Guide: Serial number change for BLECF

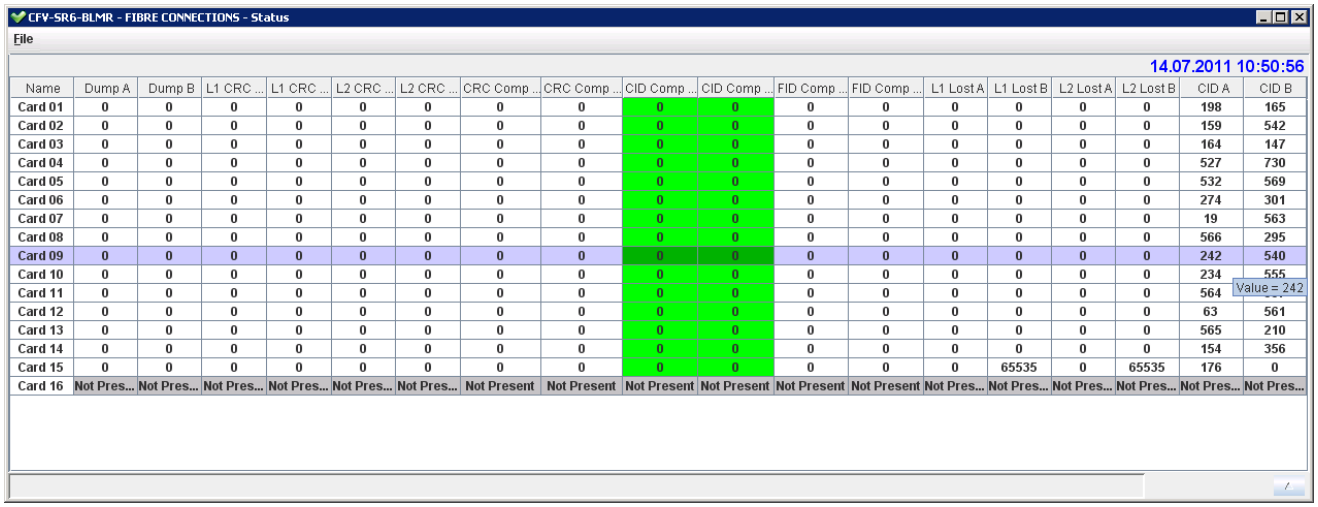
Contents

1. Discover the new serial

In general, the person responsible for the exchange of the card has the serial number since it is printed on the front panel.

As soon as the card is installed and starts transmitting data, we can double check. From the Status application we check that the serial read online from the card is correct, i.e. equal to the one installed.

NOTE: the example covers the exchange of the BLECF serial in the crate SR6.R and card 9 A



Name	Dump A	Dump B	L1 CRC ...	L1 CRC ...	L2 CRC ...	L2 CRC ...	CRC Comp ...	CRC Comp ...	CID Comp ...	CID Comp ...	FID Comp ...	FID Comp ...	L1 Lost A	L1 Lost B	L2 Lost A	L2 Lost B	CID A	CID B
Card 01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	198	165
Card 02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	159	542
Card 03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	164	147
Card 04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	527	730
Card 05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	532	569
Card 06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	274	301
Card 07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	563
Card 08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	566	295
Card 09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	242	540
Card 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	234	555
Card 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	564	[illegible]
Card 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	561
Card 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	565	210
Card 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154	356
Card 15	0	0	0	0	0	0	0	0	0	0	0	0	0	65535	0	65535	176	0
Card 16	Not Pres...	Not Pres...	Not Pres...	Not Pres...	Not Pres...	Not Pres...	Not Present	Not Present	Not Present	Not Present	Not Present	Not Present	Not Pres...	Not Pres...	Not Pres...	Not Pres...	Not Pres...	Not Pres...

2. Insert serial in the database

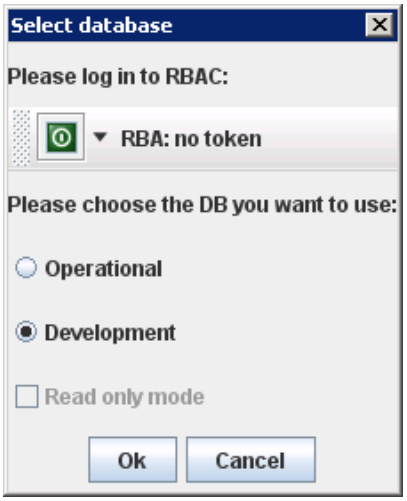
2.1. Internal parameters application

The internal parameters application allows the insertion of settings in the database.

