



Purpose

This documentation provides you with the procedure for configuring the date/time and timezone for the Nagios XI server. This include the system time, clock, and PHP time settings.

Target Audience

This document is intended for administrators who have had issues with the Nagios XI time configuration or are not able to connect their XI server to the internet (security policies, firewall rules, etc) and those who have ran into configuration issues based around system and PHP time settings.

Overview

This document will cover:

- Timezone Configuration Using Nagios XI GUI
- System Timezone
- PHP Timezone
- Date/time
- NTP

Timezone Configuration Using Nagios XI GUI

Nagios XI has a dedicated configuration section in the web GUI which does the same as all the subsequent steps covered in this documentation.

- Navigate to **Admin > System Config > System Settings**
- Find the **Timezone Settings** section (on the General tab)
- From the **Timezone** drop down list select your timezone
- Click the **Update Settings** button

A screenshot on the following page shows the steps just described.

Nagios XI Home Views Dashboards Reports Configure Tools Help **Admin** Search nagiosadmin Logout

System Settings

General Security Passwords & Accounts Theme & Display User Accounts Integration Backward Compatibility

General Program Settings

Program URL:
The default URL used to access Nagios XI directly from your internal network.

External URL:
The URL used to access Nagios XI from outside of your internal network (if different than the default above). If defined, this URL will be referenced in email alerts and generated pdf reports to allow quick access to the XI interface.

Automatically Check for Updates ([Check Now](#))

Allow HTML Tags in Host/Service Status

Timezone Settings

Timezone:

Other Settings

Write Audit Log to file: When checked all audit log events will be written to `/usr/local/nagiosxi/var/components/auditlog.log`

Acknowledgement Defaults: Sticky Acknowledgement Send Notification Persistent Comment

Autocomplete Sensitive Fields When checked, autocompletion is enabled for sensitive fields.

Update Settings Cancel

Once you click **Update Settings** the screen will refresh and will display **System settings updated** at the top of the screen.

If you are experiencing date/time and timezone issues after using the Nagios XI GUI you can follow the remainder of this documentation file to ensure the correct settings are being applied.

The remainder steps require you to establish a terminal session to your Nagios XI server as a user with root privileges.

Setting the System Timezone

The steps for changing the system timezone are different depending on your operating system and version. We will use **America/Los_Angeles** for this document, but be mindful that you must substitute your actual country/city.

RHEL 6 | CentOS 6 | Oracle Linux 6

The Linux Operating System default timezone files are located at:

```
/usr/share/zoneinfo/
```

The timezones are listed by country/city and include daylight savings time adjustments. The current and working system's time zone file is located at `/etc/localtime` and must be replaced with your zoneinfo.

The following command will copy the timezone file to `/etc/localtime`:

```
cp /usr/share/zoneinfo/America/Los_Angeles /etc/localtime
```

Alternatively you could create a symbolic link to the file instead, but symbolic links between `/usr` and `/etc` are no popular with POSIX purists. The steps for creating a symbolic link is as follows:

```
rm -f /etc/localtime
ln -s /usr/share/zoneinfo/America/Los_Angeles /etc/localtime
```

You will also need to set the `ZONE` directive in `/etc/sysconfig/clock`. The following command will open the file in the `vi` text editor:

```
vi /etc/sysconfig/clock
```

When using the `vi` editor, to make changes press `i` on the keyboard first to enter insert mode. Press `Esc` to

exit insert mode.

Change or add the following line within your timezone:

```
ZONE="America/Los_Angeles"
```

When you have finished, save the changes in vi by typing:

```
:wq
```

and press Enter.

RHEL 7 | CentOS 7 | Oracle Linux 7

The `timedatectl` command is used to configure the timezone. You can display a list of available timezones with the following command:

```
timedatectl list-timezones
```

The timezones are listed by country/city and include daylight savings time adjustments. The command above can be piped to the `grep` command to help search for your timezone, for example:

```
timedatectl list-timezones | grep Los
```

This will produce the following output:

```
America/Los_Angeles
```

Then you use the `timedatectl` command to configure the timezone:

```
timedatectl set-timezone America/Los_Angeles
```

Running the `timedatectl` command by itself will produce a summary, which will have the following line:

```
Time zone: America/Los_Angeles (PST, -0800)
```

Debian | Ubuntu

The `dpkg-reconfigure` command is used to configure the timezone. Use the following command to set the timezone:

```
dpkg-reconfigure tzdata
```

Select the appropriate region and this completes the required steps.

PHP Timezone

Next, you need to configure the `php.ini` for your timezone set above. The location of the `php.ini` file differs depending on your operating system / version. The following command will determine the location:

```
find /etc -name php.ini
```

If there are multiple results then the one in the `apache` directory is the one that needs changing. Open the file in the `vi` text editor with the following command (the following example is using `/etc/php.ini`):

```
vi /etc/php.ini
```

When using the `vi` editor, to make changes press `i` on the keyboard first to enter insert mode. Press `Esc` to exit insert mode.

