Fedora (standalone)

⊘ This documentation has not been updated for Release 4.0.0 yet. Please see the one host (all-in-one) Manual Installation Instructions.

⚠ This documentation is for Release 3.0.0. For the Release 1 version of this page, see v.81. For the Release 2 version of this page, see v.87.

Intended as guidance for production environments with different hosts for most tasks, these instructions provide a recipe for building only the **Fedora** piece of an Avalon system from scratch on CentOS or Red Hat Enterprise Linux. Recipes for the other components for Avalon may be found here. MySQL (standalone), Web (standalone), Solr (standalone), Red5 (standalone), and Matterhorn (standalone).

Instructions for building every component on one host (all-in-on) please see here: Manual Installation Instructions.

- Ready the Installation Environment
- Fedora Commons Repository
- Restarting the Server

Ready the Installation Environment

Install EPEL

```
rpm -ivh http://linux.mirrors.es.net/fedora-epel/6/i386/epel-release-6-8.noarch.rpm
```

This package has libyaml-devel which is required by ruby and not provided by Redhat.

Make sure a valid hostname is resolvable

The default hostname is "avalon.dev", so name the machine this and enter it into /etc/hosts

```
# hostname
avalon.dev
# cat /etc/hosts
127.0.0.1   localhost localhost.localdomain localhost4 localhost4.localdomain4 avalon.dev
```

Configure iptables

The Avalon Media System requires several ports to be open to client browsers.

Here are the port settings that will need to be configured:

Port	Purpose	External?
8983	HTTP (Fedora/Solr)	No

The preferred method is to create a shell script that will do the work for you. Here is an example script that you should look through and customize as needed: avalon-iptables-config.sh

⊘ If you're connected over ssh, it might kick you off.

Save your script to /etc/sysconfig/avalon-iptables-config.sh, make it executable and run it.

```
chmod +x /etc/sysconfig/avalon-iptables-config.sh
/etc/sysconfig/avalon-iptables-config.sh
```

If you run into connection issues you can disable the iptables, by running "service iptables stop". This will completely drop your firewall. When finished troubleshooting run "service iptables start".

Disable SELinux

```
echo 0 > /selinux/enforce
vim /etc/selinux/config #change the value of `SELINUX` from `enforcing` to `permissive`
```

Add the NUL repository

Create the Avalon repository config file:

```
vim /etc/yum.repos.d/avalon-public.repo
```

Append the following code:

```
[avalon_public]
name=Avalon Public RHEL repository
baseurl=http://repo.avalonmediasystem.org/x86_64
enabled=1
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-avalon
cost=150
```

Install and place the Avalon GPG key in the proper location:

```
curl http://repo.avalonmediasystem.org/RPM-GPG-KEY-avalon -o /etc/pki/rpm-gpg/RPM-GPG-KEY-avalon
```

Install development libraries and packages for building Ruby

```
yum groupinstall "Development Tools"
yum install readline-devel zlib-devel libyaml-devel libffi-devel openssl-devel libxml2-devel libxslt-devel java-
1.6.0-sun-devel tomcat-7.0.32
```

Fedora Commons Repository

Download and run the fcrepo installer

```
wget http://sourceforge.net/projects/fedora-commons/files/fedora/3.6.2/fcrepo-installer-3.6.2.jar
java -jar fcrepo-installer-3.6.2.jar
```

Use the following values in place of defaults

Setting	Value
Installation type	custom
Fedora home directory	/usr/local/fedora
Fedora administrator password	fedoraPassword

Fedora server host	localhost
Fedora application server context	fedora
Authentication requirement for API-A	false
SSL availability	true
SSL required for API-A	false
SSL required for API-M	true
Servlet engine	existingTomcat
Tomcat home directory	/usr/local/tomcat
Tomcat HTTP port	8983
Tomcat shutdown port	8005
Tomcat Secure HTTP port	8443
Keystore file	default
Keystore password	changeit
Keystore type	JKS
Database	mysql
MySQL JDBC driver	included
Database username	fcrepo
Database password	fcrepo

Accept remaining defaults then add permissions for Tomcat and restart Tomcat

```
chown -R tomcat7:tomcat /usr/local/fedora
service tomcat restart
```

Restarting the Server

Before you restart your Avalon server, you'll want to make sure all of the services necessary to run Avalon will start automatically after the restart. Run these commands once and you should be set:

```
chkconfig --level 345 tomcat on
```