

User Guide for Batch Handler

Ericsson Dynamic Activation 1

USER GUIDE

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1 Introduction

This document is a guide of Batch Handler in Ericsson™ Dynamic Activation (EDA).

1.1 Purpose and Scope

The purpose of this document is to provide help information on how to perform configuration tasks using the Batch Handler.

This document covers all actions available in the Batch Handler.

1.2 Target Group

The target group for this document is users of the Batch Handler.

For more information about different target groups, see *Library Overview*, Reference [1].

1.3 Typographic Conventions

Typographic conventions are described in *Library Overview*, Reference [1].

1.4 Prerequisites

To perform the configuration tasks, the user must have a general understanding of Batch Handler.

For more information, refer to the following document:

- *Function Specification Dynamic Activation Execution Environment*, Reference [3].





2 General

This section provides basic information about the Batch Handler GUI.

Note:

- Do not use the Back and Forward buttons in the web browser, as this causes an error.
- The supported web browsers are Chrome 58 and Firefox 52 or later versions.

2.1 Get Started

The Batch Handler GUI shown as Figure 1 after first access.

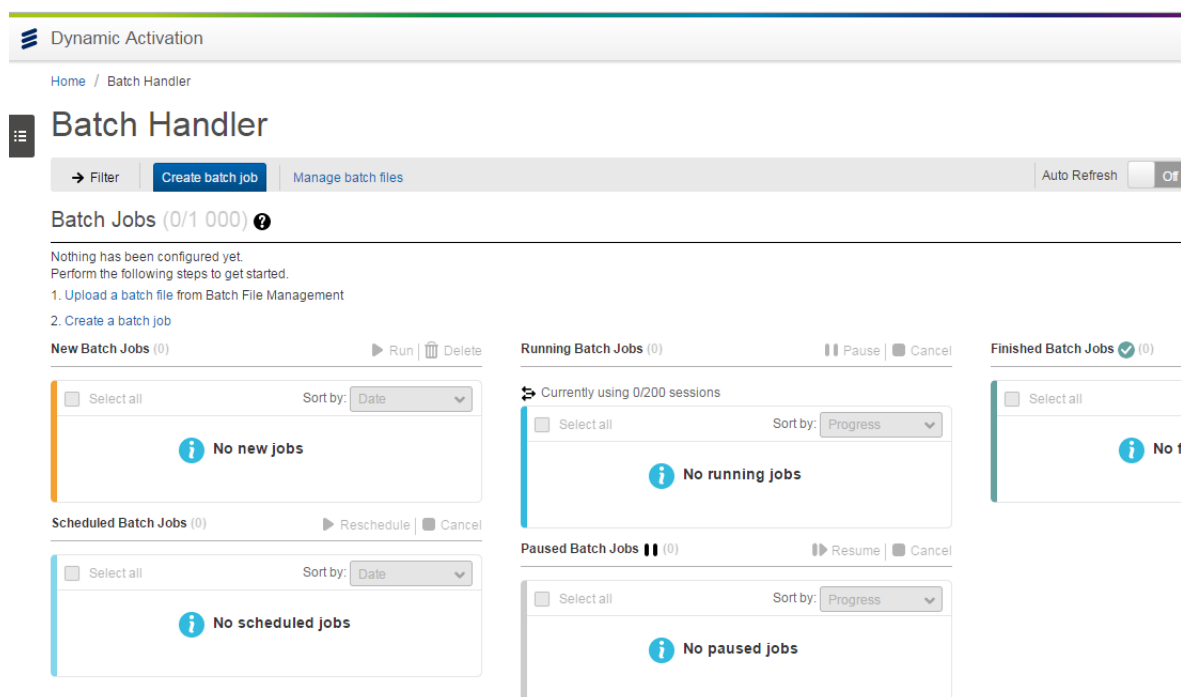






Figure 1 Batch Handler GUI



The following is a typical workflow of batch handler:

Preparation:

1. Generate a batch file. For detailed instruction, see Section 2.1.1 on page 4
2. (Optional) Generate a scheme file. For detailed instruction, see Section 2.1.2 on page 8.

**GUI Operations:**

1. Access the **Batch Handler** GUI by logging through `https://<VIP-OAM-IP>:8383`. For more details of Dynamic Activation GUI, refer to *User Guide for Resource Activation*, Reference [5].
2. Click  to upload the batch file through **Batch File Management** GUI. For detailed instruction, see Section 2.3 on page 29.
3. Go back to **Batch Handler** GUI. Click  or  to create a batch job with created batch file and scheme file (optional). For detailed instruction, see Section 2.1.3 on page 11.
4. The newly created batch job is listed in **New Batch Jobs** widget. Click  to run the batch job immediately or schedule an execution time for the batch job. For detailed instruction, see Section 2.2.1 on page 15.

Batch Handler executes the batch jobs and sends the provisioning requests towards Network Elements. The provisioning logs can be found in the Log Management, refer to *User Guide for Resource Activation*, Reference [5].
5. The running batch job moves to **Running Batch Jobs** widget. Manage and monitor the batch job according to the instruction described in Section 2.2.3 on page 18.
6. The finished batch job moves to **Finished Batch Jobs** widget. Click  to remove the finished batch job, see Section 2.2.5 on page 21.
7. Click  to go to **Batch File Management** GUI. Delete the batch file according to the instruction in Section 2.3 on page 29.

2.1.1**Batch File**

The Batch file contains the provisioning requests that are going to be used for a batch job. The supported types are CAI3G and CAI.

A batch file can either be composed by the constant values of parameters or variable values of parameters.

The format of the variable value is: `${ParameterInSchemeFile}`

`${ParameterInSchemeFile}` is generated according to the parameters within a value range or listed in scheme file. For more information about scheme file, see Section 2.1.2 on page 8.



A single CAI3G or CAI request in batch file can include multiple parameters. The corresponding scheme file must have the same number of items in `range` or `list` for these parameters.

2.1.1.1 CAI3G Batch File

This section describes the syntax and example of the CAI3G batch file.

2.1.1.1.1 Syntax of CAI3G Batch File

A CAI3G batch file is consisted by a set of CAI3G requests. The file extension is `.cai3g`.

Each CAI3G request must comply with the CAI3G batch XSD file. The `${ParameterInSchemeFile}` of CAI3G can be defined as both MOld and MOAttributes in XSD file. The CAI3G batch XSD file can be found in the downloadable zip file [Batch_Handler_XSD_files.zip](#).

For the description of each parameter, refer to *Generic CAI3G Interface 1.2*, Reference [2].

