Data Sources', 'Devices', 'Collection Methods', 'Data Queries', 'Data Input Methods', 'Templates', 'Configuration', 'Settings', 'Utilities', and 'System Utilities'. At the bottom of the sidebar is a cactus icon. The top right corner shows 'Logged in as admin (Logout)' and 'Version 0.8.7i'.

Documentació

<http://www.cacti.net/downloads/docs/html/index.html>

Zabbix

<http://www.zabbix.com>

Instal·lació

1. apt-get update
2. apt-get install apache2 libapache2-mod-php5 php5 php5-mysql
3. apt-get install mysql-server

Configuració del paquet «mysql-server-5.5»	
New password for the MySQL "root" user:	PASSWORD
Repeat password for the MySQL "root" user:	PASSWORD

4. apt-get install zabbix-server-mysql

Configuració del paquet «zabbix-server-mysql»	
Configure database for zabbix-server-mysql with dbconfig-common?	Sí
Password of the database's administrative user:	PASSWORD
MySQL application password for zabbix-server-mysql:	PASSWORD
Confirmeu la contrasenya:	PASSWORD

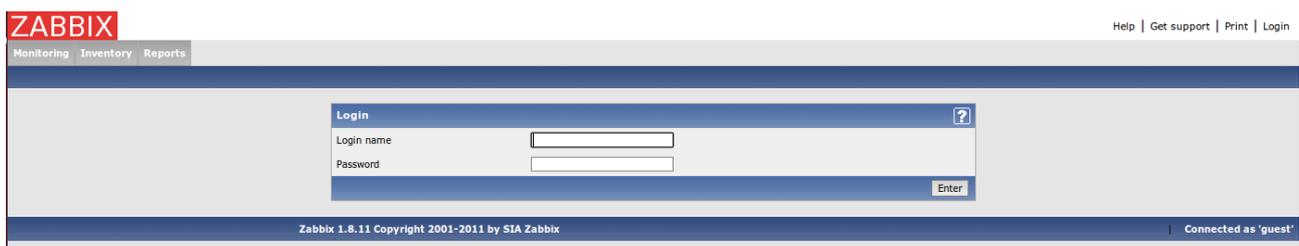
5. apt-get install zabbix-frontend-php

Configuració del paquet «zabbix-frontend-php»	
Database type to be used by zabbix-frontend-php:	mysql
MySQL application password for zabbix-frontend-php:	PASSWORD
Confirmeu la contrasenya:	PASSWORD

6. service apache2 restart

Accés

http://ip_del_servidor/zabbix



Inicia la sessió amb l'usuari **admin** i la contrasenya **zabbix**

ZABBIX
Monitoring Inventory Reports
Help | Get support | Print | Login
Login
Login name admin
Password *****
Enter
Zabbix 1.8.11 Copyright 2001-2011 by SIA Zabbix | Connected as 'guest'

El programa et donarà la benvinguda.

ZABBIX
Monitoring Inventory Reports Configuration Administration
Help | Get support | Print | Profile | Logout
Welcome to Zabbix! You are connected as Admin.
Zabbix 1.8.11 Copyright 2001-2011 by SIA Zabbix | Connected as 'Admin'

Prem en la part superior dreta a sobre de Profile per canviar la contrasenya de l'usuari admin i l'idioma de la interfície.

User "Admin"
Password Change password
Language English (GB)
Theme System default
Auto-login
Auto-logout (min 90 seconds) 900
Refresh (in seconds) 30
Rows per page 50
URL (after login)
Media No media defined
Add
GUI Messaging
Save Cancel

Estado de ZABBIX

Parámetro	Estado	Detalles
Servidor ZABBIX operativo	SI	127.0.0.1:10051
Número de equipos/plantillas (monitorizados/no monitorizados/plantillas)	43	0 / 1 / 42
Número de monitores (monitorizados/inactivos/no soportados)	0	0 / 0 / 0
Número de iniciadores (activos/inactivos)[problemas/desconocidos/correctos]	0	0 / 0 [0 / 0 / 0]
Número de usuarios(en línea)	2	2
Required server performance, new values per second	0	-
PHP post max size	8M	16M is minimum size of PHP post
PHP max execution time	30	300 seg is a minimal limitation on execution time of PHP scripts
PHP max input time	60	300 seg is a minimal limitation on input parse time for PHP scripts
PHP timezone	no	Timezone for PHP is not set. Please set "date.timezone" option in php.ini.

Actualizado: 18:29:29

System status

Grupo del equipo	Critica	Alta	Media	Baja	Informativa	No clasificada
...						

Actualizado: 18:29:29

Host status

Grupo del equipo	Without problems	With problems	Total
...			

Actualizado: 18:29:29

Last 20 issues

Equipo/Plantilla	Issue	Último cambio	Age	Aceptar	Acciones
...					

Actualizado: 18:29:29

Monitorización Web

En les màquines que vulguis monitorar has d'instal·lar zabbix-agent. Si és una màquina GNU/Linux: `apt-get install zabbix-agent`. Si és una màquina Windows hauràs de descarregar l'agent per a Windows des de http://www.zabbix.com/downloads/2.0.0/zabbix_agents_2.0.0.win.zip

Documentació

<http://www.zabbix.com/documentation/>

Còpies de seguretat

Grsync (GUI) o rsync (CLI)

<http://www.opbyte.it/grsync/>

Instal·lació

1. `apt-get update`
2. `apt-get install grsync` (o bé, `rsync`)

Programació de les còpies

Pots programar còpies de seguretat amb cron. Per exemple, per fer còpies de seguretat a les 4:00h els dimarts, dimecres, dijous, divendres i dissabte:

3. nano /etc/crontab afegeix la línia

```
0 4 * * 2-6 root rsync -r -t -p -o -g -v --delete -l -H -s /origen /destinació
```

Tar

Altra manera de fer còpies és amb el programa tar.

Configuració

1. nano /root/copies_targz.sh afegeix les línies

```
#!/bin/sh
cd /
tar zcf /destinació/origen-$(date +%B).tar.gz origen
```

2. chmod u+x ~/copies_targz.sh

Programació de les còpies

Pots programar còpies de seguretat amb cron. Per exemple, per fer còpies de seguretat a les 5:00h el primer dia de cada mes:

3. nano /etc/crontab afegeix la línia

```
0 5 1 * * root sh ~/copies_targz.sh
```

Clonatge

Clonezilla

<http://clonezilla.org/>

Descarrega

http://sourceforge.net/projects/clonezilla/files/clonezilla_live_stable/1.2.12-37/clonezilla-live-1.2.12-37-i686-pae.iso/download

i crea un live-USB amb UNetbootin o bé grava un CD amb brasero.

Antivirus

ClamAV

<http://www.clamav.net/lang/en/>

Instal·lació

1. apt-get update
2. apt-get install clamav

Programació de l'escaneig

Pots programar una actualització de l'antivirus i un escaneig de virus amb cron. Per exemple, per fer cada dia una actualització de l'antivirus a les 2:55h i un escaneig de virus del directori /carpeta a les 3:00h, a més en l'arxiu /root/clamlog.txt tindràs la informació acumulada dels arxius que s'han escanejat, si s'han trobat virus, etc.

3. nano /etc/crontab afegeix les línies

```
55 2 * * * root /usr/bin/freshclam
0 3 * * * root clamscan -ir --remove=yes /carpeta >> ~/clamlog.txt
```

Índex de continguts

Eines per a l'administració de sistemes a gran escala.....	1
Accés remot.....	1
Gestió d'incidències i control d'inventari.....	1
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