How to build secure Apache Tomcat deployments with RPM.

My security experiences really tie into everyday work. A colleague called me from my last gig and asked how to build a RedHat Package Manager (RPM) package for Apache Tomcat. I asked him why he was doing this and the answer came back that the customer wanted this done. So back to the tie in with work comment. One of my current colleagues has been building custom RPMs for my current contract and he incited some new interest with me in regards to performing more Secure deployments of software. Specifically using the %pre, %post, %preun and %postun sections to perform the necessary actions that would secure the installation. I love laying down files with RPMs because I can set the exact file permissions that I want, along with ownership of those files. This ties into Discretionary Access Controls (DAC) because as the administrator, I set what I believe the user should have (at my discretion). The tomcat user could change these, but I've performed an action in my %pre section that will prevent anyone but someone who is root or has the sudo capability to switch to the tomcat user from modifying these permissions.

Target Platform:	Virtual Machine in VMware Workstation 6.5.
CPUs:	2 CPUs allocated
Memory:	2 GB allocated
Hard Drive:	30 GB allocated for vmdk

Software used:

OS:	RHEL 5.7	http://www.redhat.com
Applications:	Apache Tomcat 7	http://tomcat.apache.org
	Java 6	http://www.oracle.com

OS Install

Followed default install from vendor (literally, just hit next, next, next and then Finish).

Java 6 Install

Download Java from: http://www.oracle.com/technetwork/java/javase/downloads/jdk-6u26-download-400750.html

The directory /opt already existed on my system, if it doesn't exist for you, create it with these commands:

```
su – root
mkdir /opt
chmod 0755 /opt
```

Copy Java to /opt

```
su - root
cp <your_download_directory>/jdk-6u26-linux-i586.bin /opt
```

Change directory to /opt, extract the contents and create a sym link to the new directory:

```
cd /opt
umask 0022
chmod  750  jdk-6u26-linux-i586.bin
./jdk-6u26-linux-i586.bin
ln -s jdk1.6.0_26 java
rm  -f  jdk-6u26-linux-i586.bin
```

Base install of Apache Tomcat

Download the tarball for Tomcat 7 from: http://tomcat.apache.org/

RPM Construct

You can build the source tarball (the file rpmbuild uses as the source of all files you wish to include in your RPM) as your organization sees fit [meaning that you choose how much you wish to include and what to exclude]. I've tried to figure out a way to automate this process and have stumbled every step of the way. The reason is getting the permissions right on all of the files. Every software package is different, so choosing a generic permission of 0644 fails when the file needs to execute with permissions 0755. You will also need to follow the documentation

from Fedora on building RPMs, specifically how to set up the folder structure. If it doesn't have the following line, you need better instructions:

```
mkdir -p $HOME/rpmbuild/{BUILD,BUILDROOT,RPMS,SOURCES,SPECS,SRPMS,tmp}
```

Place your source tarball into $HOME/rpmbuild/SOURCES/.

I named mine apache-tomcat-7.0.tgz.

Place your SPEC file into $HOME/rpmbuild/SPECS/.

I named mine apache-tomcat-7.0.spec.

Now, as your separate build user (don't build RPMs as the root user, ever), run this command:

```
rpmbuild -ba ./apache-tomcat-7.0.spec
```

And finally test, test, test before moving the RPM into production.

How Security and Common Sense are Applied

The magic of the %pre section

```
%pre
(
   ## Variables for this section:
   DATE=$( /bin/date +%Y%b%d-%H:%M )

   ## Make the destination directory if it doesn't exist:
   [ ! -d /opt/apache-tomcat-7.0.47 ] && mkdir -p /opt/apache-tomcat-7.0.47

   ## Remove sym link, if it exists:
   [ -L /opt/apache-tomcat ] && unlink /opt/apache-tomcat

   ## If the tomcat user and group doesn't exist, add them.
   ## I chose gid and uid of 333 because I want it less than 500 for
   ## user accounts. This is a service acct.
   [ `grep -c tomcat /etc/group` -lt "1" ] && groupadd -f -g 333 tomcat
   [ `grep -c tomcat /etc/passwd` -lt "1" ] && useradd \
      -c "Tomcat Srvc Acct." -m -g 333 -s /bin/bash -u 333 tomcat
   ## the sys admin doesn't need to know this AND
   ## it needs to be unique per system:
   MAC=$( ip addr show eth0 | grep ether | awk '{print $2}' )
   PASSWD_TOMCAT=$( echo "$MAC $HOSTNAME" `cat /var/log/messages` | \
                    /usr/bin/sha512sum | cut -c8-36 )
   echo "tomcat:${PASSWD_TOMCAT}" | chpasswd
) > /var/tmp/%{name}-%{version}-%{release}-install.pre.log 2>&1
```

The DATE variable is not needed here. Part of my template for RPMs.

