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**DBV-OSI II
Offene Kommunikation der Fachinformations- und
Bibliothekssysteme**

TEST TOOL MANUAL
468-SUM-005
Issue 2
D-023
September 1999

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ISO 9001
REGISTERED FIRM

DOCUMENT STATUS SHEET

DOCUMENT STATUS SHEET			
1. DOCUMENT TITLE: **DBV-OSI II Test Tool Manual 468-SUM-005 - D-023**			
2. ISSUE	3. REVISION	4. DATE	5. REASON FOR CHANGE
1	1	7 Mar 95	Preparatory draft
2	0	20 July 95	Revised for API Release
	1	20 Sept 99	Revised for API release 2.2

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INTRODUCTION

Purpose of the Test Tool

The Test Tool is provided as a means of proving and testing the DBV-OSI II API library functionality. It is used by the API developers and testers as a rigorous test harness, but is also available to whoever downloads the API who will hopefully find it useful when exploring the usage of the API functions and the data structures which are required for its successful operation.

The Test tool contains two components,

-        an origin test tool;

-        a target test tool.

When using the Test Tool, it is possible to test every field of every structure and every function which combine to make up the API library.
Due to the nature of the Z39.50 specification and DBV-OSI II implementation of it, it is theoretically possible to have structures with a theoretically infinite number of other structures contained within it (externals which contain externals which contain externals etc.... is an example of this). There is no set limit to the depth of structures imposed by the API or the Test Tool, but there are obviously limits set by the system hardware and software of your system. It is not envisaged that the API user will ever come anywhere near these limits, but they should always be remembered.

This complexity also creates testing problems, but it is hoped that the Test Tool is only as complex as is necessary.

1.2 Abbreviations and Nomenclature

The following abbreviations and nomenclature are used in this document.

ACSE	Association Control Service Element
AIX	IBM Workstation UNIX environment.
ANSI	American National Standards Institute.
APDU	Application Protocol Data Unit. Synonymous with PDU.
API	Application Programmers Interface.
ASCII	American Standard Code for Information Interchange.
	Typically used as a synonym for readable text.
DBV-OSI II	Project to which this document applies.
GCC	GNU 'gcc' ANSI C compiler
GDB	GNU 'gdb' source code debugger
GNU	Gnu's Not Unix. The prefix name given to a range of products produced by the

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	Free Software Foundation.
Origin Test Tool	The origin component of the Test Tool package.
OSI	Open Systems Interconnection. A communication architecture.
ISODE	'ISO' Development Environment. A collection of library routines and programs that implements an extensive set of OSI upper-level services. The 'ISO' part of the system name has no meaning.
PDU	Protocol Data Unit. A logical data unit used by Z39.50.
RPN	Reverse Polish Notation.
SES	Software External Specification.
SIL	Satellites International Limited.
SIS	Software Internal Specification.
Target Test Tool	The Target component of the Test Tool package.
tbl	Table Format. This is a file format which has been developed at SIL.
TCP	Transmission Control Protocol.
Test Tool	The Test Tool package comprising of the origin and target applications.
X.25	Recommendation describing the access interface to packet-switched data networks.
xterm	A UNIX application which provides a user shell in a window
Z39.50	A standard produced to facilitate the interconnection of computer systems for the purpose of information retrieval

2 USING THE TEST TOOL

2.1 Locating and Building the Test Tool Components

The Test Tool is located in the `src/testtools` directory of the API directory. It is necessary to build the Test Tool before it can be used and the Test Tool can only be compiled after a successful build of the DBV-OSI II API. It requires the same compilation tools as the API and it is assumed here that they are installed and that the installer has an understanding of the operation of these tools

Building the Test Tool is straightforward and utilises the UNIX system facility **make**. The building of the API library includes a configuration stage which automatically includes a configuration of the make scripts and other related build files for the Test Tool.

The Test Tool can be built as part of the main API make procedure, or can be built separately.

In order to build the Test Tool as a separate procedure, set the current directory to `testtools/target` .

Type the command *make*. If you are compiling with the GNU gcc compiler and the GNU make utility there should be no compilation problems. The correct configuration files will have been copied into the Test Tool distribution when the api was configured.

Once the compilation is completed, there will be an archive file named `libtesttool.a` in the `testtools` directory and two executables in their respective directories:

> `origin/origin` and `target/target`.

2.2 Running the Test Tool

The sections below concerning operating the Test Tool assume that the user has a Unix window manager running which is capable of displaying `xterm` windows.

To start the origin Test Tool move to the `origin` subdirectory and type `origin`. This will start the origin part of the Test Tool.

You can test TCP/IP associations with the target daemon listener supplied with the main part of the API. To do this, select a new `xterm` and start the `targetd` program and use the `-e` option of targetd to specify the `target` Test Tool application as the Z39.50 target applicatgion.

If OSI associations are required you must register the target Test Tool service with the OSI daemon you are using (`iaed` or `tsapd`). See documents **D-022 Software Internal Specification Section 14** - **Registering an OSI Application With ISODE**, **ISODE Volume 5: Administrator's**

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Guide Directory Services Chapter 5 (see 5.5.7 for Application Entity Entry specification) and
ISODE Volume 2: Administrator's Guide Installation (whole document).

Once the daemons have been configured and the origin program started, the Test Tool is ready for
use).

2.2.1 Using the Origin - Configuration

Certain run-time configuration options can be chosen by the Test Tool user. These options are
defined in the file *config* which can be found in the `origin` directory of the Test Tool.

The format of the configuration file is as follows:

```
Mode, < "Menu" | "Batch" >;
```
        Default: `"Menu"`.

This entry instructs the origin to enter either Menu Mode or Batch Mode at startup.

```
WorkingDirectory, < Filename >;
```
        Default: `"../origin_scripts"`.

This entry is used to specify the working directory for the origin. All subsequent file and path-
names must be specified relative to this location.

```
AssociationOutputTo, < Filename >;
```
        Default: `"Association_Results"`.

This entry specifies a file which will contain the results of calls to `DbvAssociateRequest()`,
`DbvConfirmAssociateRequest()`,   `DbvReleaseRequest()`,   `DbvAbortRequest()`,
`DbvConfirmReleaseRequest()`.

```
CompletedStructuresTo, < Filename >;
```
        Default: `"Completed_Origin_PDUs"`.

This entry specifies the name of a file to contain all the completed PDUs before they are sent.

```
UtilityOutputTo, < Filename >;
        Default: "Utility_Results".
```

This entry is used to specify a file which will contain the results of calls to the utility functions.

```
ReceivedPdusTo, < Filename >;
        Default: "Received_Origin_PDUs".
```

This entry is used to specify a file which will contain content of all the PDUs received from the target.

```
BatchFile, < Filename >;
```
        Default: None.

This parameter is used to specify a batch file used by the Test Tool. If the entry `BatchFile` is included in the configuration file a file name must be specified. This entry will be ignored if the Mode is specified as `Menu`. The type `Filename` must be a quoted string.

The default is used when the entry line is missing (the whole entry line, not just the `Filename` entry).

2.2.2 Origin Batch Mode

When the origin is configured for batch mode operation a batch file should be written and given the same filename as specified in the `configure` file in the `origin` directory. The batch file contains the function names to be tested together with a string which points to the test script file to be read in.

Origin Batch file format:

```
< API Function Name >, < Filename >;
```

The valid `API Function Name` entries are:

        DbvAssociateRequest

        DbvReleaseRequest

        DbvAbortRequest

        DbvConfirmAssociateRequest

        DbvConfirmReleaseRequest

        DbvInitializeRequest

        DbvSearchRequest

        DbvPresentRequest

        DbvDeleteResultSetRequest

        DbvScanRequest

        DbvResourceReportRequest

        DbvSortRequest

        DbvExtendedServicesRequest

        DbvCloseRequest

        DbvCloseResponse

        DbvReceiveDataOrigin

        SIGetEventLocation

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```
        SISetACSEFile

        SIWhichStack

        SISetTraceParameter
```

For example:

```
/* Origin */

DbvAssociateRequest, "assoc_tcp/assocreq_blocking";

DbvInitializeRequest, "../SR_origin/initreq";

SIGetEventLocation, "utility/geteventloc_blocking";

DbvReceiveDataOrigin, "../SR_origin/rdo_blocking";

DbvCloseRequest, "../SR_origin/closereq";

DbvReceiveDataOrigin, "../SR/rdo_blocking";

/* End */
```

When the end of the batch file is reached the Test Tool gives the option to revert to menu mode or to exit the test tool. Reverting to menu mode may be useful if the user wishes to move to a certain state within the Z39.50 protocol and then complete testing with some manual operations.

2.2.3 The Origin Menu Structure

The targetd process should be started before the Origin Test Tool program is run. It is advisable to run the Test Tool int an XTerm with scroll-bars enabled, because several of the menus are quite long. On executing the Origin Test Tool program, the following text will appear:

```
DBV-OSI Origin Test Tool (c) Crossnet

-----------------------------------

Make sure that targetd has been started

Using:

        -e /usr2/dbvosi/src/testtools/origin/../target/target

as non-interactive target process

Directory which holds origin TBL files is :../origin_scripts/


Choose Origin API Function Group To Test

1) Association Handling

2) SR-/Z39.50 and Communication Utility Functions
```

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```
3) Non Communication Utility Functions

4) Exit

Choice (1/2/3/4) :
```

Option 1 from the top menu will provide a list of options for testing the Association Functions. The menu will appear like:

```
Choose Origin Association Handling Function

1) Valid DbvAssociateRequest()

Input From:       assocreq_valid

Output To:        assocreq_valid_result

2) Invalid DbvAssociateRequest()

Input From:       assocreq_invalid

Output To:        assocreq_invalid_result

3) Valid DbvConfirmAssociateRequest()

Input From:       confasreq_valid

Output To:        confasreq_valid_result

4) Invalid DbvConfirmAssociateRequest()

Input From:       confasreq_invalid

Output To:        confasreq_invalid_result

5) Valid DbvReleaseRequest()

Input From:       relreq_valid

Output To:        relreq_valid_result

6) Invalid DbvReleaseRequest()

Input From:       relreq_invalid

Output To:        relreq_invalid_result

7) Valid DbvConfirmReleaseRequest()

Input From:       confrereq_valid

Output To:        confrereq_valid_result

8) Invalid DbvConfirmReleaseRequest()
```

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```
Input From:       confrereq_invalid

Output To:        confrereq_invalid_result

9) Valid DbvAbortRequest()

Input From:       abortreq_valid

Output To:        abortreq_valid_result

10) Invalid DbvAbortRequest()

Input From:       abortreq_invalid

Output To:        abortreq_invalid_result

11) Previous Menu

Choice (1/2/3/4/5/6/7/8/9/10/11) :11
```

The messages like `Input From:` and `Output To:` indicate the names of the files the the Test Tool will read and write to for that particular function.

Option 2 from the top menu will provide a list of options for testing the API Functions. The menu will appear like:

```
Choose Origin API Function Group To Test

1) Association Handling

2) SR-/Z39.50 and Communication Utility Functions

3) Non Communication Utility Functions

4) Exit

Choice (1/2/3/4) :2

Choose Origin SR-/Z39.50 / Communication Utility Function:

SR-/Z39.50 Functions

1) Valid DbvInitializeRequest()

Input From:     initreq_valid

Output To:      initreq_valid_result

        Request at Target To:

                initreq_valid_received
```

```
        Target Response From:

                initresp_valid

        Response From Target To:

                initresp_valid_received

2) Invalid DbvInitializeRequest()

Input From:      initreq_invalid

Output To:       initreq_invalid_result

3) Valid DbvSearchRequest()

Input From:      srchreq_valid

Output To:       srchreq_valid_result

        Request at Target To:

                srchreq_valid_received

        Target Response From:

                srchresp_valid

        Response From Target To:

                srchresp_valid_received

4) Invalid DbvSearchRequest()

Input From:      srchreq_invalid

Output To:       srchreq_invalid_result

5) Valid DbvPresentRequest()

Input From:      presreq_valid

Output To:       presreq_valid_result

        Request at Target To:

                presreq_valid_received

        Target Response From:

                presresp_valid

        or

                segreq_valid

        Response From Target To:

                presresp_valid_received
```

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```
        or

                 segreq_valid_received

6) Invalid DbvPresentRequest()

Input From:      presreq_invalid

Output To:       presreq_invalid_result

7) Valid DbvDeleteResultSetRequest()

Input From:      delreq_valid

Output To:       delreq_valid_result

        Request at Target To:

                 delreq_valid_received

        Target Response From:

                 delresp_valid

        Response From Target To:

                 delresp_valid_received

8) Invalid DbvDeleteResultSetRequest()

Input From:      delreq_invalid

Output To:       delreq_invalid_result


9) Valid DbvScanRequest()

Input From:      scanreq_valid

Output To:       scanreq_valid_result

        Request at Target To:

                 scanreq_valid_received

        Target Response From:

                 scanresp_valid

        Response From Target To:

                 scanresp_valid_received

10) Invalid DbvScanRequest()

Input From:      scanreq_invalid

Output To:       scanreq_invalid_result

11) Valid DbvResourceReportRequest()
```

```
Input From:      resreq_valid

Output To:       resreq_valid_result

        Request at Target To:

                resnreq_valid_received

        Target Response From:

                resnresp_valid

        Response From Target To:

                resresp_valid_received

12) Invalid DbvResourceReportRequest()

Input From:      resreq_invalid

Output To:       resreq_invalid_result

13) Valid DbvSortRequest()

Input From:      sortreq_valid

Output To:       sortreq_valid_result

        Request at Target To:

                sortreq_valid_received

        Target Response From:

                sortresp_valid

        Response From Target To:

                sortesp_valid_received

14) Invalid DbvSortRequest()

Input From:      sortreq_invalid

Output To:       sortreq_invalid_result

15) Valid DbvExtendedServicesRequest()

Input From:      extreq_valid

Output To:       extreq_valid_result

        Request at Target To:

                extreq_valid_received

        Target Response From:

                extresp_valid
```

```
        Response From Target To:

                extresp_valid_received

16) Invalid DbvExtendedServicesRequest()

Input From:      extreq_invalid

Output To:      extreq_invalid_result

17) Valid DbvCloseRequest()

Input From:      closereq_valid

Output To:      closereq_valid_result

        Request at Target To:

                closereq_valid_received

        Target Response From:

                closeresp_valid

        Response From Target To:

                closeresp_valid_received

18) Invalid DbvCloseRequest()

Input From:      closereq_invalid

Output To:      closereq_invalid_result

19) Valid DbvCloseResponse()

Input From:      closeresp_valid

Output To:      closeresp_valid_result

        Request at Target To:

                closeresp_valid_received

20) Invalid DbvCloseResponse()

Input From:      closeresp_invalid

Output To:      closeresp_invalid_result


---------------------------------------------

Communication Related Utility functions

21) Valid SIGetEventLocation()

Input From:      origin_sievent_valid
```

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```
Output To:       origin_sievent_valid_result

22) Invalid SIGetEventLocation()

Input From:      origin_sievent_invalid

Output To:       origin_sievent_invalid_result

23) Valid DbvReceiveDataOrigin()

Input From:      origin_receive_valid

Output To:       origin_receive_valid_result

24) Invalid DbvReceiveDataOrigin()

Input From:      origin_receive_invalid

Output To:       origin_receivet_invalid_result

25) Previous Menu

Choice (1/2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25) :
```

Option 3 from the top menu will provide a list of Non Communication Utility Functions to test. The menu will appear like:

```
Choose Origin Non Communication Utility Function:

1) Valid SISetACSEFile()

Input From:      origin_acse_valid

Output To:       origin_acse_valid_result

2) Invalid SISetACSEFile()

Input From:      origin_acse_invalid

Output To:       origin_acse_invalid_result

3) Valid SIWhichStack()

Input From:      origin_stack_valid

Output To:       origin_stack_valid_result

4) Invalid SIWhichStack()

Input From:      origin_stack_invalid
```

DBV-OSI II

```
Output To:        origin_stack_invalid_result

5) Valid SISetTraceParameter()

Input From:       origin_trace_valid

Output To:        origin_trace_valid_result

6) Invalid SISetTraceParameter()

Input From:       origin_trace_invalid

Output To:        origin_trace_invalid_result

7) Previous Menu

Choice (1/2/3/4/5/6/7) :
```

Option 4 from the top menu will exit from the Test Tool.

For each of the functions in the first three menus, the option will prompt the user to instigate the function be called. A message will be displayed giving the status of the function. The generated results can be displayed if required.

2.2.4 Using the Target - Configuration

Certain run-time configuration options can be chosen by the Test Tool user. These options are defined in the file *config* which can be found in the target directory or the Test Tool.

The format of the target configuration file is as follows:

```
Mode, <Menu | Batch>;
      Default: "Menu".
```

This entry specifies the mode of operation of the test-tool.