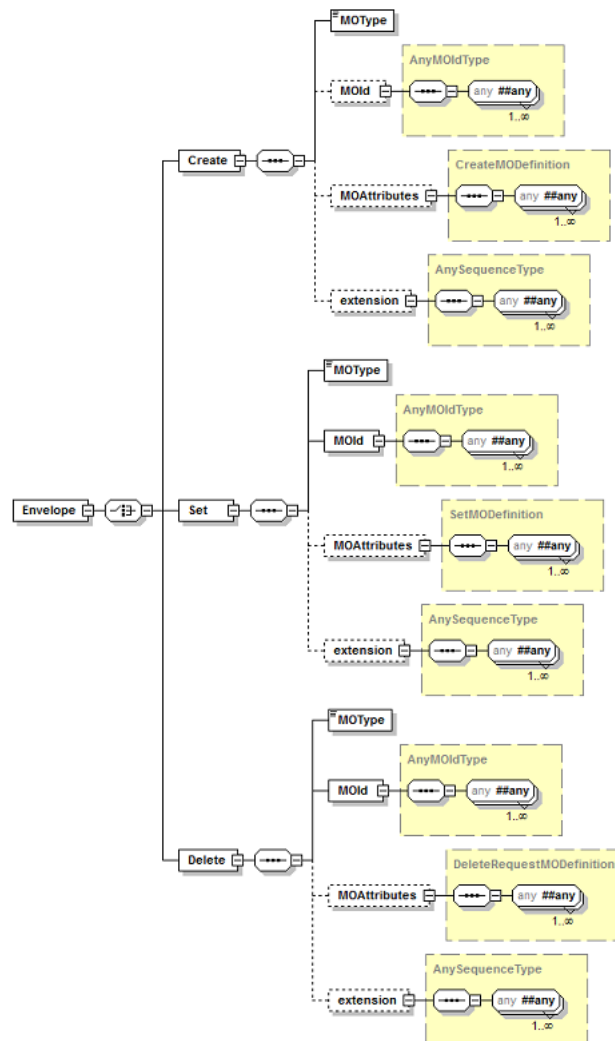


Figure 2 Parameters in CAI3G Batch File

2.1.1.1.2 Example of CAI3G Batch File

The following is an example of a CAI3G batch file:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
xmlns:ns="http://schemas.ericsson.com/pg/hlr/13.5/">
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>Subscription@http://schemas.ericsson.com/pg/hlr/13.5/</cai3:MOType>
      <cai3:MOId>
        <ns:msisdn>${msisdn}</ns:msisdn>
        <ns:imsi>${imsi}</ns:imsi>
      </cai3:MOId>
      <cai3:MOAttributes>
        <ns:CreateSubscription msisdn="${msisdn}" imsi="${imsi}">
          <ns:msisdn>${msisdn}</ns:msisdn>
          <ns:imsi>${imsi}</ns:imsi>
          <profileId>1</profileId>
          <amsisdn amsisdn="${amsisdn}">
            <amsisdn>${amsisdn}</amsisdn>
          </amsisdn>
        </ns:CreateSubscription>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```



```

        <bc>0</bc>
      </amsisdn>
    </ns:CreateSubscription>
  </cai3:MOAttributes>
</cai3:Create>
</soapenv:Body>
</soapenv:Envelope>

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:ns="http://schemas.ericsson.com/pg/hlr/13.5/">
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOTType>Subscription@http://schemas.ericsson.com/pg/hlr/13.5/</cai3:MOTType>
      <cai3:MOId>
        <ns:msisdn>${msisdn}</ns:msisdn>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:ns="http://schemas.ericsson.com/pg/hlr/13.5/">
  <soapenv:Body>
    <cai3>Create>
      <cai3:MOTType>Subscription@http://schemas.ericsson.com/pg/hlr/13.5/</cai3:MOTType>
      <cai3:MOId>
        <ns:msisdn>60000001</ns:msisdn>
        <ns:imsi>61000001</ns:imsi>
      </cai3:MOId>
      <cai3:MOAttributes>
        <ns:CreateSubscription msisdn="60000001" imsi="61000001">
          <ns:msisdn>60000001</ns:msisdn>
          <ns:imsi>61000001</ns:imsi>
        </ns:CreateSubscription>
      </cai3:MOAttributes>
    </cai3>Create>
  </soapenv:Body>
</soapenv:Envelope>

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:ns="http://schemas.ericsson.com/pg/hlr/13.5/">
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOTType>Subscription@http://schemas.ericsson.com/pg/hlr/13.5/</cai3:MOTType>
      <cai3:MOId>
        <ns:msisdn>60000001</ns:msisdn>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:ns="http://schemas.ericsson.com/pg/hlr/13.5/">
  <soapenv:Body>
    <cai3>Create>
      <cai3:MOTType>Subscription@http://schemas.ericsson.com/pg/hlr/13.5/</cai3:MOTType>
      <cai3:MOId>
        <ns:msisdn>${msisdn1}</ns:msisdn>
        <ns:imsi>${imsi1}</ns:imsi>
      </cai3:MOId>
      <cai3:MOAttributes>
        <ns:CreateSubscription msisdn="${msisdn1}" imsi="${imsi1}">
          <ns:msisdn>${msisdn1}</ns:msisdn>
          <ns:imsi>${imsi1}</ns:imsi>
        </ns:CreateSubscription>
      </cai3:MOAttributes>
    </cai3>Create>
  </soapenv:Body>
</soapenv:Envelope>

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"

```



```

xmlns:ns="http://schemas.ericsson.com/pg/hlr/13.5/">
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>Subscription@http://schemas.ericsson.com/pg/hlr/13.5/</cai3:MOType>
      <cai3:MOId>
        <ns:msisdn>${msisdnl}</ns:msisdn>
      </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>

```

Example 1 CAI3G Batch File

The above example includes six CAI3G requests.

2.1.1.2 CAI Batch File

This section describes the syntax and example of a CAI batch file.

2.1.1.2.1 Syntax of CAI Batch File

A CAI Batch file is consisted by a set of CAI requests. The file extension is `.cai`.

The CAI batch file must follow the following rules:

- One CAI request per a row.
- CAI request needs to start with [CREATE, SET, DELETE].