Before I install, make sure the directory structure exists. This is me being somewhat anal, RPM will perform this for me. Next, remove the symbolic link if it exists. Next, create the account and group if they don't exist. For security, don't ever run a web server, service, application as root. It's just plain stupid. If someone hacks the service, then they own it at the level of the user running that service. Game over. Finally, create some unique variables to that system, combine them and pass them to a hash algorithm that will always give a unique output which we will then parse out a 24 character password that is not shared with anyone. If he/she has root, they can use "su – tomcat" or if applicable, "sudo su – tomcat" to get into that account.

The magic of the %post section

```
%post
(
   ## Variables for this section:
   DATE=$( /bin/date +%Y%b%d-%H:%M )

   ## Create sym link to new package:
   /bin/ln -s /opt/apache-tomcat-7.0.47 /opt/apache-tomcat

   ## Set the service to run on boot:
   /sbin/chkconfig --add apache-tomcat

   ## Start the service
   /sbin/service apache-tomcat start

) > /var/tmp/%{name}-%{version}-%{release}-install.post.log 2>&1
```

I've used the file section to include my startup file, /etc/init.d/apache-tomcat.

I then create a sym link for /opt/apache-tomcat to the real directory.

Finally, add the service to automatically start on reboot (startup).

The magic of the %preun section

```
%preun
(
   ## Variables for this section:
   DATE=$( /bin/date +%Y%b%d-%H:%M )
```

```
   ## Stop the service:
   /sbin/service apache-tomcat stop

   ## Delete the service:
   /sbin/chkconfig --del apache-tomcat

   ## backup functional files:
   [ -d /opt/apache-tomcat-7.0.47 ] && /bin/tar czf /opt/apache-tomcat-
7.0.47-${DATE}.tgz /opt/apache-tomcat-7.0.47/conf /opt/apache-tomcat-7.0.47/
webapps /etc/init.d/apache-tomcat

   ## remove the sym link
   /bin/unlink /opt/apache-tomcat

) > /var/tmp/%{name}-%{version}-%{release}-uninstall.pre.log 2>&1
```

I spent some time here getting this right. First, stop the service and delete the service with

chkconfig.

Second, what needs to be backed up before uninstall. The answer is your current configurations,

the deployed webapps and finally the startup script (in case anything custom was put into it for

that system).   This allows you to upgrade to a newer version and reconfigure the server back the

way you want it. Even better yet, include those changes into your custom RPM.

Then unlink the sym link to /opt/apache-tomcat.

The magic of the %postun section
This section doesn't do anything.

Conclusion

I spent over 10 hours studying all of the pre-requisites in order to get this right. In the appendix I have included my Spec file for your consideration. The important parts are the above sections (%pre .. %postun) and what they are executing. This is the magic of how to get a very secure and stable installation of tomcat running on all of your servers. The file permissions are handled by RPM. What can you do to make the rest of the install optimized and how can you further change your servers so that you end up with stable, consistent and highly reliable platforms for your deployed web services and servers? The challenge is now in your mind.

Appendix:

