Chapter 10. Syntax

Review information about DB2 Analytics Accelerator Loader example JCL and syntax diagrams and definitions. You can customize the example JCL according to the needs of your site. Syntax diagrams provide the information necessary for constructing valid DB2 Analytics Accelerator Loader syntax.

Topics:
- “Loading data from non-DB2, remote DB2, and remote system sources”
- “Consistent load and Image Copy load jobs” on page 175
- “Loading from an external file” on page 197
- “Loading data to multiple accelerators” on page 205

### Loading data from non-DB2, remote DB2, and remote system sources

Before you build and run a job that loads data from a non-DB2, remote DB2, or remote system source, review all reference and conceptual information for the feature, including the correct syntax, usage considerations, and examples.

#### Example JCL

**Example 1: Load the accelerator with data from another DB2 subsystem**

The following sample syntax shows control cards to load only the accelerator with data from another DB2 subsystem. In the example, *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.

```sql
EXEC SQL
  DECLARE HLOCSR CURSOR FOR
    SELECT * FROM USER1.SOURCE_DB2_TABLE
ENDEXEC

LOAD DATA REPLACE
  IDAA_ONLY ON UB1AACC1
  LOG NO NOCOPYPEND
  ENFORCE NO
  ACCEL_CURSOR HLOCSR
  ACCEL_SOURCE_DB2 RA1B
  ACCEL_HLV_SSID hlvid
  ACCEL_REMOVE_AND_ADD_TABLES
  ACCEL_ON_SUCCESS_ENABLE YES
  ACCEL_LOAD_TASKS 1
INTO TABLE USER1.TARGET_DB2_TABLE
```

The sample syntax is converted to the following DB2 LOAD statement:

```sql
LOAD DATA REPLACE
  INTO TABLE USER1.TARGET_DB2_TABLE
  INDDN HLOREC FORMAT INTERNAL
```
Example 2: Load the accelerator with data from a remote system

The following sample syntax shows control cards to load only the accelerator with source data from a remote Accelerator Loader server.

```
LOAD DATA
   IDAA_ONLY ON RDSBACC1
   REPLACE
   LOG NO NOCOPYPEND
   ENFORCE NO
   ACCEL_CURSOR HLVCSR
   ACCEL_HLV_SSID HLVS
   ACCEL_DATA_SERVER HSZ3
   ACCEL_REMOVE_AND_ADD_TABLES
   ACCEL_ON_SUCCESS_ENABLE YES
   ACCEL_LOAD_TASKS 1
   INTO TABLE "TSADO"."RemoteLoad"
/*
```

Syntax diagram: Load from a non-DB2, remote DB2, or remote system source

Review syntax for a job that loads data from a non-DB2, remote DB2, or remote system source.

```
<table>
<thead>
<tr>
<th>LOAD DATA</th>
<th>IDAA_ONLY ON accelerator_name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCEL_REMOVE_AND_ADD_TABLES</td>
<td></td>
</tr>
<tr>
<td>ACCEL_ADD_TABLES ACCEL_CURSOR cursor_name</td>
<td></td>
</tr>
<tr>
<td>ACCEL_SOURCE_DB2 ssid</td>
<td></td>
</tr>
<tr>
<td>ACCEL_HLV_SSID ssid</td>
<td></td>
</tr>
<tr>
<td>ACCEL_HLV_GRPNAME group_name</td>
<td></td>
</tr>
<tr>
<td>ACCEL_LOAD_TASKS integer</td>
<td></td>
</tr>
<tr>
<td>ACCEL_ON_SUCCESS_ENABLE NO YES</td>
<td></td>
</tr>
<tr>
<td>ENFORCE NO YES</td>
<td></td>
</tr>
<tr>
<td>INTO TABLE table_name PART integer</td>
<td></td>
</tr>
</tbody>
</table>
```

Syntax definitions: Load from a non-DB2, remote DB2, or remote system source

Review descriptions of syntax elements that are valid for loading data from a non-DB2, remote DB2, or remote system source.

**ACCEL_ADD_TABLES**
Add missing tables to the accelerator before starting the load job.
ACCEL_CURSOR cursor_name
   Specifies the Accelerator Loader server cursor that retrieves the source data. Valid cursor names are a maximum of eight characters. The cursor must be declared via the EXEC SQL utility statement before the LOAD statement that references the cursor.

ACCEL_DATA_SERVER remote-data-server-name
   Specifies the remote Accelerator Loader server that contains the source data.

   You must also specify ACCEL_CURSOR and either ACCEL_HLV_SSID or ACCEL_HLV_GRPNAME. Do not also specify ACCEL_SOURCE_DB2.

ACCEL_HLV_SSID ssid | ACCEL_HLV_GRPNAME group_name
   Specify one of these options to identify the server to which DB2 Analytics Accelerator Loader connects. You can identify the server by SSID or group name.

ACCEL_REMOVE_AND_ADD_TABLES
   Remove and re-add existing tables to the accelerator before starting the load job.

ACCEL_SOURCE_DB2 ssid
   Specify this option only when the data source is a DB2 subsystem. Because DB2 sources do not require server mappings, you must specify the subsystem ID to locate the source DB2 table.

ACCEL_LOAD_TASKS integer
   Specifies the number of partitions to load into the accelerator and optionally into DB2 in parallel when loading from an external file. Valid values are in the range 1 - 20.

   This value cannot exceed the value of the IBM DB2 Analytics Accelerator for z/OS parameter AQT_MAX_UNLOAD_IN_PARALLEL, which indicates the maximum number of partitions that can be loaded in parallel. If AQT_MAX_UNLOAD_IN_PARALLEL is set to 2, the maximum number of partitions that can be written to the accelerator at one time is 2, regardless of the value that you specify for Parallel load tasks ACCEL_LOAD_TASKS.

ACCEL_ON_SUCCESS_ENABLE YES | NO
   Controls whether query acceleration is enabled for the table after a successful load. If DB2 discards any rows during the load, query acceleration is not enabled. Valid values are YES and NO.

ENFORCE YES | NO
   Specifies whether to enforce check constraints and referential constraints.

IDAA_ONLY ON accelerator_name
   Indicates that you want to load data to the accelerator only. Replace accelerator_name with the name of the accelerator to load. If the load job specifies LOAD REPLACE, existing data in the DB2 table or partition is deleted.

LOG YES | NO
   Indicates whether to enable logging.