How is Batch Performance calculated when using CBDC?

This is a difficult question to answer as there are a number of related issues.

Simple speaking the mechanism used is the same for CBDC and ABDC. The Performance Calculation mechanism knows nothing about how the Batch record was generated but works from the parameters recorded in the database.

The first thing that needs to be noted here is that by default no calculations are performed until there are at least 5 batches run on a particular version of a particular master recipe (this can be decreased down to 2 or increased up to 100). This is fine for ABDC as Master Recipes and any changes to them are recorded automatically from the CENTUM CS3000 Batch or CENTUM VP Batch system however in the case of CBDC it is possible that the master recipe parameter is not configured at all. If you wish to use Performance Calculations with CBDC you must therefore configure a Master Recipe ID (one of the Property Tags on the CBDC tool) even if this is the same for all batches. This could be configured and read from a tag of course. See the FAQ What are the limitations of Custom Batch Data Collection? for more details.

If you have a Master Recipe ID defined then as soon as there are 5 batches run it will calculate the performance in the same way as ABDC.

You would also need some way of picking up such things as whether the batch had been put into hold or aborted. This can be done using the Status field in the Property Tags Tab of the CBDC Tool. See the FAQ What are the limitations of Custom Batch Data Collection? for more details.

The number of events metrics would also only work if the Batch ID known to Exaquantum Batch was the same as that on the DCS gathered via OPC AE which again may not be the case.

Basically the design of a CBDC configuration needs to take into account the Batch Metrics (on the System Configuration Tool) if Performance Calculations are required and used effectively.

There is also currently no way to add or remove batch metrics although setting a value to 0 means that that particular metric has no effect on the actual calculation.

Exaquantum /Batch Releases Affected
All