My Apache Tomcat 7 spec file (my apologies for the line wraps below):

```
#----------------------------------------------------------------------------#
# Define variables for later use
%define name          apache-tomcat
%define version       7.0
%define release       47


#----------------------------------------------------------------------------#
# Package information
Packager:             Master Foo (Foo@fortress.lan)
Summary:              apache-tomcat setup for RHEL 5
Name:                 %{name}
Version:              %{version}
Release:              %{release}
BuildArch:            x86_64
Group:                Applications
License:              GPL
Url:                  http://www.fortress.lan
Vendor:               Master Foo
Source0:              %{name}-%{version}.tgz
Buildroot:            %{_tmppath}/%{name}-%{version}-buildroot
BuildRequires:        coreutils
Requires:             jdk, /sbin/chkconfig, /sbin/service, /bin/unlink, /bin/mv,
/bin/mkdir, /bin/rm

#----------------------------------------------------------------------------#
# Package Description
%description
This rpm lays down the files necessary for the application %{name} compiled for RHEL
5.

#----------------------------------------------------------------------------#
# What to do in prep for building
%prep
%setup -c

#----------------------------------------------------------------------------#
# Build process (not really needed most times)
%build

#----------------------------------------------------------------------------#
## Package install process
%install
rm -rf %{buildroot}
# install - copy files and set attributes:
## Directory Build:
mkdir -p %{buildroot}/opt
mkdir -p %{buildroot}/etc/init.d
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/bin
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/temp
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/work
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/logs
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/conf
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/lib
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/examples
```

```
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/WEB-INF
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/jsp
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/META-INF
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/images
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/api
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/WEB-INF
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/architecture
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-
7.0.47/webapps/docs/architecture/startup
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-
7.0.47/webapps/docs/architecture/requestProcess
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/jspapi
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/tribes
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/web
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/web/WEB-INF
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/web/images
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/src
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/src/mypackage
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/docs
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/servletapi
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/funcspecs
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/images
mkdir -p -m 0755 %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/elapi
## Files Install:
install -m 0750 etc/init.d/apache-tomcat %{buildroot}/etc/init.d/apache-tomcat
install -m 0644 opt/apache-tomcat-7.0.47/RELEASE-NOTES %{buildroot}/opt/apache-tomcat-
7.0.47/RELEASE-NOTES
install -m 0644 opt/apache-tomcat-7.0.47/bin/setclasspath.bat %{buildroot}/opt/apache-
tomcat-7.0.47/bin/setclasspath.bat
install -m 0755 opt/apache-tomcat-7.0.47/bin/version.sh %{buildroot}/opt/apache-
tomcat-7.0.47/bin/version.sh
install -m 0755 opt/apache-tomcat-7.0.47/bin/startup.sh %{buildroot}/opt/apache-
tomcat-7.0.47/bin/startup.sh
install -m 0755 opt/apache-tomcat-7.0.47/bin/configtest.sh %{buildroot}/opt/apache-
tomcat-7.0.47/bin/configtest.sh
install -m 0644 opt/apache-tomcat-7.0.47/bin/digest.bat %{buildroot}/opt/apache-
tomcat-7.0.47/bin/digest.bat
install -m 0644 opt/apache-tomcat-7.0.47/bin/version.bat %{buildroot}/opt/apache-
tomcat-7.0.47/bin/version.bat
install -m 0755 opt/apache-tomcat-7.0.47/bin/setclasspath.sh %{buildroot}/opt/apache-
tomcat-7.0.47/bin/setclasspath.sh
install -m 0644 opt/apache-tomcat-7.0.47/bin/shutdown.bat %{buildroot}/opt/apache-
tomcat-7.0.47/bin/shutdown.bat
install -m 0644 opt/apache-tomcat-7.0.47/bin/startup.bat %{buildroot}/opt/apache-
tomcat-7.0.47/bin/startup.bat
install -m 0755 opt/apache-tomcat-7.0.47/bin/tool-wrapper.sh %{buildroot}/opt/apache-
tomcat-7.0.47/bin/tool-wrapper.sh
install -m 0644 opt/apache-tomcat-7.0.47/bin/catalina-tasks.xml
%{buildroot}/opt/apache-tomcat-7.0.47/bin/catalina-tasks.xml
install -m 0644 opt/apache-tomcat-7.0.47/bin/tool-wrapper.bat %{buildroot}/opt/apache-
tomcat-7.0.47/bin/tool-wrapper.bat
install -m 0755 opt/apache-tomcat-7.0.47/bin/catalina.sh %{buildroot}/opt/apache-
tomcat-7.0.47/bin/catalina.sh
```

```
install -m 0644 opt/apache-tomcat-7.0.47/bin/bootstrap.jar %{buildroot}/opt/apache-
tomcat-7.0.47/bin/bootstrap.jar
install -m 0755 opt/apache-tomcat-7.0.47/bin/digest.sh %{buildroot}/opt/apache-tomcat-
7.0.47/bin/digest.sh
install -m 0644 opt/apache-tomcat-7.0.47/bin/cpappend.bat %{buildroot}/opt/apache-
tomcat-7.0.47/bin/cpappend.bat
install -m 0644 opt/apache-tomcat-7.0.47/bin/configtest.bat %{buildroot}/opt/apache-
tomcat-7.0.47/bin/configtest.bat
install -m 0644 opt/apache-tomcat-7.0.47/bin/commons-daemon-native.tar.gz
%{buildroot}/opt/apache-tomcat-7.0.47/bin/commons-daemon-native.tar.gz
install -m 0644 opt/apache-tomcat-7.0.47/bin/tomcat-juli.jar %{buildroot}/opt/apache-
tomcat-7.0.47/bin/tomcat-juli.jar
install -m 0644 opt/apache-tomcat-7.0.47/bin/tomcat-native.tar.gz
%{buildroot}/opt/apache-tomcat-7.0.47/bin/tomcat-native.tar.gz
install -m 0644 opt/apache-tomcat-7.0.47/bin/catalina.bat %{buildroot}/opt/apache-
tomcat-7.0.47/bin/catalina.bat
install -m 0644 opt/apache-tomcat-7.0.47/bin/commons-daemon.jar
%{buildroot}/opt/apache-tomcat-7.0.47/bin/commons-daemon.jar
install -m 0755 opt/apache-tomcat-7.0.47/bin/shutdown.sh %{buildroot}/opt/apache-
tomcat-7.0.47/bin/shutdown.sh
install -m 0755 opt/apache-tomcat-7.0.47/bin/daemon.sh %{buildroot}/opt/apache-tomcat-
7.0.47/bin/daemon.sh
install -m 0644 opt/apache-tomcat-7.0.47/temp/safeToDelete.tmp
%{buildroot}/opt/apache-tomcat-7.0.47/temp/safeToDelete.tmp
install -m 0644 opt/apache-tomcat-7.0.47/NOTICE %{buildroot}/opt/apache-tomcat-
7.0.47/NOTICE
install -m 0600 opt/apache-tomcat-7.0.47/conf/logging.properties
%{buildroot}/opt/apache-tomcat-7.0.47/conf/logging.properties
install -m 0600 opt/apache-tomcat-7.0.47/conf/web.xml %{buildroot}/opt/apache-tomcat-
7.0.47/conf/web.xml
install -m 0600 opt/apache-tomcat-7.0.47/conf/server.xml %{buildroot}/opt/apache-
tomcat-7.0.47/conf/server.xml
install -m 0600 opt/apache-tomcat-7.0.47/conf/catalina.policy %{buildroot}/opt/apache-
tomcat-7.0.47/conf/catalina.policy
install -m 0600 opt/apache-tomcat-7.0.47/conf/context.xml %{buildroot}/opt/apache-
tomcat-7.0.47/conf/context.xml
install -m 0600 opt/apache-tomcat-7.0.47/conf/catalina.properties
%{buildroot}/opt/apache-tomcat-7.0.47/conf/catalina.properties
install -m 0600 opt/apache-tomcat-7.0.47/conf/tomcat-users.xml
%{buildroot}/opt/apache-tomcat-7.0.47/conf/tomcat-users.xml
install -m 0644 opt/apache-tomcat-7.0.47/lib/tomcat-util.jar %{buildroot}/opt/apache-
tomcat-7.0.47/lib/tomcat-util.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/tomcat-i18n-fr.jar
%{buildroot}/opt/apache-tomcat-7.0.47/lib/tomcat-i18n-fr.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/ecj-4.2.2.jar %{buildroot}/opt/apache-
tomcat-7.0.47/lib/ecj-4.2.2.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/servlet-api.jar %{buildroot}/opt/apache-
tomcat-7.0.47/lib/servlet-api.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/websocket-api.jar
%{buildroot}/opt/apache-tomcat-7.0.47/lib/websocket-api.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/tomcat-i18n-es.jar
%{buildroot}/opt/apache-tomcat-7.0.47/lib/tomcat-i18n-es.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/annotations-api.jar
%{buildroot}/opt/apache-tomcat-7.0.47/lib/annotations-api.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/jsp-api.jar %{buildroot}/opt/apache-
tomcat-7.0.47/lib/jsp-api.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/tomcat7-websocket.jar
%{buildroot}/opt/apache-tomcat-7.0.47/lib/tomcat7-websocket.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/catalina-ha.jar %{buildroot}/opt/apache-
tomcat-7.0.47/lib/catalina-ha.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/catalina.jar %{buildroot}/opt/apache-
tomcat-7.0.47/lib/catalina.jar
```

```
install -m 0644 opt/apache-tomcat-7.0.47/lib/tomcat-api.jar %{buildroot}/opt/apache-
tomcat-7.0.47/lib/tomcat-api.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/jasper-el.jar %{buildroot}/opt/apache-
tomcat-7.0.47/lib/jasper-el.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/catalina-ant.jar %{buildroot}/opt/apache-
tomcat-7.0.47/lib/catalina-ant.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/tomcat-i18n-ja.jar
%{buildroot}/opt/apache-tomcat-7.0.47/lib/tomcat-i18n-ja.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/tomcat-jdbc.jar %{buildroot}/opt/apache-
