

PERSISTENT SYSTEMS LIMITED

Batch Functionality

Batch script and Batch command

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This document is based on the requirement received from NCRA.

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Batch Functionality

Batch Script

Batch Script Validation

1. User should be able to upload and validate any batch script that supports .pl or .txt extension
2. In case of any invalid command or syntax error in command appropriate message should be displayed to user
3. The supported common cms commands supported in batch script are as follows:
 1. command – executes any valid subsystem command.
Supported syntax is :
command(" <subsystem-name>,<command-name>,<command parameters(commma-seperated)>");
 2. error - displays the error message on console.
Supported syntax is :
error("<error-msg>");
 3. info - displays the informational message on console.
Supported syntax is :
info("<msg>");
 4. getCommandStatus – returns the command status of a given command.
Supported syntax is :
getCommandStatus ("<seq-num of command>");
 5. getCommandStatusInt – returns the integer status of a given command.
Supported syntax is :
getCommandStatusInt ("<seq-num of command>");
 6. getParamValue – return the parameter value received from subsystem/wrapper as response.
Supported syntax is :
getParamValue (<seq-num of command>,<param-name>");
 7. startTime – starts the script after specified time in hh:mm:ss
Supported syntax is :
startTime ("<hh:mm:ss>");
 8. stop – stops the batch script
Supported syntax is :
stop ();
 9. waitForCmdCompletion - wait for command completion
Supported syntax is :
waitForCmdCompletion ("<seq-num>, <sleepTime[sec](optional)>,<time_out[sec](optional)>");
 10. restore – restore the last monitoring parameter value from database
Supported syntax is :

```
restore("<subsystem-name>,<param-name>");
```

11. gts – gets the catalog object

Supported syntax is :

```
gts("<source-name>");
```

12. updateBatchStatus – updateBatchStatus updates the batch status. Valid integer values are 2(fail) and 5(Success).

Supported syntax is: updateBatchStatus(<batchstatus>);

13. checkSubSystemStatus – check the sub system status, either it is active or de-active.

Supported syntax is: checkSubSystemStatus ("<subsystem-name>");

4. The supported ncra specific commands supported in batch script are as follows:

1. loadProperty – Updates the Global property value. The property has to be pre-configured in globalparameter.properties.

Supported syntax is:

```
loadProperty("<property-name>,<property-value>");
```

The below mentioned batch functions are for CMS internal use, so these are not available as command in Expert Tab and Engineering GUI. These are implemented to be used only in a batch script. These functions if used inappropriately may change the CMS internal settings.

2. getProperty – Gets the Global property value.

Supported syntax is:

```
getProperty("<property-name>");
```

3. updateTrackingAttributes – Updates the Tracking attributes such as source, ra_mean, dec_mean etc. on firing track command.

Supported syntax is:

```
updateTrackingAttributes();
```

4. clearTrackingAttributes – Clears the Tracking attributes. **This is called when the track parameter is received as false in servo monitoring data.**

Supported syntax is:

5. updateDataAcqProgress – Updates the data acq progress. The acq-percentage and

Supported syntax is:

```
updateDataAcqProgress("<acqPercentage>,<acqStatusMessage>");
```

6. updateDataAcqHeaderStatus – Updates the data acq progress in CMS Header.

Supported syntax is:

```
updateDataAcqHeaderStatus("<acqStatus>");
```

7. enableStartDataAcq– Enables the Start Data Acquisition button on Manual mode tab. And disables the Stop Data Acquisition button.

Supported syntax is:

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enableStartDataAcq ();

8. disableStartDataAcq– Disables the Start Data Acquisition button on Manual mode tab. And enables the Stop Data Acquisition button.

Supported syntax is:

disableStartDataAcq ();

5. Sleep supports the Functions specified in Sleep Manual

Note: The variables when specified in a batch script should be preceded or succeeded by a white space.

For e.g if \$x is to be used in a function info it should be used as follows:

Info(" x value = \$x ");

Batch Script Execution

1. User should be able to upload and run any batch script that supports .pl or .txt extension
2. In case of any invalid command or syntax error in command appropriate message should be displayed to user.
3. The user should be able to stop batch command at any point of time. The batch will eventually stop after the current command gets executed completely. This may take time depending upon the time taken by the last command to execute.
4. Once started, the start button would be disable and stop button would be enabled
5. On Stop, the stop button will be disabled and start button will be enabled

Batch Command

Batch Command Validation

1. User should be able to specify a batch command in the subsystem commands.xml file. For e.g for servo subsystem the batch command can be specified in servo_commands.xml in the following format:

```
<batchcommand>
    <name>batch1 (init-position) </name>
    <id>412</id>
    <syntax>z</syntax>
    <sample>2</sample>
    <params>
        <param required="true">
            <paramname>z</paramname>
            <type>integer</type>
        </param>
    </params>
    <filepath>E:\\batch1.txt</filepath>
</batchcommand>
```

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2. If user makes a mistake in the xml syntax the application should display an error message in the log file mentioning the cause.
3. If the batch file path is incorrect, then on batch command execution the error message of “Empty or missing file path or script tag should be displayed” or similar such error message should be shown to user
4. The batch command is validated similar to the normal command, i.e. the syntax of the input parameters is checked, and the associated batch script validation is done only during batch command execution. So the user is expected to test the batch script using batch console before adding it as a batch command.
5. The batch command can be inserted in a batch script in the similar way as the normal command.

Batch Command Execution

1. The batch command can be executed in following ways:
 - a. Through expert tab where it appears like a normal command
 - b. By adding it to the batch script
2. The batch execution status can be viewed in message console when the batch command is fired from Expert Tab
3. The batch execution can be viewed in batch console when the batch command is fired from a batch script