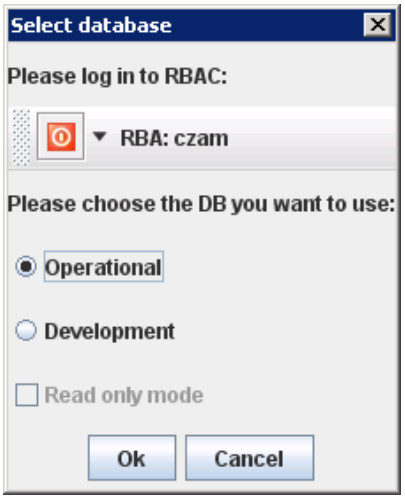
a) Start the internal parameters application from the following url:

http://bdidev1/bdisoft/operational/applauncher.php?launch=BLMInternalParametersApp_V2

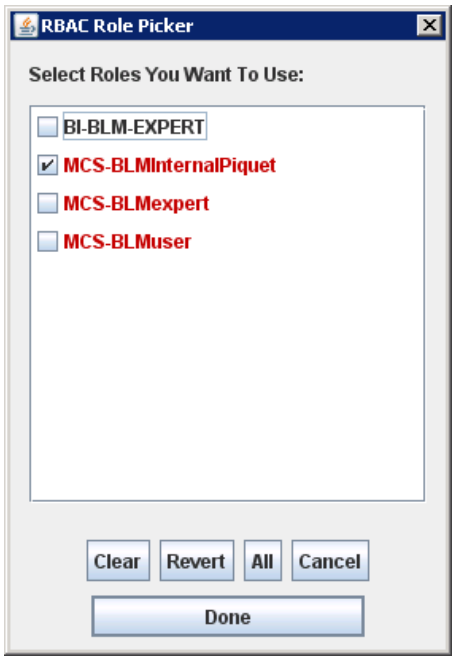
b) First window asks to choose the database:



c) Select the "**Operational**" and choose the appropriate Access Role:



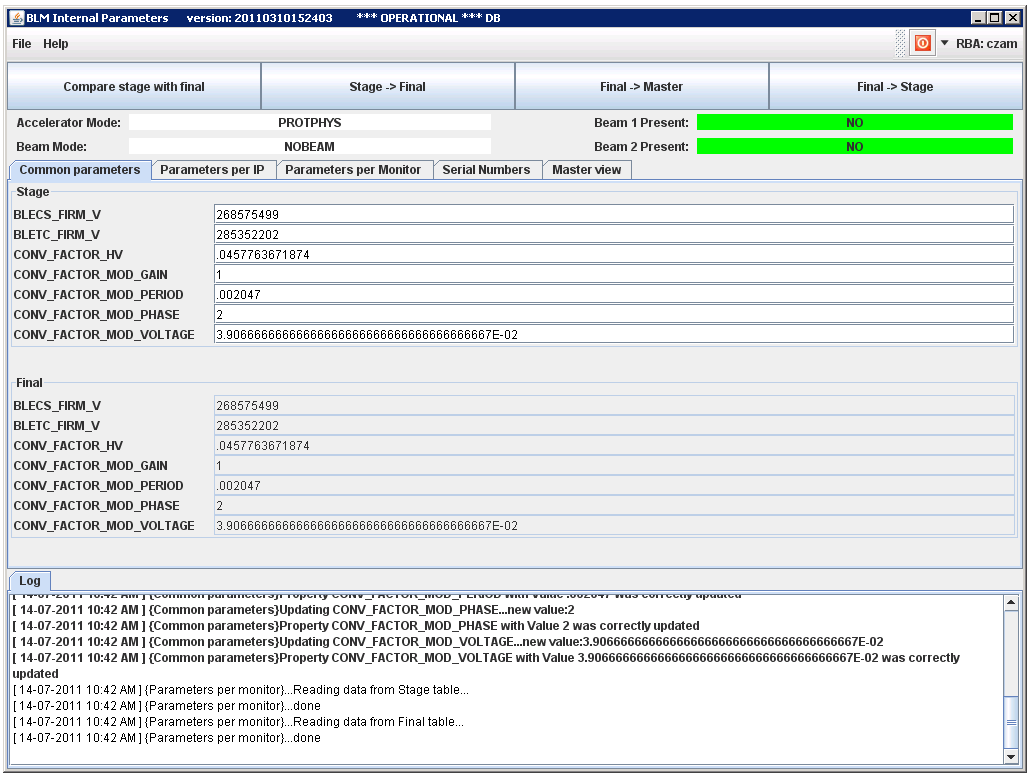
d) You need the MCS-BLMInternalPiquet selected only.



