**How to install, configure and run META May Demo on Linux**

This procedure was verified on a 32 bit Ubuntu laptop. It is sufficient for running the following test cases:

* Load initial Amil Graph
* View Amil Graph
* Publish requirements from Magic Draw
* View revised Amil Graph

This procedure is not sufficient for running the two Use Cases since they require MatLab, which wasn’t available..

1. Unzip jdk1.6.0\_22 under /opt
2. Set environmental variable JAVA\_HOME = /opt/jdk1.6.0\_22
3. Unzip clisp-2.4.4 under /opt
4. Unzip Maven 3.0.3 under /opt
5. Unzip Ant 1.8.2 under /opt
6. Make the MagicDraw installation script, MD\_UML\_170\_sp1\_unix.sh, executable (chmod 744) and execute as root. Note, this is an Install Anywhere script which includes the archive.
7. When prompted, change the installation directory from /root/MagicDraw\_UML to /opt/MagicDraw
8. Make the STS install script executable and execute it in /opt, just like for MagicDraw. Install it to /opt/springsource. When prompted for the JDK path, select /opt/jdk1.6.0\_22
9. Execute the System->Administration->Synaptic Package Manager to update SVN to the latest available version. This was 1.6.6 for Ubuntu
10. Make sure that /usr/local/bin is first in your PATH
11. Add the following soft links to /usr/local/bin using command ln –s <target> <link name>

* java -> /opt/jdk1.6.0\_22/bin/java
* ant -> /opt/apache-ant-1.8.3/bin/ant
* mvn -> /opt/apache-maven-3.0.3/bin/mvn
* sts -> /opt/springsource/sts-2.6.1.RELEASE/STS

Note, a MagicDraw link was not added since it needs to be executed in directory /opt/MagicDraw\_UML using the command ./bin/mduml. Make sure mduml is executable (chmod 744)

1. Checkout the META trunk to a convenient location using a command similar to the following

* svn checkout –r 641 svn+ssh://<username>@cvsext.ait.na.baesystems.com/proj/meta/svn/trunk

1. Install g++ if not already installed. On Ubuntu, it prompted me to install it when I attempted to use it. Which I did
2. Rebuild ArmorMain and LowFidelityRampMassPropertiesModel by navigating to Meta trunk/models/Armor/src/ArmorMain and typing “make”. When the system is built with maven and executed in a server in following steps, the ArmorMain executable and LowFidelityRampMassPropertiesModel executable are copied to the following two folders in sequence:

* Meta trunk/ArrowWebServices/target/ArrowWebServices-0.0.2-SNAPSHOT/linux
* /opt/springsource/vfabric-tc-server-developer-2.5.0.RELEASE/<servername>/wtpwebapps/ArrowWebServices/linux

Note, if the server configuration folder is manually deleted from the command line, it might be necessary to delete it from the STS workspace as well. It turns out that the STS workspace contains a backup of the server configuration in folder

* <sts workspace path>/.metadata/.plugins/org.eclipse.wst.server.core/tmp0

1. Open up permissions (chmod –R 777) on /opt/springsource/vfabric-tc-server-developer-2.5.0.RELEASE.
2. Follow procedure, MetaStsConfiguration.docs, for setting up the STS environment. If a server does not exist, manually define a new server using SpringSource tc server v2.1. For the installation directory, browse to and select /opt/springsource/vfabric-tc-server-developer-2.5.0.RELEASE. This will automatically populate the Version field. When creating a tc Server Instance, give it any name (e.g., meta\_server), select [] bio, and leave Layout as Separate
3. Make ArmorMain and LowFidelityRampMassPropertiesModel executable (chmod 744) in folder /opt/springsource/vfabric-tc-server-developer-2.5.0.RELEASE/<servername>/wtpwebapps/ArrowWebServices/linux

Other notes and issues:

* When running in Debug mode, you may need to start the browser externally and then enter the address <http://localhost:8080/ArrowWebServices>
* Need to run MagicDraw in the installation directory. Cd /opt/MagicDraw\_UML and enter ./bin/mduml
* When attempting to run Use Case 1, the system could not find door-opening-1-no-time-scn.lisp. This appears to be due to the existence of back slashes in the path (…/envisioner\QML-IFV\door-opening-1-no-time-scn.lisp)
* The AMIL graph doesn’t expand like it does on Windows. It starts out blank, then displays one blob, then the graph. It doesn’t expand in a cool fashion.