

# Installation of the Quickstart system

We have prepared a bash shell script that starts all the necessary components on one machine. We will use this script throughout this quickstart manual to allow you to get a feel for what the system can do and how it works without having to deal with issues of distributing to other servers.

- [Setup JMS](#)
- [Download NetarchiveSuite](#)

## Base system required

For the quick startup, NetarchiveSuite requires:

- A Linux system with a minimum of 2GB free disk space. The QuickStart guide was tested with Ubuntu.
- Sun/Oracle Java 8 SE runtime (or higher). Other Java versions such as OpenJDK are not tested or recommended.
- An additional user is named "test". The commands to install NetarchiveSuite are run from your own login. The commands install and run the NetarchiveSuite software under user "test". This simulates the more realistic production situation where the software runs under various logins on one or more machines in a distributed network. For convenience, it is a good idea to configure the test-user to have password-free ssh access - i.e. you should be able to execute "ssh test@localhost" in a shell without entering the test-user's password.

## Setup JMS

NetarchiveSuite uses Java Messaging Service (JMS) for communication between the different components. (The implementation used is OpenMQ 5.1)

Download the [openmq installation script](#):

```
wget
https://raw.githubusercontent.com/netarchivesuite/netarchivesuite/master
/deploy/deploy-core/scripts/openmq/mq.sh
chmod +x mq.sh
```

Install the openmq broker:

```
./mq.sh install
```

This will download openmq, install and start it.

Note: OpenMQ will be installed to ~/MessageQueue5.1.

## Download NetarchiveSuite

Binary releases are available from <https://sbforge.org/nexus/content/groups/public/org/netarchivesuite/distribution/> and <https://sbforge.org/nexus/content/groups/public/org/netarchivesuite/heritrix3-bundler/>.

The Netarchivesuite-bundle is in the 'distribution' folder, and the heritrix3-bundle in the 'heritrix3-bundler' folder.

Create a working directory and navigate to it

```
mkdir netarchive; cd netarchive
```

Download the latest release

```
NAS_VERSION=5.4
wget -O NetarchiveSuite.zip
https://sbforge.org/nexus/content/groups/public/org/netarchivesuite/distribution/$NAS_VERSION/distribution-$NAS_VERSION.zip
```

together with the latest bundled harvester

```
NAS_VERSION=5.4
wget -O NetarchiveSuite-heritrix3-bundler.zip
https://sbforge.org/nexus/content/groups/public/org/netarchivesuite/heritrix3-bundler/$NAS_VERSION/heritrix3-bundler-$NAS_VERSION.zip
```

Download `RunNetarchiveSuite.sh` and `deploy_standalone_example.xml` to the `netarchive` directory:

```
wget -N
https://raw.githubusercontent.com/netarchivesuite/netarchivesuite/master/
deploy/distribution/src/main/resources/examples/deploy_standalone_example.xml
wget -N
https://raw.githubusercontent.com/netarchivesuite/netarchivesuite/master/
deploy/deploy-core/scripts/RunNetarchiveSuite.sh
chmod +x RunNetarchiveSuite.sh
```

The first script is a simple script for doing all the steps during deployment. It takes a NetarchiveSuite package ('.zip'), a configuration file (the second file), a temporary installation directory, and the heritrix3 bundler zipfile as arguments (in the given order). The different ports used by the application for communication are included in the `deploy_standalone_example.xml` file.

In the configuration file all the applications are placed on one machine, the current machine (localhost).

When the installation script is run it will unpack the installation files into the `netarchive/deploy` directory as the current user and then - as the user "test" - install NetarchiveSuite into the `/home/test/QUICKSTART` directory (using ssh).

Remember that Sun/Oracle Java 8 is required for the Quickstart procedure.

If you already have a Quickstart installation, the existing bitarchive, database and admin.data files will be untouched. You must explicitly remove any previous installation, if you want a clean empty installation.

To do the deployment:

```
./RunNetarchiveSuite.sh NetarchiveSuite.zip
deploy_standalone_example.xml deploy
NetarchiveSuite-heritrix3-bundler.zip
```

Note that if you have not setup your automatic ssh test user login (using key based login), you need to login multiple times before the installation finishes successfully.

The script creates a deployment folder named "QUICKSTART" under the test users home directory, which contains methods for starting and stopping NetarchiveSuite, and starts the whole NetarchiveSuite. The files to run the installation will be placed in the directory `deploy` under the directory where you ran the `RunNetarchiveSuite.sh` command,

Now configure your browser:

- Start a web browser.
- Setup the browser to proxy on port 8070 on the host executing the netarchive, and exclude localhost and the hostname (used by the Heritrix GUI). In Firefox it is done as follows:

```
Choose in the Firefox toolbar:  
Edit->Preferences->Advanced->Network->Settings  
Checkmark:  
Manual Proxy Configuration  
and add:  
Http proxy: name-of-host  
Port: 8070  
  
No Proxy for: localhost, name-of-host
```

- Write the following url in the browser <http://localhost:8074/HarvestDefinition> (if running on the local machine, otherwise go to port 8074 on the host running NetarchiveSuite).

You should see the Netarchive harvest definition page:



If you see a stacktrace instead of the Netarchive pages, this is most likely because the browser tries to go through the ViewerProxy. Revisit the browser configuration and try again.

- You can now see the webinterface in the browser. You can now create jobs, run them, and browse output following the basic instructions in the rest of this manual, or the more complete description in the User Manual.
- You can stop and start the entire NAS system with:

```
ssh test@localhost  
cd QUICKSTART  
./conf/killall.sh  
./conf/startall.sh
```

- If you want to try other deploy examples, then go to "Examples of deploy configuration files" in the Installation Manual.

