MyNetWatch-2.2
Installation Manual

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Introduction

MyNetWatch is a suite of OSS products which monitors host, service and network. It comprises of below software:

- Platform: CentOS
- Nagios : Hosts, Services, Network Monitoring
- NagiosQL: Web Based Administration Tools

It includes below features:

- OS Neutral: MyNetWatch is capable to check its remote hosts in any platform, i.e. Linux, Unix, FreeBSD, Mac, Window etc.
- Protocol Flexibility: It could access/monitor network services with various network protocol, i.e. HTTP, FTP, etc.
- Reporting: Reports on trends, availability, alerts, notifications can be easily generated.
- Plug-ins: New host and service checks can be easily developed.
- Downtime Scheduler: “Downtime” could be scheduled so that no notification will be generated during scheduled maintenance or server upgrade.
- Problem Acknowledgeability: Certain “problems” could be determined and acknowledged so that alert on such “problems” will not be generated until the problem is resolved.

Hardware and Software Requirements

Hardware

Recommended hardware

- Pentium IV and above
- 512MB RAM and above
- 10GB HD and above
- 1 NIC Card

Software

- CentOS 5 / Red Hat Enterprise Linux – Operating System
- Nagios
- NagiosQL
- Apache

Dependencies Installation

Dependencies Resolved

Package	Arch	Version	Repository	Size
Installing:				
mynetwatch	noarch	2.2-1.oscc	oscc-repos2	3.4 k
Updating:				
krb5-libs	i386	1.6.1-25.el5_2.1	oscc-updates	656 k
Installing for dependencies:				
e2fsprogs-devel	i386	1.39-15.el5	oscc-base	568 k
fping	i386	2.4-1.b2.2.el5.rf	rpmforge	46 k
gd	i386	2.0.33-9.4.el5_1.1	oscc-base	157 k
gmp	i386	4.1.4-10.el5	oscc-base	664 k
httpd	i386	2.2.3-11.el5_2.centos.4	oscc-updates	1.1 M
keyutils-libs-devel	i386	1.2-1.el5	oscc-base	27 k
krb5-devel	i386	1.6.1-25.el5_2.1	oscc-updates	1.9 M
libselinux-devel	i386	1.33.4-5.el5	oscc-base	131 k
libsepol-devel	i386	1.15.2-1.el5	oscc-base	189 k
libtool-ltdl	i386	1.5.22-6.1	oscc-base	37 k
mysql	i386	5.0.45-7.el5	oscc-base	4.1 M
mysql-devel	i386	5.0.45-7.el5	oscc-base	2.4 M
mysql-server	i386	5.0.45-7.el5	oscc-base	9.7 M
nagios	i386	3.0.6-1.el5.rf	rpmforge	3.6 M
nagios-devel	i386	3.0.6-1.el5.rf	rpmforge	41 k
nagios-plugins	i386	1.4.13-1.el5.rf	rpmforge	1.1 M
nagios-plugins-nrpe	i386	2.5.2-1.el5.rf	rpmforge	19 k
nagiosql	noarch	2.0.2-2.centos5	oscc-repos2	274 k
openssl-devel	i386	0.9.8b-10.el5	oscc-base	1.8 M
perl-Crypt-DES	i386	2.05-3.2.el5.rf	rpmforge	37 k
perl-DBD-MySQL	i386	3.0007-1.fc6	oscc-base	147 k
perl-DBI	i386	1.607-1.el5.rf	rpmforge	866 k
perl-Digest-HMAC	noarch	1.01-15	oscc-base	12 k
perl-Digest-SHA1	i386	2.11-1.2.1	oscc-base	48 k
perl-Net-Daemon	noarch	0.43-1.el5.rf	rpmforge	44 k
perl-Net-SNMP	noarch	5.2.0-1.2.el5.rf	rpmforge	96 k
perl-PlRPC	noarch	0.2020-1.el5.rf	rpmforge	33 k
perl-Socket6	i386	0.20-1.el5.rf	rpmforge	47 k

Package	Arch	Version	Repository	Size
php	i386	5.1.6-20.el5_2.1	oscc-updates	1.1 M
php-cli	i386	5.1.6-20.el5_2.1	oscc-updates	2.1 M
php-common	i386	5.1.6-20.el5_2.1	oscc-updates	154 k
php-mysql	i386	5.1.6-20.el5_2.1	oscc-updates	84 k
php-pdo	i386	5.1.6-20.el5_2.1	oscc-updates	62 k
php-pear	noarch	1:1.4.9-4.el5.1	oscc-base	356 k
zlib-devel	i386	1.2.3-3	oscc-base	101 k
Updating for dependencies:				
krb5-workstation	i386	1.6.1-25.el5_2.1	oscc-updates	873 k

Transaction Summary

Install 36 Package(s)
Update 2 Package(s)
Remove 0 Package(s)

Total download size: 35 M

Prerequisites

CentOS 5 Installation

CentOS is an Enterprise-class Linux Distribution derived from sources freely provided to the public by a prominent North American Enterprise Linux vendor. CentOS is perfect for servers and cluster nodes where newer software is not a requirement.