```
WorkingDirectory, < Filename >;
      Default: "../target_scripts". The working directory for the target is specified here. All
subsequent file and path-names must be specified relative to here.

AssociationOutputTo, < Filename >;

      Default: "Association_Results". The file which will contain the results of calls to
DbvReceiveAssociateRequest(),    DbvAssociateResponse(),    DbvReleaseResponse(),
DbvAbortRequest().

CompletedStructuresTo, < Filename >;
```

Default: `"Completed_Target_PDUs"`. This file will contain all the completed PDUs before they are sent.

`UtilityOutputTo, < Filename >;`

Default: `"Utility_Results"`. This file will contain the results of calls to the utility functions.

`ReceivedPdusTo, < Filename >;`

Default: `"Received_Target_PDUs"`. This file will contain all of the PDUs received from the origin.

`BatchFile, < Filename >;`

Default: None. If the entry `BatchFile` is included in the configuration file a file name must be specified.

The `targetd` process should be started before the Origin Test Tool program is run. The name of the target Test Tool executable must be passed as an argument to the `targetd` process when it is started. This is so that the `targetd` knows which process to invoke when an association is received.

There is an option within the Target Test Tool program whether to use the GNU `gdb` debugger facility. Enter `y` to invoke the debugger. For successful operation, the user shell environment must include a directory in which the `xterm` program can be located. This is because the `targetd` process will invoke an `xterm` through which the Target Test Tool is run (although this feature may be switched off using the `-n` option).

2.2.5 Target Batch Mode

When the target is configured for batch mode operation a batch file should be written and given the same filename as specified in the `configure` file in the `target` directory. The batch file contains the function names to be tested together with a string which points to the test script file to be read in.

Target Batch file format:

`< API Function Name >, < Filename >;`

The valid `API Function Name` entries are:

> DbvTargetInitialize
>
> DbvReceiveAssociateRequest
>
> DbvAssociateResponse
>
> DbvReleaseResponse
>
> DbvAbortRequest
>
> DbvInitializeResponse
>
> DbvSearchResponse
>
> DbvPresentResponse
>
> DbvDeleteResultSetResponse
>
> DbvScanResponse

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```
        DbvResourceReportResponse

        DbvSortResponse

        DbvSegmentationRequest

        DbvExtendedServicesResponse

        DbvCloseRequest

        DbvCloseResponse

        DbvReceiveDataTarget

        SIGetEventLocation

        SISetACSEFile

        SIWhichStack

        SISetTraceParameter
```

The entry `DbvTargetInitialize` should have a dummy filename entry associated with it. This is because this API function cannot be tested using script files.

Example:

```
DbvTargetInitialize, " ";

DbvReceiveAssociateRequest, "assoctcp/reassocreq";

DbvAssociateResponse, "assoctcp/assocresp_Accepted";

DbvReceiveDataTarget, "../SR_target/rdt_blocking";

DbvInitializeResponse, "../SR_target/initresp";

DbvReceiveDataTarget, "../SR_target/rdt_blocking";

DbvCloseResponse, "../SR_target/closeresp";

/* End */
```

2.2.6 The Target Menu Structure

When the Origin process is used to open an association, the `targetd` will spawn an `xterm` in which the Target Test tool will be displayed.

Some diagnostic messages will be displayed, followed by the menu:

```
DBV-OSI Target Test Tool (c) Crossnet

-----------------------------------

argc = 3

argv[0] = /usr2/dbvosi/src/testtools/origin/../target/target

argv[1] = TCP

argv[2] = 5
```

```
DBV-OSI Interactive Target Test Tool (c) Crossnet 1999

-------------------------------------------------------

Choose Target API Function Group To Test

1) Association Handling

2) Non Communication Utility Functions

3) Exit

Choice (1/2/3) :
```

Option 1 from the top menu will provide a list of Association Handling Functions to test. The menu will appear like:

```
Choose Target Association Handling Function

1) Valid DbvReceiveAssociateRequest()

Input From: reassocreq_valid

Output To:  reassocreq_valid_result

2) Invalid DbvReceiveAssociateRequest()

Input From: reassocreq_invalid

Output To:  reassocreq_invalid_result

3) Valid DbvAssociateResponse()

Input From: assocresp_valid

Output To:  assocresp_valid_result

4) Invalid DbvAssociateResponse()

Input From: assocresp_invalid

Output To:  assocresp_invalid_result

5) Valid DbvReleaseResponse()

Input From: relresp_valid

Output To:  relresp_valid_result

6) Invalid DbvReleaseResponse()

Input From: relresp_invalid

Output To:  relresp_invalid_result
```

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```
7) Valid DbvAbortRequest()

Input From: abortreq_valid

Output To:  abortreq_valid_result

8) Invalid DbvAbortRequest()

Input From: abortreq_invalid

Output To:  abortreq_invalid_result

9) PDU Reception from Origin (menu)

10) Previous Menu

Choice (1/2/3/4/5/6/7/8/9/10) :
```

Option 9 from this menu will provide a list of APDU and Communication Utility functions to test. The menu will display as follows:

```
Choose Target SR-/Z39.50  Function


1) Valid InitializeResponse()

Input From: initresp_valid

Output To:  initresp_valid_result

Response At Origin To:

     initresp_valid_received

2) Invalid InitializeResponse()

Input From: initresp_invalid

Output To:  initresp_invalid_result

3) Valid SearchResponse()

Input From: srchresp_valid

Output To:  srchresp_valid_result

Response At Origin To:

     srchresp_valid_received

4) Invalid SearchResponse()

Input From: srchresp_invalid
```

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```
Output To:  srchresp_invalid_result

5) Valid PresentResponse()

Input From: presresp_valid

Output To:  presresp_valid_result

Response At Origin To:

      presresp_valid_received

6) Invalid PresentResponse()

Input From: presresp_invalid

Output To:  presresp_invalid_result

7) Valid DeleteResultSetResponse()

Input From: delresp_valid

Output To:  delresp_valid_result

Response At Origin To:

      delresp_valid_received

8) Invalid DeleteResultSetResponse()

Input From: delresp_invalid

Output To:  delresp_invalid_result

9) Valid ScanResponse()

Input From: scanresp_valid

Output To:  scanresp_valid_result

Response At Origin To:

      scanresp_valid_received

10) Invalid ScanResponse()

Input From: scanresp_invalid

Output To:  initresp_invalid_result

11) Valid ResourceReportResponse()

Input From: resresp_valid

Output To:  resresp_valid_result

Response At Origin To:

      resresp_valid_received
```

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12) Invalid ResourceReportResponse()

Input From: resresp_invalid

Output To: resresp_invalid_result

13) Valid SortResponse()

Input From: sortresp_valid

Output To: sortresp_valid_result

Response At Origin To:

sortresp_valid_received

14) Invalid SortResponse()

Input From: sortresp_invalid

Output To: sortresp_invalid_result

15) Valid SegmentationRequest()

Input From: segresp_valid

Output To: segresp_valid_result

Response At Origin To:

segresp_valid_received

16) Invalid SegmentationRequest()

Input From: segresp_invalid

Output To: segresp_invalid_result

17) Valid ExtendedServicesResponse()

Input From: extresp_valid

Output To: extresp_valid_result

Response At Origin To:

extresp_valid_received

18) Invalid ExtendedServicesResponse()

Input From: extresp_invalid

Output To: extresp_invalid_result

19) Valid CloseResponse()

Input From: closeresp_valid

Output To: closeresp_valid_result

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Response At Origin To:

     closeresp_valid_received

20) Invalid CloseResponse()

Input From: closeresp_invalid

Output To: closeresp_invalid_result

21) Valid CloseRequest()

Input From: closereq_valid

Output To: closereq_valid_result

Request At Origin To:

     closereq_valid_received

     Origin Response From:

         closeresp_valid

     Response From origin To:

         closeresp_valid_received

22) Invalid CloseRequest()

Input From: closereq_invalid

Output To: closereq_invalid_result

Communication Related Utility Functions

23) Valid SIGetEventLocation()

Input From: target_sievent_valid

Output To: target_sievent_valid_result

24) Invalid SIGetEventLocation()

Input From: target_sievent_invalid

Output To: target_sievent_invalid_result

25) Valid DbvReceiveDataTarget()

Input From: target_receive_valid

Output To: target_receive_valid_result

26) Invalid DbvReceiveDataTarget()

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```
Input From: target_receive_invalid

Output To:  target_receive_invalid_result

27) Previous Menu

Choice (1/2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27)
:27
```

Option 2 from the top menu will provide a list of Association Handling Functions to test. The menu will appear like:

```
Choose Target Non Communication Utility Function:

1) Valid DbvTargetInitialize()

Input From: targetinit_valid

Output To:  targetinit_valid_result

2) Invalid DbvTargetInitialize()

Input From: targetinit_invalid

Output To:  targetinit_invalid_result

3) Valid SISetACSEFile()

Input From: target_acse_valid

Output To:  target_acse_valid_result

4) Invalid SISetACSEFile()

Input From: target_acse_invalid

Output To:  target_acse_invalid_result

5) Valid SIWhichStack()

Input From: target_stack_valid

Output To:  target_stack_valid_result

6) Invalid SIWhichStack()

Input From: target_stack_invalid

Output To:  target_stack_invalid_result

7) Valid SISetTraceParameter()

Input From: target_trace_valid

Output To:  target_trace_valid_result

8) Invalid SISetTraceParameter()
```

```
Input From: target_trace_invalid

Output To:  target_trace_invalid_result
```

9) Previous Menu

```
Choice (1/2/3/4/5/6/7/8/9) :
```

Press enter

Option 3 from the top menu will exit from the Target Test Tool.

For each of the functions in the first two menus, the option will prompt the user to instigate the function be called. A message will be displayed giving the status of the function.

2.2.7 Beginning a Test Run

Before the APDU functionality can be tested, an association must be created between an origin and target process. This requires API functions at the origin and target to be executed in a certain order.

- **Step 1** - The origin API function `DbvAssociateRequest` must be called first(it is found in the `Association Handling` menu). If the script specifies the `lSeconds` parameter as CALL_ASYNCHRONOUS or CALL_BLOCKING calls to the function `DbvConfirmAssociateRequest` may be necessary. If the `DbvAssociateRequest` script specifies CALL_BLOCKING and the association is using OSI communications, then the call will block until the target accepts or rejects the association.

- **Step 2** - Once the target has been invoked by the daemon the test tool user must call three API functions before APDU testing may begin. Firstly, `DbvTargetInitialize` must be called. This function does not require a script and is located in the `Non Communication Utility Functions` Menu.

- **Step 3** - `DbvReceiveAssociateRequest` should be called next. This function is located in the `Association Handling` menu.

- **Step 4** - `DbvAssociateResponse`. If the user wishes to test the APDU functions, then the script for this function must accept the association. This function is also located in the `Association Handling` menu.

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2.3 Test Tool Script Files

2.3.1 Introduction

The Test Tool uses the idea of 'script files' to hold the information required to construct the parameters of a specific API function. These files are plain ASCII files which must be written by the Test Tool user (although the supplied examples can also be easily modified).

The format of these files have been written to be as intuitive and readable as possible in consideration of the complex parameters that they define.

2.3.2 Script File Format Explanation

A script file is made up from fields and records. Fields are separated by commas and records are separated by semi-colons, e.g.

        <record-1 field-1>, <record-1 field-2>, <record-1 field-3>;

        <record-2 field-1>, <record-2 field-2>, <record-2 field-3>;

After the explanation of each record or (group of records) there will follow an example of that format.

NOTE: Putting all the examples together in a format explanation will not necessarily produce a valid script file!

There are three **basic** types of field in a record:

- `char` - This is an **unquoted** text field and can contain all alphanumeric and punctuation characters EXCEPT the comma character. The first character must be an upper or lower case (English) letter. For example, `This is a valid_char field!!` is an example of a valid char field. A `char` field is usually used as a title. Note the use of whitespace is permitted.

- `string` - This is a **quoted** text field and can contain all characters except double quotes (") with which it must start and end. For example, `"This is my string"` is an example of a valid string field, and again the use of whitespace is permitted

- `integer` - This is a numerical field. On most 32-bit systems valid values are between 2,147,483,647 and -2,147,483,648. For example, `12349876` is an example of a valid integer field.

In the script file formats there are also more **complicated** types which are comprised of the above three types.

- `octet` - This represents a DbvOctetString and consists of an `integer` and a `string`. For example, `15, "An Octet string"` is an example of an `octet` type. For a valid test, the `integer` should hold the number of characters in the string. For convenience, if you do not wish to count the number of characters in a string, the value `-1` may be used. This will count the number of characters for you and fill out the structure accordingly.

- `inter` - This represents a DbvInternationString. It is used in exactly the same way as the `octet` type.

- **title** - Where ever the type `title` appears in a script format it means that a `char` type can be placed in the field. A `title` is only for improved readability of the script and is ignored by the application reading the script file.

- **Bool** - A `Bool` type is entered as a string. The only valid values are `"DBV_TRUE"`, `"DBV_FALSE"` and `"NULL"` (where appropriate). In the case of an invalid value a warning will be printed and the value placed in the variable will be `DBV_FALSE`.

- **completed** - Two values "completed" or "NULL" are valid and this is used where elements of structures are pointing to other structures. If "NULL" is used, then the structure being pointed to is not required to be specified in the script. If   "completed" is used, then the structure being pointed to is required to be specified in the the following lines of the script.

Each record that marks the start of a new parameter begins with an `integer`. The `integer` represents the number of the parameter in the parameter list of the function.

Comments

The script files can contain 'C' style comments in the format `/* Comment Comment */`. They cannot include embedded comments. Use of embedded comments will produce unpredictable results, ie, it will not work.

Field Validation

The reason that no fields are checked for correctness is due to the fact that the test tool is designed to test for valid and invalid *actions* by the API user. While this makes it a much more flexible system, it can create problems if you are trying to the emulate valid behaviour of a Z39.50 system. When writing script files you should always check that what you are writing is valid. A script file syntax validation program exists which will check some script file format (such as embedded comments). It is often the case that erroneous situations occur that can be easily considered as a fault in the code under test but is in fact a semantic error in the script file.

Enumerated types

An enumerated type is entered as a `string` type, which is then converted by the Test Tool. `"EVT_SingleASN1Type"` would be valid as an `DbvExternalValueType` which would be read, converted and placed in the structure.

Specifying a NULL pointer

Where valid, it is possible to specify a NULL pointer to an optional structure or variable by using the `string` type `"NULL"`. This means that integer values have to be specified as a `string` type if they are optional (they will be pointers to `long`'s in the actual C code).

Reading the Formats

It is always useful to have at hand the document **D-008 API-Definition** and specifically **Section 4 - Data Definitions** and **Annex: SR-/Z39.50 Datastructures**. This will help a great deal when

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trying to understand the script file structure. The **ANSI/NISO** document **Z39.50 Information Retrieval: Application Service Definition and Protocol Specification** is also useful.

Multiple Associations

It is possible to repeat the whole script format of a function many times within one file. This is used in the origin for controlling and testing multiple associations. This is not valid for the target as it only ever controls one association.

3 COMMON SCRIPT FILE FORMATS

3.1 DbvASN1External

The format for the `DbvASN1External` structure is one of the most complex to be found in the API. In consideration of the complexity, it is placed in its own script file. If a `DbvASN1External` is required to be specified within another structure, then the file name of the external that is required to be loaded is placed in the appropriate position of the script file. This method makes the formats simpler and more flexible. If it is required to set a different external within a structure, then the name of another external file is specified.

Script Format:

