Table of Contents

Registering a C++ Type to be 'Get'table from the EventSetup

Complete:

Registering a C++ Type

In order to make a C++ type accessible from an EventSetup Record, that type must be registered with the EventSetup system. This is done by

1. create a source file named 'ES_<data type name>.cc' in the src directory of the package containing the data type
2. edit the source file
   1. include the header of the data type
   2. include the header "FWCore/Utilities/interface/typelookup.h"
   3. add the line `TYPELOOKUP_DATA_REG(<data type name>);`
3. edit the CMS.BuildFile.xml of the package
   1. add `<use name="FWCore/Utilities"/>`

In addition, it is possible to make a C++ type accessible directly from the EventSetup (using the `getData` method) without having the user first get the Record containing the type. The only time to allow this is when the C++ type will only every be contained in one type of Record (or there is a 'default' Record that would be used for almost all data accesses). To make such an access possible, do the following:

1. edit the C++ type's header file
   1. include the header file for the Record
   2. include FWCore/Framework/interface/data_default_record_trait.h
   3. at the end of the header file add the line `EVENTSETUP_DATA_DEFAULT_RECORD(<data type name>,<record type name>)`
2. edit the CMS.BuildFile
   1. add `<use name=<library holding record type> >`
   2. also add the above to the `<export>` directive block

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