

## Creating virtual tables for Adabas

Create virtual tables for SQL access to Adabas data.

### Before you begin

Have the following information available: Adabas DB ID and password, the file number to use, and the subsystem name.

**Note:** The password is required only if Software AG ADASCR Adabas Security has been implemented on the file.

### Procedure

1. On the **Server** tab, verify that you are connected to the correct Accelerator Loader server.
2. Expand **Admin > Source Libraries** and verify that the required source libraries exist.
3. Expand **SQL > Data**, and then expand the server from which you want to create the virtual table.
4. Right-click **Virtual Tables**, and select **Create Virtual Table**.
5. Under **Wizards**, select the wizard to use, and then click **Next**.
6. Complete the following fields, and then click **Next**:

Option	Description
<b>Name</b>	Enter a unique name. The name can contain a maximum of 30 characters. Uppercase alphanumeric characters are allowed as well as numbers 0-9. The underscore (_) character is allowed; however, the initial character in the name must be an alphanumeric character.
<b>Target</b>	Select the target data set to store metadata (for example, HLQ.USER.MAP). Data sets are defined in the server configuration file. For example: HLO.USER.MAP
<b>Description</b>	Enter an optional description.
<b>Arrays Handling</b>	Enable one of the following array management options: <ul style="list-style-type: none"><li>• <b>Flatten arrays into a single fixed table at runtime:</b> This supports both <b>OCCURS</b> and <b>OCCURS DEPENDING ON</b> statements.</li><li>• <b>Return arrays into separate tables at runtime:</b> This supports both <b>OCCURS</b> and <b>OCCURS DEPENDING ON</b> statements. A subtable is generated for each array. Subtables only support SQL read access.</li></ul>

7. Complete the Adabas table parameters fields, then click **Next**:

Option	Description
<b>DB ID</b>	Enter the Adabas database ID.
<b>File Number</b>	Enter the number of the file to use.
<b>Adabas Password</b>	If the file is password-protected, enter the password. This password is stored in the virtual table so that future queries use the same password to access the data..
<b>Database</b>	Enter the name of the Adabas database.
<b>SubSystem</b>	Enter the name of the Adabas subsystem.
<b>Max MU Count</b>	Enter the maximum number of times to repeat the MU field. The default is 10.
<b>Max PE Count</b>	Enter the maximum number of times to repeat the PE field. The default is 10.
<b>Create Count Field</b>	Enable if you want to index every MU or PE field so that the index (count) field created precedes the repeating field. This index field tells the caller how many repeating fields are being used.
<b>Secure</b>	Enable if you want to choose the Adabas file ID number to be used for file name security.
<b>DE Search only</b>	Enable if you want the utility to generate control definitions that allow the client to only use WHERE columns that are Adabas descriptors (such as superde, subde, and hyperde).
<b>Search by PE index</b>	Enable to allow the client to target rows that match a particular occurrence of the PE field when searching rows using the WHERE clause. If this parameter is not specified, all rows where any occurrence of that PE field match the value specified will be targeted.
<b>Unpacked to Packed</b>	Informs the extract to convert all unpacked format fields to packed format.
<b>Binary to Integer</b>	Informs the extract to convert all 2-byte and 4-byte binary fields to short integer and integer formats, respectively.
<b>Advanced</b>	To divide the data into logical partitions and process the partitions in parallel, click <b>Advanced</b> . Enter a <b>Thread Count</b> value for <b>MapReduce (Server Parrellism Settings)</b> . The number of zIIP processors is checked at runtime, and one thread is used for each processor that is discovered. The value that you specify overrides the default value (2) and the discovered value.

- Optional: If you have a Natural Data Definition Module (DDM) listing of the file, you can complete the following to get additional metadata information:

Option	Description
<b>Available Source Libraries</b>	From the list of <b>Available Source Libraries</b> , select the source library that contains the data structure definition that you want to use when virtualizing data.
<b>Source Library Members</b>	Select the names of each source library member that represents the data structure that you want to include. The green arrow next to a DDM indicates that it is a suggested member, not that it is selected.

9. Complete the following data layout fields, and then click **Next**:

Option	Description
<b>Source</b>	Expand the source file to verify that it correctly displays the source (member).
<b>Start Field</b>	Accept the default root start field, or expand the file and select a different start field.
<b>End Field</b>	Accept the default root end field, or expand the file and select a different end field. By default, <b>End Field</b> is disabled.

10. Click **Finish**.

## What to do next

You can use the virtual table to generate a SQL query.