

Creating DDMs

This section describes how to create a DDM by either copying DDMs or creating DDMs directly from the field definitions in a database. In addition, it provides information on how to generate multiple DDMs from an SQL database.

This section covers the following topics:

- Copying DDMs
 - <CREATE> from Adabas
 - <CREATE> from SQL
 - Creating Multiple DDMs from SQL
 - <CREATE> from Tamino
-

Copying DDMs

This section describes how to create a new DDM from an existing one.

If you want to copy DDMs between different libraries, database files, and/or hardware platforms, see also *Maintaining DDMs in Different Environments*.

Predict Installations:

If XREF entries exist for the DDM in the FDIC system file, they will also be copied for the new DDM.

To copy a DDM

1. On the **DDM Services** screen, choose **DDM Maintenance**.

The DDM maintenance window appears with a list of all DDMs available.

2. In the DDM maintenance window, position the cursor at the DDM you want to copy (in the example below: EMPLOYEES), enter the function code C and press ENTER.

The **Copy DDM to** window appears preset to the name of the DDM to be copied as shown in the example below:

```

24/09/2004          DDM Services          Library: SYSTEM
10:04:31           V 6.1.1 Pl 9   Software AG 2004   DBID   : 20
User: SAG                               FNR    : 14
+-----+
|  Library          DDM Maintenance          Services Profile          Quit          |
+-----+
                                     +-----+
                                     | <CREATE> |
                                     | C EMPLOYEES |
                                     | PERSONNEL |
+-----+ Copy DDM to -----+
| EMPLOYEES |
+-----+

Enter new DDM name
    
```

3. In the **Copy DDM to** window, replace the preset name by a new one and press ENTER.

The new DDM (here: EMPLOYEES_NEW) is saved as a source and a cataloged object and is added to the list of DDMs:

```

24/09/2004          DDM Services          Library: SYSTEM
10:04:31           V 6.1.1 Pl 9   Software AG 2004   DBID   : 20
User: SAG                               FNR    : 14
+-----+
|  Library          DDM Maintenance          Services Profile          Quit          |
+-----+
                                     +-----+
                                     | <CREATE> |
                                     | EMPLOYEES |
                                     | EMPLOYEES_NEW |
                                     | PERSONNEL |
                                     | VEHICLES |
+-----+

Select DDM
    
```

<CREATE> from Adabas

This section describes how to create a new DDM from an Adabas database by using the <CREATE> menu option.

 **To create a DDM from an Adabas database**

1. On the **DDM Services** screen, choose **DDM Maintenance**.

The DDM maintenance window appears.

- 2. From the top of the DDM maintenance window, choose <CREATE>.

The **Select Database** window appears as shown in the example below:

```

24/09/2004          DDM Services          Library: SYSTEM
10:04:31           V 6.1.1 Pl 9   Software AG 2004   DBID   :
User: SAG                               FNR    :
+-----+
|  Library          DDM Maintenance          Services Profile          Quit          |
+-----+
                +-----+
                |  <CREATE>                |
                +-----+
                | Select Database          |
                +-----+
                | DBID    1                |
                +-----+
                |          VEHICLES          |
                +-----+

Enter database number (0 - 65535 except 255)

```

- 3. Enter the database ID (**DBID**) of the Adabas file for which a DDM is to be created. Valid values are 0 - 65535, except 255. If you enter a 0 (zero), the database ID specified with the Natural profile parameter UDB (see the *Parameter Reference* documentation) of the Natural parameter file NATPARM is used.

If the specified DBID identifies an Adabas database, the **Create ADABAS DDM** window appears:

```

24/09/2004          DDM Services          Library: SYSTEM
10:04:31           V 6.1.1 Pl 9   Software AG 2004   DBID   :
User: SAG                               FNR    :
+-----+
|  Library          DDM Maintenance          Services Profile          Quit          |
+-----+
                +-----+
                |  <CREATE>                |
                +-----+
                | Create ADABAS DDM          |
                +-----+
                | FNR      1                |
                | DDM Name                |
                | Password                |
                +-----+

Enter file number (1 - 5000)

```

- 4. Enter the file number (**FNR**) of the database file for which a DDM is to be created (valid values: 1 - 5000) and the name to be assigned to the DDM. If access to the Adabas file is protected, a password is required.

