

VSAM to DB2 Conversion Strategy Options

1. *Determine data and process requirements*

- 1.1. Determine existing physical model.
 - 1.1.1. Using existing vsam files determine what are the relationships between files.
 - 1.1.2. Output would be a physical data model
- 1.2. Determine how physical model corresponds to current business and logical model (if there is one).
- 1.3. If entity relationships are defined in current logical model and do not correspond to the vsam physical model then impact on existing processes using vsam data need to be analyzed.
- 1.4. If entity relationships are not defined in current logical model :
 - 1.4.1. Determine how missing entity relationships would be integrated into the current business and logical model
 - 1.4.2. Analyze impact on processes, using vsam data

2. *Determine Conversion Strategy*

- 2.1. If there are significant discrepancies in the models or other factors that would justify a redesign/rewrite of the application then intermediate solution would be to:
 - 2.1.1. Define db2 tables to correspond with vsam records exactly.
 - 2.1.2. Convert existing code and data to sql/db2/ (see conversion strategy 1)
- 2.2. If there are no discrepancies in the models and no other factors that would justify a redesign/rewrite of the application then solution would be to :
 - 2.2.1. Define db2 tables to correspond with vsam physical model
 - 2.2.2. Convert existing code and data to sql/db2 (see conversion strategy 2)
- 2.3. If there are minimal discrepancies and no other factors that would justify a redesign/rewrite of the application then solution would be to:
 - 2.3.1. Integrate vsam physical model into current model(s), using db2 for physical model
 - 2.3.2. Convert existing code and data to sql/db2 (see conversion strategy 3)

Conversion strategy 1

Overview

Since this strategy is intermediate the main focus is to convert the existing applications from Vsam to Db2 with the least amount of program logic changes. Almost all vsam statements could be automatically or manually converted without any logic changes. (except return code checking). Consolidating multi file reads into consolidated sql joins would not be done since this would require more effort.

VSAM to DB2 Conversion Strategy Options

Conversion strategy 2

Overview

Since this strategy is longer term the main focus is to convert the existing applications from VSAM to Db2 making maximum use of sql capabilities. Some Vsam statements can be directly (automatically) converted to sql.(read,write,delete) without any logic changes at all (except return code checking) . However any programs that navigate through multiple files should be re-structured to be either platform independent or to coincide with the full capabilities of sql e.g selecting only required fields, not entire record.

Conversion strategy 3

Overview

This strategy would be similar to conversion strategy 2. In addition program changes would be required to reflect the changes in the model.

VSAM Statements	DB2 sql command	comments
Write	Insert	Auto
Read	Select	Auto
Rewrite	Update	Auto +?
Delete	Delete	Auto +?
Open/Close	Not applicable (can be removed)	Auto
Start Browse	Declare & Open cursor(single table)	Auto +?
Read Next	Fetch	Auto +?
Read Prev	Fetch	Auto +?
End Browse	Close cursor	Auto