Table of Contents

CEMon CLI User guide

1 Introduction

The CEMon CLI is provided by the `glite-ce-monitor-client-api-c` package, which is installed by default on a EMI-UI.

It provides the following executables:

- `/usr/bin/glite-ce-monitor-getinfo`
- `/usr/bin/glite-ce-monitor-gettopics`
- `/usr/bin/glite-ce-monitor-getevent`
- `/usr/bin/glite-ce-monitor-subscribe`
- `/usr/bin/glite-ce-monitor-subinfo`
- `/usr/bin/glite-ce-monitor-subupdate`
- `/usr/bin/glite-ce-monitor-pause`
- `/usr/bin/glite-ce-monitor-resume`
- `/usr/bin/glite-ce-monitor-unsubscribe`
- `/usr/bin/glite-ce-monitor-consumer`

whose use is explained in the following sections.

2 Query the CEMon service

2.1 Get general information about CEMon

`glite-ce-monitor-getinfo` is the tool to be used to have general information about a CEMon installation.

Usage:

```
glite-ce-monitor-getinfo [--cert <CERTIFICATE_FILE] [--key <KEY_FILE>] <CEMon_URL>
```

If the `--cert` option is not specified, the file referred by the environment variable `X509_USER_CERT` is considered. If this variable is not set, the the file referred by the environment variable `X509_USER_PROXY` is considered. If even this variable is not set, the file `/tmp/x509_u<uid>` is considered

If the `--key` option is not specified, the file referred by the environment variable `X509_USER_KEY` is considered. If this variable is not set, the the file referred by the environment variable `X509_USER_PROXY` is considered. If even this variable is not set, the file `/tmp/x509_u<uid>` is considered

`CEMon_URL` is the URL of the CEMon service

Example:

```
$ glite-ce-monitor-getinfo --cert /tmp/x509up_u756 --key /tmp/x509up_u756 https://cream-35.pd.inf
Description=[cemonitor service]
Version    =[1.0]
HostDN     =[/C=IT/O=INFN/OU=Host/L=Padova/CN=cream-35.pd.infn.it]
Action [SendExpiredNotification::]
Action [DoNotSendNotification::]
Action [SendNotification::]
```

2.2 Get information about deployed CEMon sensors

`glite-ce-monitor-gettopics` is the tool to be used to have general information about installed CEMon sensors. For each installed sensor it provides:

- the topic name
- the available dialects, along with the query languages that can be used for that dialect

Usage:

```
glite-ce-monitor-gettopics [--cert <CERTIFICATE_FILE] [--key <KEY_FILE>] <CEMon_URL>
```

If the `--cert` option is not specified, the file referred by the environment variable `X509_USER_CERT` is considered. If this variable is not set, the the file referred by the environment variable `X509_USER_PROXY` is considered. If even this variable is not set, the file `/tmp/x509_u<uid>` is considered

If the `--key` option is not specified, the file referred by the environment variable `X509_USER_KEY` is considered. If this variable is not set, the the file referred by the environment variable `X509_USER_PROXY` is considered. If even this variable is not set, the file `/tmp/x509_u<uid>` is considered

`CEMon_URL` is the URL of the CEMon service

Example:

```
$ glite-ce-monitor-gettopics --cert /tmp/x509up_u756 --key /tmp/x509up_u756 https://cream-35.pd.i
Topic [CE_MONITOR]
   Dialect [ISM_CLASSAD_GLUE_1.2]
      queryLanguage [RegEx]
      queryLanguage [ClassAd]
   Dialect [ISM_CLASSAD]
      queryLanguage [RegEx]
      queryLanguage [ClassAd]
   Dialect [ISM_LDIF_GLUE_1.2]
      queryLanguage [RegEx]
      queryLanguage [ClassAd]
   Dialect [ISM_LDIF]
      queryLanguage [RegEx]
      queryLanguage [ClassAd]
Topic [CREAM_JOBS]
   Dialect [CLASSAD]
      queryLanguage [ClassAd]
```

2.3 Get information provided by a CEMon sensor

`glite-ce-monitor-getevent` is the tool to be used to get the last output produced by a specific CEMon sensor

Usage:

```
glite-ce-monitor-getevent --topic <TOPIC_NAME> [--dialect <DIALECT_NAME>] [--cert <CERTIFICATE_FI
```

`TOPIC_NAME` is the name of the topic (sensor) for which the event is requested

=DIALECT_NAME is the name of the dialect (which defines how the information should be rendered). ==If the --dialect option is not specified the default dialect for that sensor is considered

If the `--cert` option is not specified, the file referred by the environment variable `X509_USER_CERT` is considered. If this variable is not set, the the file referred by the environment variable `X509_USER_PROXY` is considered. If even this variable is not set, the file `/tmp/x509_u<uid>` is considered

If the `--key` option is not specified, the file referred by the environment variable `X509_USER_KEY` is considered. If this variable is not set, the the file referred by the environment variable `X509_USER_PROXY` is considered. If even this variable is not set, the file `/tmp/x509_u<uid>` is considered