2.1.1.2.2 Example of CAI Batch File

The following is an example of a CAI batch file:

```

CREATE:HLRSUB:MSISDN,${MSISDN}:IMSI,${IMSI};
DELETE:HLRSUB:MSISDN,${MSISDN};
CREATE:HLRSUB:MSISDN,17000000:IMSI,17000000;
DELETE:HLRSUB:MSISDN,17000000;
CREATE:HLRSUB:MSISDN,17000001:IMSI,17000001;
DELETE:HLRSUB:MSISDN,17000001;
CREATE:HLRSUB:MSISDN,17000002:IMSI,17000002;
DELETE:HLRSUB:MSISDN,17000002;
CREATE:HLRSUB:MSISDN,17000003:IMSI,17000003;
DELETE:HLRSUB:MSISDN,17000003;

```

Example 2 CAI Batch File

2.1.2 Scheme File

The Scheme file contains :

- The configuration to control the execution procedure of the batch job.
- A list or a range of parameters according to the variable value of `${ParameterInSchemeFile}` in the batch file.

2.1.2.1 Syntax of Scheme File

The scheme file is a standard .xml file. The batch scheme XSD file can be found in the downloadable zip file [Batch Handler XSD files.zip](#).

The parameters that are used in the batch scheme xsd file are shown in Figure 3.

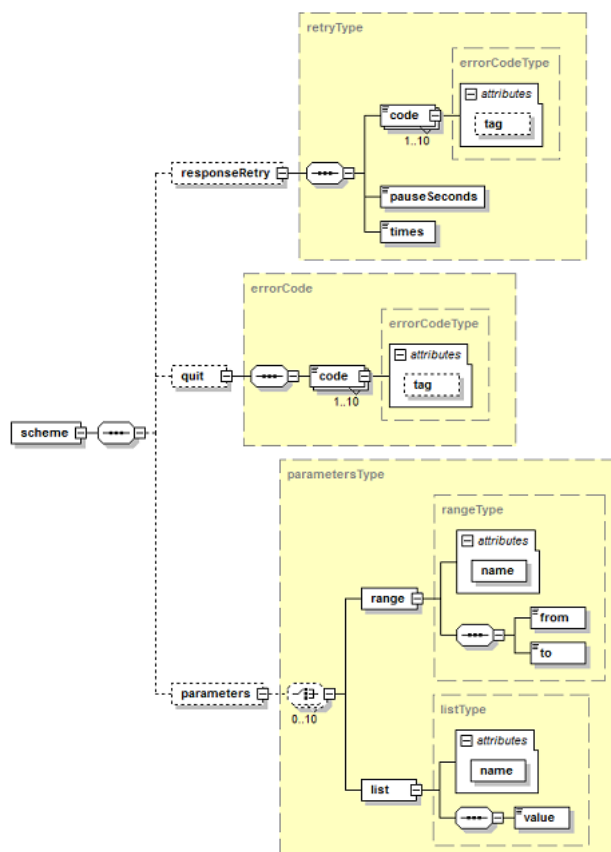


Figure 3 Parameters in Scheme File

The following table covers the parameters that can be used in a scheme file.

Table 1 Parameters in Scheme File

| Elements | Type | Occurrence | Type Occurrence |
|---------------|-----------|------------|--|
| responseRetry | retryType | Optional | The CSO response definition that trigger the retry action. |



| Elements | Type | Occurrence | Type Occurrence |
|--------------|----------------|------------|--|
| code | errorCodeType | Mandatory | CSO response code. For CAI3G : The code can be any error code that existed in the CAI3G response. The error code for each CAI3G MO can be found in respective CAI3G interface specification. For CAI : The code is the error code that existed in the CAI response. The error code for each CAI MO can be found in respective CAI3G interface specification. |
| pauseSeconds | int | Mandatory | The time interval (in seconds) to wait before sending the CSO again. |
| times | int | Mandatory | The number of times to retry the request. |
| quit | errorCode | Optional | The CSO response definition that triggers the cancel action. |
| code | errorCodeType | Mandatory | CSO response code. For CAI3G : The code can be any error code that existed in the CAI3G response. The error code for each CAI3G MO can be found in respective CAI3G interface specification. For CAI : The code is the error code that existed in the CAI response. The error code for each CAI MO can be found in respective CAI3G interface specification. |
| parameters | parametersType | Optional | Set the variable value of the parameters defined in batch file. |
| range | rangeType | Optional | Set a value range for the parameters. |
| name | String | Mandatory | The name of the parameter defined in the batch file. |
| from | Long | Mandatory | The start value of the parameter. |
| to | Long | Mandatory | The end value of the parameter. |
| list | listType | Optional | Set a list of the parameters. |
| name | String | Mandatory | The name of the parameter defined in the batch file. |
| value | String | Mandatory | The value list of the parameters. Values are separated by comma “,”. |

2.1.2.1.1 Example of Scheme File

The following is an example of a scheme file:



```

<scheme>
<responseRetry>
  <code>10001</code>
  <pauseSeconds>2</pauseSeconds>
  <times>2</times>
</responseRetry>
<quit>
  <code>10014</code>
</quit>
<parameters>
  <list name="msisdn">
    <value>90000000,90000003,90000005</value>
  </list>
  <list name="imsi">
    <value>91000000,91000003,91000005</value>
  </list>
  <list name="amsisdn">
    <value>46455381222,46455381224,46455381226</value>
  </list>
  <range name="msisdn1">
    <from>60000002</from>
    <to>60000004</to>
  </range>
  <range name="imsi1">
    <from>61000002</from>
    <to>61000004</to>
  </range>
</parameters>
</scheme>

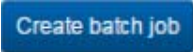
```

Example 3 Example of a Scheme File

2.1.3

Create Batch Job

To create a batch job, do the following:

1. In the **Batch Handler** GUI, click . This opens the **Create Batch Job** dialog.



Create Batch Job

Name*

Batch File*

Provisioning Client*

Scheme File (.xml)

Notification for Finished Job

Run Batch Job

Sessions


Create Cancel

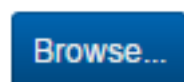
2. Specify a name and select a batch file from the drop-down list.

Ensure the batch file to be used for this batch job has already been uploaded. The drop-down list is disabled if there is no available batch file. For details, see Section 2.3 on page 29.

3. Select a provisioning client from the drop-down list.

Ensure the provisioning client who executes the requests in the batch file has been created in Access Control. For more information about Access Control, refer to *User Guide for Resource Activation*, Reference [5].

4. (Optional) Click  to upload the scheme file. The acceptable file extension is .xml.



-  **✓ scheme.xml**  indicates that the scheme file is valid.



Browse...

-  **scheme.xml**  indicates that the scheme file is invalid.

Click  can remove the scheme file.