```
/* The tbl formats for externals */

/* ********* EVT_SingleASN1Type ********* */
/* eValueType (string), pcObjectIdentifier (string);
"EVT_OctetAligned", "1.2.840.10003.5.1";
/* ********* END EVT_SingleASN1Type ********* */

/* Next, the test tool expects either OctetAligned, Arbitrary, or SingleASN1Type
formats */
/* ********* EVT_OctetAligned ********* */
/* Title, OctetString->ulLength (integer),
     OctetString->pcValue (string); */
EVT_OctetAligned format, 9, "hello mum";

/* ********* EVT_Arbitrary ********* */
/* Title, OctetString->ulLength (integer),
       OctetString->pcValue (string); */
EVT_Arbitrary format, 14, "Arbitrary type";

/* ********* SingleASN1Type ********* */
/* Title, eASN1Type (string); */
SingleASN1Type format, "AT_UnstructuredText";

/* Choose one of the eight types */
/* ********* DbvUnstructedText ********* */
/* Title, DbvGeneralString->ulLength (integer),
     DbvGeneralString->pcValue (string); */
SUTRS format, 32, "This is my sutrs external string";
/* ********* END of DbvUnstructedText ********* */
```

OPAC Record:

```
/* ********* DbvOpacRecord ********* */
/* Title, external TBL filename (string); */
BibliographicRecord (external) Syntax, "NULL";
/* Title, Number of DbvHoldingsRecord structures to read */
Records to read, 1;
```

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```
/* ********* DbvHoldingsRecord ********* */
/* Title, DbvHoldingsRecType (string) Choice; */
HoldingsRecType Choice, "HRT_MarchHoldingsRecord";


/* ********* DbvHoldingsRecord, MarcHoldingsRecord format ********* */
/* Title, external TBL filename (string); */
ASN1External Syntax, "Another_External_File";
/* ********* END MarcHoldingRecord format ********* */


/* ********* DbvHoldingsRecord, DbvHoldingsAndCircData ********* */
/* Title, 17 * DbvInternationalString;*/
DbvHoldingsAndCircData DbvInternational Strings,
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL";
/* ********* DbvHoldingsAndCircData->Volume list ********* */
/* Title, Number of DbvVolume structures to read; */
Volume Records to Read =, 1;
/* Title, 3 * DbvInternationalString; */
Volume DbvInternationalStrings,
      0, "NULL",
      0, "NULL",
      0, "NULL";
/* ********* END of DbvVolume list ********* */


/* ********* DbvHoldingsAndCircData->ppsCircRecord list ********* */
/* Title, Number of DbvCircRecord structures to read; */
DbvCircRecords to read =,1;
/* Title, DbvBool, 4 * DbvInternationalString, 2 * DbvBool,
      3* DbvInternationalString */
DbvCircRecord structure,
      "DBV_TRUE",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      0,"NULL",
      "DBV_TRUE",
      "DBV_TRUE",
      0,"NULL",
      0,"NULL",
      0,"NULL";
/* ********* END of DbvCircRecord list ********* */


/* ********* END of DbvHoldingsAndCircData ********* */


/* ********* END of DbvHoldingsRecord ********* */
```

```
/* ********* END of DbvOpacRecord ********* */
```

Summary Record:

```
/* ********* DbvSummaryRecord ********* */
/* Title, 5 * DbvInternationalString; */
Summary Record Format,
      -1, "sTitle",
      -1, "psAuthor",
      -1, "psCallNumber",
      -1, "psRecordType",
      -1, "psBibliographicLevel";

/* ********* START DbvSummaryRecord->DbvFormatSpec List ********* */
/* Title, number of records to read (integer); */
Number of DbvFormatSpec records to read, 1;

/* DbvFormatSpec list */
/* Title, sType (DbvInternationalString), pulSize (string),
      pulBestPosn (string); */
DbvFormatSpec format,
      -1,"sTitle",
      "12934",
      "NULL";

/* ********* END of DbvFormatSpec ********* */

/* Title, 4 * DbvInternationalString, string, 2 * DbvInternationalString; */
DbvSummaryRecord Continuation,
      -1,"psPublicationPlace",
      -1,"psPublicationDate",
      -1,"psTargetSystemKey",
      -1,"psSatisfyingElement",
      "999",
      -1,"psDocumentId",
      -1,"psAbstract";
/* ********* START DbvOtherInformation format ********* */
/* See Manual for details of DbvOtherInformation */
/* ********* END DbvOtherInformation format ********* */

/* ********* END of DbvSummaryRecord ********* */
```

Resource Report 1

```
/* ********* DbvResourceReport1 Record ********* */
/* Title, Number of records to read (integer); */
Numer of DbvEstimate1 records to read, 1;

/* ********* START DbvEstimate1 Format ********* */
/* Title, DbvEstimteType (string), ulValue (integer), pulCurrenyCode
      (string); */
DbvEstimateType, "ET_CurrentSearchRecords", 99, "99";
/* ********* END DbvEstimate1 Format ********* */

/* Title, sMessage (DbvInternationalString) */
DbvResourceReport1 continued,
      -1,"sMessage DbvInternationalString";
/* ********* END DbvResourceReport1 format ********* */
```

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Resource Report 2:

```
/* ********* DbvResourceReport2 Record ********* */
/* Title, Number of records to read (integer); */
Numer of DbvEstimate2 records to read, 1;

/* ********* START DbvEstimate2 Format ********* */

/* ***********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";

/* **********END SNT_String****** */

/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;

/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format*************** */

/* **********DbvIntUnit format************/

/* Title,Value (integer); */
   Value,1;

/* **********DbvUnit format************* */
/* Title Unit ,COMPLETED; */
   Unit,"COMPLETED";

/* Title,UnitSystem (Inter) */
   UnitSystem, -1,"a Unitsystem string";

/* Title, Completed; */
   UnitType, "COMPLETED";
/* ***********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";

/* **********END SNT_String****** */

/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;

/* **********END SNT_Numeric****** */
```

```
/* **********END DbvStringOrNumeric format************** */

/* Title,Completed; */
   Unit, "COMPLETED";
/* **********DbvStringOrNumeric format*************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */

/* *********SNT_String********* */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";

/* **********END SNT_String****** */

/* **********SNT_Numeric********* */
/* Title, Numeric (integer); */
   SNT_Numeric,1;

/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format************** */

/* Title,ScaleFactor (string); */
   ScaleFactor,"1";
/* **********END DbvUnit format************** */

/* **********END DbvIntUnit format************** */

/* ********* END DbvEstimate2 Format ********* */

/* Title, sMessage (DbvInternationalString) */
DbvResourceReport2 continued,
    -1,"ResourceReport-2-Message";

/* ********* END DbvResourceReport2 Record ********* */
```

DbvEsTaskPackage

```
/* ********* SingleASN1Type ********* */
/* Title, eASN1Type (string); */
SingleASN1Type format, "AT_EsTaskPackage";


/* ********* DbvEsTaskPackage ********* */

/* Title, pcPackageType (Object Identifier); */
pcPackageType, "1.2.12345.1.1";

/* Title, psPackageName (DbvInternationalString); */
PackageName, -1, "PackageName International string Example";

/* Title, psUserId (DbvInternationalString); */
UserId, -1, "UserId International string Example";

/* Title,DbvIntUnit,COMPLETED; */
   DbvIntUnit,"COMPLETED";
```

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```
/* **********DbvIntUnit format********** */

/* Title,Value (integer); */
   Value,1;

/* **********DbvUnit format************* */

/* Title Unit ,COMPLETED; */
   Unit,"COMPLETED";

/* Title,UnitSystem (Inter) */
   UnitSystem, -1,"a Unitsystem string";

/* Title,COMPLETED; */
   UnitType,"COMPLETED";
/* **********DbvStringOrNumeric format***************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";

/* **********END SNT_String****** */

/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/
/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format*************** */

/* Title,Completed; */
   Unit, "COMPLETED";
/* **********DbvStringOrNumeric format***************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_Numeric";
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";

/* **********END SNT_String****** */

/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;

/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format*************** */


/* Title,ScaleFactor (integer); */
   ScaleFactor,"1";

/* **********END DbvUnit format*************** */
```

```
/* **********END DbvIntUnit format************** */

/* Title,Number of Permissions (integer); */
   Number of Permissions,1;

/* N * DbvPermissions */
/* if N=0 then structure not completed */

/* **********DbvPermissions format************** */

/* Title,UserId (Inter); */
   UserId,-1,"UserId string";

/* Title,Number of AllowableFunctions (integer); */
   Number of AllowableFunctions,2;

/* N * DbvPermAllowableFunctions */

/* Title, Completed, DbvPermAllowableFunctions (enum);
        (PAF_Delete,PAF_ModifyContents,PAF_ModifyPermisssions,
         PAF_Present,PAF_Invoke) */
   AllowableFunctions1, Completed, "PAF_Delete";

/* Title,Completed, DbvPermAllowableFunctions (enum);
        (PAF_Delete,PAF_ModifyContents,PAF_ModifyPermisssions,
         PAF_Present,PAF_Invoke) */
   AllowableFunctions2,Completed, "PAF_ModifyContents";

/* **********END DbvPermissions format************** */

/* Title, Description (DbvInternationalString); */
Description, -1, "psDescription test string";

/* Title, TargetReference (DbvOctetString); */
TargetReference, -1, "psTargetReference";

/* Title, CreationDateTime (string); (Note: specify "NULL" if not required) */
CreationDateTime, "pcCreationDateTime test string";

/* Title, eExtServicesTaskStatus; */
/* Choose from: ESTS_Pending, ESTS_Active , ESTS_Complete, ESTS_Aborted,
     ESTS_Invalid */
eExtServicesTaskStatus, "ESTS_Pending";

/* Title,Number of PackageDiagnostics (integer); */
   Number of PackageDiagnostics,1;

/*   N * DbvDiagRec */
/* if N=0 then  structure not completed */

/* **********DbvDiagRec format**************** */

/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */

/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */
```

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```
/* **********DT_DefaultFormat format***************** */

/* **********Default format************* */

/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"1.2.840.10003.4.1";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format ********************/
/* Title,ProtocolVersionInforce (enum),COMPLETED; (PVIF_Version2,PVIF_Version3)
*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */

/* Now choose either PVIF_Version2 or PVIF_Version3 */

/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format***************** */

/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
   V3,-1,"V3 string";

/* **********END PVIF_Version3 format***************** */

/* **********END AdditonalInfo format ********************/

/* **********END Default format************* */

/* **********END DT_DefaultFormat format***************** */

/* **********DT_ExternallyDefined format***************** */
/* ExternallyDefined */

/* **********DbvASN1External format***************** */
/* Title,External file name (string); */
   External file name,"FileName_External";
/* **********END DbvASN1External format***************** */

/* **********DT_ExternallyDefined format***************** */


/* **********END DbvDiagRec format***************** */

/* **********DbvASN1External format***************** */
/* Title,External file name (string); */
   External file name,"FileName_External";
/* **********END DbvASN1External format***************** */
```

DbvUpdateExtendedService

```
/* ********* SingleASN1Type ********* */
/* Title, eASN1Type (string); */
SingleASN1Type format, "AT_UpdateExtendedService";

/* ********* DbvUpdateExtendedService ********* */

/* Title, eUpdateReqRsp (enum); */
```

```
/* Choose between - UROR_Request, UROR_Response; */
eUpdateReqRsp, "UROR_Request";

/* ********* UROR_Request - DbvUpdateRequestPackage ********* */

/* ********* DbvOriginPartToKeep ********* */

/* Title, DbvUpdtAction (enum); */
/* Choose From: UA_RecordInsert, UA_RecordReplace, UA_RecordDelete,
        UA_ElementUpdate, UA_Invalid */

DbvUpdtAction, "UA_RecordInsert";

/* Title, sDatabaseName (DbvInternationalString) */
sDatabaseName, -1, "sDatabaseName test string";

/* Title, OID; */
pcSchema, "1.2.12345.2.1";

/* Title, psElementSetName (DbvInternationalString); */
psElementSetName, -1, "psElementSetName test string";

/* ********* END DbvOriginPartToKeep ********* */

/* ********* DbvSuppliedRecord ********* */

/* Title, NUmber of elements in sequence (integer); */
DbvSuppliedRecord sequence, 1;

/* ********* DbvUpdtRecordId ********* */
/* Title, Completed; */
DbvUpdtRecordId, "COMPLETED";

/* Title, eRecordIdType (enum); */
/* Choose one of: URIT_Number, URIT_String, URIT_Opaque */
eRecordIdType, "URIT_Number";

/* ********* URIT_Number ********* */
/* Title, ulNumber; (integer) */
ulNumber, 1234567;
/* ********* END URIT_Number ********* */

/* ********* URIT_String ********* */
/* Title, psString (DbvInternationalString); */
psString, -1, "Update Extended Service psString test string";
/* ********* END URIT_String ********* */

/* ********* URIT_Opaque ********* */
/* Title, psOpaque (DbvOctetString); */
psOpaque, -1, "psOpaque test string for Update Extended Service";
/* ********* END URIT_Opaque ********* */

/* ********* END DbvUpdtRecordId ********* */

/* ********* DbvUpdtSupplementalId ********* */
/* Title, Completed; */
DbvUpdtSupplementalId, "COMPLETED";
/* Title, eSupplementalIdType (enum); */
/* Choose between: USIT_Time, USIT_Version, USIT_PreviousVersion */
```

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```
eSupplementalIdType, "USIT_Time";

/* ********* USIT_Time ********* */
/* Title, pcTime (string); */
pcTime, "pcTime test string";

/* ********* END USIT_Time ********* */

/* ********* USIT_Version ********* */
/* Title, psVersion (DbvInternationalString); */
psVersion, -1, "psVersion International String type test";
/* ********* END USIT_Version ********* */

/* ********* USIT_PreviousVersion ********* */
/* Title, External filename (string); */
External, "External_FileName";
/* ********* END USIT_PreviousVersion ********* */

/* ********* END DbvUpdtSupplementalId ********* */

/* ********* DbvCorrelationInfo ********* */

/* Title, Completed; */
DbvCorrelationInfo structure, "COMPLETED";

/* Title, psNote (DbvInternationalString); */
psNote, -1, "psNote test string";

/* Title, pulId (string); */
pulId, "999";

/* ********* END DbvCorrelationInfo ********* */

/* ********* DbvASN1External ********* */
/* Title, External filename (string); */
External, "External_FileName";
/* ********* END DbvASN1External ********* */

/* ********* END DbvSuppliedRecord ********* */

/* ********* END DbvUpdateRequestPackage - UROR_Request********* */


/* ********* UROR_Response - DbvUpdateTaskPackage ********* */

/* ********* DbvOriginPartToKeep ********* */

/* Title, DbvUpdtAction (enum); */
/* Choose From: UA_RecordInsert, UA_RecordReplace, UA_RecordDelete,
      UA_ElementUpdate, UA_Invalid */

DbvUpdtAction, "UA_RecordInsert";

/* Title, sDatabaseName (DbvInternationalString) */
sDatabaseName, -1, "sDatabaseName test string";

/* Title, OID; */
pcSchema, "1.2.12345.2.1";