5. Press ENTER.

If the specified database and the file are available, the DDM editor is invoked and the fields contained in that database file are read into the editing area.

If the specified database is not active or cannot be accessed or if the file does not exist, a corresponding error message is issued. Nevertheless, if you press ENTER, you can still open an empty DDM editor screen, enter new field attribute definitions and save the DDM source. However, in this case you cannot check any definitions against the database file description.

6. If required, edit the DDM: see the section *Using the DDM Editor Screen*.
7. After editing, press ESC and, from the **MISC** menu choose **EXIT (with STOW)**. See also *Saving and Cataloging a DDM*.

The syntax of the DDM source is checked and the DDM is saved as a source and a cataloged object.

<CREATE> from SQL

This section describes how to create a DDM from an SQL database using the <CREATE> menu option.

▶ To create a DDM from an SQL database

1. On the **DDM Services** screen, choose **DDM Maintenance**.

The DDM maintenance window appears.

2. From the top of the DDM maintenance window, choose <CREATE>.

The **Select Database** window appears as shown in the example below:

```

24/09/2004                DDM Services                Library: SYSTEM
10:04:31                  V 6.1.1 Pl 9   Software AG 2004   DBID   :
User: SAG                  FNR           :
+-----+-----+-----+-----+
|  Library          DDM Maintenance          Services Profile          Quit          |
+-----+-----+-----+-----+
                        +-----+
                        |  <CREATE>          |
                        +-----+
                        |  Select Database  |
                        +-----+
|  DBID            1          |
+-----+-----+-----+
                        |  VEHICLES          |
                        +-----+

Enter database number (0 - 65535 except 255)

```

3. Enter the database ID (**DBID**) of the SQL table for which a DDM is to be created. Valid values are 0 - 65535, except 255. If you enter a 0 (zero), the database ID specified with the Natural profile parameter UDB (see the *Parameter Reference* documentation) of the Natural parameter file NATPARM is used.

If the specified DBID identifies an SQL database, the **Select SQL Table** window appears:

```

04/10/2004                DDM Services                Library: SYSTEM
10:49:05                  V 6.1.1.1 Pl 9   Software AG 2004   DBID   :
User: SAG                  FNR      :
+-----+-----+-----+-----+
|  Library          DDM Maintenance          Services Profile          Quit  |
+-----+-----+-----+-----+
                                +-----+
                                |  <CREATE>  |
                                |  EMPLOYEES  |
                                |  PERSONNEL  |
                                +-----+
+-----+-----+-----+-----+
|  Table Owner: *  |
|  Table Name : *  |
+-----+-----+-----+-----+

Enter SQL database Table Owner (case sensitive)

```

4. Enter the name of the table owner and the name of the table for which a DDM is to be created.

To specify a range: use asterisk (*) to list all tables (this is the default setting) or use asterisk (*) notation to list particular tables, for example, AB* selects all SQL tables with names that start with AB.

Depending on your SQL database settings, if you are accessing this SQL database for the first time in this session, the **Database Logon** window appears.

Enter the user ID and the password specified for the database and choose ENTER.

If the specified table exists, a DDM is created from this table.