tomcat-7.0.47/lib/tomcat-jdbc.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/el-api.jar %{buildroot}/opt/apache-
tomcat-7.0.47/lib/el-api.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/jasper.jar %{buildroot}/opt/apache-
tomcat-7.0.47/lib/jasper.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/tomcat-dbcp.jar %{buildroot}/opt/apache-
tomcat-7.0.47/lib/tomcat-dbcp.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/tomcat-coyote.jar
%{buildroot}/opt/apache-tomcat-7.0.47/lib/tomcat-coyote.jar
install -m 0644 opt/apache-tomcat-7.0.47/lib/catalina-tribes.jar
%{buildroot}/opt/apache-tomcat-7.0.47/lib/catalina-tribes.jar
install -m 0644 opt/apache-tomcat-7.0.47/LICENSE %{buildroot}/opt/apache-tomcat-
7.0.47/LICENSE
install -m 0644 opt/apache-tomcat-7.0.47/RUNNING.txt %{buildroot}/opt/apache-tomcat-
7.0.47/RUNNING.txt
install -m 0644 opt/apache-tomcat-7.0.47/webapps/examples/index.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/examples/index.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/bg-button.png
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/bg-button.png
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/WEB-INF/web.xml
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/WEB-INF/web.xml
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/asf-logo-wide.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/asf-logo-wide.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat.css
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat.css
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/index.jsp
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/index.jsp
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/RELEASE-NOTES.txt
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/RELEASE-NOTES.txt
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/bg-nav.png
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/bg-nav.png
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/build.xml
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/build.xml
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/bg-middle.png
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/bg-middle.png
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat-power.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat-power.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/asf-logo.png
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/asf-logo.png
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/favicon.ico
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/favicon.ico
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat.svg
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat.svg
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/bg-upper.png
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/bg-upper.png
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/bg-nav-item.png
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/bg-nav-item.png
install -m 0644 opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat.png
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat.png
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/jsp/sessionDetail.jsp
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/jsp/sessionDetail.jsp
```

```
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/jsp/404.jsp
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/jsp/404.jsp
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/jsp/sessionsList.jsp
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/jsp/sessionsList.jsp
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/jsp/403.jsp
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/jsp/403.jsp
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/jsp/401.jsp
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/jsp/401.jsp
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/web.xml
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/web.xml
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/xform.xsl
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/xform.xsl
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/index.jsp
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/index.jsp
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/META-INF/context.xml
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/META-INF/context.xml
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/status.xsd
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/status.xsd
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/images/tomcat.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/images/tomcat.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/images/update.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/images/update.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/images/fix.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/images/fix.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/images/asf-logo.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/images/asf-logo.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/images/docs.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/images/docs.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/images/add.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/images/add.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/images/void.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/images/void.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/images/design.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/images/design.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/manager/images/code.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/manager/images/code.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/windows-service-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/windows-service-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/connectors.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/connectors.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/realm-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/realm-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/cgi-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/cgi-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/virtual-hosting-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/virtual-hosting-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/api/index.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/api/index.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/web-socket-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/web-socket-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/WEB-INF/web.xml
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/WEB-INF/web.xml
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/security-manager-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/security-manager-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/ssi-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/ssi-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/apr.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/apr.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/default-servlet.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/default-servlet.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/architecture/startup.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/architecture/startup.html
```

```
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/architecture/requestProcess.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/architecture/requestProcess.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/architecture/index.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/architecture/index.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/architecture/overview.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/architecture/overview.html
install -m 0644 opt/apache-tomcat-
7.0.47/webapps/docs/architecture/startup/serverStartup.pdf %{buildroot}/opt/apache-
tomcat-7.0.47/webapps/docs/architecture/startup/serverStartup.pdf
install -m 0644 opt/apache-tomcat-
7.0.47/webapps/docs/architecture/startup/serverStartup.txt %{buildroot}/opt/apache-
tomcat-7.0.47/webapps/docs/architecture/startup/serverStartup.txt
install -m 0644 opt/apache-tomcat-
7.0.47/webapps/docs/architecture/requestProcess/requestProcess.pdf
%{buildroot}/opt/apache-tomcat-
7.0.47/webapps/docs/architecture/requestProcess/requestProcess.pdf
install -m 0644 opt/apache-tomcat-
7.0.47/webapps/docs/architecture/requestProcess/roseModel.mdl %{buildroot}/opt/apache-
tomcat-7.0.47/webapps/docs/architecture/requestProcess/roseModel.mdl