/* Title, psElementSetName (DbvInternationalString); */
```

```
psElementSetName, -1, "psElementSetName test string";

/* ******** End DbvOriginPartToKeep ******* */

/* ******** DbvUpdateTargetPart ********* */
/* Title, eTaskStatus (enum); */
/* Choose From: UTS_Success, UTS_Partial, UTS_Failure, UTS_Invalid */
eTaskStatus, UTS_Success;

/* Title,Number of GlobalDiagnostics (integer); */
   Number of GlobalDiagnostics,1;

/*   N * DbvDiagRec */
/* if N=0 then  structure not completed */

/* **********DbvDiagRec format**************** */

/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */

/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */

/* **********DT_DefaultFormat format**************** */

/* **********DbvDefaultDiagFormat format************* */

/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"1.2.840.10003.4.1";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format *****************/
/* Title,ProtocolVersionInforce (enum),COMPLETED; (PVIF_Version2,PVIF_Version3)
*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */

/* Now choose either PVIF_Version2 or PVIF_Version3 */

/* **********PVIF_Version2 format**************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format**************** */

/* **********PVIF_Version3 format**************** */
/* Title,V3 (Inter); */
   V3,-1,"V3 string";

/* **********END PVIF_Version3 format**************** */

/* **********END AdditonalInfo format *****************/

/* **********END DbvDefaultDiagFormat format************* */

/* **********END DT_DefaultFormat format**************** */

/* **********DT_ExternallyDefined format**************** */
```

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```
/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   External file name,"FileName_External";
/* **********END DbvASN1External format**************** */

/* ********** END DT_ExternallyDefined format**************** */

/* **********END DbvDiagRec format**************** */

/* Title,Number of TaskPackageRecord records (integer); */
   Number of TaskPackageRecord,1;

/*   N * DbvTaskPackageRecord */
/* if N=0 then  structure not completed */

/* ********* DbvTaskPackageRecord ********* */

/* ********* DbvUpdtRecordOrDiag ********* */

/* Title, Completed; */
/* If Completed is set to "COMPLETED" structure contents must follow */
DbvUpdtRecordOrDiag, "COMPLETED";

/* Title, eUpdtRecordOrDiag (enum); */
/* Choose one of : URDT_Record, URDT_Diagnostic */
eUpdtRecordOrDiag, "URDT_Diagnostic";

/* ********* URDT_Record ********* */
/* title, External File Name (string); */
   Record External, "External_Filename";

/* ********* End URDT_Record ********* */

/* ********* URDT_Diagnostic ********* */

/* **********DbvDiagRec format**************** */

/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */

/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */

/* **********DT_DefaultFormat format**************** */

/* **********Default format************* */

/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"1.2.840.10003.4.1";
/* Title,Condition (integer); */
   Condition,1;

/* **********AdditonalInfo format *******************/
/* Title,ProtocolVersionInforce (enum),completed; (PVIF_Version2,PVIF_Version3)
*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */

/* Now choose either PVIF_Version2 or PVIF_Version3 */
```

```
/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format***************** */

/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
   V3,-1,"V3 string";
/* **********END PVIF_Version3 format***************** */

/* **********END AdditonalInfo format ******************/

/* **********END Default format************* */

/* **********END DT_DefaultFormat format**************** */

/* **********DT_ExternallyDefined format**************** */
/* ExternallyDefined */

/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   ExternalllyDefined_External file name,"Authentication_External";
/* **********END DbvASN1External format**************** */

/* **********END DT_ExternallyDefined format**************** */

/* **********END DbvDiagRec format**************** */

/* ********* END URDT_Diagnostic ********* */

/* ********* END DbvUpdtRecordOrDiag ********* */


/* ********* DbvCorrelationInfo ********* */

/* Title, Completed; */
DbvCorrelationInfo structure, "COMPLETED";

/* Title, psNote (DbvInternationalString); */
psNote, -1, "psNote test string";

/* Title, pulId (string); */
pulId, "999";

/* ********* END DbvCorrelationInfo ********* */

/* Title, eUpdtRecordStatus; */
/* Choose one of: URST_Success, URST_Queued, URST_InProcess, URST_Failure,
     URST_Invalid */
eUpdtRecordStatus, "URST_Success";

/* ********* END DbvTaskPackageRecord ********* */

/* ******* END DbvUpdateTargetPart ********* */

/* ********* END DbvUpdateTaskPackage - UROR_Response ********* */

/* ********* End DbvUpdateExtendedService ********* */
```

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Examples:

Octet Aligned:

```
"EVT_OctetAligned", "1.2.840.10003.5.10";
EVT_OctetAligned format, 9, "hello mum";
```

Arbitrary:

```
/* "EVT_Arbitrary", "1.2.840.10003.5.10";
EVT_Arbitrary format, -1, "This is my ANSI_USMARC Arbitrary external"; */
```

Unstructured Text:

```
"EVT_SingleASN1Type", "1.2.840.10003.5.101";
SingleASN1Type format, "AT_UnstructuredText";
SUTRS format, -1, "This is my test SUTRS string";
```

Opac Record:

```
"EVT_SingleASN1Type","1.2.840.10003.5.102";
SingleASN1Type Format, "AT_OpacRecord";
BibliographicRecord (external), "NULL"; /* Note: Put the name of a script file
                                         holding an external here if you wish */
DbvHoldingsRecord structures to read, 1;
/* Start of DbvHoldingsRecord */
Union choice, "HRT_HoldingsAndCirc";

DbvHoldingsAndCircData DbvInternational Strings,
     -1,"TypeOfRecord",
     -1,"EncodingLevel",
     -1,"Format",
     -1,"ReceiptAcqStatus",
     -1,"GeneralRetention",
     -1,"Completeness",
     -1,"DateOfReport",
     -1,"NucCode",
     -1,"LocalLocation",
     -1,"ShelvingLocation",
     -1,"CallNumber",
     -1,"ShelvingDate",
     -1,"CopyNumber",
     -1,"PublicNote",
     -1,"ReproductionNote",
     -1,"TermsUseRepro",
     -1,"EnumAndChron";

Volume Records to Read, 2;
Volume format 1,
     -1,"Enumeration 111",
     -1,"Chronology 111",
     -1,"EnumAndChron 111";

Volume format 2,
     -1,"Enumeration 222",
     -1,"Chronology 222",
```

```
      -1,"EnumAndChron 222";

DbvCircRecords to read, 1;

DbvCircRecord structure,
      "DBV_TRUE",
      -1,"AvailabilityDate",
      -1,"AvailableThru",
      -1,"Restrictions",
      -1,"IemId",
      "DBV_TRUE",
      "DBV_FALSE",
      -1,"EnumAndChron",
      -1,"Midspine",
      -1,"TemporaryLocation";
```

Summary:

```
/* SummaryRecord external example */
"EVT_SingleASN1Type","1.2.840.10003.5.103";
SingleASN1TypeFormat, "AT_SummaryRecord";

/* Start of Summary record */
Summary Record,
      -1,"sTitle string",
        -1, "psAuthor",
        -1, "psCallNumber",
        -1, "psRecordType",
        -1, "psBibliographicLevel";
/* DbvFormatSpec list */

Records to read, 4;

DbvFormatSpec 1,
      -1,"sTitle Number 1",
      "11111",
      "11111";
DbvFormatSpec 2,
      -1,"sTitle Number 2",
      "22222",
      "22222";
DbvFormatSpec 3,
      -1,"sTitle Number 3",
      "33333",
      "33333";
DbvFormatSpec 4,
      -1,"sTitle Number 4",
      "44444",
      "44444";

DbvSummaryrecord continued,
      -1,"psPublicationPlace",
        -1,"psPublicationDate",
        -1,"psTargetSystemKey",
        -1,"psSatisfyingElement",
        "999",
        -1,"psDocumentId",
        -1,"psAbstract";

Number of DbvOtherInformation records, 1;
```

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```
OtherInformation, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.20", 101084;
DbvInformationType, "IT_BinaryInfo";
BinaryInfo, -1, "This a binary info type sting thing. It is meant to test the
correct operation of the BinaryInfo OctetString structure etc ...";
```

Resource Report 1:

```
/* ResourceReportRequest1 external example */
"EVT_SingleASN1Type","1.2.840.10003.7.1";
SingleASN1Type Format, "AT_ResourceReport1";

/* ********* DbvResourceReport1 Record ********* */
/* Title, Number of records to read (integer); */
Numer of DbvEstimate1 records to read, 3;

/* Title, DbvEstimteType (string), ulValue (integer), pulCurrenyCode
        (string); */
DbvEstimateType, "ET_CurrentSearchRecords", 99, "9";
DbvEstimateType, "ET_FinalOpTimeElapsed", 1275369, "9";
DbvEstimateType, "ET_CurrentConnectAssocCost", 1876756432, "9";

/* Title, sMessage (DbvInternationalString) */
DbvResourceReport1 continued,
        -1,"sMessage DbvInternationalString";
```

Resource Report 2:

```
/* ********* EVT_SingleASN1Type ********* */
/* eValueType (string), pcObjectIdentifier (string); */
"EVT_SingleASN1Type", "1.0.10163.7.2";


/* ********* SingleASN1Type ********* */
/* Title, eASN1Type (string); */
SingleASN1Type format, "AT_ResourceReport2";

/* ********* DbvResourceReport2 Record ********* */
/* Title, Number of records to read (integer); */
Numer of DbvEstimate2 records to read, 1;

/* ********* START DbvEstimate2 Format ********* */
/* ********* START DbvStringOrNumberic ********* */
/* Title, DbvStringOrNumericType (string); */
DbvStringOrNumericType, "SNT_String";
/* Choose between String or Numeric type */
/* String: Title, DbvInternationString; */
psString format, -1, "StringType";

/* Numeric: integer;
ulNumeric, 78654; */
/* ******** END DbvStringOrNumeric ********* */

/* **********DbvIntUnit format********** */
/* Title,Value (integer); */
   Value,1;
/* **********DbvUnit format*********** */
/* Title Unit ,COMPLETED; */
   Unit,"COMPLETED";
```

```
/* Title,UnitSystem (Inter) */
   UnitSystem, -1,"a Unitsystem string";

/* Title,UnitType,COMPLETED; */
   UnitType,"COMPLETED";
/* **********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */

/* *********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";

/* *********END SNT_String****** */

/* *********SNT_Numeric********** */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* *********END SNT_Numeric****** */

/* *********END DbvStringOrNumeric format*************** */

/* Title,Unit,COMPLETED; */
   Unit,"COMPLETED";
/* **********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */

/* *********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";

/* *********END SNT_String****** */

/* *********SNT_Numeric********** */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* *********END SNT_Numeric****** */
/* *********END DbvStringOrNumeric format***************/

/* Title,ScaleFactor (integer); */
   ScaleFactor,"1";
/* *********END DbvUnit format************** */
/* *********END DbvIntUnit format************** */

/* ********* END DbvEstimate2 Format ********* */

/* Title, sMessage (DbvInternationalString) */
DbvResourceReport2 continued,
    -1,"ResourceReport-2-Message";
```

EsTaskPackage:

```
"EVT_SingleASN1Type","1.2.840.10003.5.106";
```

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```
/* EsTaskPackage External format */

/* ********* SingleASN1Type ********* */
/* Title, eASN1Type (string); */
SingleASN1Type format, "AT_EsTaskPackage";

/* ********* DbvEsTaskPackage ********* */

/* Title, pcPackageType (Object Identifier); */
pcPackageType, "1.2.12345.1.1";

/* Title, psPackageName (DbvInternationalString); */
PackageName, -1, "PackageName International string Example";

/* Title, psUserId (DbvInternationalString); */
UserId, -1, "UserId International string Example";

/* Title,DbvIntUnit,COMPLETED; */
   DbvIntUnit,"COMPLETED";

/* **********DbvIntUnit format********** */

/* Title,Value (integer); */
   Value,1;

/* **********DbvUnit format************ */

/* Title Unit ,COMPLETED; */
   Unit,"COMPLETED";

/* Title,UnitSystem (Inter) */
   UnitSystem, -1,"a Unitsystem string";

/* Title,UnitType,COMPLETED; */
   UnitType,"COMPLETED";
/* **********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";

/* **********END SNT_String****** */

/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format************** */

/* Title,Completed; */
   Unit, "COMPLETED";
/* **********DbvStringOrNumeric format************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_Numeric";
/* Now choose between SNT_String or SNT_Numeric */
```

```
/* **********SNT_String********** */
/* Title, String (Inter); */
/*   SNT_String,-1,"a SNT_String";*/

/* **********END SNT_String****** */

/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;

/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format************** */


/* Title,ScaleFactor (integer); */
   ScaleFactor,"1";

/* **********END DbvUnit format************** */

/* **********END DbvIntUnit format************** */

/* Title,Number of Permissions (integer); */
   Number of Permissions,2;

/* N * DbvPermissions */
/* if N=0 then structure not completed */

/* **********DbvPermissions format************** */

/* Title,UserId (Inter); */
   UserId,-1,"UserId string";

/* Title,Number of AllowableFunctions (integer); */
   Number of AllowableFunctions,2;

/* N * DbvPermAllowableFunctions */

/* Title, Completed, DbvPermAllowableFunctions (enum);
        (PAF_Delete,PAF_ModifyContents,PAF_ModifyPermisssions,
         PAF_Present,PAF_Invoke) */
   AllowableFunctions1,"COMPLETED", "PAF_Delete";

/* Title, Completed, DbvPermAllowableFunctions (enum);
        (PAF_Delete,PAF_ModifyContents,PAF_ModifyPermisssions,
         PAF_Present,PAF_Invoke) */
   AllowableFunctions2, "COMPLETED", "PAF_ModifyContents";

/* **********END DbvPermissions format************** */

/* **********DbvPermissions format************** */

/* Title,UserId (Inter); */
   UserId,-1,"UserId string";

/* Title,Number of AllowableFunctions (integer); */
   Number of AllowableFunctions,1;

/* N * DbvPermAllowableFunctions */
```

```
/* Title,DbvPermAllowableFunctions (enum);
        (PAF_Delete,PAF_ModifyContents,PAF_ModifyPermisssions,
         PAF_Present,PAF_Invoke) */
   AllowableFunctions1, "COMPLETED", "PAF_Invoke";

/* **********END DbvPermissions format************** */

/* Title, Description (DbvInternationalString); */
Description, -1, "psDescription test string";

/* Title, TargetReference (DbvOctetString); */
TargetReference, -1, "psTargetReference";

/* Title, CreationDateTime (string); (Note: specify "NULL" if not required) */
CreationDateTime, "pcCreationDateTime test string";

/* Title, eExtServicesTaskStatus; */
/* Choose from: ESTS_Pending, ESTS_Active , ESTS_Complete, ESTS_Aborted,
      ESTS_Invalid */
eExtServicesTaskStatus, "ESTS_Pending";

/* Title,Number of PackageDiagnostics (integer); */
   Number of PackageDiagnostics,1;

/*   N * DbvDiagRec */
/* if N=0 then  structure not completed */

/* **********DbvDiagRec format***************** */

/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */

/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */

/* **********DT_DefaultFormat format***************** */

/* **********Default format************* */

/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"1.2.840.10003.4.1";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format ******************/
/* Title,ProtocolVersionInforce (enum),COMPLETED; (PVIF_Version2,PVIF_Version3)
*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */

/* Now choose either PVIF_Version2 or PVIF_Version3 */

/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format***************** */

/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
/*   V3,-1,"V3 string"; */
```

```
/* **********END PVIF_Version3 format***************** */

/* **********END AdditonalInfo format ********************/

/* **********END Default format************* */

/* **********END DT_DefaultFormat format**************** */

/* **********DT_ExternallyDefined format**************** */
/* ExternallyDefined */

/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
/*   External file name,"NULL"; */
/* **********END DbvASN1External format**************** */

/* **********DT_ExternallyDefined format**************** */

/* **********END DbvDiagRec format**************** */

/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   External file name,"ResRep2_External";
/* **********END DbvASN1External format**************** */

/* ********* END DbvEsTaskPackage ********* */
```

