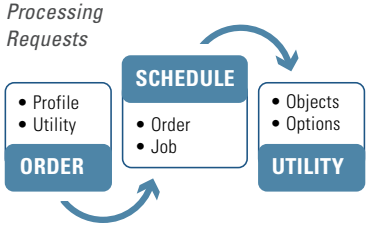
TUC™
AUTOMATING LOG ANALYSIS



Maintenance Automation

DB2 maintenance tasks include backup, reorg and statistics collection. TUC automates the generation and triggering of maintenance jobs. Real Time Statistics and thresholds are used to trigger utilities only when needed. TUC allows you to group objects in profiles for uniform processing. TUC identifies any new object and refreshes the profiles and the maintenance jobs automatically. Customization options allow the administrator to easily control utilities, objects and resources. Maintenance tasks may include log analysis to audit changes on critical tables or propagate changes. TUC has a unique interface with ULT4DB2 and provides a front-end user interface to generate log analysis jobs.

Benefits

- *Automate the generation of utility statements*
- *Ensure all objects are covered*
- *Identify candidates for utility processing*
- *Minimize resource consumption of utilities*
- *Exploit parallelism and balance workload*
- *Remove dependency on a specific vendor*
- *Integrate utilities and applications*
- *Leave control in the hands of administrators*
- *Provide a single point of control*
- *Increase administrators productivity*

Log Tracker Automation

ULT4DB2 Log Tracker reads log records for a range of timestamps and generates UNDO or REDO SQL statements, audit information in flat file format or comma delimited values format. TUC can automate the process of continuous monitoring of the log or can generate log analysis jobs for immediate execution.

TUC allows processing the log for a group of objects using profiles. Only Data Capture Changes tables included in a profile can be processed. The TUC/ULT procedure executes the ULT MINILOG program for the requested range of timestamps. All the required output datasets of the LOGL2SQL program are pre-allocated using normal DB2 TEMPLATE utility statements. The usage of the TEMPLATE utility provides a powerful way to control the dynamic allocation and naming convention of datasets. The output datasets are recorded under a SYNCID. This allows you to use the online dialogs to locate the datasets easily and to edit, execute and reload the output datasets into auditing tables.

The LOAD procedure permits the reload of all the output datasets by simply providing the SYNCID that was used for the ULT processing. The LOAD procedure allows changing the various LOAD options and the target table creator. Datasets can be sorted by the cluster index key or to remove duplicates. The policy rule can be used to trigger ULT processing when updates become available in the archive logs only for the tables that have been changed since the last ULT processing using Real Time Statistics. These services make it easier to automate the continuous monitoring of the log when daily audit reports or data propagation is required.

Displaying Objects

TUC allows you to display lists of databases, tablespaces, tables, indexes, datasets and events. From the displayed list you can use a wide range of line commands including recovery jobs and log analysis jobs. The ease of use allows you to quickly generate the desired JCL without additional manual effort.

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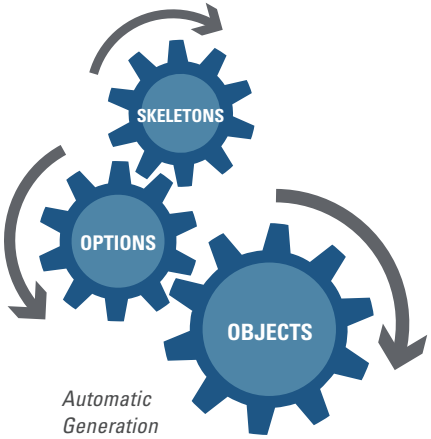
Features

- *Display log inventory*
- *Display logging and archiving status*
- *Display log durations*
- *Display object lists*
- *Display events*
- *Generate log analysis jobs*
- *Generate recovery jobs*
- *Use ULT to analyze logs and generate UNDO/REDO outputs*
- *Use ULT to detect quiet points for consistent recovery*
- *Rename and reregister logs*



Automatic Generation

Protecting your logs and processing log analysis requests

The DB2 logs record updates on tables for the entire DB2 subsystem. If you allow users to access the information on the logs, you basically expose the data in all tables. To protect your data you need to prevent read access to the logs but that creates a problem when log analysis is required. TUC has a unique mechanism that allows users to place a request for object processing, including log analysis. The user needs authorization to place a request but does not need direct authorization to process the objects. The user can then place a request to scan the logs for a group of objects without having read access to the DB2 logs. The request is processed automatically by TUC and jobs can be handed over to the scheduler as needed. When the request completes successfully, the user can access the desired outputs. This leaves the responsibility and control of the operation in the hands of the administrators.