Application starts and the interface present:

- tabs with groups of parameters,
- a set of buttons for the propagations between tables.

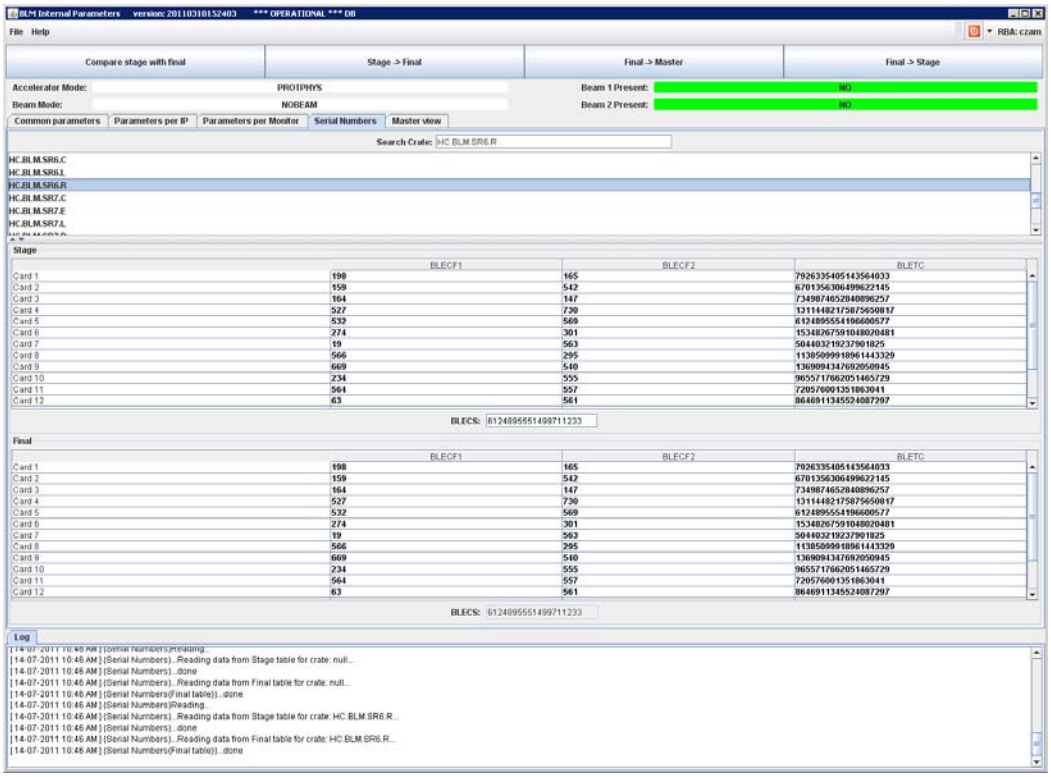
Note: *the database uses staging for introduction of data.*



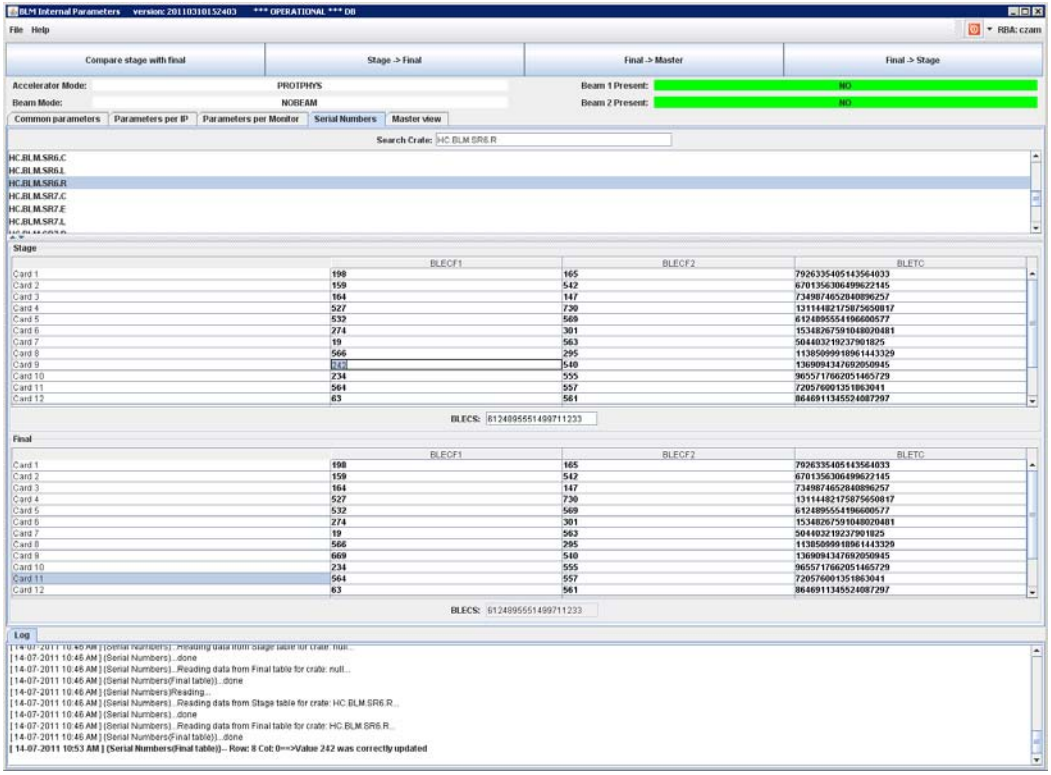
e) Press button "**Final -> Stage**"