UpdateExtended Services:

```
"EVT_SingleASN1Type","1.2.3.4.5.6";

SingleASN1Type format, "AT_UpdateExtendedService";

/* Title, eUpdateReqRsp (enum); */
eUpdateReqRsp, "UROR_Request";
/* ********* UROR_Request - DbvUpdateRequestPackage ********* */

/* ********* DbvOriginPartToKeep ********* */
DbvUpdtAction, "UA_RecordInsert";
sDatabaseName, -1, "sDatabaseName test string";
pcSchema, "1.2.12345.2.1";
psElementSetName, -1, "psElementSetName test string";
/* ********* END DbvOriginPartToKeep ********* */

/* ********* DbvSuppliedRecord ********* */

/* Title, NUmber of elements in sequence (integer); */
DbvSuppliedRecord sequence, 1;

/* ********* DbvUpdtRecordId ********* */
/* Title, Completed; */
DbvUpdtRecordId, "COMPLETED";
eRecordIdType, "URIT_Opaque";
/* ********* URIT_Number ********* */
/* Title, ulNumber; (integer) */
/* ulNumber, 1234567;*/
/* ********* END URIT_Number ********* */

/* ********* URIT_String ********* */
```

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```
/* Title, psString (DbvInternationalString); */
/* psString, -1, "Update Extended Service psString test string";*/
/* ********* END URIT_String ********* */
/* ********* URIT_Opaque ********* */
/* Title, psOpaque (DbvOctetString); */
psOpaque, -1, "psOpaque test string for Update Extended Service";
/* ********* END URIT_Opaque ********* */


/* ********* END DbvUpdtRecordId ********* */

/** ********* DbvUpdtSupplementalId ********* */
DbvUpdtSupplementalId, "COMPLETED";
/* Title, eSupplementalIdType (enum); */
eSupplementalIdType, "USIT_Time";

/* ********* USIT_Time ********* */
/* Title, pcTime (string); */
pcTime, "pcTime test string";
/* ********* END USIT_Time ********* */

/* ********* USIT_Version ********* */
/* Title, psVersion (DbvInternationalString); */
/* psVersion, -1, "psVersion International String type test"; */
/* ********* END USIT_Version ********* */

/* ********* USIT_PreviousVersion ********* */
/* Title, External filename (string); */
/* External, "UserInformationField_External";  */
/* ********* END USIT_PreviousVersion ********* */

/* ********* END DbvUpdtSupplementalId ********* */

/* ********* DbvCorrelationInfo ********* */
DbvCorrelationInfo structure, "COMPLETED";
psNote, -1, "psNote test string";
pulId, "999";
/* ********* END DbvCorrelationInfo ********* */
/* ********* DbvASN1External ********* */
/* Title, External filename (string); */
External, "UserInformationField_External";
/* ********* END DbvASN1External ********* */

/* ********* END DbvSuppliedRecord ********* */

/* ********* END DbvUpdateRequestPackage - UROR_Request********* */
```

3.2 DbvOtherInformation

Script Format:

```
/* Title, Number of records to read; */
Number of DbvOtherInformation records, 1;


/* Title, Completed (string); */
/* Set Completed to "NULL" if you don't want specify this structure */
OtherInformation format, "COMPLETED";

/* DbvInfoCategory. Title, Completed, OID (string), int; */
/* If Completed is NULL, the rest of the InfoCategory record will be ignored */
InfoCategory, "COMPLETED", "1.2.3.4.5", 999;
/* InfoCategory, "NULL"; Don't fill out optional DbvInfoCategory structure*/

/* Title, InformationType; */
DbvInformationType, "IT_CharacterInfo";

/* Now choose between CharacterInfo, BinaryInfo, ExternallyDefinedInfom,
     ObjectIdentifier */

/* ********* CharacterInfo ********* */
/* Title, DbvInternationalString; */
CharacterInfo type, -1, "This is a character info type string";

/* ********* END CharacterInfo ********* */

/* ********* BinaryInfo ********* */
/* Title, DbvOctetString; */
Octetstring, -1, "This is a binary info type sting thing";

/* ********* END OctetString ********* */

/* ********* ExternallyDefinedInfo ********* */
/* Title, External filename; */
External file name, "SUTRS_external";

/* ********* END ExternallyDefinedInfo ********* */

/* ********* Object Identifier ********* */
/* Title, DbvObjectIdentifier (string); */
OID, "1.2.3.4.5";

/* ********* END Object Identifier ********* */
```

Examples:

```
Number of DbvOtherInformation Records, 3;

OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.0.2.5.1", 576;
DbvInformationType, "IT_BinaryInfo";
CharacterInfo type, -1, "This a binary info type string thing. It is meant to
test the correct operation of the BinaryInfo OctetString structure etc ...";
```

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```
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.0.2.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This a CHARACTER info type string thing. It is meant to
test the correct operation of the CharacterInfo International String structure
etc ...";

OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "NULL", 576;
DbvInformationType, "IT_ObjectIdentifier";
test OID, "1.3.14001.15";

/* End of DbvOtherInformation */
```

4 ORIGIN SCRIPT FILE FORMATS

4.1 Origin Association Handling

4.1.1 DbvAssociateRequest()

Read From: assocreq_(in)valid

Result To: assocreq_(in)valid_result

Notes:

For a valid DbvAssociateRequest() by name only, then a valid names file must exist in the origin directory. See document **D-022 Software Internal Specification Section 12 Specifying Targets by Name** for more details.

Script Format:
```
/* Format for AssociateRequest function */

/* 1, DbvAssocId; (output parameter) */
1, "OUT_PARAM";

/* 2, DbvSecs; (secs-string) */
2, "CALL_AYNCHRONOUS";

/* 3, DbvTarget.eTargetNameOrAddress (string),
For Name Format:
    DbvTarget.uNameOrAddress.pcTargetName (string);
For TCP Format:
    DbvTarget.uNameOrAddress.psTargetInformation->
        eOsiOrInternetAddress (string - "Internet_Address"),
    DbvTarget.uNameOrAddress.psTargetInformation->uOsiOrInternetAddress.
        psInternetAddress->pcHostAddress (string),
    ....->ulPortNumber (integer);
For OSI Format:
    DbvTarget.uNameOrAddress.psTargetInformation->
        eOsiOrInternetAddress (string - "Osi_Address"),
    DbvTarget.uNameOrAddress.psTargetInformation->uOsiOrInternetAddress.
        psOsiAddress->pcPsel (string),
        ....->pcSsel (string),
        ....->pcTsel (string),
        ....->pcNsap (string);
NOTE: The rest of the fields are completed automatically */

/* e.g.    "Target_Name", "SILServer";
    "Target_Address", "Internet_Address","sun001.sil.com", 2010;
    "Target_Address", "Osi_Address","Psel","Ssel","Tsel","Nsap"; */
3, "Target_Address", "Internet_Address","sun001.sil.com", 2010;

/* 4, DbvAssociateState; (output parameter) */
```

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```
4, "OUT_PARAM";
/* 5, DbvAssociateResult; (output parameter) */
5, "OUT_PARAM";
/* 6, SIError; (output parameter) */
6, "OUT_PARAM";

/* The End */
```

Examples:

TCP Association:

```
1, "OUT_PARAM";
2, "CALL_BLOCKING";
3, "Target_Address", "Internet_Address","sun001.sil.com", 2010;
4, "OUT_PARAM";
5, "OUT_PARAM";
6, "OUT_PARAM";
```

OSI Association:

```
1, "OUT_PARAM";
2, "CALL_BLOCKING";
3, "Target_Address", "Osi_Address", "Psel","Ssel","Tsel","Nsap";
4, "OUT_PARAM";
5, "OUT_PARAM";
6, "OUT_PARAM";
```

Specifying by Name:

```
1, "OUT_PARAM";
2, "CALL_BLOCKING";
3, "Target_Name", "DDBServer";
4, "OUT_PARAM";
5, "OUT_PARAM";
6, "OUT_PARAM";
```

4.1.2 DbvReleaseRequest()

Read From: relreq_(in)valid

Result To: relreq_(in)valid_response

Notes:

Script Format:

```
/* Format for ReleaseRequest() functions */

/* 1, DbvAssocId (Integer); */
1, 1;

/* 2, DbvSecs (secs string); */
2, "5";

/* 3, DbvReleaseState; (output parameter) */
3, "OUT_PARAM";

/* 4, SIError; (output parameter) */
4, "OUT_PARAM";

/* The End */
```

Examples:

Two Associations, CALL_BLOCKING and CALL_ASYNCHRONOUS

```
1, 1;
2, "CALL_BLOCKING";
3, "OUT_PARAM";
4, "OUT_PARAM";

1, 2;
2, "CALL_ASYNCHRONOUS";
3, "OUT_PARAM";
4, "OUT_PARAM";
```

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4.1.3 DbvAbortRequest()

Read From: abortreq_(in)valid

Result To: abortreq_(in)valid

Notes:

Script Format:
```
/* 1, DbvAssocId; (integer) */
1, 1;
/* 2, SIError; (output parameter) */
2, "OUT_PARAM";
```

Examples:
```
1, 1;
2, "OUT_PARAM";
```

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4.1.4 DbvConfirmAssociateRequest()

Read From: confasreq_(in)valid

Result To: confasreq_(in)valid_result

Script Format:
```
/* 1, DbvAssocId; (integer) */
1, 1;
/* 2, DbvSecs; (secs string) */
2, "CALL_BLOCKING";
/* 3, DbvAssociateState; (output parameter) */
3, "OUT_PARAM";
/* 4, DbvAssociateResult; (output parameter) */
4, "OUT_PARAM";
/* 5, SIError; (output parameter) */
4, "OUT_PARAM";
```

Examples:

1, 1;

2, "CALL_BLOCKING";

3, "OUT_PARAM";

4, "OUT_PARAM";

5, "OUT_PARAM";

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4.1.5 DbvConfirmReleaseRequest()

Read From: confrereq_(in)valid

Result To: confrereq_(in)valid_result

Script Format:

```
/* 1, DbvAssocId; (integer) */
1, 1;
/* 2, DbvSecs; (secs string) */
2, "8";
/* 3, DbvReleaseState; (output parameter) */
3, "OUT_PARAM";
/* 4, SIError; (output parameter) */
4, "OUT_PARAM";
```

Examples:

```
1, 1;
2, "CALL_ASYNCHRONOUS";
3, "OUT_PARAM";
4, "OUT_PARAM;
```

4.2 Origin SR-/Z39.50 Functions

4.2.1 DbvInitializeRequest()

Read From: initreq_(in)valid

Result To: initreq_(in)valid_result

Notes:

At the target, result is stored as initreq_valid_received.pid.

Script Format:

```
/* 1, DbvAssocId; (integer) */
1, 1;

/* DbvInitializeReq structure detailed below */
/* 2, ReferenceId (octet), */
2, "-1", "InitReq reference Id",
/* ProtocolVersion (string), */
     "1100000000000000",
/* Options (string), */
     "1100000000000000",
/* PreferredMessageSize, (integer) */
     5200,
/* MaximumMessageSize; (integer) */
     5200;

/* Authentication format follows */
/* Title, DbvAuthenticationType (string),*/

/* Choose between the four formats */
/* AT_Open:
     psOpen (Inter); */
/* AT_IdPassword:
     psGroupid (Inter), psUserId (Inter), psPassword (Inter); */
/* AT_Anonymous:
     (Nothing! Finish record with ';') */
/* AT_Other:
     External file name (string); */
/* Examples:
     Authentication, "AT_Open", -1, "Open string";
     Authentication, "AT_IdPassword", -1, "Group Id String", -1, "UserId
String", -1, "Password String";
     Authentication, "AT_Anonymous";
     Authentication, "AT_Other", "AuthenticationExternal"; */
/* END of Authentication Format */
Authentication, "AT_Anonymous";

/* ImplementationId (Inter), */
     -1, "ImplementationId string",
/* ImplementationName (Inter), */
     -1, "ImplementationName string",
/* ImplementationVersion (Inter), */
     -1, "ImplementationVersion string";
```

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```
/* UserInformationField Format */
/* Title, External file name (string); */
UserInformationField, "UserInformationField_External";
/* End of UserInformationField Format */
```

/* Other Information: See OtherInformation format explanation and place here*/

```
/* 3, SIError; (output parameter) */
3, "OUT_PARAM";
```

Examples:

```
/* AssocId (integer ) */
1, 1;
2, 21, "InitReq reference Id", "1100000000000000", "1100000000000000", 5200,
5200;

/* Authentication, "AT_Open", 11, "Open string";*/
/* Authentication, "AT_IdPassword", 15, "Group Id String", 13, "UserId string",
15, "Password string"; */
/* Authentication,"AT_Anonymous";*/
/* Authentication, "AT_Other", "Authentication_External"; */

Authentication, "AT_Other", "Summary_ExternalExample";

6, "ImpId", 8, "ImpName", 7, "ImpVer";

UserInformationField,"UserInformationField_External";
/* UserInformationField,"ResourceReport1_ExternalExample";*/

/* OtherInfo */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.3.4.5", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";

3, "OUT_PARAM";
```

