

# Manual Installation of Avalon Using Puppet

Installation via Puppet is deprecated as of Avalon 6.0. If you're looking for automated installation, please see our documentation on [installing Avalon with Docker](#) (forthcoming).

This documentation is for Release 5.x. For documentation on previous releases, please select from the options below.

- Release 1.x version of this page: [v.18](#).
- Release 2.x version of this page: [v.35](#).
- Release 3.0-3.2 version of this page: [v.57](#).
- Release 3.3 version of this page: [v.61](#).
- Release 4.0 version of this page: [v.72](#).

## Instructions

1. Create and log into a CentOS 6.x or Red Hat Enterprise Linux 6.x system as a user with sudo rights

The current Puppet script has issues if executed on a clean, "minimal" CentOS. A "minimal desktop" CentOS is recommended.

2. Become root

```
sudo -s
```

3. Disable SELinux (which we're not currently set up to support)

```
echo 0 > /selinux/enforce  
sed -ie "s/SELINUX=enforcing/SELINUX=permissive/" /etc/selinux/config
```

4. Install puppet from the Puppet Labs repository

```
rpm -ivh  
http://yum.puppetlabs.com/el/6/products/i386/puppetlabs-release-6-10.  
noarch.rpm  
yum install puppet
```

### On CentOS 7

```
rpm -ivh http://yum.puppetlabs.com/puppetlabs-release-el-7.noarch.rpm
```

5. Install git

```
yum install git
```

6. Install Ruby 2.2.5 if ruby current version is lower

```
ruby -v
#The following command won't work the first time.
# It will request you download the signatures first
# and provide the command to download it.
curl -sSL https://get.rvm.io | bash -s
source /usr/local/rvm/scripts/rvm
rvm install 2.2.5
rvm use 2.2.5
gem install bundler
```

7. Install json extensions for the system ruby

```
gem install ruby-json
```

8. Clone the Avalon install script

```
git clone --recursive --depth 1
https://github.com/avalonmediasystem/avalon-installer.git -b
5.x-stable
cd avalon-installer
```

9. Set up the installation variables

```
export INSTALL_DIR=`pwd`
ln -s $INSTALL_DIR/files /etc/puppet/avalon_files
```

10. Collect facts to feed to puppet about your installation, the following will create *hiera/data/custom.yaml*

```
ruby -r './fact_gatherer.rb' -e 'FactGatherer.gather_facts'
```

**Facter can't detect some early CentOS 7 versions, if so run**  
yum update

11. Execute the puppet script

```
rvm system do puppet apply
--fileserverconfig=$INSTALL_DIR/fileserver.conf \
--modulepath=$INSTALL_DIR/modules
--hiera_config=$INSTALL_DIR/hiera/hiera.yaml \
--templatedir=$INSTALL_DIR/templates manifests/init.pp
--detailed-exitcodes
```

It is important to give a hostname when asked, otherwise Avalon/Fedora may not work.  
If you see errors like "Could not prefetch firewall provider 'iptables'", then running `iptables --flush` will help.

Be patient. The manifest needs to download, install and configure a whole lot of dependencies and servers. This could take 30 minutes or more even with a fast connection.

- When the script finishes, open a web browser and connect to the public address for your server (e.g., <http://avalon.example.edu/>) Create a new user with email `archivist1@example.com`, this is the default `collection_manager` and `group_manager`.

**NOTE:** Puppet needs to download dozens of system packages, software distributions, source files, and other information, largely from trusted third party repositories. Sometimes, one or more repositories might be offline, unresponsive, or otherwise unavailable, causing Puppet to display a series of errors about failed dependencies. Fortunately, Puppet can usually figure out how to make things right. Simply repeat the `puppet apply ...` command in step 11 to try to repair the install.

## Ports

The Avalon Media System requires several ports to be open to client browsers. The [Vagrant Install](#) handles all the port forwarding for local access automatically, but the manual install will require attention to make sure the required ports are open and accessible. [Here](#) are the manual instructions.

Port	Purpose	External?
80	HTTP (Avalon)	Yes
1935	RTMP (red5)	Yes
5080	HTTP (red5)	No
8983	HTTP (Fedora/Solr)	No
18080	HTTP (Matterhorn)	Yes

## Using the System

- You can find specific information about using the system in the [Collection Manager's Guide](#).
- [Configure additional features](#)
- [Install sample content](#)
- [Known Issues](#) - a list of bugs, workarounds, and cautions