`CEMon_URL` is the URL of the CEMon service

Example:

```
$ glite-ce-monitor-getevent --topic CE_MONITOR --dialect ISM_LDIF --cert /tmp/x509up_u756 --key /
Event[0]:
   Message[0]=[[
   gluecestatefreejobslots = 0;
   glueceinfolrmstype = "lsf";
   gluecestatetotaljobs = 0;
   gluecepolicymaxtotaljobs = 999999999;
   glueceinfocontactstring = "https://cream-35.pd.infn.it:8443/ce-cream/services";
   gluecepolicypreemption = 0;
   glueforeignkey = {
      "GlueClusterUniqueID=cream-35.pd.infn.it"
   };
   gluecestaterunningjobs = 0;
   gluecestateestimatedresponsetime = 777777;
   gluecepolicymaxobtainablewallclocktime = 999999999;
   glueinformationserviceurl = "ldap://cream-35.pd.infn.it:2170/mds-vo-name=resourc";
```

```
glueceinfodatadir = "unset";
gluecehostingcluster = "cream-35.pd.infn.it";
gluecepolicymaxwaitingjobs = 999999999;
gluecestateworstresponsetime = 1555554;
glueceinfoapplicationdir = "/opt/exp_soft/alice";
glueceuniqueid = "cream-35.pd.infn.it:8443/cream-lsf-creamtest2";
glueceimplementationversion = 31;
gluececapability = "unset";
      ...
      ...
```

```
glueceinfodatadir = "unset";
gluecehostingcluster = "cream-35.pd.infn.it";
gluecepolicymaxwaitingjobs = 999999999;
gluecestateworstresponsetime = 1555554;
```

2.3 Get information provided by a CEMon sensor

5

3 Work with CEMon subscriptions

3.1 Create a subscription

`glite-ce-monitor-subscribe` is the tool to be used to create a CEMon subscription. The events produced by the relevant CEMon sensor will be specified to the specified CEMon consumer.

Usage:

```
glite-ce-monitor-subscribe [--cert <CERTIFICATE_FILE>] [--key <KEY_FILE>] --topic <TOPIC_NAME> [-
```

If the `--cert` option is not specified, the file referred by the environment variable `X509_USER_CERT` is considered. If this variable is not set, the the file referred by the environment variable `X509_USER_PROXY` is considered. If even this variable is not set, the file `/tmp/x509_u<uid>` is considered

If the `--key` option is not specified, the file referred by the environment variable `X509_USER_KEY` is considered. If this variable is not set, the the file referred by the environment variable `X509_USER_PROXY` is considered. If even this variable is not set, the file `/tmp/x509_u<uid>` is considered

`TOPIC_NAME` is the name of the topic (sensor) for which the event is requested

If the `--dialects` option is not specified the default dialect for that sensor is considered

`CONSUMER_URL_TO_SUBSCRIBE` is the URL of the CEMon consumer where the information produced by the relevant CEMon sensor must be sent

Notifications for the specified topic will be sent to the consumer every `DELAY_BETWEEN_TWO_NOTIFICATIONS` seconds

`CEMon_URL` is the URL of the CEMon service

Examples:

```
$ glite-ce-monitor-subscribe --topic CE_MONITOR --dialects ISM_LDIF --cert /tmp/x509up_u756 --key
SubscriptionID=[uuid-1247573738304]
```

```
$ glite-ce-monitor-subscribe --topic CE_MONITOR --dialects ISM_LDIF --cert /tmp/x509up_u756 --key
SubscriptionID=[uuid-1247573798410]
```

3.2 List existing subscriptions

The `glite-ce-monitor-subinfo` command can be used to list the existing subscriptions (belonging to the user issuing the command) on a specific CEMon installation.

Usage:

```
glite-ce-monitor-subinfo [--cert <CERTIFICATE_FILE] [--key <KEY_FILE>] <CEMon_URL>
```

If the `--cert` option is not specified, the file referred by the environment variable `X509_USER_CERT` is considered. If this variable is not set, the the file referred by the environment variable `X509_USER_PROXY` is considered. If even this variable is not set, the file `/tmp/x509_u<uid>` is considered

If the `--key` option is not specified, the file referred by the environment variable `X509_USER_KEY` is considered. If this variable is not set, the the file referred by the environment variable `X509_USER_PROXY` is considered. If even this variable is not set, the file `/tmp/x509_u<uid>` is considered

`CEMon_URL` is the URL of the CEMon service

Example:

```
$ glite-ce-monitor-subinfo --cert /tmp/x509up_u756 --key /tmp/x509up_u756 https://cream-35.pd.inf
ID=[uuid-1247573798410] Topic=[CE_MONITOR] Consumer=[https://lxsgaravatto.pd.infn.it:5677] Rate=[
ID=[uuid-1247573738304] Topic=[CE_MONITOR] Consumer=[http://lxsgaravatto.pd.infn.it:5676] Rate=[2
```

3.3 Modify a CEMon subscription

`glite-ce-monitor-subupdate` is the command that must be used to modify an existing CEMon subscription.

