# ITM 6.2/6.1 Attribute Difference Report

| | |
|---|---|
| **Application** | **KUD** |
| **Product** | **UD** |
| **Agent** | **DB2 Database** |

## [=] TABLE: KUDINFO00

***Use the System Overview attributes to monitor general information about the DB2 UDB subsystem in your environment.***

| | |
|---|---|
| [+] db2start_time_timestamp | *The date and time that the database manager was started using the DB2START command.* |
| [+] last_reset_timestamp | *The date and time that the monitor counters were reset for the application requesting the snapshot.* |
| [+] snapshot_time_timestamp | *The string date and time when the database system monitor information was collected.* |
| [+] comm_private_mem_KB | *The amount (in KB) of private memory that the instance of the database manager currently has committed at the time of the snapshot.* |
| [+] cons_in_exec_pct | *The percentage of the maximum number of applications allowed that are connected to a database and processing a unit of work during the monitoring interval.* |
| [+] db_partition | *The DB2 database partition node number, which can range from 0 to 999.* |
| [+] sort_heap_used_pct | *The percentage of the allocated sort heap that the DB2 instance used during the monitoring interval.* |

## [=] TABLE: KUDDBASEGROUP00

***Use these attributes to obtain information about database activities.***

| | |
|---|---|
| [+] db_partition | *The DB2 database partition node number, which can range from 0 to 999.* |
| [+] instance_name_U | *The name of the monitored DB2 instance (Unicode).* |

## [=] TABLE: KUDLOCKCONFLICT00

***These attributes provide information to identify which applications are waiting for resources and which applications are holding the resources.***

| | |
|---|---|
| [+] snapshot_time_timestamp | *The string date and time when the database system monitor information was collected.* |
| [+] status_change_time_timestamp | *The date and time the application entered its current status.* |
| [+] lock_wait_start_time_timestamp | *The date and time that the application started waiting to obtain a lock on the object that is currently locked by another application.* |
| [+] db_partition | *The DB2 database partition node number, which can range from 0 to 999.* |

## [=] TABLE: KUDBUFFERPOOL00

***The Buffer Pool attributes provide information about buffer pool activities.***

| | |
|---|---|
| [+] pool_total_reads_K | *The total number of read requests in thousands (K) that required I/O to get data pages and index pages into the buffer pool.* |
| [+] pool_total_writes_K | *The total number of write requests in thousands (K).* |
| [+] db_partition | *The DB2 database partition node number, which can range from 0 to 999.* |

## [=] TABLE: KUDTABSPACE

***The Tablespace attributes provide information to monitor page size and usage characteristics for a tablespace.***

| | |
|---|---|
| [+] SPACE_USED_SMS_TABLE_MB | *The number of MB allocated to the System Managed Space (SMS) tablespace.* |
| [+] db_partition | *The DB2 database partition node number, which can range from 0 to 999.* |
| [+] pool_hit_ratio_pct_for_int | *The overall buffer pool hit ratio (as a percentage) for the database during the monitoring interval.* |
| [+] instance_name_U | *The name of the monitored DB2 instance (Unicode).* |
| [+] tbsp_state_name | *The comma-delimited tablespace state name that corresponds to the tablespace status (TBSP STATUS) attribute.* |

## [=] TABLE: KUDDBASEGROUP01

***Use these attributes to obtain information about the efficiency of the database and identify any problem areas for corrective action.***