f) Choose "Serial Numbers" tab

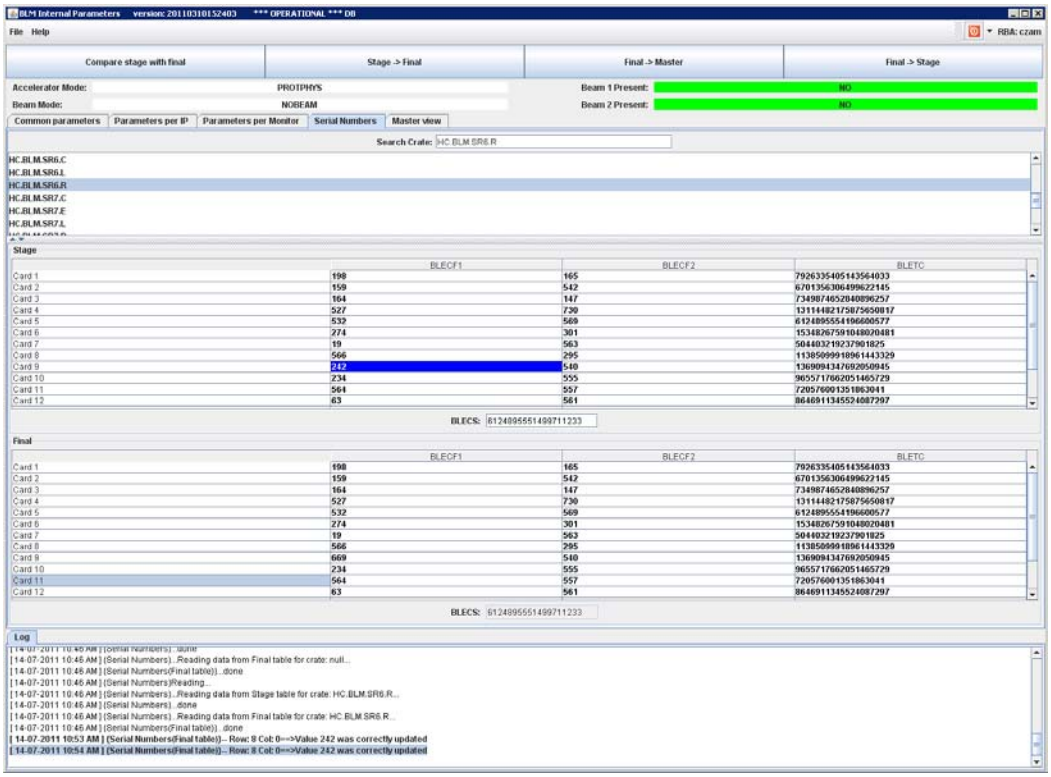
g) Select the crate



h) Change the serial

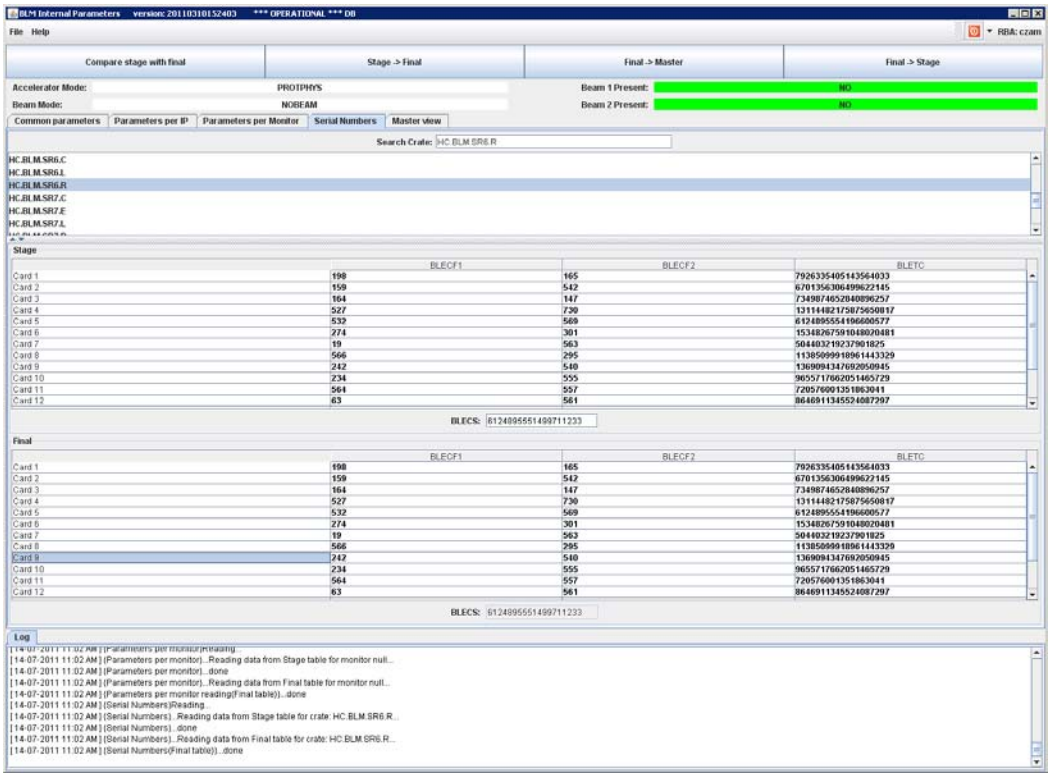


INFO: *The new value should appear marked in blue colour as well as in the log panel.*



i) Press button "**Stage to Final**" to propagate the value in the FINAL LSA tables

j) Press button "**Final to Master**" to propagate the value in the MASTER LSA tables



INFO: the database changes have now been completed. Next steps are to Generate the Settings and Drive them to the electronics.

3. Generate and Drive the settings

The generation application collects the data from the multiple tables and produces groups of those data per crate signed with a private key calculated by the user role.