5. Enable the notification for finished batch job by selecting ☒ **SNMP** or ☒ **E-mail** or both.


- If select ☒ **SNMP**, an SNMP event is sent out once the batch job is finished.
- If select ☒ **E-mail**, an email is sent out once the batch job is finished.

The following is an example of the notification email for finished batch job.

E-mail title:
BatchHandler Notification - Job dec75b23-e426-4a5c-bc2b-4dca26ca2e8c
E-mail content:
Job test Finished:
2 requests succeeded.
2 requests failed.
0 requests not run.

For how to configure notification email, refer to *User Guide for Resource Activation*, Reference [5].


- If select both check box, an SNMP event and an email are both sent out once the batch job is finished.
6. Configure the execution time of the batch Job:

- Select ☒ **Now** to run the batch job immediately.
- Select ☒ **Schedule to run later**  to schedule an execution time for the batch job.

Click  to select a date and time.


Note: If the schedule time is in the past, batch job runs immediately.



- If not specified, the created batch job is listed in the **New Batch Jobs** widget and user can determine the execution time by  **Run** this batch job.
7. Specify the number of sessions per batch job if the execution time is configured.

The allocated sessions cannot exceed the available sessions if run batch job immediately. To check the available sessions, see Area 4 in section Section 2.2 on page 14.



8. Click  to create the batch job.
9. The created batch job could show in **New Batch Jobs** widget, **Running Batch Jobs** widget or **Scheduled Batch Jobs** widget regarding to the execution time.

2.2 Batch Job Management

The **Batch Handler** GUI shown in Figure 4 is used for managing and monitoring the batch jobs.

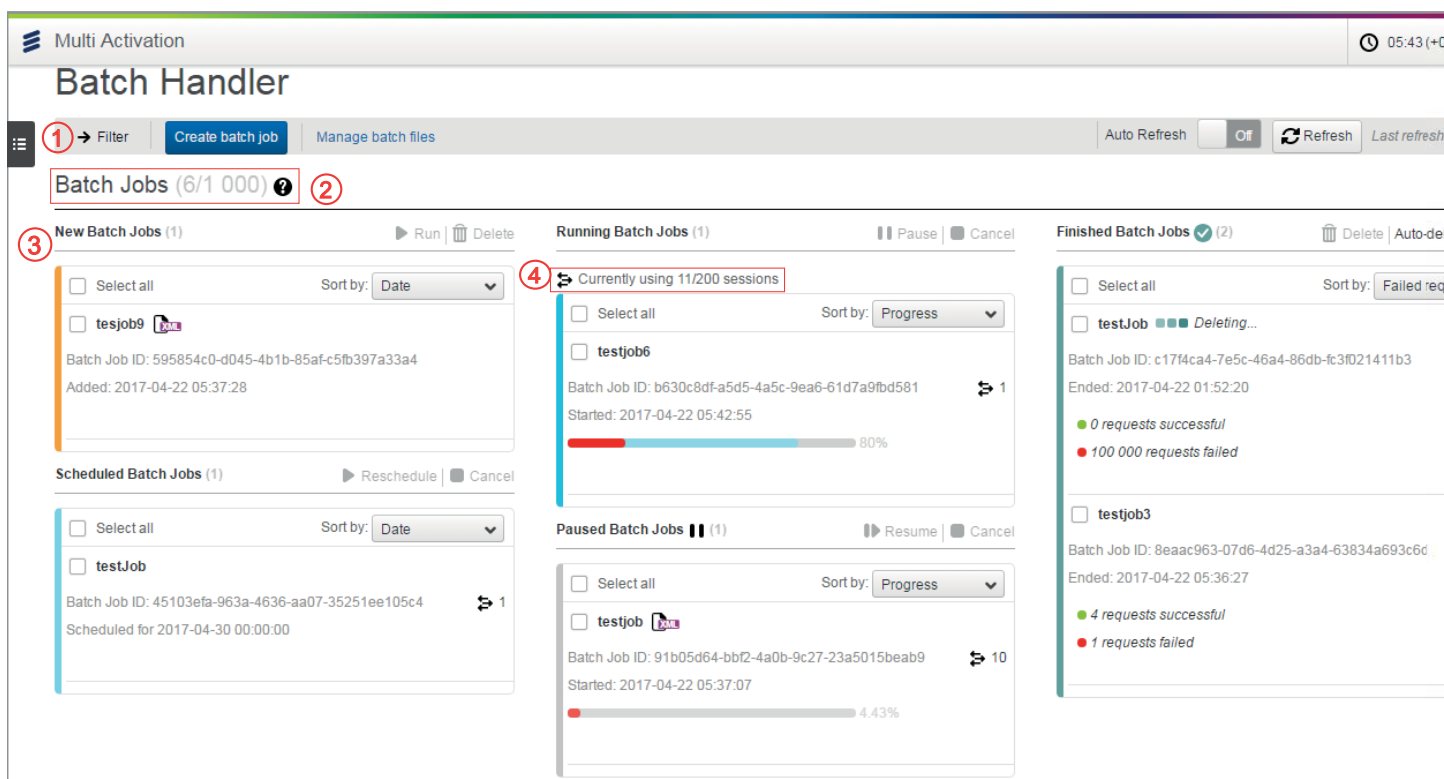
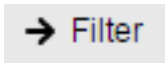




Figure 4 Batch Handler GUI

- In Area 1, user can:



- Filter the desired batch jobs by clicking , see Section 2.2.6.5 on page 27.
- Create a batch job by clicking , see Section 2.1.3 on page 11.
- Switch to **Manage Batch Files** page by clicking , see Section 2.3 on page 29.
- Enable or disable auto refresh function.

When **Auto-refresh** is enabled, Batch Handler refreshes the widgets in Area 3 every 5 seconds.

When **Auto-refresh** is disabled, use **Refresh** to manually refresh the widgets.

- In Area 2, the number in parentheses indicates the number of the current batch jobs and the maximum number of the batch jobs. For how to configure the maximum number of the batch jobs, refer to *System Administrators Guide for Native Deployment*, Reference [7] for native deployment or *System Administrators Guide for Virtual and Cloud Deployment*, Reference [8] for virtual and cloud deployment.
- **Note:** When maximum number is reached, it is not allowed to create batch job. It is recommended to delete some finished batch jobs before creating a batch job.
- In Area 3, all the batch jobs are listed in the following widgets base on their state.
 - New Batch Jobs, see Section 2.2.1 on page 15.
 - Scheduled Batch Jobs, see Section 2.2.2 on page 17.
 - Running Batch Jobs, see Section 2.2.3 on page 18.
 - Paused Batch Jobs, see Section 2.2.4 on page 19.
 - Finished Batch Jobs, see Section 2.2.5 on page 21.
- In Area 4 **Currently using (n/m) sessions**, *n* indicates the number of sessions allocated to Running Batch Jobs and Paused Batch Jobs. *m* indicates the maximum number of sessions. The number of the available sessions is *m-n*. The maximum session can be configured by Batch Handler Module, refers to *System Administrators Guide for Native Deployment*, Reference [7] for native deployment or *System Administrators Guide for Virtual and Cloud Deployment*, Reference [8] for virtual and cloud deployment.

