

How To Back Up And Restore Your Nagios XI 5 System

Purpose

This document describes how to backup a Nagios XI installation and restore a Nagios XI installation from a previously made backup. Backups are an important aspect of administration and maintenance of your system. They can easily facilitate the migration of a Nagios XI installation between a virtual server and physical server, and the design of a fail-over or disaster recovery instance of Nagios XI.

If you are backing up and restoring Nagios XI 2024, see [Backing Up and Restoring Nagios XI 2024](#).

Before backing up, see the [Nagios XI OS compatibility matrix](#).

If this is the first time performing a backup and restore, you may want to read the Backup Overview and Restore Overview notes at the end of this document.

Backup Methods

There are multiple methods for creating a backup:

- From the command line
- Using the web interface
- Manually created
 - Scheduled ([Scheduling Backups in The Web Interface in Nagios XI](#))

Creating A Backup From The Command Line

To create a backup of your Nagios XI system from the command line, open a terminal or SSH session and log into your Nagios XI server as the root user. Next you can create a backup of your Nagios XI installation by running the following script:

```
/usr/local/nagiosxi/scripts/backup_xi.sh
```

A successful backup will complete with the following message:

```
=====  
BACKUP COMPLETE  
=====
```

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Backup stored in `/store/backups/nagiosxi/1479858443.tar.gz`

Creating A Manual Backup In The Web Interface

You can create manual backups in the web UI via **Admin > System Backups > Local Backup Archives**.

Nagios XI Home Views Dashboards Reports Configure Tools Help **Admin** 🔍 🟢 👤 nagiosadmin 🚪 Logout ☰

^ System Information
^ Users
^ System Config
^ Monitoring Config
^ Check Transfers
^ System Extensions
▼ System Backups
 Scheduled Backups
 Local Backup Archives

Local Backup Archives

These are the current backups that exist on the Nagios XI server. Backups are stored in `/store/backups/nagiosxi` by default.

[Create Backup](#)

| Date | Filename | Size | Actions |
|---------------------|-------------------|----------|---------|
| 2018-04-04 13:12:50 | 1522811542.tar.gz | 83.50 MB | 📄 🗑️ ✖️ |
| 2018-04-04 13:04:53 | 1522811062.tar.gz | 83.50 MB | 📄 🗑️ ✖️ |

Click the **Create Backup** button and the backup process will begin. There is no status of the backup process on this page, you will only know it is completed when the `.tar.gz` file appears in the list of backups.

Notes: Before you restore from a backup, you must make sure that you have performed an installation of Nagios XI on the target machine you plan on restoring. This ensures that required users, groups, and packages are setup and installed on the target system.

The version of the fresh install of Nagios XI that you are restoring to needs to match the version of Nagios XI that the backup was taken from. For example:

- Backup was created on Nagios XI 5.10
- The server you are restoring to must have Nagios XI 5.10 installed on it

All versions of Nagios XI can be downloaded from the following page:

<https://assets.nagios.com/downloads/nagiosxi/versions.php>

After performing the restore you can then proceed to upgrade to the latest version available. If you have offloaded your databases to an external MySQL server using our offload procedure:

- The restore script will restore the databases to the offloaded MySQL server as it gathers this information from the backup file.

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If you have Nagios XI configured with a RAM Disk you need to make sure the system you are restoring to already has the RAM Disk configured, please refer to the following documentation: [Utilizing a RAM Disk in Nagios XI](#)

Restoring A Backup From The Command Line

To restore a backup of your Nagios XI system you must execute the restore script from the command line. If you are performing the restore on a new system you will need to copy the `.tar.gz` file to the `/store/backups/nagiosxi/` directory.

To restore a backup of your Nagios XI system from the command line, establish a terminal session to your Nagios XI server as the root user. Start the restore by running the following script, pointing it to the full location of the `.tar.gz` file:

```
/usr/local/nagiosxi/scripts/restore_xi.sh </full/path/to/backupfile.tar.gz>
```

Example:

```
/usr/local/nagiosxi/scripts/restore_xi.sh  
/store/backups/nagiosxi/1279411912.tar.gz
```

Wait while the restore is performed.

A successful restore will complete with the following message:

```
=====  
RESTORE COMPLETE  
=====
```

Link below to an example video backing up XI from a CentOS 7 machine and restoring to a CentOS Stream 9 machine:

<https://www.youtube.com/watch?v=xr4u3CRj3Fo>

After The Restore

If you restored Nagios XI to a different server, the following additional steps may be required.

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If your original server has any 3rd party plugins that require other applications/modules to function, they will need to be installed on the restore server.

- Examples are the Oracle Instant Client for Oracle server checks might need perl or python modules installed, etc.

If the server was running Oracle checks, you must [install and configure oracle plugins](#) on the new server. If the server was running the older VMWare checks, you must [perform these steps](#) on the new server. If the server was running MSSQL checks, you must [install MSSQL prereqs](#) on the new server.

