

2.1.2 Linux Package Install Guide

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Introduction

This guide details the process for installing the Direct Certificate Discovery Tool (DCDT, or the *Tool*) from a Linux (Debian) package. The package obtained by either [building it from the source](#) or by simply downloading the prebuilt package as described on this page.

Requirements

See the System Requirements Install Guide for instructions on how to prepare your system prior to installation of the *Tool*.

Add Tool Apt Repository

In order to resolve some dependent packages, you will need to add the *Tool*'s Apt repository:

```
sudo add-apt-repository http://packages.direct-test.com/ubuntu/  
sudo apt-get update
```

Install Tool Package

If you have [built the package from the source code](#), the package has been built locally and can be installed by running:

```
sudo dpkg -i ~/direct-certificate-discovery-tool/assembly/target/direct-cert-discovery-tool-assembly-*.deb
```

Otherwise, the latest version of the package can be downloaded from the *Tool*'s Apt repository by running:

```
sudo apt-get install direct-cert-discovery-tool-assembly
```

Configure the Environment

Append the following lines to the global environment configuration file, `/etc/environment`:

```
DIRECT_HOME="/usr/share/direct"  
DIRECT_VAR="/var/lib/direct"
```

Source and export the variables in the global environment configuration file by running:

```
. /etc/environment  
export DIRECT_HOME DIRECT_VAR
```

Configure Tomcat

Stop the Tomcat 7 service by running:

```
sudo service tomcat7 stop
```

Modify the HTTP connector port by running:

```
sudo /usr/share/direct/direct-cert-discovery-tool-utils/bin/tomcat7-setport.sh
```

Append the following lines to the file `/etc/default/tomcat7`:

```
JAVA_HOME="/usr/lib/jvm/java-7-oracle"  
JAVA_OPTS="-Djava.awt.headless=true -Xms512m -Xmx1536m -XX:+UseConcMarkSweepGC"
```

If the file `/usr/share/tomcat7/bin/setenv.sh` does not exist, create it by running:

```
sudo touch /usr/share/tomcat7/bin/setenv.sh
```

Append the following lines to the file /usr/share/tomcat7/bin/setenv.sh:

```
CATALINA_OPTS="$CATALINA_OPTS -XX:PermSize=256m -XX:MaxPermSize=512m"
CATALINA_OPTS="$CATALINA_OPTS -Dderby.stream.error.file=$CATALINA_BASE/logs/derby.log"
CATALINA_OPTS="$CATALINA_OPTS -Ddcdt.config.dir=/var/lib/direct/direct-cert-discovery-tool/config"
CATALINA_OPTS="$CATALINA_OPTS -Ddcdt.log.dir=$CATALINA_BASE/logs"
```

Start the Tomcat 7 service by running:

```
sudo service tomcat7 start
```

Configure Direct DNS Services

Start the Direct DNS Server service by running:

```
sudo service DirectDNSServer start
```

Configure ApacheDS

Stop the ApacheDS default instance service by running:

```
sudo service apacheds-2.0.0-M10-default stop
```

Create the ApacheDS domain2ldap1 instance data by running:

```
sudo mkdir -p /var/lib/apacheds-2.0.0-M10/domain2ldap1/run
sudo cp -r /var/lib/apacheds-2.0.0-M10/default/conf/ /var/lib/apacheds-2.0.0-M10/domain2ldap1/conf/
sudo sed -i -r 's/^(ads\-\systemport: )10(389|636)${/\111\2/g' /var/lib/apacheds-2.0.0-M10/domain2ldap1/conf/config.ldif
sudo chown -R apacheds:apacheds /var/lib/apacheds-2.0.0-M10/domain2ldap1
```

Create the ApacheDS domain2ldap1 instance service by running:

```
sudo cp /etc/init.d/apacheds-2.0.0-M10-default /etc/init.d/apacheds-2.0.0-M10-domain2ldap1
sudo sed -i -r 's/(apacheds \${1} )default/\1domain2ldap1/' /etc/init.d/apacheds-2.0.0-M10-domain2ldap1
```

Start both ApacheDS instance services by running:

```
sudo service apacheds-2.0.0-M10-default start
sudo service apacheds-2.0.0-M10-domain2ldap1 start
```

Further Steps

At this point the system contains all of the *Tools* software components, but has not yet been made deployment domain-specific. To finalize the configuration, please follow the instructions in the [Configuration Guide](#).