| | |
|---|---|
| [+] snapshot_time_timestamp | *The string date and time when the database system monitor information was collected.* |
| [+] db_conn_time_timestamp | *The date and time when the first database connection was made.* |
| [+] last_backup_timestamp | *The date and time that the latest database backup was completed.* |
| [+] lock_list_in_use_KB | *The total amount of lock list memory in KB that is currently in use.* |
| [+] pool_total_reads_K | *The total number of read requests in thousands that required input output to get data pages and index pages into the buffer pool.* |
| [+] pool_total_writes_K | *The total number of write requests in thousands.* |
| [+] sec_log_used_top_MB | *The maximum amount of secondary log space in MB that has been used.* |
| [+] tot_log_used_top_MB | *The maximum amount of total log space (in MB) that has been used.* |
| [+] total_log_used_MB | *The total log space used in MB in the database.* |
| [+] db_partition | *The DB2 database partition node number, which can range from 0 to 999.* |
| [+] instance_name_U | *The name of the monitored DB2 instance in Unicode.* |
| [+] lock_timeouts_for_int | *The number of times that a request to lock an object were timed out instead of being granted during the monitoring interval.* |
| [+] rollback_rate_for_int | *The rate, in rollbacks per second, at which unit-of-work rollbacks were attempted during the monitoring interval.* |
| [+] sql_stmts_rate_for_int | *The rate, in executed SQL statements per second, at which SQL statements were executed during the monitoring interval.* |
| [+] days_since_last_backup | *The numbers of days since the last database backup was completed.* |
| [+] sort_overflows_pct_for_int | *The percentage of application sorts that overflowed during the monitoring interval.* |
| [+] failed_sql_stmts_pct_for_int | *The percentage of total Structured Query Language statements that failed during the monitoring interval.* |
| [+] avg_lock_escal_con_for_int | *The average lock escalations per connection for this database during the monitoring interval.* |
| [+] deadlock_rollbacks_pct | *The percentage of the total number of rollbacks that deadlock caused.* |
| [+] lock_escalation_for_int | *The total number of lock escalations for applications connected to this database during the monitoring interval.* |
| [+] pri_log_used_top_MB | *The maximum bytes of primary logs used in MB.* |

## [=] TABLE: KUDDB2APPLGROUP01

***The Application Information attribute group provides information about the database and the application.***

| | |
|---|---|
| [+] snapshot_time_timestamp | *The string date and time when the database system monitor information was collected.* |
| [+] lock_wait_start_time_timestamp | *The date and time that the application started waiting to obtain a lock on the object that is currently locked by another application.* |
| [+] appl_con_time_timestamp | *The date and time that an application started a connection request.* |
| [+] conn_complete_time_timestamp | *The date and time that a connection request was granted.* |
| [+] stmt_start_timestamp | *The date and time that the most recent SQL statement operation started.* |
| [+] stmt_stop_timestamp | *The date and time that the most recent SQL statement operation stopped.* |
| [+] prev_uow_stop_time_timestamp | *The date and time that the unit of work completed.* |
| [+] uow_start_time_timestamp | *The date and time that the unit of work first required database resources.* |
| [+] uow_stop_time_timestamp | *The date and time that the most recent unit of work completed, which occurs when database changes are committed or rolled back.* |
| [+] pool_total_reads_K | *The total number of read requests in thousands (K) that required I/O to get data pages and index pages into the buffer pool.* |
| [+] pool_total_writes_K | *The total number of write requests in thousands (K).* |
| [+] uow_log_space_used_MB | *The amount of log space (in MB) used in the current unit of work of the monitored application.* |
| [+] appl_id_U | *The application ID.* |
| [+] db_partition | *The DB2 database partition node number, which can range from 0 to 999.* |
| [+] instance_name_U | *The name of the monitored DB2 instance (Unicode).* |
| [+] appl_section_lookups | *Number of lookups of SQL sections by an application from its SQL work area.* |
| [+] agent_usr_cpu_time | *The total CPU time (in seconds) that the database manager agent process spent in system calls.* |
| [+] agent_sys_cpu_time | *The total system CPU time (in seconds) that the database manager agent process spent executing database manager code.* |
| [+] lock_list_in_use_pct | *The total elapsed time, (in seconds), that the application waited for a lock to be granted during the monitoring interval.* |
| [+] open_curs | *The number of local and remote cursors that are currently open for this application, including blocking cursors.* |
| [+] open_curs_blk | *The number of local and remote blocking cursors that are currently open for this application.* |
| [+] pool_hit_ratio_pct_for_int | *The overall buffer pool hit ratio (as a percentage) for the database during the monitoring interval.* |
| [+] total_sorts_for_int | *The total number of sorts that are executed by the application during the monitoring interval.* |

