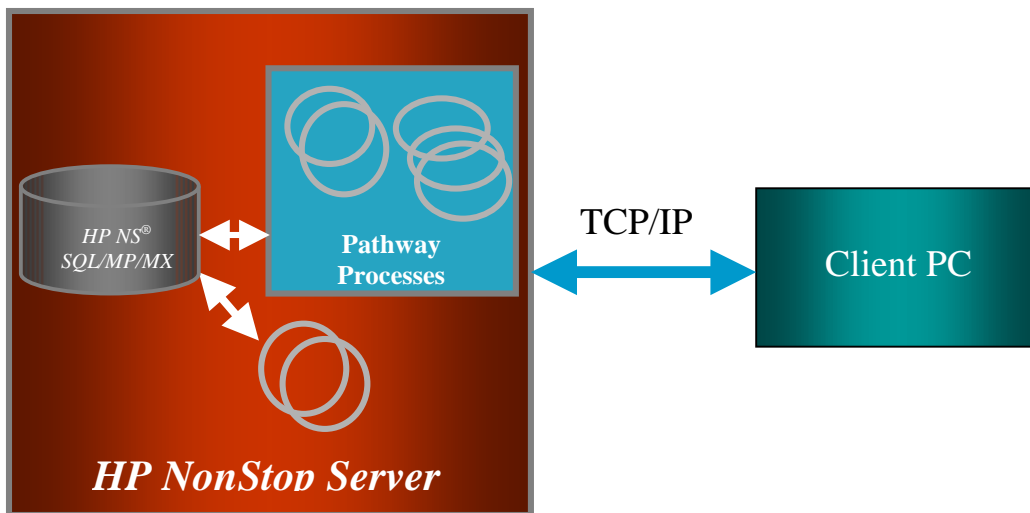# Genus
Software, Inc

HP NonStop dba/m Database Manager for SQL/MP/MX

Overview: Genus dba/m® database manager for HP NonStop™ SQL databases employs a graphical user interface (GUI) to help you perform critical database operations. In addition, this product can automate many of the tasks you currently perform manually. With the simplicity and power of this database manager, your database administrators will enjoy greater productivity and a heightened ability to monitor vital information resources.

dba/m Architecture

Major Features:

Enhanced Object Tree
- List views providing more details about objects like Volume sizes and Table sizes, with ability to sort based on various attributes.
- Context menus (right click menus) provide easy access to management operations.
- Support for find objects features to locate Volumes, Catalogs, and SQL objects using wild cards.
- Ability to provide total number of SQL objects registered on a Catalog.
- While the existing version provides ability to create one custom tree, this version would allow administrators to create multiple named custom object trees.

Enhanced Partitioning
- Auto Design of Key for One Way/Two Way Splits (i.e. auto partitioning for single partition)
- Merge Partition : Merges a partition to its logically adjacent partition. It is opposite of splitting a partition, wherein partition boundaries are changed by moving records to logically adjacent partition.
- Reuse Partition : Instead of doing DROP/ADD partition, REUSE partition option can be used to claim the disk space of existing but useless partition. This operation consumes only one-third time than normal DROP/ADD partition operation.

- Big Partition : This feature overcomes the 2GB limit per partition. Architecturally, it supports 1TB per partition now with this feature.
- Index partitioning : Support for automatic index partitioning.

Shared Access Option
- This option allows running SQL applications to have concurrent R/W access to objects being changed by long-running DDL operations (i.e. during MOVE, SPLIT, MERGE, ADD of partitions). Normally without this option, only read access is allowed. This option significantly reduces the downtime.

Smart Monitoring and Alert management
- Whenever a disk volume or SQL object's used space exceeds thresholds set by the user, they can be notified about the event via an Email message and Pager.
- User can use Compaq's iPaq to remotely view the details about triggered alarms.

Calendar and Event based Batch Scheduling
- Ability to schedule batch jobs using a calendar based scheme. This will enable users to schedule batches that run on periodic basis (weekly or monthly).
- Currently batches are scheduled based on time particular to day/week/month. It will be enhanced to have scheduling based on event triggered when objects exceed threshold set by user. This will be useful to users who want to automate the table/index partitioning to prevent SQL applications failure due to disk full or file full events.

Volume Pools
- When a system has several volumes, the user will be able to specify and set Volume Pool in profile which will include only those volumes that they are interested in. User will be able to define multiple volume pools.

Replication This will enable users to perform SQL Table replication on different systems. Replication is based on all Tables found in user specified catalog. Dbam32 will generate the template scripts which user can change to new system name, and run them in Direct SQL window to create new objects.

Improved Statistics and Reorganization
- Gives statistics about tables/Indexes as well as partitions.
- Provide interface to FUP RELOAD feature to reload a SQL Table/Index that has become fragmented and disorganized. This vastly increases the data access performance.

Revamped Error Logging/Viewer
- Enhanced logging of errors generated by Dbam32 background servers while providing Auto Partitioning and Disk Monitoring functions. Also program flow trace information is logged, which the user will be able to view more effectively. This will also help Genus developers in the quick resolution of any problem faced in the field.

Graphical Explain Plan
- Ability to display compiled SQL query plans in graphical tree format with associated costing information for each operators in the query plan.

Interface to SMF
- Ability to create and maintain virtual disks.