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/index.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/index.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/changelog.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/changelog.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/jspapi/index.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/jspapi/index.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/manager-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/manager-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/html-manager-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/html-manager-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/aio.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/aio.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-sender.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-sender.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/realm.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/realm.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-membership.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-membership.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/manager.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/manager.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-listener.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-listener.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/context.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/context.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/cluster.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/cluster.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/server.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/server.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/index.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/index.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/loader.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/loader.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-manager.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-manager.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/filter.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/filter.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-channel.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-channel.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/http.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/http.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-interceptor.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-interceptor.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-deployer.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-deployer.html
```

```
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/resources.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/resources.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/engine.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/engine.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/jar-scanner.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/jar-scanner.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/ajp.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/ajp.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/systemprops.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/systemprops.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/service.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/service.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/globalresources.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/globalresources.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/host.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/host.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/valve.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/valve.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/listeners.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/listeners.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/executor.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/executor.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-valve.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-valve.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-receiver.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-receiver.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/security-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/security-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/tribes/membership.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/tribes/membership.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/tribes/faq.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/tribes/faq.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/tribes/transport.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/tribes/transport.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/tribes/status.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/tribes/status.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/tribes/introduction.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/tribes/introduction.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/tribes/developers.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/tribes/developers.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/tribes/interceptors.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/tribes/interceptors.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/tribes/setup.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/tribes/setup.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/class-loader-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/class-loader-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/ssl-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/ssl-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/maven-jars.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/maven-jars.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/index.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/index.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/introduction.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/introduction.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/source.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/source.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/web.xml.txt
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/web.xml.txt
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/index.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/index.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/web/WEB-
INF/web.xml %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/web/WEB-
INF/web.xml
```

```
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/web/index.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/web/index.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/web/hello.jsp
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/web/hello.jsp
install -m 0644 opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/web/images/tomcat.gif %{buildroot}/opt/apache-
tomcat-7.0.47/webapps/docs/appdev/sample/web/images/tomcat.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/build.xml
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/build.xml
install -m 0644 opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/src/mypackage/Hello.java %{buildroot}/opt/apache-
tomcat-7.0.47/webapps/docs/appdev/sample/src/mypackage/Hello.java
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/sample.war
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/sample.war
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/docs/README.txt
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/docs/README.txt
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/build.xml.txt
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/build.xml.txt
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/deployment.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/deployment.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/processes.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/processes.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/appdev/installation.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/appdev/installation.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/BUILDING.txt
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/BUILDING.txt
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/deployer-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/deployer-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/introduction.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/introduction.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/servletapi/index.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/servletapi/index.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/RELEASE-NOTES.txt
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/RELEASE-NOTES.txt
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/jndi-resources-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/jndi-resources-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/cluster-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/cluster-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-jdbc-realm.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-jdbc-realm.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/mbean-names.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/mbean-names.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/index.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/index.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-memory-realm.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-memory-realm.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-admin-opers.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-admin-opers.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-admin-apps.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-admin-apps.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-jndi-realm.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-jndi-realm.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-default.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-default.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-admin-objects.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-admin-objects.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/mbeans-descriptor-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/mbeans-descriptor-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/logging.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/logging.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/jasper-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/jasper-howto.html