If no such table exists or if you have specified a range of table owners and/or table names, the **Import SQL Table Contents** window appears from which you can select the required SQL table as shown in the example below.

```

04/10/2004          DDM Services          Library: SYSTEM
11:18:15           V 6.1.1 Pl 9   Software AG 2004   DBID   :
User: SAG           FNR           :
+-----+-----+-----+-----+
|  Library          DDM Maintenance          Services Profile          Quit          |
+-----+-----+-----+-----+
+-----+-----+-----+-----+
|  Table Owner          Table Name          Type          |
+-----+-----+-----+-----+
|  DEMO          AUTOMOBILES          T          |
|  DEMO          EMPLOYEES          T          |
|  DEMO          SALARY          T          |
|  SAG          YACHT          T          |
|  SAG          ALLDATA          T          |
+-----+-----+-----+-----+
Select SQL table

```

5. Press ENTER.

The DDM editor is invoked and the DDM generated from the selected table is read into the editing area.

A name is generated automatically for the DDM. It is a combination of the table owner and the table name and cannot be changed. For example, if the table owner's name is SAG and the table name is TEST, the DDM name is SAG-TEST.

If the specified database is not active or cannot be accessed or if the file does not exist, a corresponding error message is issued. Nevertheless, if you press ENTER, you can still open an empty DDM editor screen, enter new field attribute definitions and save the DDM source. However, in this case you cannot check any definitions against the database file description.

6. If required, edit the DDM: see the section *Using the DDM Editor Screen*.
7. After editing, press ESC and, from the MISC menu choose **EXIT (with STOW)**. See also *Saving and Cataloging a DDM*.

The syntax of the DDM source is checked and the DDM is saved as a source and a cataloged object.

Creating Multiple DDMs from SQL

The Natural program DDMGEN (supplied in the Natural system library SYSTEM) provides the option to generate multiple DDMs simultaneously from SQL tables without using the DDM editor.

To execute DDMGEN

1. Enter the following direct command:

```
DDMGEN
```

The **SQL DDM Generation** screen appears where you can fill the fields required to generate a DDM from an SQL table as demonstrated in the example below:

```

SQL DDM Generation
=====

DDM Library   : DDMTEST
DDM DBID      : 210
Table Owner   : QA*
Table Name    : *
Replace (Y/N): N

```

Enter the name of the library where you want to create the DDMs and enter the name of a table and/or specify a range as described in the previous section.

2. Press ENTER to execute the program.

Status messages appear at the bottom of the screen that indicate which DDM is generated from which SQL table. The DDMs generated are saved as source and cataloged objects in the specified library.

<CREATE> from Tamino

This section describes how to create a DDM from a Tamino database using the <CREATE> menu option.

▶ To create a DDM from a Tamino database

1. On the **DDM Services** screen, choose **DDM Maintenance**.

The DDM maintenance window appears.

2. From the top of the DDM maintenance window, choose <CREATE>.

The **Select Database** window appears as shown in the example below:

```

01/10/2004                DDM Services                Library: SYSTEM
15:50:58                  V 6.1.1 Pl 9 Software AG 2004  DBID   :
User: SAG                  FNR     :
+-----+-----+-----+-----+
| Library      DDM Maintenance      Services Profile      Quit      |
+-----+-----+-----+-----+
                        +-----+
                        | <CREATE> |
                        +-----+
                        | Select Database |
                        +-----+
| DBID      1 |
+-----+
                        | EMPLOYEES_NEW |
                        | PERSONNEL   |
                        | VEHICLES    |
                        +-----+

Enter database number (0 - 65535 except 255)

```


6. From the list, select a doctype and press ENTER.

The DDM editor is invoked and the DDM generated from the selected doctype is read into the editing area.

If the specified database is not active or cannot be accessed or if the file does not exist, a corresponding error message is issued. Nevertheless, if you press ENTER, you can still open an empty DDM editor screen, enter new field attribute definitions and save the DDM source. However, in this case you cannot check any definitions against the database file description.

7. If required, edit the DDM source: see the section *Using the DDM Editor Screen*.
8. After editing, press ESC and, from the **MISC** menu choose **EXIT (with STOW)**.

The syntax of the DDM source is checked and the DDM is saved as a source and a cataloged object. See also *Saving and Cataloging a DDM*.