GAMA Roll Experiences

Rocks-A-Palooza I

Track 2

Case Studies of Existing Rolls

Sandeep Chandra

GAMA Roll Function

- ◆ GSI credential management solution.
- ◆ For web/grid portals and web service clients.
- ◆ Automatically install/configure components including
  - ➲ CA System (CACL)
  - ➲ MyProxy (Credential Repository)
  - ➲ Globus (GSI libraries)
  - ➲ Axis web service wrappers
  - ➲ Tomcat containers hosting Axis services
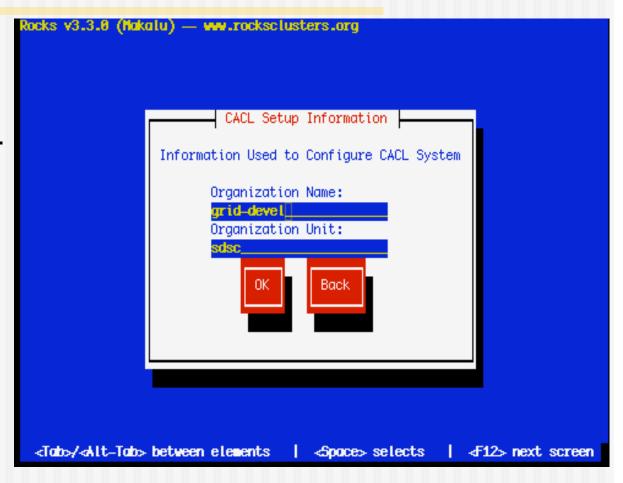
Issue

◆ Configuring CACL and MyProxy requires access to system variables and other software configuration information before the frontend is up and running.
  - ➲ Hostname, IP address
  - ➲ Organization name, organization unit, CA encryption password, etc.

◆ One solution:
  - ➲ Define and display screens to accept user input.
  - ➲ Use Roll's <var> tag to extract the required field name from the database.

Dealing with the Variable Issue

◆ Trick:

- ➲ Define screens and accept configuration information from users.

- ➲ Information stored in the DB which holds unique values.

- ➲ Use Roll's <var name="config"> tag to retrieve value for the variable named "config" from the DB.

How We Do It

rocks/src/roll/gama/nodes/gama.xml

◆ Some variables are retrieved using the standard Rocks installation screens.

➲ For hostname use `<var name="Kickstart_PublicHostname"/>`
➲ For password use `<var name="Kickstart_PublicRootPassword"/>`
➲ For IP address use `<var name="Kickstart_PublicAddress"/>`

◆ We define custom screens to accept roll specific configuration information.

➲ For Organization Name use
`<var name="Info_OrganizationName"/>`
➲ For Organization Unit use
`<var name="Info_OrganizationUnit"/>`

The Nodes File

```
<post>

………………………………..
<file name="/opt/jakarta-tomcat-non-secure/webapps/axis/WEB-INF/classes/myproxy-server.properties"
 mode="append">
myproxyHost=<var name="Kickstart_PublicAddress"/>
myproxyPort=7512
myproxyLifetime=8100
</file>


……………………………….
……………………………….

# setup certificates
(cd /usr/local/CA_SYSTEM; ./caad 1 <var name="Kickstart_PublicHostname"/> 1
<var name="Kickstart_PublicRootPassword"/> <var name="Kickstart_PublicRootPassword"/>)
mkdir -p /etc/grid-security/certificates
cp /usr/local/CA_SYSTEM/server.certs/*.pem /etc/grid-security
cp /usr/local/CA_SYSTEM/server.certs/*.pem /tmp


……………………………….
</post>
```

Other Rolls Which Use This Trick

◆ We plan to use it in ArcIMS (Mapping software) for license information.