

Considerations When Migrating From One Database Management System (DBMS) to Another

NOTE: When accessing the embedded links, please navigate to the DBMS relevant to your "Migration" scenario

Comparative Item	PostgreSQL	Netezza	Why?
Hardware	Admin Setting?	Admin Setting?	<- For Hardware, Have Admin Supply these comparisons...
Priority Queue Per User Id (or Application?)	?	?	In many databases, the administrators restrict hardware allocations based on Priority at varying execution times.
Memory Allocation per Application Process?	?	?	There are upper limits to how much memory an application can consume.
Disk I/O Allocations per Application Process?	?	?	There could be limits on "Paging" and/or "I/O Swap file" processing.
Read and/or Write (Insert) Buffer Settings	?	?	There are recommended settings for various execution types. I've seen performance improved when these are set to 30K+.
Concurrent Usage Settings in the DBMS	?	?	Multiple Users/Applications hitting servers at the same time can cause a performance impact.
Ask your Admin if there are others...They are the expert!!!			Collaboration with the experts will exponentially improve your chances of success!!!
Software	Programmer Consideration?	Programmer Consideration?	
Passing the WHERE Clause to the DBMS			May vary by use of acceptable Functions, Formats, or Options for a specific DBMS.
Consistent Functions	Passing SAS Functions to PostgreSQL	Passing SAS Functions to Netezza	When migrating code, are all FUNCTIONS being used compatible for both DBMS environments?
Consistent Formats	Data Types for PostgreSQL	Data Types for Netezza	When migrating code, are all FORMATS (DATA TYPES) being used compatible for both DBMS environments?
Consistent Options	Data Set Options for PostgreSQL	Data Set Options for Netezza	When migrating code, are all OPTIONS being used compatible for both DBMS environments?
Passing Joins That Use Two or More LIBNAME Statements	?	?	Are the Pre-Assigned Libraries consistent?
When Passing Joins to the DBMS Fails	?	?	May help to consider when diagnosing why a query would run in Netezza and not PostgreSQL.
There are many "Best Practices," but this may achieve the level of success you expect...For more, consult the content of these links:			
Performance Considerations			
Optimizing Your SQL Usage			
The SQL Tuning Checklist: Making Slow Database Queries a Thing of the Past			
Data	Database Admin (DBA)?	Database Admin (DBA)?	
Consistent Column Width Definition	?	?	When moving data from one DBMS environment to another, there must be consistent design if performance is expected to be the same...Varying column definitions will consume more hardware resources.
SAS Views of DBMS Data	?	?	Using Views instead of Tables may or may not improve performance...Be sure the understand the details running "under the hood."
Consistent Indices/Partitions/Segmentations	?	?	If these exist in one DBMS and the data is migrated to a new DBMS, the same design must be applied in order to experience the same level of expected performant result.
Ask your DBA if there are others...They are the expert!!!			Collaboration with the experts will exponentially improve your chances of success!!!
Be sure to subscribe to this link: An Insider's Guide to SAS and Database Support information			

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NOTE: This is not an exhaustive list and may be augmented accordingly.

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