Recovery Services

TUC provides a friendly user interface that allows quick generation of recovery jobs for a wide range of recovery scenarios, including point in time tablespace recovery, recovering an entire database, recovering an entire volume or recovering a single table of a multi-table-tablespace. The dialogs allow displaying application syncpoints, SYSCOPY events or logged events. TUC uses ULT to detect logical units of recovery and quiet points, periods of no activity against a group of objects that can be used as points of consistency. TUC allows the user to select a valid point of consistency for recovery and generate recovery jobs. If you avoid taking QUIESCE, TUC can use ULT to detect a quiet point when requesting to recover objects to a point in time that is not known as a point of consistency for a group of objects. If data was corrupted by an application program, TUC allows the user to display unit of recovery and generate RECOVER statements to recover the tables to a consistent point in time before the data was corrupted.

Display log inventory

TUC allows you to display the log map inventory for a limited number of days or logs. TUC accesses the BSDS directly to allow you to quickly display only the relevant information. The displayed list of logs allows you to generate jobs to analyze the logs using ULT or DSN1LOGP. You can issue commands to offload the active logs or display the logging status.

Displaying log durations

TUC allows you to display the duration of all of your active logs and archive logs. Since the rate of logging can be sometimes high, it is important to monitor and see how long you keep your updates in the logs, increase the size or number of your active logs if necessary or increase the retention of your archive logs. TUC analyzes the log duration of all members of the data sharing group and allows you to identify the member with the shortest logging duration that may affect the entire group.

Rebuilding the BSDS

Renaming BSDS or active logs might be needed when you implement data sharing or when you wish to bring up your

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subsystem on disaster recovery site. TUC allows you to rename current active logs, archive logs and BSDS datasets. The new names are reregistered in the new BSDS datasets. You can generate the batch job to reregister logs in batch or online. The generated JCL allows you to take the following steps:

- Take a backup for the current BSDS datasets
- Rename BSDS datasets
- Rename active logs
- Rename archive logs allocated on DASD
- Alter the SHAREOPTIONS of the active logs to enable data sharing.
- Remove archive logs that no longer exist using DSNJU003 DELETE.
- Remove old names of active and archive logs before rename.
- Reregister active and archive logs with new names using DSNJU003 NEWLOG

Why TUC?

TUC automates the generation and execution of DB2 utilities and allows you to handle your DB2 maintenance efficiently. TUC automation helps saving resources and cutting down expensive maintenance tasks while ensuring full recoverability and availability. TUC allows you to cut the cost of backups, REORG and statistics collection by using Real Time Statistics. TUC improves the DBA productivity and allows easy automation of repeatable tasks. You can minimize the damage of availability loss by ensuring fast recovery. Efficient database maintenance also improves the overall system performance by increasing capacity. TUC is the ultimate product to automate the DB2 maintenance procedures by providing dynamic services to match your needs and demands.

» Take total control of utilities – Use Total Utility Control. «

The DB2 High-End Product Line:

BCV4™
Full DB2 Subsystem Clones in minutes versus days

BCV5™
Save 90% CPU & Run Time with each DB2 copy

BCV6™
Log enhanced copies for 24x7 DB2 refresh/migration

BPA4DB2™
Premier advisor for DB2 buffer pool optimization

ULT4DB2™
Easily identify & restore unwanted changes of DB2 data

TUC4DB2™
RTS & Policy driven automation of DB2 data maintenance

XM4DB2™
Pro-active surveillance for a greater DB2 availability

Contact Us For More Information

We offer a free 30-day trial evaluation as well as private web demo. Learn more about TUC and our complete line of DB2 z/OS products at:

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