Changed IP Address

If the IP Address of your Nagios XI server changed, the following needs to be checked / updated:

- Navigate to **Admin > System Config > System Settings** and ensure the Program URL and External URL are correct
- Navigate to Admin > System Config > License Information and ensure the server is licensed
- Reconfigure and agents/clients like NRPE or NSClient++ to allow the new IP address to connect

Changed Operating System Version / Architecture / Family

If you are restoring a backup from a different OS version, architecture or family this can be a problem because the backup is overwriting the compiled binaries. To fix this you will need to execute the following commands:

```
cd /tmp
wget https://assets.nagios.com/downloads/nagiosxi/scripts/restore_repair.sh
chmod +x restore_repair.sh
./restore_repair.sh
```

The script downloads the Nagios XI tarball for the version you have restored and installs a series of components, this fixes a few minor incompatibilities between the operating systems.

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Restore Troubleshooting

In certain circumstances the restore can fail, generally the script will give an error message which can highlight the reason for the failure. After fixing the problem re-run the restore script again.

If you changed the `themysqlpass=` definition in the restore script, you will most likely need to make that change again as the restore script will have been deleted and restored from the backup.

The most common problem experienced in the restore script is MySQL permission issues:

```
ERROR 1045 (28000): Access denied for user 'root'@'10.26.5.12' (using
password: YES) Error restoring MySQL database 'nagios' - check the password
in this script!
```

Generally, these are resolved by changing the `themysqlpass=` definition in the restore script to match that of your root password on your MySQL server.

If you have offloaded your MySQL databases to an external server, you may need to grant the root user permission to connect to allow the restore to work. The following commands will do just that (these commands will use `mypassword` as the example password).

Establish a terminal session to your offloaded MySQL server and execute the following commands:

```
mysql -u root -p'mypassword'
```

Once logged in, execute these commands:

```
GRANT ALL PRIVILEGES ON *.* TO 'root'@'10.26.5.12' IDENTIFIED BY 'mypassword' ;
FLUSH PRIVILEGES;
QUIT;
```

You will need to change the address 10.26.5.12 to the IP address of your Nagios XI server. After making those changes the restore script should successfully complete.

Backup Overview

The backup script will save a copy of the following components of Nagios XI:

- Nagios Core files (`/usr/local/nagios/`)
- Nagios XI files (`/usr/local/nagiosxi/`)

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- MRTG files (`/var/lib/mrtg/` and `/etc/mrtg/`)
- NRDP files (`/usr/local/nrdp/`) NagVis files (`/usr/local/nagvis/`)
- CRON files (in `/var/spool/cron/apache`)
- Apache config files (in `/etc/httpd/conf.d/`)
- logrotate config files (in `/etc/logrotate.d/`)
- MySQL databases (`nagios`, `nagiosql`, `nagiosxi`)

The backup script will save backups in the `/store/backups/nagiosxi/` directory. Backup names correspond to the Unix timestamp at the time the backups were created, for example `1479858002.tar.gz`

The backup script will:

- Gather all the files explained above into a directory in `/store/backups/nagiosxi/`
- After collecting all of this data it then creates the `.tar.gz` file
- When the `.tar.gz` file is successfully created, it will then delete all the files it collected during the gathering process it is important that there is enough free disk space in `/store/backups/nagiosxi/` for the steps just explained, otherwise the backup process will fail (and your Nagios XI server may run out of disk space causing other issues)
- In relation to the scheduled backups ([Scheduling Backups in The Web Interface in Nagios XI](#)), once the `.tar.gz` file is successfully created it will be copied to the location defined in the scheduled backup method and then deleted from `/store/backups/nagiosxi/`

The backup script restarts the nagios service at the beginning of the backup to ensure the `retention.dat` file is up to date with the latest information. There will be a slight interruption to the monitoring process when the restart occurs.

If you changed your MySQL root password to something different than "nagiosxi" (the default), you will need to edit the script and change the `themysqlpass=` definition found in the first few lines of the script. It is recommended that you save a copy of the backups that are created on another server or backup medium.

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Restoring Overview

The restore script for Nagios XI can be used for the following scenarios:

- Restoring a Nagios XI server that died or crashed (on the same server or a different server)
- Migrating Nagios XI from:
 - Different server types:
 - Physical to Physical
 - Physical to Virtual
 - Virtual to Virtual
 - Virtual to Physical
 - Different server versions and architectures, for example:
 - CentOS 7. to CentOS Stream 9
 - CentOS 7.x x86 to RHEL 9.x x86_64
 - CentOS 7.x x86_64 to Ubuntu 22.0.4 LTS x86_64
 - Note: Additional steps are required when restoring to a different OS family (see below). Migration is possible between any of our [supported distributions and architectures](#).

The restore script will restore the components of Nagios XI as outlined in the Backup Overview section of this document. If the components exist, they will be deleted and/or overwritten.

The script will destroy any existing configurations and data on the server you are restoring Nagios XI to. It is important that there is enough free disk space on the server as the restore script will:

- Extract the `.tar.gz` file to `/store/backups/nagiosxi/`
- Copy the extracted files to the correct locations
- Remove the extracted `.tar.gz` folder when the restore completes

If you changed your MySQL root password to something different than "nagiosxi" (the default), you will need to edit the script and change the `themysqlpass=` definition found in the first few lines of the script.

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Finishing Up

This completes the documentation on how to backup and restore Nagios XI. If you have additional questions or other support-related questions, please visit us at our Nagios Support Forum, Nagios Knowledge Base, or Nagios Library:

[Visit Nagios Support Forum](#)

[Visit Nagios Knowledge Base](#)

[Visit Nagios Library](#)