2.2.1 New Batch Jobs

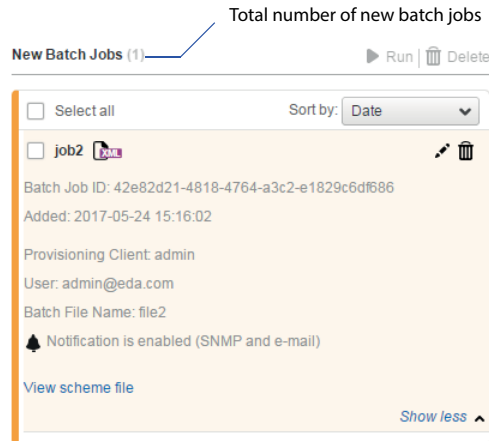


Figure 5 New Batch Jobs Widget

In **New Batch Jobs** widget, user can:

- Run one or more batch jobs by ticking the check box and then clicking **Run**. For run batch jobs operation, see Section 2.2.6.3 on page 25.

The running batch jobs move to **Running Batch Jobs** widget.


The scheduled batch jobs move to **Scheduled Batch Jobs** widget.

- Delete one or more batch jobs by ticking the check box and then clicking **Delete**. Or hover the mouse over a batch job to show deletion button and then clicking it.
- Edit a batch job by hovering the mouse over a batch job to show edit button and then clicking it. For edit operation, see Section 2.2.6.2 on page 24.
- Sort batch jobs by using the drop-down list.
- View the detailed information of each batch job.

– indicates that the batch job has a scheme file.

– Hover the mouse over a batch job can show **Show more**. Expand **Show more** to view more information about batch jobs, see Section 2.2.6.1 on page 24 for description of the parameters.



- If the notification for finished job has been configured, a message (Such as,  **Notification is enabled (SNMP and e-mail)**) is shown.
- If the batch job has a scheme file, the link **View scheme file** is shown. Click **View scheme file** to view the scheme file, see Section 2.2.6.6 on page 29.

2.2.2 Scheduled Batch Jobs

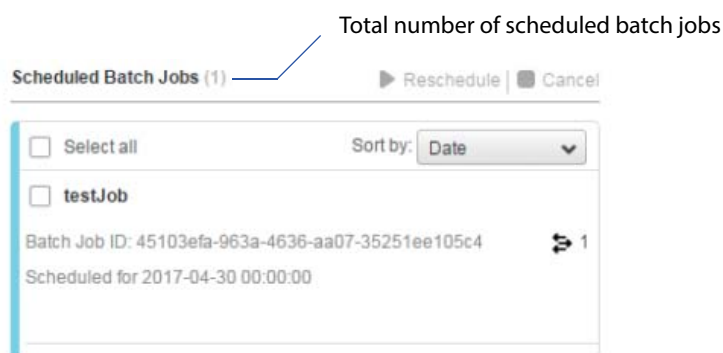







Figure 6 Scheduled Batch Jobs Widget





In **Scheduled Batch Jobs** widget, user can:

- Re-schedule one or more batch jobs by ticking the check box and then clicking  **Reschedule** . For re-schedule batch jobs, see Section 2.2.6.3 on page 25.
- Cancel one or more batch jobs by ticking the check box and then clicking  **Cancel** .

After the cancel operation, the batch jobs move to **New Batch Jobs** widget.

- Edit a batch job by hovering the mouse over a batch job to show edit button  . For edit operation, see Section 2.2.6.2 on page 24.
- Delete a batch job by hovering the mouse over a batch job to show deletion button  and then clicking it.
- Sort batch jobs by using the drop-down list.
- View the detailed information of each batch job.
 -  indicates that the batch job has a scheme file.



-  indicates the number of sessions allocated to this batch job.
- Hover the mouse over a batch job can show [Show more](#) . Expand [Show more](#)  to view more information about the batch job, see Section 2.2.6.1 on page 24 for description of the parameters.
 - If the notification for finished job has been configured, a message (Such as ,  [Notification is enabled \(SNMP and e-mail\)](#)) is shown.
 - If the batch job has a scheme file, the link [View scheme file](#) is shown. Click [View scheme file](#) to view the scheme file, see Section 2.2.6.6 on page 29.

Note: When a scheduled batch job is ready to run, but the available sessions are less than the sessions assigned for this batch job, the scheduled execution time automatically postpone every five minutes until the system has available sessions.

2.2.3

Running Batch Jobs

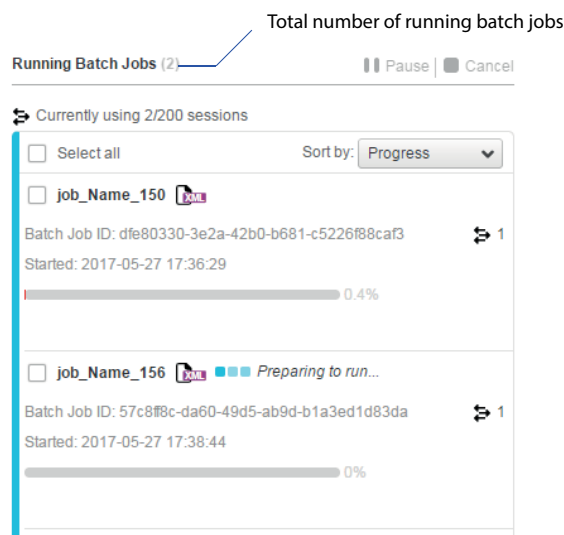




Figure 7 Running Batch Jobs Widget

In **Running Batch Jobs** widget (includes running batch jobs and preparing batch jobs), user can:

- Pause one or more batch jobs by ticking the check box and then clicking  [Pause](#) .





After the pause operation, The batch jobs move to **Pause Batch Jobs** widget.

- Cancel one or more batch jobs by ticking the check box and then clicking  **Cancel**.

After the cancel operation, the batch jobs move to **Finished Batch Jobs** widget.