```

```
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/building.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/building.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/jndi-datasource-examples-
howto.html %{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/jndi-datasource-
examples-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/windows-auth-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/windows-auth-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/extras.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/extras.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/developers.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/developers.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/images/tomcat.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/images/tomcat.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/images/update.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/images/update.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/images/fix.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/images/fix.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/images/asf-logo.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/images/asf-logo.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/images/docs.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/images/docs.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/images/cors-flowchart.png
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/images/cors-flowchart.png
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/images/add.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/images/add.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/images/void.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/images/void.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/images/design.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/images/design.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/images/code.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/images/code.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/images/printer.gif
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/images/printer.gif
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/images/tomcat.svg
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/images/tomcat.svg
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/proxy-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/proxy-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/RUNNING.txt
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/RUNNING.txt
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/elapi/index.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/elapi/index.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/balancer-howto.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/balancer-howto.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/setup.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/setup.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/monitoring.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/monitoring.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/jdbc-pool.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/jdbc-pool.html
install -m 0644 opt/apache-tomcat-7.0.47/webapps/docs/comments.html
%{buildroot}/opt/apache-tomcat-7.0.47/webapps/docs/comments.html


#------------------------------------------------------------------------#
## Pre install scripts
%pre
(
    ## Variables for this section:
    DATE=$( /bin/date +%Y%b%d-%H:%M )

    ## Make the destination directory if it doesn't exist:
    [ ! -d /opt/apache-tomcat-7.0.47 ] && mkdir -p /opt/apache-tomcat-7.0.47
```

```
    ## Remove sym link, if it exists:
    [ -L /opt/apache-tomcat ] && unlink /opt/apache-tomcat

    ## If the tomcat user and group doesn't exist, add them.
    ## I chose gid and uid of 333 because I want it less than 500 for user accounts.
This is a service acct.
    [ `grep -c tomcat /etc/group` -lt "1" ] && groupadd -f -g 333 tomcat
    [ `grep -c tomcat /etc/passwd` -lt "1" ] && useradd -c "Tomcat Srvc Acct." -m -g
333 -s /bin/bash -u 333 tomcat
    ## the sys admin doesn't need to know this AND it needs to be unique per system:
    MAC=$( ip addr show eth0 | grep ether | awk '{print $2}' )
    PASSWD_TOMCAT=$( echo "$MAC $HOSTNAME" `cat /var/log/messages` | /usr/bin/sha512sum
| cut -c8-36 )
    echo "tomcat:${PASSWD_TOMCAT}" | chpasswd

) > /var/tmp/%{name}-%{version}-%{release}-install.pre.log 2>&1


#-------------------------------------------------------------------------#
## Post install scripts
%post
(
    ## Variables for this section:
    DATE=$( /bin/date +%Y%b%d-%H:%M )

    ## Create sym link to new package:
    /bin/ln -s /opt/apache-tomcat-7.0.47 /opt/apache-tomcat

    ## Set the service to run on boot:
    /sbin/chkconfig --add apache-tomcat

    ## Start the service
    /sbin/service apache-tomcat start

) > /var/tmp/%{name}-%{version}-%{release}-install.post.log 2>&1


#-------------------------------------------------------------------------#
## Pre uninstall scripts
%preun
(
    ## Variables for this section:
    DATE=$( /bin/date +%Y%b%d-%H:%M )

    ## Stop the service:
    /sbin/service apache-tomcat stop

    ## Delete the service:
    /sbin/chkconfig --del apache-tomcat

    ## backup functional files:
    [ -d /opt/apache-tomcat-7.0.47 ] && /bin/tar czf /opt/apache-tomcat-7.0.47-
${DATE}.tgz /opt/apache-tomcat-7.0.47/conf /opt/apache-tomcat-7.0.47/webapps
/etc/init.d/apache-tomcat

    ## remove the sym link
    /bin/unlink /opt/apache-tomcat

) > /var/tmp/%{name}-%{version}-%{release}-uninstall.pre.log 2>&1


#-------------------------------------------------------------------------#
## Pre uninstall scripts
```

```
%postun
(
    echo " "
) > /var/tmp/%{name}-%{version}-%{release}-uninstall.post.log 2>&1


#------------------------------------------------------------------------#
## Files section, what do we install and how we keep track of it.
%files
%defattr(664, root, root, 755)
%dir /opt
%defattr(664, tomcat, tomcat, 755)
%dir /opt/apache-tomcat-7.0.47
%dir /opt/apache-tomcat-7.0.47/bin
%dir /opt/apache-tomcat-7.0.47/temp
%dir /opt/apache-tomcat-7.0.47/work
%dir /opt/apache-tomcat-7.0.47/logs
%dir /opt/apache-tomcat-7.0.47/conf
%dir /opt/apache-tomcat-7.0.47/lib
%dir /opt/apache-tomcat-7.0.47/webapps
%dir /opt/apache-tomcat-7.0.47/webapps/examples
%dir /opt/apache-tomcat-7.0.47/webapps/ROOT
%dir /opt/apache-tomcat-7.0.47/webapps/ROOT/WEB-INF
%dir /opt/apache-tomcat-7.0.47/webapps/manager
%dir /opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF
%dir /opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/jsp
%dir /opt/apache-tomcat-7.0.47/webapps/manager/META-INF
%dir /opt/apache-tomcat-7.0.47/webapps/manager/images
%dir /opt/apache-tomcat-7.0.47/webapps/docs
%dir /opt/apache-tomcat-7.0.47/webapps/docs/api
%dir /opt/apache-tomcat-7.0.47/webapps/docs/WEB-INF
%dir /opt/apache-tomcat-7.0.47/webapps/docs/architecture
%dir /opt/apache-tomcat-7.0.47/webapps/docs/architecture/startup
%dir /opt/apache-tomcat-7.0.47/webapps/docs/architecture/requestProcess
%dir /opt/apache-tomcat-7.0.47/webapps/docs/jspapi
%dir /opt/apache-tomcat-7.0.47/webapps/docs/config
%dir /opt/apache-tomcat-7.0.47/webapps/docs/tribes
%dir /opt/apache-tomcat-7.0.47/webapps/docs/appdev
%dir /opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample
%dir /opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/web
%dir /opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/web/WEB-INF
%dir /opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/web/images
%dir /opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/src
%dir /opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/src/mypackage
%dir /opt/apache-tomcat-7.0.47/webapps/docs/appdev/sample/docs
%dir /opt/apache-tomcat-7.0.47/webapps/docs/servletapi
%dir /opt/apache-tomcat-7.0.47/webapps/docs/funcspecs
%dir /opt/apache-tomcat-7.0.47/webapps/docs/images
%dir /opt/apache-tomcat-7.0.47/webapps/docs/elapi
#
%attr(750, root, root) /etc/init.d/apache-tomcat
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/RELEASE-NOTES
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/setclasspath.bat
%attr(755, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/version.sh
%attr(755, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/startup.sh
%attr(755, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/configtest.sh
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/digest.bat
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/version.bat
%attr(755, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/setclasspath.sh
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/shutdown.bat
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/startup.bat
%attr(755, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/tool-wrapper.sh
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/catalina-tasks.xml
```

```
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/tool-wrapper.bat
%attr(755, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/catalina.sh
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/bootstrap.jar
%attr(755, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/digest.sh
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/cpappend.bat
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/configtest.bat
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/commons-daemon-native.tar.gz