## [=] TABLE: KUDDB2APPLGROUP00_U

***The Application Information (Unicode) attribute group provides information about the database and the application.***

| | |
|---|---|
| [+] db_partition | *The DB2 database partition node number, which can range from 0 to 999.* |

## [+] TABLE: KUD_DB2_Apply_Program

***The Apply Program attributes provide status information about the Apply program processes that are configured to run on a database manager server.***

| | |
|---|---|
| [+] instance_name_U | *The name of the monitored DB2 instance (Unicode).* |
| [+] db_name_U | *The database name on the Apply control server where the subscription set table is stored.* |
| [+] apply_qualifier | *Uniquely identifies which Apply program processes this subscription set.* |
| [+] apply_id | *The subscriber user ID that started the Apply program.* |
| [+] apply_status | *Indicates the state of the Apply subscription process for every distinct apply id in the Apply program subscription sets.* |
| [+] tot_apply_sub_fail | *The number of subscriptions with the same apply id that the Apply program failed to replicate.* |
| [+] tot_apply_sub_lag | *The total number of Apply program subscriptions that have not completed within their scheduled replication interval.* |

## [+] TABLE: KUD_DB2_Table

***The Table attribute group provides information to monitor table specific attributes, such as row read and row write rates.***

| | |
|---|---|
| [+] instance_name_U | *The name of the monitored DB2 instance (Unicode).* |
| [+] db_name_U | *The database name.* |
| [+] db_partition | *The DB2 database partition node number, which can range from 0 to 999.* |
| [+] table_name_U | *The table name.* |
| [+] table_schema_U | *The schema name.* |
| [+] reorg_needed | *Indicates whether the table, its indexes, or both need to be reorganized, and is calculated using DB2 monitoring data that is generated when the DB2 RUNSTATS utility is run.* |
| [+] rows_read_rate_for_int | *The rate (per second) at which rows were read from the table during the monitoring interval.* |
| [+] rows_write_rate_for_int | *The rate (per second) at which rows were changed (inserted, deleted, or updated) in the table during the monitoring interval.* |

## [+] TABLE: KUD_DB2_DCS_Database

***The DCS Database attributes provide Direct Connection Service (DCS) database information for the monitored database gateway.***

| | |
|---|---|
| [+] instance_name_U | *The name of the monitored DB2 instance (Unicode).* |
| [+] db_name_U | *The real name of the host database for which information is collected or to which the application is connected.* |
| [+] db_partition | *The DB2 database partition node number, which can range from 0 to 999.* |
| [+] gw_cur_cons | *The current number of connections to host databases that the DB2 Connect gateway is handling.* |
| [+] gw_cons_wait_host | *The current number of connections to host databases that the DB2 Connect gateway is handling, and that are waiting for a reply from the host.* |
| [+] gw_comm_errors_for_int | *The number of times during the monitoring interval that a communication error (SQL30081) occurred while a DCS application tried to connect to a host database, or while it was processing an SQL statement.* |
| [+] host_throughput_for_int | *The host throughput in bytes per second for the monitoring interval.* |

## [+] TABLE: KUD_DB2_Apply_Subscription

***The Apply Subscription attributes provide information about Apply program subscription sets that are configured to run on a database manager server.***

| | |
|---|---|
| [+] instance_name_U | *The name of the monitored DB2 instance (Unicode).* |
| [+] db_name_target | *Database name.* |
| [+] target_table | *The name of the target table or view for this member.* |
| [+] target_owner | *The name of the target owner for this member.* |
| [+] apply_num_reqs_refresh | *Indicates the number of subscriptions the Apply program failed to replicate because refresh copying was disabled.* |
| [+] apply_sub_status | *The Apply program subscription status.* |
| [+] apply_id | *Subscriber user ID that started the Apply program.* |