The drive application is used to send and flash the parameters on each crate. The front-end receives the data and distributes them per card's flash memory.

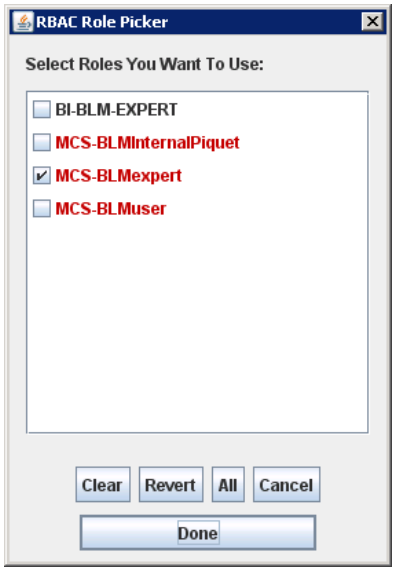
Note: after the send to final action the timestamps for the data stored in the DB have been changed, therefore it is necessary to re-generate and drive the settings for both the BLECS and BLETC modules.

3.1. Generation application

a) Start the generation application from the following url:

http://slwww.cern.ch/%7Epcrops/releaseinfo/pcropsdist/lsa/lsa-app-generation/NEXT/lsa-global-generation-3t.jnlp?accelerator=LHC&contextfamily=beamprocess&lsa.server=lhc

b) Choose the appropriate Access role (RBAC): MCS-BLMexpert



c) Choose tab "Generate Settings"