- Sort batch jobs by using the drop-down list.
- View the detailed information of each batch job.

—  indicates that the batch job has a scheme file.

—  indicates the number of sessions used by this batch job.

— Hover the mouse over the progress bar to show the running result. The blue bar indicates the successful requests and the red bar indicates the failed requests.

The progress bar can be refreshed automatically or manually.

- Hover the mouse over a batch job can show **Show more** . Expand **Show more**  to view more information about the batch job, see Section 2.2.6.1 on page 24 for description of the parameters.
 - If the notification for finished job has been configured, a message (Such as ,  **Notification is enabled (SNMP and e-mail)**) is shown.
 - If the batch job has a scheme file, the link **View scheme file** is shown. Click **View scheme file** to view the scheme file, see Section 2.2.6.6 on page 29.

2.2.4 Paused Batch Jobs

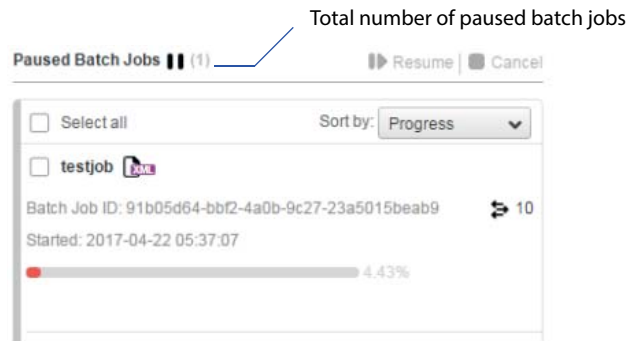




Figure 8 Paused Batch Jobs Widget

In **Paused Batch Jobs** widget, user can:


- Resume one or more batch jobs by ticking the check box and then clicking  **Resume**.


After the resume operation, the batch jobs move to **Running Batch Jobs** widget.

- Cancel one or more batch jobs by ticking the check box and then clicking  **Cancel**.



After the cancel operation, the batch jobs move to **Finished Batch Jobs** widget.

- Sort batch jobs by using the drop-down list.
- View the detailed information of each batch job.


-  indicates that the batch job has a scheme file.

-  indicates the number of sessions used by this batch job.

- Hover the mouse over the progress bar to show the running result. The blue bar indicates the successful requests and the red bar indicates the failed requests.

- Hover the mouse over a batch job can show . Expand  to view more information about the batch job, see Section 2.2.6.1 on page 24 for description of the parameters.



- If the notification for finished job has been configured, a message (Such as,  [Notification is enabled \(SNMP and e-mail\)](#)) is shown.
- If the batch job has a scheme file, the link [View scheme file](#) is shown. Click [View scheme file](#) to view the scheme file, see Section 2.2.6.6 on page 29.



2.2.5 Finished Batch Jobs

Total number of finished batch jobs

Finished Batch Jobs (4) Delete | Auto-delete: ON

☐ Select all Sort by: Failed requests

☐ jobName_214 Canceling...

Batch Job ID: 630b828d-35d2-471c-9519-46cf2ce7f8d

Ended:

0 requests successful

0 requests failed

9 requests not run

☐ jobName_210 Failed

Error Message:

com.ericsson.ema.batch.exception.BatchException: Not all the parameter can be found in scheme for request. Expect [range] but got []

Batch Job ID: 076c9bb3-7e20-4dfe-b570-91fd7d693f5f

Ended: 2017-05-31 19:30:10

0 requests successful

0 requests failed

☐ jobName_228 Cancelled

Batch Job ID: 812e3a40-aacb-498a-a94f-bb0805f5b4a0

Ended: 2017-06-01 02:44:45

0 requests successful

1 121 requests failed

879 requests not run

☐ jobName_225 Deleting...

Batch Job ID: c14170b5-f927-4947-b61a-eba3a1ad1758

Ended: 2017-06-01 02:43:41

0 requests successful

1 497 requests failed



503 requests not run


Figure 9 Finished Batch Jobs Widget

In **Finished Batch Jobs** widget (includes finished batch jobs, failed batch jobs, cancelling/cancelled batch jobs, and deleting batch jobs), user can:







- Delete one or more batch jobs by ticking the check box and then clicking Delete



- Click [Auto-delete: ON](#)  or [Auto-delete: OFF](#)  to configure the Auto-delete, see Section 2.2.6.4 on page 27.

[Auto-delete: ON](#)  indicates that Auto-delete is enabled (recommended).

[Auto-delete: OFF](#)  indicates that Auto-delete is disabled.

- Sort batch jobs by using the drop-down list.
- Delete a batch job by hovering the mouse over a batch job to show deletion button  and then clicking it.
- If the batch job has failed requests and/or not run requests, export this batch job by hovering the mouse over a batch job to show export button  and then clicking it. The failed requests and not run requests are export to a batch file. User can create a batch job with this batch file to rerun the requests.
- View the detailed information of each batch job.
 -  indicates that the batch job has a scheme file.
 - Hover the mouse over a batch job can show [Show more](#) . Expand [Show more](#)  to view more information about the batch job, see Section 2.2.6.1 on page 24 for description of the parameters.
 - If the notification for finished job has been configured, a message (Such as,  [Notification is enabled \(SNMP and e-mail\)](#)) is shown.
 - If the batch job has a scheme file, the link [View scheme file](#) is shown. Click [View scheme file](#) to view the scheme file, see Section 2.2.6.6 on page 29.



2.2.6 Batch Job Operations

2.2.6.1 Batch Job Information

Table 2 Batch Job Parameters

| Parameter | Description | Shown in |
|------------------------------|--|--|
| Batch Job ID | The unique identity of the batch job. | All batch job widget |
| Added | The create time of the batch job. | All batch job widget |
| Provisioning Client | The provisioning user who executed the requests in the batch file. | All batch job widget |
| User | The user who created the batch job. | All batch job widget |
| Batch File Name | The readable name of the batch file. | All batch job widget |
| Scheduled for | The scheduled execution time of the batch job. | Scheduled batch job widget |
| Started | The time that batch job start to run at. | Running batch job widgets, Paused batch job widgets, Finished batch job widget |
| Ended | The time that batch job finished at. | Finished batch job widget |
| Duration time | The execution duration of the batch job. | Finished batch job widget |
| {Number} requests successful | The number of the succeeded requests | Finished batch job widget |
| {Number} requests failed | The number of the failed requests. | Finished batch job widget |
| {Number} requests not run | The number of the requests that have not been executed. | Finished batch job widget |

2.2.6.2 Edit Batch Job

To edit a batch job, do the following:

1. In the **Batch Handler** GUI, hover the mouse over a batch job and then click



, a slide-in panel is displayed on the right side.