Change the `date.timezone =` line to:

```
date.timezone = America/Los_Angeles
```

You can quickly jump to that line by typing:

```
:date
```

and press Enter.

When you have finished, save the changes in vi by typing:

```
:wq
```

and press Enter.

You now need to restart the Apache service:

RHEL 6 | CentOS 6 | Oracle Linux 6

```
service httpd restart
```

RHEL 7 | CentOS 7 | Oracle Linux 7

```
systemctl restart httpd.service
```

Ubuntu 14

```
service apache2 restart
```

Debian | Ubuntu 16/18

```
systemctl restart apache2.service
```

Checking The System Date/Time

Now that all the timezone information is configured, check the XI system time by executing the following command:

```
date
```

If the timezone is incorrect, double check that you followed all the previous steps in this document. If the timezone, date, and time are correct, or if you plan on using ntp, proceed to the next section (NTP) of this document. If the timezone is correct, but the date and/or time are incorrect and you do not plan on using ntp, set the proper time using `date`:

```
date MMDDhhmmCCYY
```

Where `MM` is month, `DD` is day, `hh` is hour, `mm` is minute, and `CCYY` is the year.

Syncing the system clock with NTP

NTP (network time protocol) syncs the system clock to a remote server, can help reduce or eliminate clock skew. Install ntp with the following commands:

RHEL | CentOS | Oracle Linux

```
yum install ntp -y
```

Debian | Ubuntu

```
apt-get install -y ntp ntpdate
```

Configure ntp to start at system boot and update the system clock:

RHEL 6 | CentOS 6 | Oracle Linux 6

```
chkconfig ntpd on
service ntpd stop
ntpdate pool.ntp.org
service ntpd start
```

RHEL 7 | CentOS 7 | Oracle Linux 7

```
systemctl enable ntpd
systemctl stop ntpd
ntpdate pool.ntp.org
systemctl start ntpd
```

Ubuntu 14

```
update-rc.d ntp defaults
service ntp stop
ntpdate pool.ntp.org
service ntp start
```

Debian | Ubuntu 16/18

```
systemctl enable ntp
systemctl stop ntp
ntpdate pool.ntp.org
systemctl start ntp
```

After executing the commands, the system should now be in sync with an external time source.

Restart Database Services

Whenever you change the system time or timezone, you need to restart the database services so that they use the new date/time. We'll also stop the other Nagios services at the same time to ensure everything is done "cleanly".

Note: The `postgresql` command is only required if you are using Nagios XI pre version 5.x OR you have upgraded to version 5.x from a previous version. If you deployed Nagios XI from version 5 then the `postgresql` command is not required.

The steps below are split up into different OS versions, due to different databases in the distributions. Execute all the commands that are applicable to your OS version.

RHEL 6 | CentOS 6 | Oracle Linux 6

```
service nagios stop
service ndo2db stop
service postgresql restart
service mysqld restart
service ndo2db start
service nagios start
```

RHEL 7 | CentOS 7

```
systemctl stop nagios.service
systemctl stop ndo2db.service
service postgresql restart
systemctl restart mariadb.service
systemctl start ndo2db.service
systemctl start nagios.service
```

Ubuntu 14

```
service nagios stop
service ndo2db stop
service postgresql restart
service mysql restart
service ndo2db start
service nagios start
```

Debian | Ubuntu 16/18

```
systemctl stop nagios.service
systemctl stop ndo2db.service
service postgresql restart
systemctl restart mysql.service
systemctl start ndo2db.service
systemctl start nagios.service
```

Troubleshooting

An occasional oddity has been noticed with some installs. The file `/etc/localtime` should be a file, but has been reported and confirmed that it occasionally is a directory. Check the file type with the following command:

```
file /etc/localtime
```

The expected output should include "timezone data" or a symbolic link to a valid timezone file. If it is reported as a directory, run the following command to remove the directory:

```
rm /etc/localtime
```

You should be prompted to remove a symbolic link. Notice the lack of a trailing slash in the above command. Once completed please follows the steps **Setting the System Timezone** in this document.

Verify

To verify that the time configuration is correct, open up the Nagios XI web GUI and Navigate to **Admin > System Config > System Profile**.

Click the **View System Info** button and this will generate a list of information about your system.

Look under **Date/Time** to verify the system is displaying the correct timezone information.

Finishing Up

This completes the documentation on changing the system time in Nagios XI.

If you have additional questions or other support related questions, please visit us at our Nagios Support Forums:

<https://support.nagios.com/forum>

The Nagios Support Knowledgebase is also a great support resource:

<https://support.nagios.com/kb>