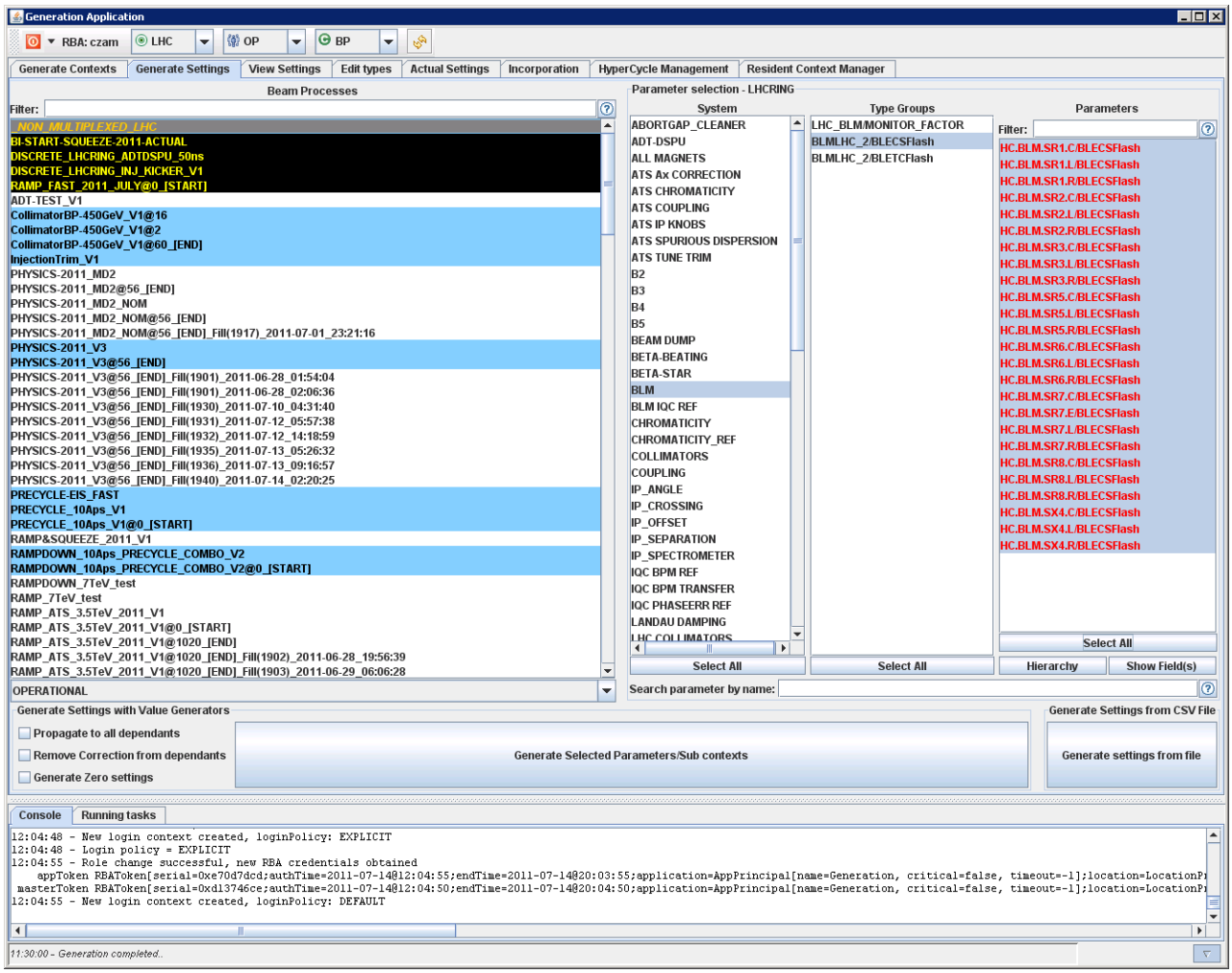
d) From the "**Beam Process**" (left) panel select "*_NON_MULTIPLEXED_LHC*"

e) From the "System" panel select "*BLM*"

f) From the "**Type Groups**" select "*BLMLHC_2:BLECSFlash*"

g) From the "**Parameters**" press the "Select All" button.

h) Press the (large) button "Generate Selected Parameters/Sub contexts"

