

Using the SMDR

Changes to Netware 4.0 caused subtle changes to the SMS platform and SDK that require SMS developers to recompile and relink their applications to remain up to date. The Storage Management Data Requestor (SMDR) replaces the NetWare 3.11 Service Independent Data Requestor (SIDR) and responder (TSA.NLM). It provides SMS module visibility, connectivity, and data transfer for the Target Service API (TS API, formerly the DR API) and Storage Device API (SD API). The SMDR's improved functionality includes a run time link to local or remote Storage Device Interface (SDI) or Target Service Agent (TSA) modules.

Note: The SIDR unnecessarily encapsulates local NetWare server calls into packets. The SMDR eliminates this problem.

Novell provides SMDR and TSAs for NetWare 3.11 and 4.0 that allow applications to backup and restore to both OSs without any changes to your code. However, SDI is provided on NetWare 4.0 servers only. Therefore, 3.11 applications must retain their process used to access the media. The following TSAs are available:

DOS TSA
OS/2 TSA

Note: TSAs for Macintosh and Btrieve will be available soon. TSAs for NetWare 2.x will be released, however their release dates have not been decided yet. These TSAs will work only with the SMDR.

A few minor changes are necessary to update your code for use with the SMDR. We feel that it is important to emphasize that the changes are relatively painless as shown below:

- SMS header file names are replaced with one header file name.
- Deletion of the load and unload SIDR functions.
- Slight modification to the parameter list of the connect functions.

Everything else is the same. To upgrade your application to use the SMDR, the following instructions are provided:

1. Modify your source files as follows:
 - A. Remove all SMS include directives and replace them with "#include <sms.h>."
 - B. Delete all calls to **NWSMLoadDataRequestor**.
 - C. Delete all calls to **NWSMUnloadDataRequestor**.
 - D. If you were using an older SDK, you may have to change all TS API function name prefixes from NWSM to NWSMTS.
 - E. Remove from **NWSMConnectToTSA** the *targetUserName* and *authentication* parameters.
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- F. Change *connection* parameter to a pointer for **NWSMTSConnectToTargetService**.
- G. Delete all variables of type NWSM_DATA_REQUESTOR_PROCS.
- H. If your application still uses error codes prefixed with "NWSM", you may have to change the prefix to:

NWSMTS	Error codes returned from the TS API.
NWSMDR	Error codes returned from the SMDR.
NWSMUT	Error codes returned from the utility library.

Note: Check the appropriate documentation to make sure the correct changes are made. A function can return error codes from other modules.

- 2. Reset the environment variables to locate the new header files.
- 3. Modify your linker settings as follows:
 - A. For NLMs, modify your import file to include "SME.IMP" and add the SMDR to your MODULE directive.
 - B. For DOS, use the provided SMS_BC.LIB library.
- 4. Recompile and relink your application.

Note: Other changes may be necessary to make your application work properly (see *SMS Changes* in your SDK). These changes are not SMDR related.

- 5. Load the SMDR NLM before loading your application.
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