Edit Batch Job

Name *

Batch File *

 ▼

Provisioning Client *

 ▼

Scheme File (.xml)

[Browse...](#)

Notification for Finished Job

☐ SNMP

☐ E-mail

[Save](#) [Cancel](#)

2. Edit the name, batch file, provisioning client as desired.
3. Reupload the scheme file if needed. The acceptable file extension is .xml.
4. Edit the notification for finished Job as desired.

5. Click  to apply the changes.

2.2.6.3 Run or Re-schedule Batch Job

To run a batch job, do (Re-schedule has a similar operation):




1. Select one or more batch jobs in **New Batch Jobs** widget, and then click  **Run**. This opens the **Run Batch Jobs** dialog.

2. Select the batch jobs to be run from the batch jobs list by ticking the check box.
3. Specify the number of sessions per batch job.

Note: If run batch jobs immediately, the allocated session cannot exceed the available session. To check the available sessions. see area 4 in section Section 2.2 on page 14.

4. Configure the execution time of the batch jobs:





- Switch to  to run the batch jobs immediately.
- Switch to  to schedule an execution time for the batch jobs. Click  to select a date and time.

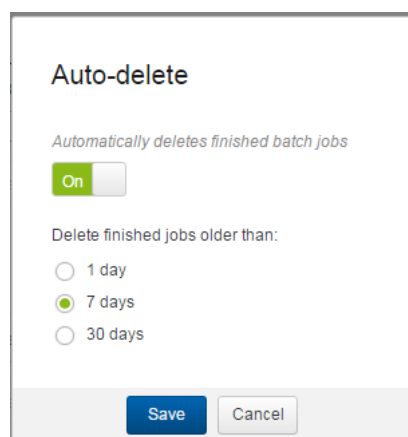
Note: If the execution time is in the past, batch job runs immediately.


5. Click  to run the batch jobs.

2.2.6.4

Configure Batch Jobs Auto Delete

1. Click **Auto-delete: ON**  or **Auto-delete: OFF** , this opens the **Auto-delete** dialog.



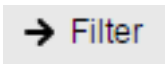
2. Switch to  to enable the Auto-delete function.

- Switch to  to disabled the Auto-delete function.

3. Click  to apply the change.

2.2.6.5

Filter

1. Click , a slide-in panel is displayed on the left side.



Filter ×

Batch Job Name

User

Batch File Name

Date

×

×

Filter

Reset

2. Filter the batch jobs that match the desired condition. The filter panel can be collapsed by or click .

- **Batch Job Name** – Specify the name of the batch job in this field.
- **User** – Specify the user who created the batch job.
- **Batch File Name** – Specify the name of the batch file in this field.
- **Date** – Specify a duration to filter the batch jobs.

The following date of the batch jobs between **Date** duration is filtered.

The added date in New Batch jobs.


The scheduled date in Scheduled batch jobs

The started date in Running batch jobs



The started date in Paused batch jobs

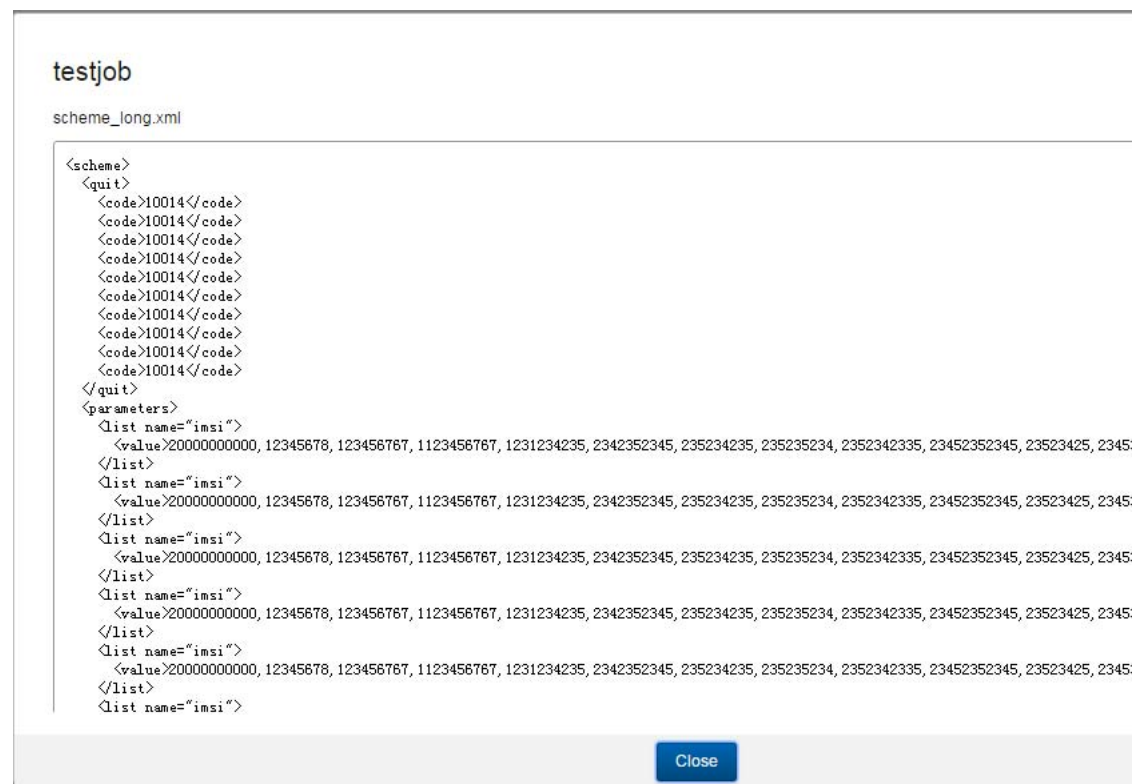
The ended date in Finished batch jobs

- Click  to apply the filter. The results are displayed in each batch jobs widget.

2.2.6.6

View Scheme File

- Click [View scheme file](#), this opens the **Scheme File** window.



- Click  to close the window.

2.3

Batch File Management

The **Batch File Management** GUI shown in Figure 4 is used for uploading, browsing, and deleting the batch files.



