

# Using SYSDDM Maintenance and Service Functions

The functions provided in the SYSDDM utility menu are used to create, display, edit, rename or delete a DDM.

This section describes the fields and functions available in the SYSDDM utility menu and provides information on maintaining DDMs in different environments.

- Help on Functions
  - Performing a Function
  - Description of Functions
  - DDM Specification
- 

## Help on Functions

This section provides instructions for obtaining information on the fields and functions provided in the SYSDDM utility menu.

### To display SYSDDM help information

1. On the SYSDDM utility screen, press PF1.

Or:

In the Command line, or in any input field, enter a question mark (?).

The **Help Main Menu** of the SYSDDM utility appears.

2. Position the cursor next to the greater than (>) sign of the help topic required and press PF1.

The SYSDDM help screen appears for the topic selected.

- To scroll forward, press ENTER.
  - To return to the **Help Main Menu**, press PF3.
  - To terminate the help function and return to the SYSDDM utility menu, press PF12.
3. To exit the **Help Main Menu**, enter a period (.) or press PF3.

The SYSDDM utility menu appears.

## Performing a Function

This section provides instructions for performing a function from the SYSDDM utility menu.

### To perform a function

- In the SYSDDM utility menu:
  - From the section **DDM Maintenance, List/Copy Services** or **Other Services** choose the one-digit code listed next to the function required and enter it in the **Code** field.  
  
For example: to edit a DDM, enter the function code **E**.  
  
The functions are explained in *Description of Functions*.
  - In the input fields next to **Code**, enter a valid value to specify the DDM(s) to be processed as described in *DDM Specification*.

## Description of Functions

This section describes the functions available on the SYSDDM utility menu and lists their corresponding function codes:

Function Code	Field	Function
<b>E</b>	<b>Edit DDM</b>	Invokes the DDM editor and reads a DDM source from the FDIC system file into the source area.
<b>R</b>	<b>Read DDM</b>	Reads a DDM source from the FDIC system file into the source area but does <i>not</i> invoke the DDM editor.
<b>C</b>	<b>Catalog DDM</b>	<p>Saves the DDM source currently contained in the source area as a cataloged object in the current FDIC system file.</p> <p>For the naming conventions that apply when cataloging a DDM, refer to <i>Object Naming Conventions</i> in the <i>Using Natural</i> documentation.</p> <p>If the source area is empty, use the function <b>Generate DDM from Adabas FDT</b> or <b>Edit DDM</b> to load a source into the source area.</p> <p>For a DDM from VSAM (<b>DDM Type</b> set to V; see also <b>DDM Type</b> in <i>DDM Specification</i>), SYSDDM prompts you for additional information.</p> <p>For details, see <i>Natural File Access</i> in the <i>Natural for VSAM</i> documentation.</p>
<b>U</b>	<b>Delete DDM</b>	<p>Deletes one or more cataloged DDM from the FDIC system file.</p> <p>The contents of the source area are not affected by the deletion.</p> <p>When you delete a DDM with SYSDDM, the corresponding Natural Security file profile is deleted too.</p>

Function Code	Field	Function
L	List DDMs	<p>Displays a single DDM source (DDM editor <i>not</i> invoked) or a list of DDMs stored in the specified FDIC system file similar to the Natural system command LIST DDM described in the <i>System Commands</i> documentation. However, unlike the system command LIST DDM, the <b>List DDMs</b> function additionally displays all DDMs for which no read or update access right is defined in Natural Security (if installed). For details, see <i>Protecting DDMs On Mainframes</i> in the <i>Natural Security</i> documentation.</p> <p>From the list of DDMs displayed on the <b>LIST DDMs</b> screen, you can select a DDM for further processing by entering the line command that corresponds to the action required in the <b>Cmd</b> column. For information on possible commands, enter a question mark (?) in the <b>Cmd</b> column.</p>

