

Investigating the IDAA with SMF (Part 1)

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The IBM DB2 Analytics Accelerator (IDAA), is a high performance solution designed to work with DB2 on z/OS to deliver faster query responses transparently to the user.

The IDAA can be considered as a virtual DB2 component working under DB2 control: the DB2 Optimizer will decide whether to dynamically “offload” a query or not to the IDAA.

IBM studies and customer experiences show that big advantages can be obtained in terms of CPU savings and I/O capacity particularly for queries which scan large amounts of data.

To analyse IDAA activity in detail the SMF records produced by statistics and accounting traces need to be used. These traces provide a lot of metrics, but unfortunately their meaning is not always straightforward or well documented.

After a short introduction to the IDAA architecture, we will discuss IDAA statistics and accounting metrics showing what you have to do in order to use them safely and effectively.

We will also discuss some optional metrics which can be produced by enabling “accelerator modelling” and which can allow you to:

- understand which components of the DB2 workload are eligible to the IDAA;
- evaluate potential performance benefits and CPU consumption reductions;
- estimate possible cost savings due to the IDAA adoption.