Run Parameters Import Tool

EXPERT ONLY
Nota bene: This document contains the information about Run Parameters Import Tool acting on Run Parameters tables in the DB and should be used by experts only. For the detailed DB design refer to SciFi-DB-Structure document available on EDMD (https://edms.cern.ch/document/2050116/1.1).

1. Requirements

In order to run the Import Tool properly, WinCC 3.16 project needs to have JCOP Component sfFeeCommon version 1.0.8 installed.

2. How to run it?

Run Parameters Import Tool can be open on sfecs01 machine and SFECS project. It will work also on side A and C project, but it is NOT recommended, as they are not designated to handle process that occupies significant amount of CPU and memory.

After logging to sfecs01 machine with your LHCb account credentials open the sfFeeExpert panel:

$WCCOAui -proj SFECS -p sfFee/sfFeeExpert.pnl -iconBar -menuBar &

Later click on button "XML->DB RunPar".

It can be run directly by typing the following command in terminal:
$WCCOAui -proj SFECS -p sfFee/sfFeeDb/sfFeeDbXmlImp.pnl -iconBar -menuBar &

3. Panel

The following panel (Figure 1) will be open. It contains two sections and Log text field on the bottom of the panel. These two sections are:
- File: Here user can select which XML file need to be used as an input to the DB. To do that after pressing the "Select XML file" the file selector will pop up - Figure 2. When the file is selected, its name – without the full path – will be printed in the text field on the left of the button.
- RunType: In the drop-down menu the user can select the desired Run Type that the XML file needs to be imported. The Run Parameters DB tables have a Run Type field under which the values for a selected board will be taken during Recipe Creation.
Important: The data will be imported with the selected Run Type name in that drop-down. Run Type stored in the DB is not depended on the file name nor content.
"DB Import" button: After the file and Run Type selection the Import Tool will parse the XML document and insert the XML data to the database with the relevant BoardIDs and Run Type. Clicking on the button will result in DB import after confirmation (Figure 3).
DB indicator: Next to the "DB import" button there is a small circle. If it is green that means the DB connection is properly established and the XML data will be imported to the DB. Red color means that the project has no DB connection.

The remaining element of the panel is the Log window. It will give the information like XML file size, estimated waiting time or any error that may occur. The latter will be printed after the import is done.
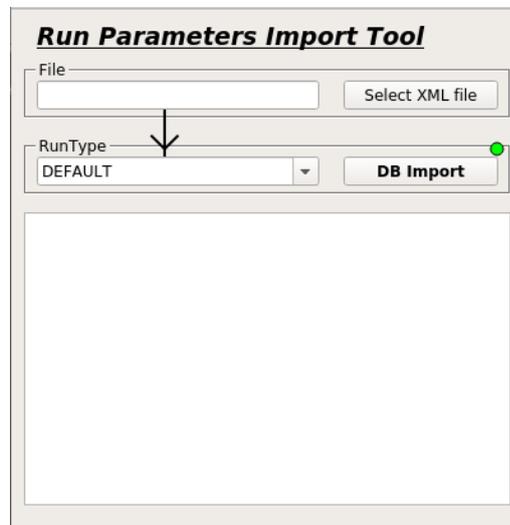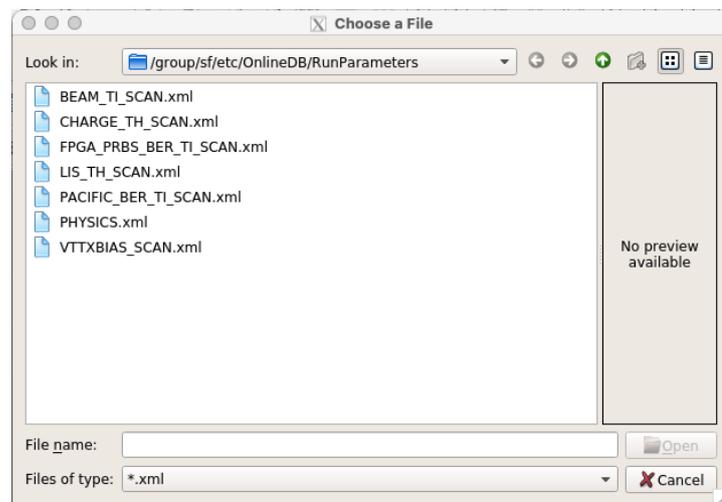

Figure 1 Run Parameters Import Tool

Figure 2 File selector

The file selector (Figure 2) can move to another directories. The default file path is highly advisable for all the version of the XML files.
XML files do not need to contain the configuration for all boards or entries. They can have few entries, but only with the properly named XML structure.

Figure 3 Confirmation pop up panel

4. Usage in brief

1) Open the Run Parameters Import Tool panel.
2) Click on "Select XML file" button.
3) Select file with Run Parameters data to be imported to Run Parameters tables in the DB.
4) Click on "Open" button in File Selector.
5) From drop-down menu select a Run Type under which the data will be saved in the DB.
6) Click on "DB Import" button. Nota bene: Due to the full XML file processing import activity cannot be aborted once it starts.
7) In pop up window confirm (or not) the import with selected file and RunType.
8) Wait the indicated in Log window time – may take shorter or longer depending on CPU and memory.
9) After the import is finished check the Log window for possible errors.

5. Result

Below one of the possible results is shown. The Log window contains a lot of errors, because the project is not connected to the DB. It also sums up how many entries have been processed during reading of the XML file.
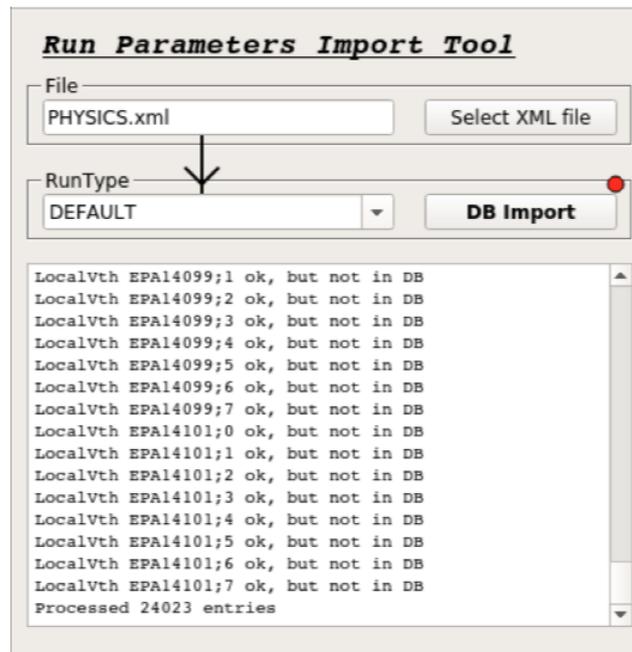
Figure 4 Result of import on machine without DB connection

6. Possible errors

After importing the following errors may appear:
- 'ERROR: MB EMB00024 cannot be added to DB' – it usually appears for some ProdDbID entries and means that the ProdDbID of Master Board EMB00024 cannot be found in respective Component DB table.
  The reason why it cannot be added to the DB is that each XML entry has a ProdDbID (here: EMB00024) which is not the same and DB ID – numbers only. Database ID needs to be retrieved from Component DB Table (here: MB) for board with the respective ProdDbID.
  Solution: Update Component DB Tables or your XML
- 'CB ECB01060 ok, but not in DB' – reading of the XML went properly, but the DB connection cannot be established.
  Solution: connect the project to SciFi Online DB or run the panel on project with such a connection