Usage:

```
glite-ce-monitor-subupdate --id <SUBSCRIPTION_ID_TO_UPDATE> [--cert <CERTIFICATE_FILE>] [--key <K
```

`SUBSCRIPTION_ID_TO_UPDATE` is the identifier of the CEMon subscription that must be updated

If the `--cert` option is not specified, the file referred by the environment variable `X509_USER_CERT` is considered. If this variable is not set, the the file referred by the environment variable `X509_USER_PROXY` is considered. If even this variable is not set, the file `/tmp/x509_u<uid>` is considered

If the `--key` option is not specified, the file referred by the environment variable `X509_USER_KEY` is considered. If this variable is not set, the the file referred by the environment variable `X509_USER_PROXY` is considered. If even this variable is not set, the file `/tmp/x509_u<uid>` is considered

`CONSUMER_URL_TO_SUBSCRIBE` is the URL of the new CEMon consumer where the information produced by the relevant CEMon sensor must be sent

Notifications for the specified topic will be sent to the consumer every `DELAY_BETWEEN_TWO_NOTIFICATIONS` seconds

`CEMon_URL` is the URL of the CEMon service

Example:

```
$ glite-ce-monitor-subupdate --id uuid-1247573738304 --cert /tmp/x509up_u756 --key /tmp/x509up_u7
```

3.4 Suspend a notification

`glite-ce-monitor-pause` is the command to be used to suspend a notification. When a notification is suspended. CEMon doesn't send any event to the relevant CEMon consumer.

Usage:

```
glite-ce-monitor-pause [--cert <CERTIFICATE_FILE] [--key <KEY_FILE>] --id <SUBSCRIPTION_ID_TO_PAU
```

`SUBSCRIPTION_ID_TO_PAUSE` is the identifier of the CEMon subscription that must be suspended

If the `--cert` option is not specified, the file referred by the environment variable X509_USER_CERT is considered. If this variable is not set, the the file referred by the environment variable X509_USER_PROXY is considered. If even this variable is not set, the file /tmp/x509_u<uid> is considered

If the `--key` option is not specified, the file referred by the environment variable X509_USER_KEY is considered. If this variable is not set, the the file referred by the environment variable X509_USER_PROXY is considered. If even this variable is not set, the file /tmp/x509_u<uid> is considered

CEMon_URL is the URL of the CEMon service

3.5 Resume a notification

glite-ce-monitor-resume is the command to be used to resume a previously suspended notification.

Usage:

```
glite-ce-monitor-resume [--cert <CERTIFICATE_FILE] [--key <KEY_FILE>] --id <SUBSCRIPTION_ID_TO_RE
<verbatim>

=SUBSCRIPTION_ID_TO_RESUME= is the identifier of the CEMon subscription that must be resumed

If the =--cert= option is not specified, the file referred by the environment variable =X509_USER

If the =--key= option is not specified, the file referred by the environment variable =X509_USER_

=CEMon_URL= is the URL of the CEMon service

---## Delete a subscription

=glite-ce-monitor-unsubscribe= is the command that must be used to remove an existing CEMon subsc

Usage:
<verbatim>
glite-ce-monitor-unsubscribe [--cert <CERTIFICATE_FILE>] [--key <KEY_FILE>] --id <SUBSCRIPTION_ID
</verbatim>

=SUBSCRIPTION_ID_TO_REMOVE= is the identifier of the CEMon subscription that must be removed

If the =--cert= option is not specified, the file referred by the environment variable =X509_USER

If the =--key= option is not specified, the file referred by the environment variable =X509_USER_

=CEMon_URL= is the URL of the CEMon service


---## Start a CEMon consumer

=glite-ce-monitor-consumer= is a command to be used to start a CEMon consumer. It starts a light

Usage:
<verbatim>
glite-ce-monitor-consumer [--key keyfile --cert certfile] [--outpath path] [--append-output] <tcp
</verbatim>

The content of the received notification is printed in a file whose name is the hostname of the C

The cert and key file must be specified only if the authentication must be turned on. Please note

Examples:

<verbatim>
$ glite-ce-monitor-consumer --outpath /home/sgaravat --append-output 8676
```

```
$ glite-ce-monitor-consumer --cert /home/sgaravat/hostcert.pem --key /home/sgaravat/hostkey.pem 5
</verbatim>
```

```
-- Main.MassimoSgaravatto - 2011-04-20</div><!-- /patternTopic-->

%META{"form"}%
%META{"attachments"}%</div><!-- /patternContent-->
---
%MAKETEXT{"This topic:"}% <nop>%WEB%%META{"parent" prefix="<span class='twikiSeparator'> &gt
%MAKETEXT{"Topic revision:"}% %REVINFO{format="r$rev - $date - <nop>$wikiname"}%
</div><!-- /patternMainContents-->
</div><!-- /patternMain-->
</div><!-- /patternFloatWrap-->
<div class="clear"> </div>
</div><!-- /patternOuter--><div id="patternBottomBar"><div id="patternBottomBarContents"><div id=
</div><!-- /patternPage-->
</div><!-- /patternPageShadow-->
</div><!-- /patternScreen-->
</body></html>
</verbatim>
<nop>
```

3.5 Resume a notification   9