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/tomcat-juli.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/tomcat-native.tar.gz
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/catalina.bat
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/commons-daemon.jar
%attr(755, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/shutdown.sh
%attr(755, tomcat, tomcat) /opt/apache-tomcat-7.0.47/bin/daemon.sh
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/temp/safeToDelete.tmp
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/NOTICE
%attr(600, tomcat, tomcat) /opt/apache-tomcat-7.0.47/conf/logging.properties
%attr(600, tomcat, tomcat) /opt/apache-tomcat-7.0.47/conf/web.xml
%attr(600, tomcat, tomcat) /opt/apache-tomcat-7.0.47/conf/server.xml
%attr(600, tomcat, tomcat) /opt/apache-tomcat-7.0.47/conf/catalina.policy
%attr(600, tomcat, tomcat) /opt/apache-tomcat-7.0.47/conf/context.xml
%attr(600, tomcat, tomcat) /opt/apache-tomcat-7.0.47/conf/catalina.properties
%attr(600, tomcat, tomcat) /opt/apache-tomcat-7.0.47/conf/tomcat-users.xml
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/tomcat-util.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/tomcat-i18n-fr.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/ecj-4.2.2.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/servlet-api.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/websocket-api.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/tomcat-i18n-es.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/annotations-api.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/jsp-api.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/tomcat7-websocket.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/catalina-ha.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/catalina.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/tomcat-api.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/jasper-el.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/catalina-ant.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/tomcat-i18n-ja.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/tomcat-jdbc.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/el-api.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/jasper.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/tomcat-dbcp.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/tomcat-coyote.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/lib/catalina-tribes.jar
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/LICENSE
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/RUNNING.txt
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/examples/index.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/bg-button.png
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/WEB-INF/web.xml
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/asf-logo-wide.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat.css
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/index.jsp
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/RELEASE-NOTES.txt
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/bg-nav.png
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/build.xml
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/bg-middle.png
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat-power.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/asf-logo.png
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/favicon.ico
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat.svg
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/bg-upper.png
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/bg-nav-item.png
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/ROOT/tomcat.png
```

```
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/WEB-
INF/jsp/sessionDetail.jsp
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/WEB-
INF/jsp/404.jsp
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/WEB-
INF/jsp/sessionsList.jsp
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/WEB-
INF/jsp/403.jsp
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/WEB-
INF/jsp/401.jsp
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/WEB-INF/web.xml
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/xform.xsl
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/index.jsp
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/META-
INF/context.xml
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/status.xsd
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/images/tomcat.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/images/update.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/images/fix.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/images/asf-
logo.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/images/docs.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/images/add.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/images/void.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/images/design.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/manager/images/code.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/windows-service-
howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/connectors.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/realm-howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/cgi-howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/virtual-hosting-
howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/api/index.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/web-socket-
howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/WEB-INF/web.xml
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/security-manager-
howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/ssi-howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/apr.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/default-servlet.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/architecture/startup.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/architecture/requestProcess.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/architecture/index.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/architecture/overview.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/architecture/startup/serverStartup.pdf
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/architecture/startup/serverStartup.txt
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/architecture/requestProcess/requestProcess.pdf
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/architecture/requestProcess/roseModel.mdl
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/index.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/changelog.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/jspapi/index.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/manager-howto.html
```

```
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/html-manager-
howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/aio.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-
sender.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/realm.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-
membership.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/manager.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-
listener.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/context.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/cluster.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/server.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/index.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/loader.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-
manager.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/filter.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-
channel.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/http.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-
interceptor.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-
deployer.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/config/resources.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/engine.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/jar-
scanner.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/ajp.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/config/systemprops.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/service.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/config/globalresources.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/host.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/valve.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/config/listeners.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/executor.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-
valve.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/config/cluster-
receiver.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/security-howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/tribes/membership.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/tribes/faq.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/tribes/transport.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/tribes/status.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/tribes/introduction.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/tribes/developers.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/tribes/interceptors.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/tribes/setup.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/class-loader-
howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/ssl-howto.html
```