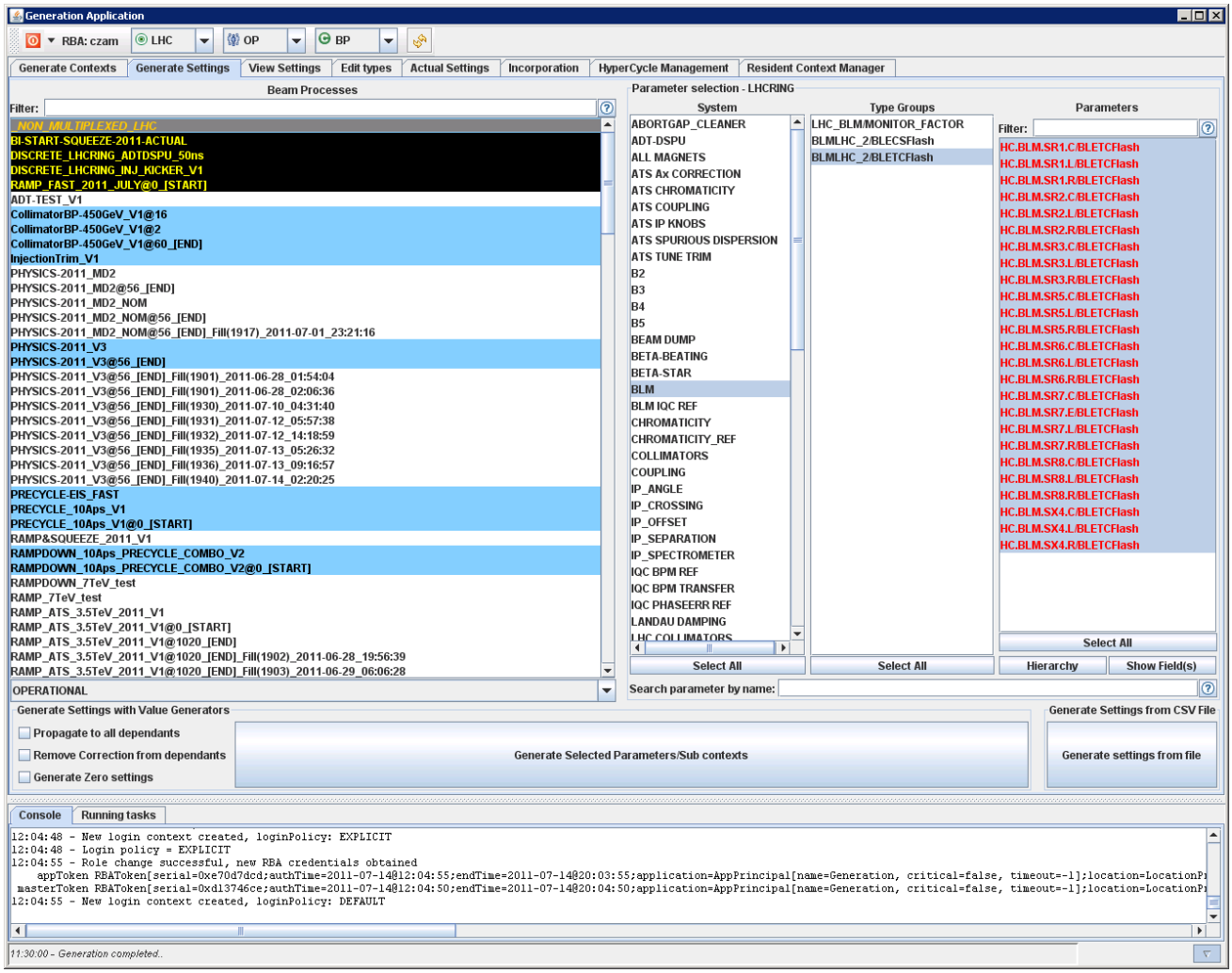


i) Continue with the generation of the BLETC module parameters:

j) From the "**Type Groups**" select "*BLMLHC_2:BLETCFlash*"

k) From the "**Parameters**" press the "Select All" button.

l) Press the (large) button "Generate Selected Parameters/Sub contexts"



INFO: In the console part of the window the log will have similar to the following messages:

11:25:34 - Generating settings for '_NON_MULTIPLEXED_LHC'

11:25:36 - Generation completed..

11:26:06 - Generating settings for '_NON_MULTIPLEXED_LHC'

11:30:00 - Generation completed..

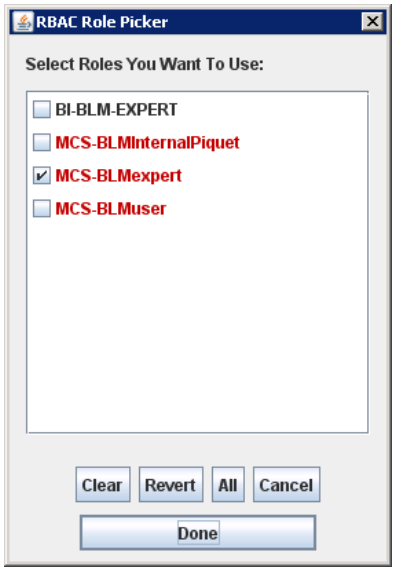
INFO: Generation of Settings has now been completed ---

