**Overview**

The following section provide a description about operating systems and software used while developing and testing MAGDA SDK.

For further informations, please refer to other sections in [MAGDA homepage](#).

**Development Tools**

The tool chosen and tested for software development is:

- Eclipse 3.2.2

The chosen operating system was:

- Ubuntu 9.04 (32-bit, i386);
- Ubuntu 9.10 (32-bit, i386).

and downloaded from the [Eclipse Project homepage](#).

However, a version of Eclipse containing all the useful plugins for MAGDA can be found [here](#).

The usage of the following plugins is recommended to develop software for MAGDA:

- Whitestein WSAG Plugin;
- MAGE-GDT Plugin;
- WSAG + MAGE-GDT Plugin.

**Platforms and Cluster OSs**

The software platforms adopted for development and testing are:

- Java (JDK) v.1.5.0_07
- Globus Toolkit v.4.0.8
- JADE Platform v.3.5

A virtual cluster was set up during development and testing (for further details, see [MAGDA Virtual Cluster](#)). The operating system adopted for all of the virtual machines is:

- Red Hat - CentOS release 4.3 (Final) for i386
The following additional packages have been added to this release:

- gcc-c++-3.4.6-l0.i386.rpm
- perl-XML-Parser-2.36-3.el3.pp.i386.rpm
- sudo-1.6.8p12-1rh73.i386.rpm

Their dependencies can be found in the last section of MAGDA Virtual Cluster Documentation.

The following software is recommended for the development of a (virtual) cluster to be going to include MAGDA SDK features:

- MAGDA SDK Grid Services;
- Customized MTP for MAGDA SDK;
- Condor for MAGDA SDK;
- MAGDA SDK GUI.

The MAGDA advanced service based on Condor project also requires:

- Condor v 7.2.4.