

# 3.0 System and Software Requirements

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## Introduction

This guide details the process for installing the system requirements of the Direct Certificate Discovery Tool (DCDT, or the *Tool*).

## Hardware Requirements

Hardware Type	Minimum Requirement	Notes
CPU	1 Processing Unit @ 2.0GHz	Only a rough estimate.
Memory (RAM)	3GB	Less memory is required if the pieces of software are run on different machines.

## Software Requirements

Software Name	Minimum Version	Notes
Ubuntu (Server)	12.04 LTS (Precise Pangolin)	Tested more extensively on 13.10 (Saucy Salamander) and 14.04 (Trusty Tahr).
Oracle Java 7 JDK + JRE	1.7.0	Install instructions detailed below.
Git CLI	1.9.1	Install instructions detailed below.
Mercurial CLI	2.6	Install instructions detailed below.
Apache Maven	3.0	Install instructions detailed below.
Apache Tomcat	7.0	Install instructions detailed below.

## Install Software Requirements

### System

Installing the software packages detailed below requires several common system-wide utilities. They can be installed by running:

```
sudo apt-get install wget
```

### Java Development Kit (JDK) & Java Runtime Environment (JRE)

In order to get the proprietary Oracle Java 7 packages, run the following:

```
sudo apt-get install python-software-properties (This may be necessary to use the add-apt-repository command)
sudo add-apt-repository ppa:webupd8team/java
sudo apt-get update
sudo apt-get install oracle-java7-installer
sudo update-alternatives -s java-7-oracle
```

 **Note:** when running the final command above, you might see some errors like the following:

```
update-alternatives: error: no alternatives for mozilla-javaplugin.so.
```

These errors can be safely ignored.

To set the JAVA\_HOME environment variable for the installed JDK:

```
export JAVA_HOME=/usr/lib/jvm/java-7-oracle
echo "export JAVA_HOME=$JAVA_HOME" | sudo tee -a /etc/environment
```

To obtain the Java Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files required for unlimited strength encryption used in DCDT, run either of the following sets of commands:

```
sudo apt-get install oracle-java7-unlimited-jce-policy
```

OR

```
wget --no-cookies --header "Cookie: oraclelicense=accept-securebackup-cookie" http://download.oracle.com/otn-pub/java/jce/7/UnlimitedJCEPolicyJDK7.zip
sudo apt-get install unzip (if not already installed)
unzip UnlimitedJCEPolicyJDK7.zip
sudo cp UnlimitedJCEPolicy/local_policy.jar $JAVA_HOME/jre/lib/security
sudo cp UnlimitedJCEPolicy/US_export_policy.jar $JAVA_HOME/jre/lib/security
```

## Git CLI

Run the following:

```
sudo apt-get install git
```

## Mercurial CLI

Run the following:

```
sudo apt-get install mercurial
```

## Apache Maven

Run the following:

```
sudo apt-get install maven
```

## Apache Tomcat

Run the following:

```
sudo apt-get install tomcat7 tomcat7-admin
```