3.2. Drive Application

a) Start the Drive application from the following url:

http://slwww.cern.ch/%7Epcrops/releaseinfo/pcropsdist/lsa/lsa-app-trim/PRO/lsa-drive-hardware-3t.jnlp?accelerator=LHC&contextfamily=beamprocess&lsa.server=lhc

b) Choose the appropriate Access role (RBAC): MCS-BLMexpert



c) Choose tab "***Drive***"

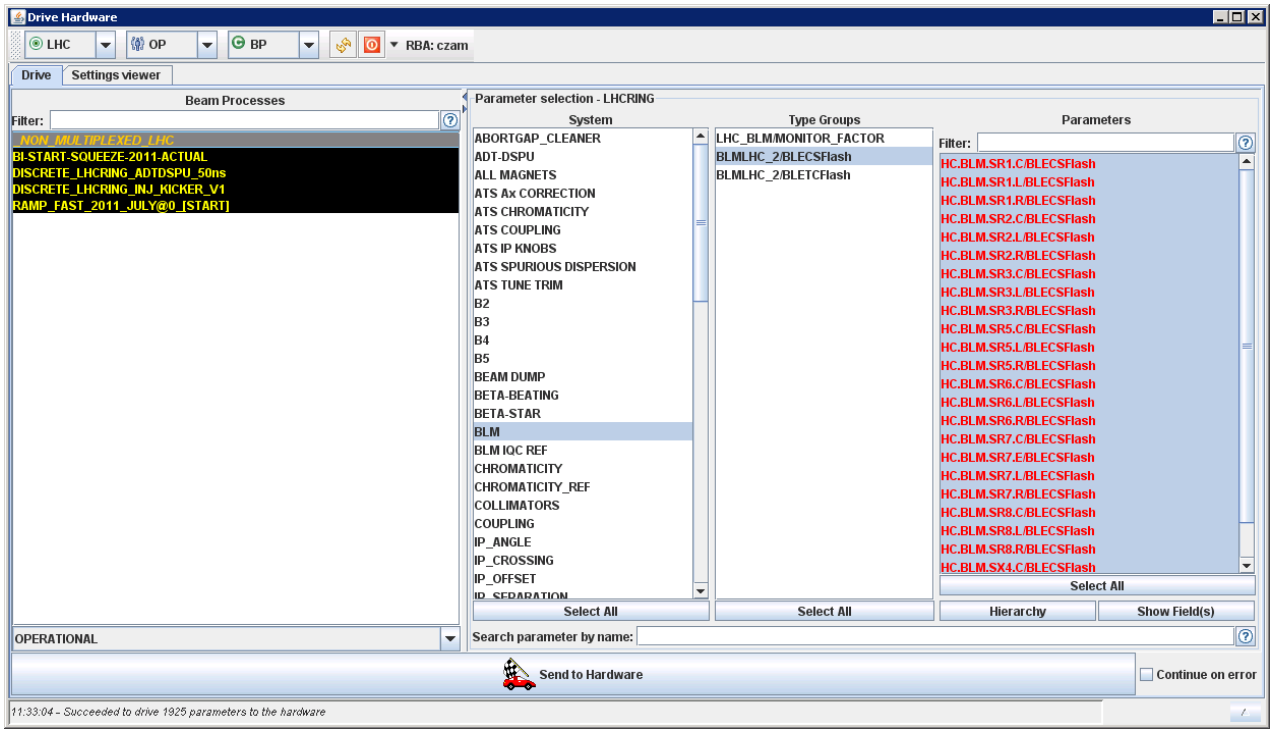
d) From the "**Beam Process**" (left) panel select "*_NON_MULTIPLEXED_LHC*"

e) From the "**System**" panel select "*BLM*"

f) From the "**Type Groups**" select "*BLMLHC_2:BLECSFlash*"

g) From the "**Parameters**" press the "Select All" button.

h) Press the (large) button "**Send to Hardware**"



i) Continue with the drive of the BLETC module parameters:

j) From the "**Type Groups**" select "*BLMLHC_2:BLETCFlash*"

k) From the "**Parameters**" press the "Select All" button.

l) Press the (large) button "**Send to Hardware**"

INFO: *Drive of Settings has now been completed.*

4. Final steps

a) Close all applications - especially the database access and expert applications.

b) Request from the operators to execute the Sanity checks from the sequencer.