Function Code	Field	Function
X	<b>List DDMs with Additional Information</b>	<p>Displays a list of DDMs stored in the specified FDIC system file. The list contains the following fields of information:</p> <p><b>DBID</b>            The database ID: see <b>DBID</b> in <i>DDM Specification</i>.</p> <p><b>FNR</b>             The file number: see <b>FNR</b> in <i>DDM Specification</i>.</p> <p><b>DDM Typ</b>        The DDM type: see <b>DDM Type</b> in <i>DDM Specification</i>.</p> <p><b>Bytes</b>            The size of the DDM in bytes.</p> <p><b>Secur. Type</b>    Only applies if Natural Security is installed. The security type: <b>Public</b>, <b>Private</b>, <b>Access</b> or <b>Undef</b> (undefined). See also the status of a DDM in the section <i>Components of a File Profile</i> in the <i>Natural Security</i> documentation).</p> <p><b>File Type</b>       Only applies to a DDM created from VSAM, or a PersonalDB file from Super Natural. The VSAM file type: <b>Log.View</b> (logical view), <b>Phy.File</b> (physical file) or <b>Log.File</b> (logical file). Super Natural: <b>Userfile</b> indicates that the DDM was created in Super Natural.</p> <p><b>File Name</b>      Only applies to DDMs from VSAM files. The name of a logical or physical file.</p> <p><b>Remark</b>         A remark such as <b>SupNat</b> (for a <b>Userfile</b> from Super Natural) or the VSAM file organization (<b>KSDS</b>, <b>RRDS</b>, <b>ESDS</b> or <b>VRDS</b>).</p> <p>From the list displayed on the screen <b>List DDMs with Additional Information</b>, you can select a DDM for further processing by entering the line command that corresponds to the action required in the <b>Cmd</b> column. For information on possible commands, enter a question mark (?) in the <b>Cmd</b> column.</p>
S	<b>Show Defined DBIDs and Used FNRs</b>	See <i>Show Defined DBIDs and Used FNRs</i> .

Function Code	Field	Function
<b>M</b>	<b>Copy DDM to Another FDIC File</b>	<p>Copies one or more DDMs from one FDIC system file to another. This can be required, for example, when a Natural application is transferred from test to production status.</p> <p>This function invokes the <b>Copy DDMs</b> window of the Natural utility SYSMAIN where you can specify source and target environment of the DDM(s) to be copied; see also the section <i>Processing DDMs</i> in the <i>SYSMAIN Utility</i> documentation.</p>
<b>G</b>	<b>Generate DDM from Adabas FDT</b>	<p>Generates a DDM from an Adabas field definition table (FDT) and places it in the source area for further processing.</p> <p>If 0 (zero) is entered as DBID, the default DBID specified with the UDB profile parameter in the Natural parameter module (NATPARAM) is used.</p> <p>The generated DDM is placed in the source area for further processing.</p>
<b>B</b>	<b>SQL Services (NDB/NSQ)</b>	<p>Only available if Natural for DB2 (NDB) or Natural for SQL/DS (NSQ) is installed.</p> <p><b>SQL Services (NDB/NSQ)</b> are used to generate DDMs from DB2 or SQL/DS tables as described in <i>SQL Services (NDB/NSQ) (Natural for DB2)</i> documentation) and <i>SQL Services (Natural for SQL/DS)</i> documentation).</p>
<b>D</b>	<b>DL/I Services</b>	<p>Only available if Natural for DL/I is installed.</p> <p><b>DL/I Services</b> are used to maintain a Natural for DL/I environment. They provide functions for inquiry into and modification of structures such as DL/I Database Descriptions (DBDs), Program Specification Blocks (PSBs), Program Communication Blocks (PCBs), DDMs and segment layouts.</p> <p><i>DL/I Services</i> are described in the <i>Natural for DL/I</i> documentation.</p>
<b>Z</b>	<b>SQL Services (NSB)</b>	<p>Only available if Natural SQL Gateway (NSB) is installed.</p> <p><b>SQL Services (NSB)</b> are used to generate DDMs from SQL tables as described in <i>SQL Services (NSB)</i> in the <i>Natural SQL Gateway</i> documentation.</p>

## Show Defined DBIDs and Used FNRs

This function shows you which database IDs (DBIDs) are defined, as well as all file numbers (FNRs) of a given DBID for which DDMs have been defined.

