

CEMON installation and configuration procedure

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1. Make sure that you have host and http service certificates on the server you are planning to install cemon:
 - a. The host certificate should be installed in /etc/grid-security with ownership and permissions as:
-rw-r--r-- root root hostcert.pem
-r----- root root hostkey.pem
 - b. . http certificate: Used by apache and tomcat. The http certificate for your system should be installed in /etc/grid-security/http with ownership and permission as:
-rw-r--r-- daemon daemon httpcert.pem
-r----- daemon daemon httpkey.pem
2. Install cemon from vdt 1.3.11:
 - a. Install the latest pacman version from:
> wget
http://physics.bu.edu/pacman/sample_cache/tarballs/pacman-latest.tar.gz
> unzip and untar the file
> cd to the untared directory
> . setup.sh
 - b. Create a directory where you want to install vdt package if it doesn't exist
> cd /usr/local
> mkdir vdt
 - c. cd to the vdt directory (\$VDT_LOCATION)
 - d. Install CEMon from vdt
> pacman -get http://vdt.cs.wisc.edu/vdt_1311_cache:CEMon
(answer "yes" to all questions)
 - e. Apache and tomcat should be started at this time.
 - f. Cemon should be started as well (cemon log file is located \$VDT_LOCATION/tomcat/v5/logs/glite-ce-monitor.log). You can verify that cemon is started by accessing it via your browser (your certificate should be imported into your browser). Use the following url:
<https://<host>:8443/ce-monitor/services/CEMonitor?method=GetInfo>

If your DN is not in the /etc/grid-security/grid-mapfile you will see the following information on the page:

```

<?xml version="1.0" encoding="UTF-8" ?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
  <soapenv:Fault>
    <faultcode>soapenv:Server.generalException</faultcode>
    <faultstring />
  </fault>
  <detail>
  <faultData>
    <MethodName>invoke</MethodName>
    <Timestamp>2006-06-23T20:33:01.301Z</Timestamp>
    <ErrorCode>1</ErrorCode>
    <Description>User <YOUR_DN> not authorized for GetInfo</Description>
    <FaultCause />
  </faultData>
  <ns1:exceptionName
    xmlns:ns1="http://xml.apache.org/axis/">org.glite.ce.faults.AuthorizationFault</ns1:exceptionName>
  <ns2:hostname
    xmlns:ns2="http://xml.apache.org/axis/">fgtest1.fnal.gov</ns2:hostname>
  </detail>
</soapenv:Fault>
</soapenv:Body>
</soapenv:Envelope>

```

If you add your DN to a grid-mapfile, you could get back meaningful information and CEMonitor

3. Install condor from vdt1.3.11:
 - a. In \$VDT_LOCATION install condor:


```
> pacman -get http://vdt.cs.wisc.edu/vdt\_1311\_cache:CEMon
```

 (answer “yes” to all questions)
4. Run post-install script to configure GIP:


```
> . $VDT_LOCATION/setup.sh
> /usr/local/vdt/vdt/setup/configure_gip --batch condor
```
5. Change the files osg-info-static-ce.ldif, osg-info-static-cluster.ldif, etc LOCATED in \$VDT_LOCATION/lcg/var/gip/ldif. Substitute the appropriate values:

```

GlueCEInfoApplicationDir: Change_Me_APP
GlueCEInfoDataDir: Change_Me_DATA
.....

```

6. Modify configuration of CEMon to report to IG.
 - a. In \$VDT_LOCATION/glite/etc/glite-ce-monitor change the file cemonitor-config.xml, uncomment and modify the following xml fragment:

```

<!-- subscription id="subscription-1"
      monitorConsumerURL="URL_of_the_CE_Monitor_Client"
      sslprotocol="SSLv3"
      retryCount="-1">
<topic name="CE_MONITOR">
  <dialect name="ISM_CLASSAD" />
</topic>
<policy rate="60000">
  <query queryLanguage="ClassAd"><![CDATA[GlueCEStateWaitingJobs<2]]>
  </query>
  <action name="SendNotification" doActionWhenQueryIs="true" />
  <action name="SendExpiredNotification" doActionWhenQueryIs="false" />
</policy>
</subscription -->

```

So it looks like the following (the modified lines are in **color**):

```

<subscription id="subscription-1"
      monitorConsumerURL="https://osg-ress-1.fnal.gov:8443/ig/services/CEInfoCollector"
      sslprotocol="SSLv3"
      retryCount="-1">
<topic name="OSG_CE">
  <dialect name="OLD_CLASSAD" />
</topic>
<policy rate="60000">
  <query queryLanguage="ClassAd"><![CDATA[GlueCEStateWaitingJobs<2]]>
</query>
  <action name="SendNotification" doActionWhenQueryIs="true" />
  <action name="SendExpiredNotification" doActionWhenQueryIs="false" />
</policy>
</subscription>

```

- b. Currently CEMon has a bug that causes memory leak in tomcat. The OutOfMemory may be caused by the CRL support of the client used to send notifications. The known work around is disable CRL support. In order to do so the attribute sslCRLfiles should be deleted in configuration file, so service tag looks like:

```

<service id="main-service"
      description="cemonitor service"
      sslkeyfile="/usr/share/tomcat5/hostkey.pem"
      sslcertfile="/usr/share/tomcat5/hostcert.pem"
      sslkeypasswd=""
      sslCAfiles="/etc/grid-security/certificates/*.0">

```