

Date of change: August 2017

Topic: Multiple

Change description: Documentation changes made in support of PTF UI49839 APARs PI84115 and PI85219 – Stop target table space before Dual type load, Reduce the TCB CPU Time of External load

- Topic "What's new" in chapter "Overview"
- Topic "Worksheets: Gathering parameter values for Tools Customizer" in chapter "Preparing to customize"
- Topic "Restrictions and considerations for loading from an external file" in chapter "Loading data from an external file"
- Topic "Accelerator Loader messages" in chapter "Troubleshooting"

Chapter "Overview"

Topic: "What's new"

Add the following descriptions:

When loading from an external file to the accelerator and DB2, you can optionally stop the target table space before loading a table enabled for replication. The stop drains all claimers and ensures that no updates are made to the DB2 table while the accelerator is being loaded. This behavior is controlled by the options module parameter **STOP the target table space before initiating the load**.

Changes have been made to reduce External load's CPU usage when running in task mode. The change that has the most impact will only reduce CPU usage in cases where External load does not sort the data. Sorting of data is currently only required when loading a range-partitioned or index-partitioned table.

Chapter "Preparing to customize"

Topic: "Worksheets: Gathering parameter values for Tools Customizer"

In subtopic "Task: Create the started task and its components (required)", add the following row to the table:

Step or parameter	Required?	Discovered?	Default value	Your value
STOP the target table space before initiating the load Controls if the target table space is stopped before loading a table enabled for replication when performing a Dual load. YES stops the target table space (or partitions) to drain all claimers before the load starts, and occurs only when loading a table enabled for replication. After the space stops, it is started for UT access. After the load, the space is restored to its original status. With NO (default), the target table space is started for UT access before the load but is never stopped.	No	Yes	No	

In subtopic "Task: Create DDL and BIND jobs (required)", add the following row to the table:

Step or parameter	Required?	Discovered?	Default value	Your value
Upgrade repository objects for APAR# PI84115 When this step and the task Create DDL and BIND jobs are selected, a job is generated that drops and recreates the repository database index HLOOBJSTATX2 to pick up the new definition when repository is changed. Use this task only when applying PTF UI49839 APAR PI84115 as maintenance.	If applying PTF UI49839 APAR PI84115 as maintenance, this step is required.	No	No default	

Chapter "Loading data from an external file"

Topic: "Restrictions and considerations for loading from an external file"

Add the following new section:

Considerations for loading the accelerator and DB2

Accelerator Loader provides the option of loading data from an external file into both the accelerator and DB2 (option IDAA_DUAL). Before using this option, consider the following point:

- When loading from an external file to the accelerator and DB2, you can optionally stop the target table space before loading a table enabled for replication. The stop drains all claimers and ensures that no updates are made to the DB2 table while the accelerator is being loaded. Once the -STOP command completes, the space is restarted for UT access to allow the DB2 LOAD utility to run. At the completion of the load, the original status of the object is restored. Accelerator Loader will wait for up to three minutes for the STOP command to complete. If at the end of three minutes the space is still in STOP PENDING status due to active claimers, Accelerator Loader will fail with message HLOU4101E.

This behavior is controlled by the options module parameter **STOP the target table space before initiating the load**. When this parameter is set to YES, the space is stopped as described. This option only affects Dual type loads when loading an accelerator table enabled for replication. If the table is not enabled for replication, Accelerator Loader makes no changes to the table space status. When the option is set to NO (default), the object is started for UT access before the load begins, but is never stopped.

Chapter "Troubleshooting"

Topic: "Accelerator Loader messages"

Add the following messages:

HLOU4101E Unable to drain claimers within timeout period.

Explanation: When loading an accelerator table enabled for replication, the product issues a -STOP command to drain claimers from the DB2 table space. The STOP command did not complete within the defined time out period. An attempt is made to restore the object's original status, and the product exits without loading any data.

User response: Cancel the active uncommitted unit of work and resubmit the job.

HLOU4102E The table cannot be loaded because the table space is stopped.

Explanation: The DB2 table must be started for read-write access for the loader to run.

User response: Start the table space and resubmit the job.

HLOU4103W -START DATABASE command failed. Unable to restore original object status.

Explanation: When loading an accelerator table enabled for replication, the product issued a -STOP command to drain claimers from the DB2 table space. Once the STOP has completed, the object is then started for utility only access. When the load has completed, the -STA DB command is issued to restart the object. The -STA command has failed. This error could be the result of a long running transaction that has left the space in STOPP (stop pending) status. An object in STOPP status cannot be restarted until the STOP completes.

User response: If the space is in STOPP status, there might be an uncommitted unit of work. If so, cancel the active uncommitted unit of work and resubmit the job. Otherwise, refer to the STC job log to determine why the start command failed; the start failure is identified in messages HLOS0207E and HLOS0202E. Correct the problem and restart the space. Because this message can be issued after an otherwise successful load, the load may have completed successfully. If the load did not complete successfully, resubmit the job.

HLOU4105E The object is in use by another utility. Refer to the STC log for more information

Explanation: The product detected another load job running against the same table space. Multiple loader jobs cannot run concurrently against the same table space.

User response: Search the STC log for message ID HLOS0512E for the identity of the blocking job.