When you invoke this function, a menu appears from which you can select the subordinate functions described in the following section.

- Database IDs Defined in Natural
- File Numbers of Existing DDMs for a Database

## Database IDs Defined in Natural

This function lists all DBIDs and appropriate database types specified with the Natural profile parameter DB (see also *DB - Database Types and Options* in the *Parameter Reference* documentation). The list does not contain the DBIDs of the default database type, which is shown at the top of the screen.

## File Numbers of Existing DDMs for a Database

This function lists for a given DBID all file numbers for which DDMs have been defined.

▶ **To invoke this function, choose either of the following methods:**

- In the menu **Show Defined DBIDs and Used FNRs**, in the **Code** field, enter an F and, if required, modify the DBID entered by default.

Or:

On the screen **Database IDs Defined in Natural**, in the Command line, enter a DBID (valid values are 1 - 65535) and press PF5.

## DDM Specification

For each function provided in the SYSDDM utility menu, you can specify one or more parameters that determine which DDM(s) are processed for which database. The section below describes the fields where you enter these parameters.

Field	Explanation
<b>DDM Name</b>	<p>The name of the DDM to be processed.</p> <p>You can also specify a range of names: use asterisk (*) to process all DDMs or use asterisk (*) notation to process particular DDMs.</p> <p>For example: EMP* selects all DDMs with names that start with EMP.</p> <p>Specifying ranges with the function <b>Delete DDMs</b> or <b>Copy DDM to Another FDIC File</b> invokes the SYSMAIN utility where you can further process the DDMs; see also the section <i>Processing DDMs</i> in the <i>SYSMAIN Utility</i> documentation.</p>
<b>FNR</b>	<p>The file number (FNR) of the database file for which the DDM is (to be) defined.</p> <p>The file number corresponds to the type of database. For example, if an Adabas file is used, the Adabas file number must be entered.</p> <p>If a DL/I segment type is used, the file number specified is used internally by Natural for DL/I.</p> <p>For VSAM files, see the <i>Natural for VSAM</i> documentation.</p> <p>Valid values are 0 - 5000.</p>

Field	Explanation
<b>DBID</b>	<p>The database ID (DBID) which contains the database file referenced by the DDM.</p> <p>Valid values are 1 - 65535, except 255.</p> <p>If 0 (zero) is specified, the database ID specified with the Natural profile parameter UDB in the Natural parameter module NATPARM is used. See also UDB in the <i>Parameter Reference</i> documentation.</p> <p>If no DBID is entered, it is generated dynamically at execution time based on the DBID of the system file FUSER.</p>
<b>Replace</b>	<p>Specifies whether to replace a DDM:</p> <p>Y     Yes. A DDM which is being copied or cataloged replaces an existing DDM with the same name.</p> <p>N     No. Existing DDMs with the same name are not replaced. This is the default setting.</p> <p>This function corresponds to the REPLACE option of the command CATALOG described in <i>Editor and System Commands</i>.</p>
<b>FDIC Type</b>	<p>The database type of the system file.</p> <p>Possible types are the same as for <b>DDM Type</b> (see below).</p> <p>This is an output field only.</p>

Field	Explanation
<b>DDM Type</b>	<p>The type of DDM, for example:</p> <p>A        Adabas           This is the default type.</p> <p>V        VSAM</p> <p>2        DB2 or SQL</p> <p>D        DL/I</p> <p>P        PROCESS (Entire System Server)</p> <p>C        Command processor</p> <p>S        Super Natural</p> <p>E        Entire DB Engine</p> <p>The type of DDM corresponds to the type of database referenced by the DDM.</p>
<b>Adabas Password</b>	The password required by Adabas if installed.
<b>DBID Type</b>	<p>The database type of the database specified in the <b>DBID</b> field.</p> <p>Possible types are the same as for <b>DDM Type</b> (see above).</p> <p>Exception: for an Adabas database, the Adabas version (for example, 5, 6 or 7) is displayed.</p> <p>This is an output field only.</p>