DBV-OSI II

4.2.2 DbvSearchRequest()

Read From: srchreq_(in)valid

Result To: srchreq_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvSearchReq structure detailed below */
/* 2,ReferenceId (octet), */
   2,-1,"SearchReq reference Id",
/* SmallSetUpperBound (integer), */
   5200,
/* LargeSetLowerBound (integer), */
   5200,
/* MediumSetPresentNumber (integer), */
   5200,
/* ReplaceIndicator (bool-string); */
   "DBV_TRUE";
/* ResultSetName (Inter); */
   -1, "ResultSetName string";
/* Title, Number of DbvInternationalStrings for DatabaseName; */
   Number of DbvInternationalString=,2;
/* N * DatabaseName (Inter); */
   -1, "DatabaseName example string1";
   -1, "DatabaseName example string2";
/* ElementSetNames format */
/* SmallSetElementNames (Element); */
/* Title, Completed (string); */
/* SetCompleted to "NULL" if you don't want to specify this structure */
   SmallSetElementNames format, "COMPLETED";
/* Title, ElementSetType; */
   DbvElementSetType, "EST_Generic";
/* Now choose between EST_Generic or  EST_DatabaseSpecific */
/* **********EST_Generic********** */
/* Title, DbvInternationalString; */
   EST_Generic type, -1, "This is a Generic Element Set Type string";
/* **********END EST_Generic****** */
/* **********EST_DatabaseSpecific********** */
/* Title, Number of ElementSetsDbSpecific */
   Number of ElementSetsDbSpecific, 1;
/* N * ElementSetsDbSpecific*/
/* if N=0 then structure not completed */
/* Title, DatabaseName (Inter); */
   DatabaseName, -1, "A Database Name string";
/* Title, DatabaseName (Inter); */
   ElementSetName, -1, "A ElementSet Name string";
/* **********END EST_DatabaseSpecific****** */
/* **********END ElementSetNames Format****** */
/* MediumSetElementNames (Element); */
/* Title, Completed (string); */
/* SetCompleted to "NULL" if you don't want to specify this structure */
   MediumSetElementNames format, "COMPLETED";
/* Title, ElementSetType; */
   DbvElementSetType, "EST_DatabaseSpecific";
/* Now choose between EST_Generic or  EST_DatabaseSpecific */
/* **********EST_Generic********** */
/* Title, DbvInternationalString; */
```

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```
   EST_Generic type, -1, "This is a Generic Element Set Type string";
/* **********END EST_Generic****** */
/* **********EST_DatabaseSpecific********** */
/* Title, Number of ElementSetsDbSpecific */
   Number of ElementSetsDbSpecific, 2;
/* N * ElementSetsDbSpecific*/
/* if N=0 then structure not completed */
/* Title, DatabaseName (Inter); */
   DatabaseName, -1, "A Database Name string1";
/* Title, DatabaseName (Inter); */
   ElementSetName, -1, "A ElementSet Name string1";
/* Title, DatabaseName (Inter); */
   DatabaseName, -1, "A Database Name string2";
/* Title, DatabaseName (Inter); */
   ElementSetName, -1, "A ElementSet Name string2";
/* **********END EST_DatabaseSpecific****** */
/* **********END ElementSetNames Format****** */
/* Title, PreferredRecordSyntax (string); */
   PreferredRecordSyntax, "1.0.10163.5.1";
/* Query Format */
/* Title, Completed (string); */
/* SetCompleted to "NULL" if you don't want to specify this structure */
   Query format, "COMPLETED";
/* Title, QueryType; */
   DbvQueryType, "QT_Iso8777";
/* Now choose between QT_Private,QT_Rpn,QT_Iso8777,QT_Z3958,
                                    QT_Erpn,QT_NaturalLanguage */
/* **********PrivateQuery********** */
/* Title, DbvOctetString; */
   PrivateQuery type, -1, "This is a PrivateQuery Type string";
/* **********END PrivateQuery****** */
/* **********RpnQuery********** */
/* Title, DbvRpnQuery,AttributeSetId (char); */
   DbvRpnQuery AttributeSetId= , "1.2.840.10003.3.1;
/* RpnStructure format */
/*  left to fill in later */
/* **********END RpnQuery****** */
/* **********Iso8777Query********** */
/* Title, DbvOctetString; */
   Iso8777Query type, -1, "This is a Iso8777Query Type string";
/* **********END Iso8777Query****** */
/* **********Z3958Query********** */
/* Title, DbvOctetString; */
   Z3958Query type, -1, "This is a Z3958Query Type string";
/* **********END Z3958Query****** */
/* **********ErpnQuery********** */
/* Title, ErpnQuery,AttributeSetId (char); */
   ErpnQuery AttributeSetId= , "1.2.840.10003.3.1";
/* RpnStructure format */
/*   left to fill in later */
/* **********END ErpnQuery****** */
/* **********NaturalLanguageQuery********** */
/* Title, DbvOctetString; */
   NaturalLanguageQuery type,-1, "This is a NaturalLanguageQuery Type string";
/* **********END NaturalLanguageQuery****** */
/*Title,AdditionalSearchInfo format */
   Additional Search Information, "COMPLETED";
   InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
   DbvInformationType, "IT_BinaryInfo";
   Octetstring, -1, "This is a binary info type string thing";
```

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```
/*Title,OtherInformation format */
  OtherInformation format, "COMPLETED";
  InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
  DbvInformationType, "IT_BinaryInfo";
  Octetstring, -1, "This is a binary info type string thing";
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM"
```

Examples:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvSearchReq structure detailed below */
/* 2,ReferenceId (octet), */
   2,-1,"SearchReq reference Id",
/* SmallSetUpperBound (integer), */
   5200,
/* LargeSetLowerBound (integer), */
   5200,
/* MediumSetPresentNumber (integer), */
   5200,
/* ReplaceIndicator (bool-string); */
   "DBV_TRUE";

/* ResultSetName (Inter); */
   -1, "ResultSetName string";
/* Title, Number of DbvInternationalStrings for DatabaseName; */
   Number of DbvInternationalString=,2;
/* N * DatabaseName (Inter); */
   -1, "DatabaseName example string1";
   -1, "DatabaseName example string2";

/* ElementSetNames format */

/* SmallSetElementNames (Element); */
/* Title, Completed (string); */
/* SetCompleted to "NULL" if you don't want to specify this structure */
   SmallSetElementNames format, "NULL";

/* Title, ElementSetType; */
/*   DbvElementSetType, "EST_Generic";*/

/* Now choose between EST_Generic or  EST_DatabaseSpecific */

/* *********EST_Generic********** */
/* Title, DbvInternationalString; */
/*   EST_Generic type, -1, "This is a Generic Element Set Type string";*/

/* **********END EST_Generic****** */

/* **********EST_DatabaseSpecific********** */

/* Title, Number of ElementSetsDbSpecific */
/*   Number of ElementSetsDbSpecific, 1; */

/* N * ElementSetsDbSpecific*/
/* if N=0 then structure not completed */

/* Title, DatabaseName (Inter); */
```

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```
/*   DatabaseName, -1, "A Database Name string"; */
/* Title, DatabaseName (Inter); */
/*  ElementSetName, -1, "A ElementSet Name string";*/

/* **********END EST_DatabaseSpecific****** */

/* **********END ElementSetNames Format****** */


/* MediumSetElementNames (Element); */
/* Title, Completed (string); */
/* SetCompleted to "NULL" if you don't want to specify this structure */
   MediumSetElementNames format, "COMPLETED";

/* Title, ElementSetType; */
   DbvElementSetType, "EST_DatabaseSpecific";

/* Now choose between EST_Generic or  EST_DatabaseSpecific */

/* **********EST_Generic********** */
/* Title, DbvInternationalString; */
/*   EST_Generic type, -1, "This is a Generic Element Set Type string";*/

/* **********END EST_Generic****** */

/* **********EST_DatabaseSpecific********** */
/* Title, Number of ElementSetsDbSpecific */
   Number of ElementSetsDbSpecific, 2;

/* N * ElementSetsDbSpecific*/
/* if N=0 then structure not completed */

/* Title, DatabaseName (Inter); */
   DatabaseName, -1, "A Database Name string1";
/* Title, DatabaseName (Inter); */
   ElementSetName, -1, "A ElementSet Name string1";
/* Title, DatabaseName (Inter); */
   DatabaseName, -1, "A Database Name string2";
/* Title, DatabaseName (Inter); */
   ElementSetName, -1, "A ElementSet Name string2";


/* **********END EST_DatabaseSpecific****** */

/* **********END ElementSetNames Format****** */

/* Title, PreferredRecordSyntax (string); */
   PreferredRecordSyntax, "1.0.10163.5.1";

/* Query Format */
/* Title, Completed (string); */
/* SetCompleted to "NULL" if you don't want to specify this structure */
   Query format, "COMPLETED";



/* Title, QueryType; */
   DbvQueryType, "QT_Iso8777";

/* Now choose between QT_Private,QT_Rpn,QT_Iso8777,QT_Z3958,
                                QT_Erpn,QT_NaturalLanguage */
```

```
/* **********PrivateQuery********** */
/* Title, DbvOctetString; */
/*   PrivateQuery type, -1, "This is a PrivateQuery Type string";*/

/* **********END PrivateQuery****** */

/* **********RpnQuery********** */
/* Title, DbvRpnQuery,AttributeSetId (char); */
/*  DbvRpnQuery AttributeSetId= , "1.2.840.10003.3.1;*/
/* RpnStructure format */

/*  left to fill in later */

/* **********END RpnQuery****** */

/* **********Iso8777Query********** */
/* Title, DbvOctetString; */
   Iso8777Query type, -1, "This is a Iso8777Query Type string";

/* **********END Iso8777Query****** */

/* **********Z3958Query********** */
/* Title, DbvOctetString; */
/*   Z3958Query type, -1, "This is a Z3958Query Type string";*/

/* **********END Z3958Query****** */

/* **********ErpnQuery********** */
/* Title, ErpnQuery,AttributeSetId (char); */
/*   ErpnQuery AttributeSetId= , "1.2.840.10003.3.1";*/
/* RpnStructure format */

/*  left to fill in later */

/* **********END ErpnQuery****** */

/* **********NaturalLanguageQuery********** */
/* Title, DbvOctetString; */
/*   NaturalLanguageQuery type,*/
/*   -1, "This is a NaturalLanguageQuery Type string";*/

/* **********END NaturalLanguageQuery****** */

/*Title,AdditionalSearchInfo format */
Additional Search Information, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
DbvInformationType, "IT_BinaryInfo";
Octetstring, -1, "This is a binary info type string thing";

/*Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
DbvInformationType, "IT_BinaryInfo";
Octetstring, -1, "This is a binary info type string thing";


/* 3, SIError; (output parameter) */
   3, "OUT_PARAM"
```

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4.2.3 DbvPresentRequest()

Read From: presreq_(in)valid

Result To: presreq_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvPresentReq structure detailed below */
/* 2,ReferenceId (octet), */
   2,-1,"PresentReq reference Id",
/* ResultSetId (Inter), */
   -1,"ResultSetId",
/* ResultSetStartPoint (integer), */
   5200,
/*NumberOfRecordsRequested (integer), */
   1000,
/* AdditionalRanges format */
/* Title, Completed (string); */
/* Set Completed to "NULL" if you don't want to specify this structure */
   AdditionalRanges format, "COMPLETED";
/* Title, Number of Additional Ranges; */
   Number of Additonal Ranges,2;
/* ***** N *  DbvRange format ******* */
/* if N=0 then structure not completed */
/* StartingPostion (integer), */
   1,
/* NumberOfRecords (integer); */
   2,
/* *******END DbvRange*******  */
/* *******DbvRecordComposition*************** */
/* Title, RecordCompostionType
        (either RCT_ElementSetNames or RCT_CompSpec); */
   DbvRecordCompostionType, "RCT_ElementSetNames";
/* RecordComposition */
/* Now choose between RCT_ElementSetNames or RCT_CompSpec */
/* **********RCT_ElementSetNames********** */
/* ElementSetNames format */
/* ElementSetNames  */
/* Title, Completed (string); */
/* Set Completed to "NULL" if you don't want to specify this structure */
   ElementSetNames format, "COMPLETED";
/* Title, ElementSetType; */
   DbvElementSetType, "EST_Generic";
/* Now choose between EST_Generic or  EST_DatabaseSpecific */
/* **********EST_Generic********** */
/* Title, DbvInternationalString; */
   EST_Generic type, -1, "This is a Generic Element Set Type string";
/* **********END EST_Generic****** */
/********EST_DatabaseSpecific********** */
/* Title, Number ElememtSetsDbSpecific */
   Number of ElememtSetsDbSpecific, 1;
/* ElementSetsDbSpecific */
/* N * Database Volumes of Name Information */
/* Title, DatabaseName (Inter); */
   DatabaseName, -1, "A Database Name string";
/* Title, DatabaseName (Inter); */
   ElementSetName, -1, "A ElementSet Name string";
```

```
/* **********END EST_DatabaseSpecific****** */
/* **********END ElementSetNames Format****** */
/* **********END RCT_ElementSetNames********* */
/* **********RCT_CompSpec****************** */
/* CompSpec */
/* Title,SelectAlternativeSyntax (bool);*/
   SelectAlternativeSyntax,"DBV_TRUE";
/* **********Generic Specification format******** */
/* Title,Schema (OID string); */
   Schema,"OID string";
/* Title,ElementSpecType (enum) (EST_Primitive or EST_External),COMPLETED; */
   ElementSpecType,"EST_Primitive","COMPLETED";
/* uElementSpec union completed if "COMPLETED" */
/* ElementSpec */
/* Now choose between EST_Primitive or EST_External */
/* **********EST_Primitive********** */
/* Title,Primitive (Inter); */
   Primitive,-1,"a primitive string";
/* **********END EST_Primitive****** */
/* **********EST_External********** */
/* Title,External file name (string); */
   EST_External file name,"FileName_External";
/* **********END EST_External****** */
/* **********END Generic Specification format**** */
/* Title, Number of DbSpecificComp (integer); */
   Number of DbSpecificComp,1;
/* N * DbSpecificComp format */
/* **********DbSpecificComp format************** */
/* Title,DatabaseName (Inter); */
   DatabaseName,-1,"DatabaseName";
/* Specification */
/* **********Specification format******** */
/* Title,Schema (OID string); */
   Schema,"OID string";
/* Title,ElementSpecType (enum) (EST_Primitive or EST_External),COMPLETED; */
   ElementSpecType,"EST_Primitive","COMPLETED";
/* uElementSpec union completed if "COMPLETED" */
/* ElementSpec */
/* Now choose between EST_Primitive or EST_External */
/* **********EST_Primitive********** */
/* Title,Primitive (Inter); */
   Primitive,-1,"a primitive string";
/* **********END EST_Primitive****** */
/* **********EST_External********** */
/* Title,External file name (string); */
   EST_External file name,"FileName_External";
/* **********END EST_External****** */
/* **********END Specification format**** */
/* **********END DbSpecificComp format*********** */
/* Title,RecordSyntax (OID string); */
   RecordSyntax,"OID string";
/* **********END RCT_CompSpec*************** */
/* Title,PreferedRecordSyntax (string);  */
   DbvObjectIdentifier, "OID";
/* Title,MaxSegmentCount (string); */
   MaxSegmentCount,"5200";
/* Title,MaxRecordSize (string); */
   MaxRecordSize,"5200";
/* Title,MaxSegmentSize (string); */
```

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```
   MaxSegmentSize,"5200";
/*Title,OtherInformation format */
  Other Information;
/* Other Information: see OtherInformation format explanation and place here */
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM"
```

Examples:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvPresentReq structure detailed below */
/* 2,ReferenceId (octet), */
   2,-1,"PresentReq reference Id",

/* ResultSetId (Inter), */
   -1,"ResultSetId",
/* ResultSetStartPoint (integer), */
   5200,
/*NumberOfRecordsRequested (integer), */
   1000,

/* AdditionalRanges format */
/* Title, Completed (string); */
/* Set Completed to "NULL" if you don't want to specify this structure */
   AdditionalRanges format, "COMPLETED";
/* Title, Number of Additional Ranges; */
   Number of Additonal Ranges,1;

/* ***** N *  DbvRange format ******* */
/* if N=0 then structure not completed */

/* Title,StartingPosition (integer); */
   StartingPosition,1;
/* Title,NumberOfRecords (integer); */
   NumberOfRecords,2;
/* *******END DbvRange*******  */

/* *******DbvRecordComposition*************** */
/* Title, RecordCompostionType
        (either RCT_ElementSetNames or RCT_CompSpec); */
   DbvRecordCompostionType, "RCT_ElementSetNames";

/* RecordComposition */
/* Now choose between RCT_ElementSetNames or RCT_CompSpec */

/* **********RCT_ElementSetNames********** */

/* ElementSetNames format */
/* ElementSetNames   */
/* Title, Completed (string); */
/* Set Completed to "NULL" if you don't want to specify this structure */
   ElementSetNames format, "COMPLETED";

/* Title, ElementSetType; */
   DbvElementSetType, "EST_Generic";

/* Now choose between EST_Generic or  EST_DatabaseSpecific */

/* **********EST_Generic********** */
```

```
/* Title, DbvInternationalString; */
   EST_Generic type, -1, "This is a Generic Element Set Type string";

/* **********END EST_Generic****** */

/* **********EST_DatabaseSpecific********* */
/* Title, Number ElememtSetsDbSpecific */
/*   Number of ElememtSetsDbSpecific, 1;*/

/* ElementSetsDbSpecific */
/* N * Database Volumes of Name Information */
/* Title, DatabaseName (Inter); */
/*  DatabaseName, -1, "A Database Name string";*/
/* Title, DatabaseName (Inter); */
/*   ElementSetName, -1, "A ElementSet Name string";*/

/* **********END EST_DatabaseSpecific****** */

/* **********END ElementSetNames Format****** */

/* **********END RCT_ElementSetNames********* */

/* **********RCT_CompSpec****************** */
/* CompSpec */
/* Title,SelectAlternativeSyntax (bool);*/
   SelectAlternativeSyntax,"DBV_TRUE";

/* **********Generic Specification format******** */

/* Title,Schema (OID string); */
/*   Schema,"1.2.840.10003.5.1";*/
/* Title,ElementSpecType (enum) (EST_Primitive or EST_External),COMPLETED; */
/* ElementSpecType,"EST_Primitive","COMPLETED";*/
/* uElementSpec union completed if "COMPLETED" */
/* ElementSpec */
/* Now choose between EST_Primitive or EST_External */

/* **********EST_Primitive********** */
/* Title,Primitive (Inter); */
/*   Primitive,-1,"a primitive string";*/

/* **********END EST_Primitive****** */

/* **********EST_External********** */
/* Title,External file name (string); */
/*   EST_External file name,"FileName_External";*/

/* **********END EST_External****** */

/* **********END Generic Specification format**** */

/* Title, Number of DbSpecificComp (integer); */
/*   Number of DbSpecificComp,1;*/
/* N * DbSpecificComp format */

/* **********DbSpecificComp format************** */
/* Title,DatabaseName (Inter); */
/*   DatabaseName,-1,"DatabaseName";*/
/* Specification */
```

