

Flattening Fields for Replication

By default, when MU and PE fields and subfields and superfields are included in the replicated data, additional tables are created, as described in . However, you can request that individual MU fields, PE fields, subfields, and superfields be *flattened* in the replicated data instead. This process of *flattening* fields will replicate them as columns in the main table, rather than as separate subtables.

If you want to flatten a field in the resulting RDBMS table, you must trigger it in the DDM specification for the field. If you do not explicitly trigger a field to be flattened in DDM, it will not be flattened in the resulting RDBMS tables.

This chapter covers the following topics:

- Triggering Field Flattening
 - Removing the Field Flattening Trigger
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


Triggering Field Flattening

To trigger field flattening for a field, you must edit the field in your DDM. This section describes this process.

▶ To trigger field flattening for a field:

1. Expand the DDM in the SYSTRANS DDMs column of the Data Mapping Tool main window.

DDM files contain one or more DDMs. DDM files are prefixed with the icon ; DDMs are prefixed with the icon .

2. Scroll through the fields in the DDM and locate the MU field, PE field, subfield, or superfield for which you want to trigger flattening. MU fields are identified with the  icon, PE fields are identified with the  icon, and subfields and superfields are identified with the  icon.
3. Right-click on the field and select **Flatten (Replicate to Columns)** from the drop-down menu.

A Flatten dialog appears. For example, the following is a Flatten dialog for an MU field.

Flatten MU Field: LANG

General

Name: LANG

Type: DDM Element

Parent Node: EMPLOYEES-DB172

Number of Children: 0

ADABAS Info

ADABAS Type: M - Multiple Value Field

ADABAS Nesting Level: 1

Occurrences

Flat Multiple Value (MU) Occurrences: 3

Flat Multiple Value (MU) Occurrences Start: 1

OK Cancel

The Occurrences area of the dialog contains two editable fields:

- Flat Multiple Value (MU) Occurrences or Flat Periodic Group (PE) Occurrences
 - Flat Multiple Value (MU) Occurrences Start or Flat Periodic Group (PE) Occurrences Start
4. Optionally, in the Flat Multiple Value (MU) Occurrences or Flat Periodic Group (PE) Occurrences field, specify the number of repeating elements for the field. Valid values must be positive integers.

Note:

A default number is supplied for this field. To specify what this default value should be, read *Specifying the Default Number of MU or PE Occurrences for Flattened Fields*.




5. Optionally, in the Flat Multiple Value (MU) Occurrences Start or Flat Periodic Group (PE) Occurrences Start field, specify the starting occurrence number. For example, if you want to start with occurrence 15 rather than occurrence 1 (the default), you would specify "15" here.
6. Click **OK** when finished.

The fields will be marked for flattening when the GFB schema is created. In addition, the DDM will expand with additional occurrences of the flattened fields as specified. You can use this updated DDM then when creating and maintaining the GFB schema.

Removing the Field Flattening Trigger

If, after you have specified that flattening should occur for a field, you decide not to flatten it, you need to remove the flattening trigger defined for the field in the DDM. This section describes this process.

▶ **To remove the field flattening trigger for a field:**

1. Expand the DDM in the SYSTRANS DDMs column of the Data Mapping Tool main window.
2. Scroll through the fields in the DDM and locate the MU field, PE field, subfield, or superfield for which you want to trigger flattening. Flattened MU fields are identified with the  icon, flattened PE fields are identified with the  icon, and flattened subfields and superfields are identified with the  icon.
3. Right-click on the field and select **Unflatten (Replicate to Sub-tables)** from the drop-down menu.

The DDM will remove the additional fields created by the flattening trigger. You can use this updated DDM then when creating and maintaining the GFB schema.