Multi Activation

Batch File Management

1 → Filter Upload batch file Manage batch jobs




Batch Files

2 Delete 3


| <input type="checkbox"/> | Name | Uploaded | User | Type | Status |
|--------------------------|---------------|---------------------|-------|-------|-----------|
| <input type="checkbox"/> | testfile3 | 2017-04-22 02:13:09 | admin | CAI | Invalid |
| <input type="checkbox"/> | testfile9 | 2017-04-22 02:58:16 | admin | CAI3G | Analysis |
| <input type="checkbox"/> | testfile4 | 2017-04-22 02:13:27 | admin | CAI3G | Invalid |
| <input type="checkbox"/> | testfile5 | 2017-04-22 02:13:39 | admin | CAI | Available |
| <input type="checkbox"/> | testFile | 2017-04-22 02:25:08 | admin | CAI3G | Deleting |
| <input type="checkbox"/> | testfile2 | 2017-04-22 02:12:36 | admin | CAI3G | Available |
| <input type="checkbox"/> | testfile1 | 2017-04-22 02:12:19 | admin | CAI | Available |
| <input type="checkbox"/> | batchfile | 2017-04-20 15:35:14 | admin | CAI3G | Current |
| <input type="checkbox"/> | TestFile | 2017-04-22 02:25:54 | admin | CAI3G | Available |
| <input type="checkbox"/> | testBatchFile | 2017-04-20 15:32:09 | admin | CAI3G | Current |

Figure 10 Batch File Management

In Area 1, user can:

- Filter the desired batch files by clicking  , see Section 2.3.2 on page 33.
- Upload a batch file by clicking  , see Section 2.3.1 on page 31.
- Switch to **Batch Handler** main page by clicking  .

Area 2 lists all the batch files, user can:

- Delete one or more batch files by ticking the check box and then clicking  .



Note: The default maximum number of the batch files is 1000. When the maximum number is reached, it is not allowed to upload new batch file. It is recommended to delete some batch files before uploading a new batch file. For how to configure the maximum number of the batch files, refer to *System Administrators Guide for Native Deployment*, Reference [7] for native deployment or *System Administrators Guide for Virtual and Cloud Deployment*, Reference [8] for virtual and cloud deployment.

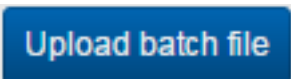
The following table describes the parameters used for Batch File Management.

Table 3 Batch File Parameters

| Parameters | Description |
|------------|--|
| Name | Batch file name. Only allows characters A-Z, a-z, 0-9, ' ' and '-'. Length should be between 1 to 100. |
| Uploaded | Uploaded time of batch file. Time format is YYYY-MM-DD HH:mm:ss |
| User | The user who uploaded the batch file. |
| Type | Protocol type. Available operation types are CAI and CAI3G. |
| Status | Batch File status. Available statuses are: <ul style="list-style-type: none"> Analyzing...: System is analyzing the batch file. The file is unable to delete or use by batch jobs. Available: The batch file is available. Invalid: The Batch file is invalid. This file is need to be deleted. Currently in use: Batch file is already used by a batch job. The file is unable to delete or use by other batch jobs. To find the batch job that using batch file, see Section 2.2.6.5 on page 27. Deleting...: System is deleting the Batch file. |

2.3.1

Upload Batch File

- Click . This opens the **Upload Batch File** dialog.



Upload Batch File

Batch File Name*

Type *

▼

Batch File (.cai3g) *


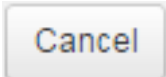
TestBatchFile.cai3g

2. Specify the name of the batch file. The name must be unique.
3. Specify the type of the batch file.

Note: The maximum file size of a batch file is 5 GB.

4. Click  to upload the batch file.

The acceptable file extension is .cai3g or .cai.



5. Click  to upload the file. User can click  during the uploading.



Upload Batch File

Batch File Name *

Type *

CAI3G  

Batch File (.cai3g) *

Browse..

cai3g_ct.cai3g

Uploading

61%

Upload

Cancel


Attention!

For native deployment, ensure the free disk in root partition of the SC nodes is at least 500 MB larger than the size of the upload file.

For virtual and cloud deployment, ensure the free disk in root partition of all nodes is at least 500 MB larger than the size of the upload file.

2.3.2

Filter Batch Files

1. Click , a slide-in panel is displayed on the right side.



Filter ×

Name

Uploaded

User

Status

All Selected

Type

☒ CAI

☒ CAI3G

Filter

Reset

2. Filter the batch file that matches the desired condition. The filter panel can be collapsed by or click Filter .
3. Fill the fields as desired, see Table 3 for detailed description.
4. Click Filter to apply the Filter.



3 Appendix A - Batch Handler GUI Operations in Log Management

Batch Handler GUI operations are logged in processing log, and can be viewed in the **Log Management** GUI. The **Instance** and **Protocol** of batch handler GUI logs are `batchJobId` and `REST` respectively.

The following table describes the batch handler GUI operations that record in the processing log and the MOType of the GUI operations.

Table 4 Batch Handler Operations and MO type

| Operate | Managed Object |
|--------------------------------------|---------------------|
| Create Batch Job | CreateJob |
| Update Batch Job | UpdateJob |
| Run Batch Jobs | RunJobs |
| Reschedule Batch Jobs | RescheduleJobs |
| Remove Batch Jobs | RemoveJobs |
| Pause Batch Jobs | PauseJobs |
| Resume Batch Jobs | ResumeJobs |
| Cancel Batch Jobs | CancelJobs |
| Change Scheme File for Batch Job | UpdateScheme |
| Remove Scheme File for Batch Job | DeleteScheme |
| Upload Batch File | UploadBatchFile |
| Remove Batch Files | RemoveBatchFiles |
| Change the Auto delete configuration | setConfiguration |
| Export failed request | ExportFailedRequest |

For more information, refer to *User Guide for Resource Activation*, Reference [5].





Reference List

Ericsson Documents

- [1] *Library Overview*, 18/1553-CSH 109 628 Uen
- [2] *Generic CAI3G Interface 1.2*, 2/155 19-FAY 302 0003 Uen
- [3] *Function Specification Dynamic Activation Execution Environment*, 6/155 17-CSH 109 628 Uen
- [4] *Provisioning over CAI3G for Resource Configuration*, 32/155 19-CSH 109 628 Uen
- [5] *User Guide for Resource Activation*, 1/1553-CSH 109 628 Uen
- [6] *Customer Adaptation Guide for Resource Configuration*, 14/1553-CSH 109 628 Uen
- [7] *System Administrators Guide for Native Deployment*, 1/1543-CSH 109 628 Uen
- [8] *System Administrators Guide for Virtual and Cloud Deployment*, 3/1543-CSH 109 628 Uen