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%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/maven-jars.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/appdev/index.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/appdev/introduction.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/appdev/source.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/appdev/web.xml.txt
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/index.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/web/WEB-INF/web.xml
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/web/index.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/web/hello.jsp
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/web/images/tomcat.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/build.xml
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/src/mypackage/Hello.java
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/sample.war
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/appdev/sample/docs/README.txt
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/appdev/build.xml.txt
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/appdev/deployment.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/appdev/processes.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/appdev/installation.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/BUILDING.txt
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/deployer-howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/introduction.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-
7.0.47/webapps/docs/servletapi/index.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/RELEASE-NOTES.txt
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/jndi-resources-
howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/cluster-howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-jdbc-
realm.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/mbean-
names.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/index.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-memory-
realm.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-admin-
opers.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-admin-
apps.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-jndi-
realm.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-
default.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/funcspecs/fs-admin-
objects.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/mbeans-descriptor-
howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/logging.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/jasper-howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/building.html
```

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%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/jndi-datasource-
examples-howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/windows-auth-
howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/extras.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/developers.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/images/tomcat.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/images/update.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/images/fix.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/images/asf-logo.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/images/docs.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/images/cors-
flowchart.png
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/images/add.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/images/void.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/images/design.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/images/code.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/images/printer.gif
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/images/tomcat.svg
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/proxy-howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/RUNNING.txt
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/elapi/index.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/balancer-howto.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/setup.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/monitoring.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/jdbc-pool.html
%attr(644, tomcat, tomcat) /opt/apache-tomcat-7.0.47/webapps/docs/comments.html


#-------------------------------------------------------------------------#
## Cleanup after build
%clean
rm -rf %{buildroot}


#-------------------------------------------------------------------------#
## Changelog
%changelog
* Mon Nov 04 2013 Master Foo <Foo@fortress.lan> 7.0.47
  - Initial build.
```