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```
/* **********Specification format******** */

/* Title,Schema (OID string); */
/*   Schema,"1.2.840.10003.5.1";*/
/* Title,ElementSpecType (enum) (EST_Primitive or EST_External),COMPLETED; */
/*   ElementSpecType,"EST_Primitive","COMPLETED";*/
/* uElementSpec union completed if "COMPLETED" */
/* ElementSpec */
/* Now choose between EST_Primitive or EST_External */

/* **********EST_Primitive********** */
/* Title,Primitive (Inter); */
/*  Primitive,-1,"a primitive string";*/

/* **********END EST_Primitive****** */

/* **********EST_External********** */
/* Title,External file name (string); */
/*   EST_External file name,"FileName_External";*/

/* **********END EST_External****** */

/* **********END Specification format**** */

/* **********END DbSpecificComp format********** */

/* Title,RecordSyntax (OID string); */
/*   RecordSyntax,"1.2.840.10003.5.101";*/

/* **********END RCT_CompSpec*************** */

/* Title,PreferedRecordSyntax (string);  */
   DbvObjectIdentifier, "1.2.840.10003.5.1";

/* Title,MaxSegmentCount (string); */
   MaxSegmentCount,"5200";

/* Title,MaxRecordSize (string); */
   MaxRecordSize,"5200";

/* Title,MaxSegmentSize (string); */
   MaxSegmentSize,"5200";

/*Title,OtherInformation format */
  OtherInformation format, "COMPLETED";
  InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
  DbvInformationType, "IT_CharacterInfo";
  CharacterInfo type, -1, "This is a character info type string";

/* 3, SIError; (output parameter) */
   3, "OUT_PARAM"
```

4.2.4 DbvDeleteResultSetRequest()

Read From: delreq_(in)valid

Result To: delreq_(in)valid_result

Script Format:
```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvDeleteResultsetReq structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"DeleteResultSetReq reference Id";
/* Title,DeleteFunction (enum) (DF_List or DF_All); */
   DeleteFunction,"DF_List";
/* Title, Number of ResultSetId */
   Number ResultSetId, 1;
/* N * ResultSetId*/
/* if N=0 then structure not completed */
/* Title,ResultSetId (Inter); */
   ResultSetId, -1, "A ResultSetId string";
/* Title,OtherInformation format */
   Other Information;
/* Other Information: see OtherInformation format explanation and place here */
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM"
```

Examples:

Example1
```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvDeleteResultsetReq structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"DeleteResultSetReq reference Id";
/* Title,DeleteFunction (enum) (DF_List or DF_All); */
   DeleteFunction,"DF_List";

/* Title, Number of ResultSetId */
   Number ResultSetId, 3;

/* N * ResultSetId*/
/* Title,ResultSetId (Inter); */
  ResultSetId, -1, "A ResultSetId string1";
  ResultSetId, -1, "A ResultSetId string2";
  ResultSetId, -1, "A ResultSetId string3";

/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";

/* 3, SIError; (output parameter) */
   3, "OUT_PARAM"
```

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Example 2
```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvDeleteResultsetReq structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"DeleteResultSetReq reference Id";
/* Title,DeleteFunction (enum) (DF_List or DF_All); */
   DeleteFunction,"DF_List";

/* Title, Number of ResultSetId */
   Number ResultSetId, 1;

/* N * ResultSetId*/
/* Title,ResultSetId (Inter); */
  ResultSetId, -1, "A ResultSetId string1";
/*  ResultSetId, -1, "A ResultSetId string2";*/
/*   ResultSetId, -1, "A ResultSetId string3";*/

/* Title,OtherInformation format */
OtherInformation format, "NULL";
/*InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;*/
/*DbvInformationType, "IT_CharacterInfo";*/
/*CharacterInfo type, -1, "This is a character info type string";*/

/* 3, SIError; (output parameter) */
   3, "OUT_PARAM"
```

4.2.5 DbvScanRequest()

Read From: scanreq_(in)valid

Result To: scanreq_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvScanReq structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"ScanReq reference Id";
/* Title, Number of DbvInternationalStrings for DatabaseName; */
   Number of DbvInternationalString=,2;
/* N * DatabaseName (Inter); */
/* if N=0 then list not completed */
   -1, "DatabaseName examplestring1";
   -1, "DatabaseName examplestring2";
/* Title,AttributesetId (string); */
   AttributeSetId,"1.2.840.10003.3.1";
/* *************AttributesPlusTerm format*****************; */
/* Title, Number of Attribute Elements; */
   Number of Attribute Elements=,1;
/* N * DbvAttributeElement format; */
/* if N=0 then structure not completed */
/* ***********DbvAttributeElement format***************; */
/* Title,AttributeSetId (string); */
   AttributeSetId,"1.2.840.10003.3.1";
/* Title,AttributeType (integer); */
   AttributeType,1;
/* ***********DbvAttributeValue format***************** */
/* Title,DbvAttributeValueType (enum) (AVT_Numeric or AVT_Complex) ; */
   DbvAttributeValueType,"AVT_Numeric";
/* Now choose between AVT_Numeric or AVT_Complex */
/* **********AVT_Numeric********** */
/* Title, Numeric (integer); */
   AVT_Numeric,1;
 /* **********END AVT_Numeric****** */
/* **********AVT_Complex********** */
/* ComplexValue */
/* Title, Number of Lists; */
   Number of Lists=,1;
/* N * DbvStringOrNumeric format; */
/* if N=0 then structure not completed */
/* ***********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */
/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";
/* **********END SNT_String****** */
/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;
/* **********END SNT_Numeric****** */
/* **********END DbvStringOrNumeric format************* */
/* Title, Number of SemanticAction; */
```

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```
/*   Number of SemanticAction=,2;*/
/* if N=0 then list not completed */
/* Title, N * SemanticAction (integer); */
   SemanticAction,1,2;
/* **********END AVT_Complex****** */
/* **********END DbvAttributeValue format****************** */
/* **********END DbvAttributeElement format*************** */
/* **********DbvTerm format****************************** */
/* DbvTermType */
/* Title,DbvTermType (enum) (1 of 8, either General,Numeric,SimpleCharacter
   ,ObjectIdentifier,DateTime,External,IntegerAndUnit or Null); */
   DbvTermType,"TT_General";
/* Now choose one of the following: */
/* **********TT_General********** */
/* Title,TT_General (octet); */
   TT_General, -1, "This is General string";
/* **********END TT_General****** */
/* **********TT_Integer********** */
/* Title,TT_Integer (integer); */
   TT_Integer, 1;
/* **********END TT_Integer****** */
/* **********TT_SimpleCharacter********** */
/* Title,TT_SimpleCharacter (Inter); */
   TT_SimpleCharacter, -1, "This is a Simplecharacter string";
/* **********END TT_SimpleCharacter****** */
/* **********TT_ObjectIdentifier********** */
/* Title,TT_ObjectIdentifier (string); */
  TT_ObjectIdentifer,"1.2.840.10003.3.1";
/* **********END TT_ObjectIdentifier****** */
/* **********TT_GeneralizedTime********** */
/* Title,TT_GeneralizedTime (string); */
   TT_GeneralizedTime,"a GeneralizedTime string";
/* **********END TT_GeneralizedTime****** */
/* **********TT_External********** */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END TT_External****** */
/* **********TT_IntegerAndUnit********** */
/* **********DbvIntUnit format************/
/* Title,Value (integer); */
   Value,1;
/* **********DbvUnit format************ */
/* Title,UnitSystem (Inter) */
   UnitSystem, -1,"a Unitsystem string";
/* Title,UnitType; */
   UnitType;
/* **********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */
/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";
 /* **********END SNT_String****** */
/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;
/* **********END SNT_Numeric****** */
/* **********END DbvStringOrNumeric format*************** */
```

```
/* Title,Unit; */
   Unit;
/* ***********DbvStringOrNumeric format***************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */
/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";
/* **********END SNT_String****** */
 /* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;
 /* **********END SNT_Numeric****** */
 /* **********END DbvStringOrNumeric format*************** */
 /* Title,ScaleFactor (string); */
   ScaleFactor,"1";
/* **********END DbvUnit format*************** */
/* **********END DbvIntUnit format*************** */
/* **********END TT_IntegerAndUnit****** */
/* **********TT_Null********** */
/* Title,TT_Null (string); */
   TT_Null, "Null";
/* **********END TT_Null****** */
/* **********END DbvTerm format*********** */
/* **********END AttributesPlusTerm format*********** */
/* Title,StepSize (string); */
   Stepsize,"1";
/* Title, NumberOfTermsRequested (integer); */
   NumberOfTermsRequested,10;
/* Title, PreferredPositionInResponse (string); */
   PreferredPositionInResponse,"1";
/* Title,OtherInformation format */
   OtherInformation format, "COMPLETED";
   InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
   DbvInformationType, "IT_CharacterInfo";
   CharacterInfo type, -1, "This is a character info type string";
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

Examples:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvScanReq structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"ScanReq reference Id";

/* Title, Number of DbvInternationalStrings for DatabaseName; */
   Number of DbvInternationalString=,2;
/* N * DatabaseName (Inter); */
/* if N=0 then list not completed */
   -1, "DatabaseName examplestring1";
   -1, "DatabaseName examplestring2";

/* Title,AttributesetId (string); */
   AttributeSetId,"1.2.840.10003.3.1";
```

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```
/* *************AttributesPlusTerm format*****************; */

/* Title, Number of Attribute Elements; */
   Number of Attribute Elements=,1;
/* N * DbvAttributeElement format; */
/* if N=0 then structure not completed */

/* ***********DbvAttributeElement format****************; */

/* Title,AttributeSetId (string); */
   AttributeSetId,"1.2.840.10003.3.1";

/* Title,AttributeType (integer); */
   AttributeType,1;

/* ***********DbvAttributeValue format****************** */
/* Title,DbvAttributeValueType (enum) (AVT_Numeric or AVT_Complex) ; */
   DbvAttributeValueType,"AVT_Numeric";
/* Now choose between AVT_Numeric or AVT_Complex */

/* **********AVT_Numeric********** */
/* Title, Numeric (integer); */
   AVT_Numeric,1;

/* **********END AVT_Numeric****** */

/* **********AVT_Complex********** */
/* ComplexValue */
/* Title, Number of Lists; */
/*   Number of Lists=,1;*/

/* N * DbvStringOrNumeric format; */
/* if N=0 then structure not completed */

/* ***********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
/*  StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********** */
/* Title, String (Inter); */
/*   SNT_String,-1,"a SNT_String";*/

/* **********END SNT_String****** */

/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
/*  SNT_Numeric,1;*/

/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format************** */

/* Title, Number of SemanticAction; */
/*   Number of SemanticAction=,2;*/

/* if N=0 then list not completed */

/* Title, N * SemanticAction (integer); */
/*  SemanticAction,1,2;*/
```

```
/* **********END AVT_Complex****** */
/* **********END DbvAttributeValue format***************** */
/* **********END DbvAttributeElement format************** */


/* **********DbvTerm format****************************** */
/* DbvTermType */
/* Title,DbvTermType (enum) (1 of 8, either General,Numeric,SimpleCharacter
   ,ObjectIdentifier,DateTime,External,IntegerAndUnit or Null); */
   DbvTermType,"TT_General";

/* Now choose one of the following: */

/* **********TT_General********* */
/* Title,TT_General (octet); */
   TT_General, -1, "This is General string";

/* **********END TT_General****** */

/* **********TT_Integer********* */
/* Title,TT_Integer (integer); */
/*   TT_Integer, 1;*/

/* **********END TT_Integer****** */

/* **********TT_SimpleCharacter********* */
/* Title,TT_SimpleCharacter (Inter); */
/*   TT_SimpleCharacter, -1, "This is a Simplecharacter string";*/

/* **********END TT_SimpleCharacter****** */

/* **********TT_ObjectIdentifier********* */
/* Title,TT_ObjectIdentifier (string); */
/*  TT_ObjectIdentifer,"1.2.840.10003.3.1";*/

/* **********END TT_ObjectIdentifier****** */

/* **********TT_GeneralizedTime********* */
/* Title,TT_GeneralizedTime (string); */
/*   TT_GeneralizedTime,"a GeneralizedTime string";*/

/* **********END TT_GeneralizedTime****** */

/* **********TT_External********* */
/* Title,External file name (string); */
/*   TT_External file name,"FileName_External";*/

/* **********END TT_External****** */

/* **********TT_IntegerAndUnit********* */

/* **********DbvIntUnit format***********/

/* Title,Value (integer); */
/*   Value,1;*/

/* **********DbvUnit format*********** */
/* Title,UnitSystem (Inter) */
/*   UnitSystem, -1,"a Unitsystem string";*/
```

```
/* Title,UnitType; */
/*   UnitType;*/
/* **********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
/*   StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */

/* *********SNT_String********* */
/* Title, String (Inter); */
/*   SNT_String,-1,"a SNT_String";*/

/* *********END SNT_String***** */

/* *********SNT_Numeric********* */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* *********END SNT_Numeric***** */

/* *********END DbvStringOrNumeric format************** */

/* Title,Unit; */
/*   Unit;*/
/* **********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
/*   StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */

/* *********SNT_String********* */
/* Title, String (Inter); */
/*   SNT_String,-1,"a SNT_String";*/

/* *********END SNT_String***** */

/* *********SNT_Numeric********* */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* *********END SNT_Numeric***** */

/* *********END DbvStringOrNumeric format************** */

/* Title,ScaleFactor (string); */
/*   ScaleFactor,"1";*/


/* *********END DbvUnit format************** */

/* *********END DbvIntUnit format************** */

/* *********END TT_IntegerAndUnit***** */

/* *********TT_Null********* */
/* Title,TT_Null (string); */
/*   TT_Null, "Null";*/

/* *********END TT_Null***** */

/* *********END DbvTerm format*********** */
```

```
/* **********END AttributesPlusTerm format*********** */

/* Title,StepSize (string); */
   Stepsize,"1";
/* Title, NumberOfTermsRequested (integer); */
   NumberOfTermsRequested,10;
/* Title, PreferredPositionInResponse (string); */
   PreferredPositionInResponse,"1";

/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";


/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

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4.2.6 DbvResourceReportRequest()

Read From: rescreq_(in)valid

Result To: rescreq_(in)valid_result

Script Format:
```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvResourceReportReq structure detailed below */
/* 2,DbvResourceReportReq ReferenceId (octet); */
   2,-1,"reference Id";
/* Title,ResourceReportstatus (enum);
   (RRS_Success,RSS_Partial,RSS_Failure_1,RSS_Failure_2,RSS_Failure_3,
   RSS_Failure_4,RSS_Failure_5,RSS_Failure_6) */
   ResourceReportstatus,"RRS_Success";
/* Title,Resource Report External file name (string); */
   ResourceReport_External file name,"FileName_External";
/* Title,OtherInformation format */
   Other Information;
/* Other Information: see OtherInformation format explanation and place here */
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