CentOS preferred software updating tool is based on yum, although support for use of an up-to-date variant exist. Each may be used to download and install both additional packages and their dependencies, and also to obtain and apply periodic and special (security) updates from repositories on the CentOS Mirror Network. The current version of CentOS is CentOS 5.0 and it was released on April 12 2007.

How to install CentOS 5.

1) Place the DVD/CD-ROM in your DVD/CD-ROM drive and boot your system from the DVD/CD-ROM. If the DVD/CD-ROM drive is found and the driver loaded, the installer will present you with the option to perform a media check on the DVD/CD-ROM. This will take some time, and you may option to skip over this step.
2) The welcome screen will appear and click 'Next' to proceed.
3) Language selection - Select the language and it will become the default language for the operating system once it is installed. Selecting the appropriate language also helps target your timezone configuration later in the installation. The installation program tries to define the appropriate time zone based on what you specify on this screen. Once you select the appropriate language, click 'Next' to continue.
4) Keyboard Layout Selection - Select the correct layout type for the keyboard you would prefer to use for the installation and as the system default. Click 'Next' to continue installation.
5) Setup your disk partitioning, the first three option will perform automatic partitioning while

'Create customs layout' will perform manual partition.

6) For Network configuration, the installation program will automatically detects any network devices and its hostname. You can edit its configuration or just click 'Next' to continue.
7) Set your time zone by selecting the city closest to your computer's physical location. Select 'System Clock uses UTC' if your system is set to UTC. (for this installation, unselect it)
8) Set root password. **This is the most important steps because root account is used for system administration.**
9) You can customize software selection of your system or do it after installation.
10) A screen preparing the installation will be appear. For your reference, a complete log of your installation can be found in /root/install.log once you reboot your system.
11) This step is when the installation program installing all the packages. How quickly this happens depends on the number of packages you have selected and your computer's speed.
12) Now your installation is complete. The installation program prompts you to prepare your system for reboot.
13) Then, start your CentOS 5 in run level 5 (graphical run level), the Setup Agent is presented, which guides you through the CentOS configuration. Using this tool, you can set up your system time and date, install software, register your machine with CentOS Network and more.

Taken from: http://www.centos.org/docs/5/html/Installation_Guide-en-US/

Reference: http://www.howtoforge.com/perfect_server_centos4.5

Steps of installation MyNetWatch

1. Open a Terminal

2. Install rpm package

[root@localhost ~]# wget -c http://dag.wieers.com/rpm/packages/rpmforge-release/rpmforge-release-0.3.6-1.el5.rf.i386.rpm
[root@localhost ~]# rpm -Uvh rpmforge-release-0.3.6-1.el5.rf.i386.rpm

3. Install oscc repository

[root@localhost ~]# wget -c http://repos.oscc.org.my/repos2/centos/5/oscc/i386/CentOS/oscc-repos2-0.0.1-1.noarch.rpm
[root@localhost ~]# rpm -Uvh oscc-repos2-0.0.1-1.noarch.rpm

4. Install package Nagios

[root@localhost ~]# yum install mynetwatch

Is this ok [y/N]:
Type 'y' to continue.

5. Create user

[root@localhost ~]# htpasswd /etc/nagios/htpasswd.users USER_ACCOUNT

(eg: htpasswd /etc/nagios/htpasswd.users admin)
(eg: password: admin)

6. Edit configuration files

- [root@localhost ~]# vi /etc/nagios/nagios.cfg

object_cache_file=/var/nagios/objects.cache
status_file=/var/nagios/status.dat
command_file=/var/nagios/rw/nagios.cmd
comment_file=/var/nagios/comments.dat
downtime_file=/var/nagios/downtime.dat
temp_file=/var/nagios/nagios.tmp
#check_result_buffer_slots=4096

7. Start services

[root@localhost ~]# chkconfig nagios on
[root@localhost ~]# service nagios start
[root@localhost ~]# service httpd start

8. After installation is complete, open web browser

Website for nagios

http://SERVER_IP/nagios
(eg: http://localhost/nagios)

Website for nagiosQL

http://SERVER_IP/nagiosQL
(eg: http://localhost/nagiosQL)

Maintenance

The following should be checked on a regular basis:

Network connections

The administrator should verify the server is reachable from the public network to avoid service interruption. Network monitoring is beyond the scope of these manual.

Log files

With the log files, it is possible to identify and monitor hardware and software problems on the servers. The log files should be checked at least once a week. All log files in /var/log/ directory.

Services

Used to start, stop or cancel a service on a local or remote computer. It is also a tool to set up recovery actions to take place if a service should fail. Should be checked in case of service failure.

e.g:

#/etc/init.d/[service_name] start/stop/status

Package update/patch

Check that the latest package update/patches has been installed on the servers. It should be checked and done at least once a month.

Disk Space

to verify that there is always enough space on the most mission critical servers. It should be done at least once a week. Use *df -lh* command.

Password change

Password should be changed periodically, at least every three months.