Examples:
```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvResourceReportReq structure detailed below */
/* 2,DbvResourceReportReq ReferenceId (octet); */
   2,-1,"ResReq reference Id";

/* Title,OperationId (octet); */
   OperationId,-1,"OperationId";

/* Title,PrefResourceReportFormat (string); */
   PrefResourceReportFormat,"1.2.840.10003.7.1";

/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
DbvInformationType, "IT_BinaryInfo";
Octetstring, -1, "This is a binary info type sting thing";

/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

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4.2.7 DbvSortRequest()

Read From: sortreq_(in)valid

Result To: sortreq_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvSortReq structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"SortReq reference Id";
/* Title, Number of DbvInternationalStrings for InputResultSetName; */
   Number of DbvInternationalString=,1;
/* N * InputResultSetName (Inter); */
/* if N=0 structure not completed */
   -1, "InputResultSetName example string1";
/* Title,SortedResultSetName (Inter); */
   SortedResultSetName,-1, "SortedResultSetName example string1";
/* SortSequence */
/* Title, Number of SortKeySpec (integer); */
   Number of SortKeySpec=,1;
/* N * SortKeySpec; */
/* if N=0 structure not completed */
/* *********DbvSortKeySpec format*********** */
/* SortElement */
/* Title,SortElementType (enum) (either SET_Generic,SET_DbSpecific),COMPLETED;
*/
   SortElementType,"SET_Generic","COMPLETED";
/* SET_Generic OR SET_DbSpecific uSortElement union COMPLETED if "COMPLETED" */
/* Now choose between SET_Generic and SET_DbSpecific */
/* **********SET_Generic********** */
/* *********DbvSortKey format*********** */
/* Title,SortKeyType (enum)
        (either SKT_SortField,SKT_ElementSpec,SKT_SortAttributes ),COMPLETED;
*/
   SortKeyType,"SKT_SortField","COMPLETED";
/* uSortElement union Completed if "COMPLETED" */
/* Now choose between SKT_SortField,SKT_ElementSpec,SKT_SortAttributes */
/* **********SKT_SortField********** */
/* Title,SKT_SortField (Inter); */
   SKT_SortField type, -1, "This is a SortField Type string";
/* **********END SKT_SortField****** */
/* **********SKT_ElementSpec********** */
/* **********Specification format******** */
/* Title,Schema (OID string); */
/*   Schema,"1.2.840.10003.5.1";*/
/* Title,ElementSpecType (enum) (EST_Primitive or EST_External),COMPLETED; */
   ElementSpecType,"EST_Primitive","COMPLETED";
/* uElementSpec union completed if "COMPLETED" */
/* ElementSpec */
/* Now choose between EST_Primitive or EST_External */
/* **********EST_Primitive********** */
/* Title,Primitive (Inter); */
   EST_Primitive,-1,"a primitive string";
/* **********END EST_Primitive****** */
/* **********EST_External********** */
/* Title,External file name (string); */
   EST_External file name,"Authentication_External";
```

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```
/* **********END EST_External****** */
/* **********END Specification format**** */
/* **********END SKT_ElementSpec********** */
/* **********SKT_SortAttributes********** */
/* Title,AttributeSetId (OID string); */
   AttributeSetId,"1.2.840.10003.3.1";
/* Title, Number of AttributeElement (integer); */
   Number of AttributeElement =,1;
/* N * DbvAttributeElement; */
/* if N=0 then structure is not completed */
/* **********DbvAttributeElement format********* */
/* Title,AttributeSetId (string); */
   AttributeSetId,"1.2.840.10003.3.1";
/* Title,AttributeType (integer); */
*  AttributeType,1;
/* DbvAttributeValue format; */
/* Title,DbvAttributeValueType (enum) (AVT_Numeric or AVT_Complex) ; */
   DbvAttributeValueType,"AVT_Numeric";
/* Now choose between AVT_Numeric or AVT_Complex */
/* **********AVT_Numeric********** */
/* Title, Numeric (integer); */
   Numeric,1;
/* **********END AVT_Numeric****** */
/* **********AVT_Complex********** */
/* ComplexValue */
/* Title, Number of Lists; */
   Complex Number of Lists=,1;
/* N * DbvStringOrNumeric format; */
/* N=0 then structure is not completed */
/* **********DbvStringOrNumeric format************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */
/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";
 /* **********END SNT_String****** */
 /* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;
 /* **********END SNT_Numeric****** */
 /* **********END DbvStringOrNumeric format************** */
 /* Title, Number of SemanticAction; */
   Number of SemanticAction=,2;
/* if N=0 then list is not completed */
/* Title, N * SemanticAction (integer); */
   SemanticAction,1,2;
/* **********END AVT_Complex****** */
/* **********END DbvAttributeElement format********* */
/* **********END SKT_SortAttributes********** */
/* **********END DbvSortKey format********** */
/* **********END SET_Generic********** */
/* **********SET_DbSpecific********** */
/* DatabaseSpecific */
/* Title, Number of DbSpecificSortKey (integer); */
   Number DbSpecificSortKeyof =,1;
/* N * DbvDbSpecificSortKey; */
/* if N=0 then structure is not completed */
/* **********DbvDbSpecificSortKey format************* */
/* Title,DatabaseName (Inter); */
```

```
   DatabaseName,-1,"databaseName string";
/* DbSort */
/*   put DbvSortKey format here see above */
/* **********END DbvDbSpecificSortKey format********** */
/* **********END SET_DbSpecific********** */
/* Title,SortRelationType (enum);
    (SRT_Ascending,SRT_Descending,SRT_FrequencyAsc,SRT_FrequencyDesc) */
   SortRelationType,"SRT_Ascending";
/* Title,SortCaseType (enum);
    (SCT_CaseSensitive,SCT_CaseInsensitive) */
   SortCaseType,"SCT_CaseSensitive";
/* **********DbvSortMVAction format******** */
/* Title, COMPLETED; */
   MVActionType structure, "COMPLETED";
/* Title, SortMVActionType (enum); (SMT_Abort,SMT_Null,SMT_Constant)*/
   SortMVActionType enum,"SMT_Constant";
/* Title,DbvOctetString (octet); */
/* <-> eSortMVActionType == SMT_Constant */
   SortMVAction octetstring,-1,"<-> eSortMVActionType == SMT_Abort";
/* **********END DbvSortMVAction format**** */
/* *********END DbvSortKeySpec format********** */
/* Title,OtherInformation format */
  OtherInformation format, "COMPLETED";
  InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
  DbvInformationType, "IT_BinaryInfo";
  Octetstring, -1, "This is a binary info type sting thing";
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

Examples:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvSortReq structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"SortReq reference Id";
/* Title, Number of DbvInternationalStrings for InputResultSetName; */
   Number of DbvInternationalString=,1;
/* N * InputResultSetName (Inter); */
/* if N=0 structure not completed */

   -1, "InputResultSetName example string1";
/* Title,SortedResultSetName (Inter); */
   SortedResultSetName,-1, "SortedResultSetName example string1";

/* SortSequence */
/* Title, Number of SortKeySpec (integer); */
   Number of SortKeySpec=,1;
/* N * SortKeySpec; */
/* if N=0 structure not completed */


/* *********DbvSortKeySpec format********** */

/* SortElement */
/* Title,SortElementType (enum) (either SET_Generic,SET_DbSpecific),COMPLETED;
*/
   SortElementType,"SET_Generic","COMPLETED";
```

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```
/* SET_Generic OR SET_DbSpecific uSortElement union COMPLETED if "COMPLETED" */

/* Now choose between SET_Generic and SET_DbSpecific */

/* **********SET_Generic********** */

/* *********DbvSortKey format********** */

/* Title,SortKeyType (enum)
        (either SKT_SortField,SKT_ElementSpec,SKT_SortAttributes ),COMPLETED;
*/
   SortKeyType,"SKT_SortField","COMPLETED";
/* uSortElement union Completed if "COMPLETED" */

/* Now choose between SKT_SortField,SKT_ElementSpec,SKT_SortAttributes */

/* **********SKT_SortField********** */
/* Title,SKT_SortField (Inter); */
   SKT_SortField type, -1, "This is a SortField Type string";

/* **********END SKT_SortField****** */

/* **********SKT_ElementSpec********** */
/* **********Specification format******** */

/* Title,Schema (OID string); */
/*   Schema,"1.2.840.10003.5.1";*/
/* Title,ElementSpecType (enum) (EST_Primitive or EST_External),COMPLETED; */
/*   ElementSpecType,"EST_Primitive","COMPLETED";*/
/* uElementSpec union completed if "COMPLETED" */

/* ElementSpec */
/* Now choose between EST_Primitive or EST_External */

/* **********EST_Primitive********** */
/* Title,Primitive (Inter); */
/* EST_Primitive,-1,"a primitive string";*/

/* **********END EST_Primitive****** */

/* **********EST_External********** */
/* Title,External file name (string); */
/* EST_External file name,"Authentication_External";*/

/* **********END EST_External****** */

/* **********END Specification format**** */

/* **********END SKT_ElementSpec********** */

/* **********SKT_SortAttributes********** */
/* Title,AttributeSetId (OID string); */
/*   AttributeSetId,"1.2.840.10003.3.1";

/* Title, Number of AttributeElement (integer); */
/* Number of AttributeElement =,1;*/
/* N * DbvAttributeElement; */
/* if N=0 then structure is not completed */

/* **********DbvAttributeElement format********* */
/* Title,AttributeSetId (string); */
```

```
/* AttributeSetId,"1.2.840.10003.3.1";*/

/* Title,AttributeType (integer); */
 /*  AttributeType,1;*/

/* DbvAttributeValue format; */
/* Title,DbvAttributeValueType (enum) (AVT_Numeric or AVT_Complex) ; */
/* DbvAttributeValueType,"AVT_Numeric";*/
/* Now choose between AVT_Numeric or AVT_Complex */

/* **********AVT_Numeric********** */
/* Title, Numeric (integer); */
/*   Numeric,1;*/

/* **********END AVT_Numeric****** */

/* **********AVT_Complex********** */
/* ComplexValue */
/* Title, Number of Lists; */
/*   Complex Number of Lists=,1;*/

/* N * DbvStringOrNumeric format; */
/* N=0 then structure is not completed */

/* **********DbvStringOrNumeric format***************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
/* StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********** */
/* Title, String (Inter); */
/* SNT_String,-1,"a SNT_String";*/

/* **********END SNT_String****** */

/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format*************** */

/* Title, Number of SemanticAction; */
/*   Number of SemanticAction=,2;*/
/* if N=0 then list is not completed */
/* Title, N * SemanticAction (integer); */
/*   SemanticAction,1,2;*/

/* **********END AVT_Complex****** */

/* **********END DbvAttributeElement format********* */

/* **********END SKT_SortAttributes********** */

/* **********END DbvSortKey format********** */

/* **********END SET_Generic********** */

/* **********SET_DbSpecific********** */
```

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```
/* DatabaseSpecific */
/* Title, Number of DbSpecificSortKey (integer); */
/*   Number DbSpecificSortKeyof =,1;*/
/* N * DbvDbSpecificSortKey; */
/* if N=0 then structure is not completed */

/* **********DbvDbSpecificSortKey format************* */

/* Title,DatabaseName (Inter); */
/* DatabaseName,-1,"databaseName string";*/
/* DbSort */

/*   put DbvSortKey format here see above */

/* **********END DbvDbSpecificSortKey format********* */

/* **********END SET_DbSpecific********** */

/* Title,SortRelationType (enum);
    (SRT_Ascending,SRT_Descending,SRT_FrequencyAsc,SRT_FrequencyDesc) */
   SortRelationType,"SRT_Ascending";

/* Title,SortCaseType (enum);
    (SCT_CaseSensitive,SCT_CaseInsensitive) */
   SortCaseType,"SCT_CaseSensitive";

/* **********DbvSortMVAction format******** */
/* Title, COMPLETED; */
   MVActionType structure, "COMPLETED";
/* Title, SortMVActionType (enum); (SMT_Abort,SMT_Null,SMT_Constant)*/
   SortMVActionType enum,"SMT_Constant";
/* Title,DbvOctetString (octet); */
/* <-> eSortMVActionType == SMT_Constant */
   SortMVAction octetstring,-1,"<-> eSortMVActionType == SMT_Abort";

/* **********END DbvSortMVAction format**** */

/* *********END DbvSortKeySpec format********** */

/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
DbvInformationType, "IT_BinaryInfo";
Octetstring, -1, "This is a binary info type sting thing";


/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

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4.2.8 DbvExtendedServicesRequest()

Read From: extreq_(in)valid

Result To: extreq_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvExtendedServicesReq structure detailed below */
/* 2,ReferenceId (octet), */
   2,-1,"ExtendedServicesReq reference Id",
/* Title,DbvExtServicesFunctions (enum);
         (ESF_Create,ESF_Delete,ESF_Modify) */
   Function,"ESF_Create";
/* Title,PackageType (OID string); */
   PackageType,"Package OID";
/* Title,PackageName (Inter); */
   PackageName,-1,"PackageName string";
/* Title,UserId (Inter); */
   UserId,-1,"UserId string";
/* Title,DbvIntUnit psRetentionTime; */
   RetentionTime;
/* **********DbvIntUnit format************/
/* Title,Value (integer); */
   Value,1;
/* **********DbvUnit format************* */
/* Title,UnitSystem (Inter) */
   UnitSystem, -1,"a Unitsystem string";
/* Title,UnitType; */
   UnitType;
/* ***********DbvStringOrNumeric format***************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */
/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";
/* **********END SNT_String****** */
/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;
  /* **********END SNT_Numeric****** */
/* **********END DbvStringOrNumeric format************** */
/* Title,Unit; */
   Unit;
/* ***********DbvStringOrNumeric format***************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */
/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";
/* **********END SNT_String****** */
 /* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;
  /* **********END SNT_Numeric****** */
```

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```
  /* **********END DbvStringOrNumeric format************** */
/* Title,ScaleFactor (integer); */
   ScaleFactor,1;
/* **********END DbvUnit format************** */
/* **********END DbvIntUnit format************** */
/* Title,Number of Permissions (integer); */
   Number of Permissions,1;
/* N * DbvPermissions */
/* if N=0 then structure not completed */
/* **********DbvPermissions format************** */
/* Title,UserId (Inter); */
   UserId,-1,"UserId string";
/* Title,Number of AllowableFunctions (integer); */
   Number of AllowableFunctions,1;
/* N * DbvPermAllowableFunctions */
/* Title,DbvPermAllowableFunctions (enum);
        (PAF_Delete,PAF_ModifyContents,PAF_ModifyPermisssions,
         PAF_Present,PAF_Invoke) */
   AllowableFunctions,"PAF_Delete";
/* **********END DbvPermissions format************** */
/* Title,Description (Inter); */
   Description,-1,"Description string";
/* Title,OriginSpecificParameter_External file name (string); */
   OriginSpecificParameter_External file name,"FileName_External";
/* Title, DbvExtServicesWaitAction (enum);
        (ESWA_Wait,ESWA_WaitIfPossible,ESWA_DontWait,ESWA_DontReturnPackage)
*/
   WaitAction,"ESWA_Wait";
/* Title,Elements (Inter); */
   Elements,-1,"Element string";
/* Title,OtherInformation format */
   Other Information;
/* Other Information: see OtherInformation format explanation and place here */
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

Examples:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvExtendedServicesReq structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"ExtendedServicesReq reference Id";

/* Title,DbvExtServicesFunctions (enum);
        (ESF_Create,ESF_Delete,ESF_Modify) */
   Function,"ESF_Create";

/* Title,PackageType (OID string); */
   PackageType,"1.2.840.10003.5.106";

/* Title,PackageName (Inter); */
   PackageName,-1,"PackageName string";

/* Title,UserId (Inter); */
   UserId,-1,"UserId string";

/* Title,DbvIntUnit psRetentionTime; */
   RetentionTime;
```

```
/* **********DbvIntUnit format************/

/* Title,Value (integer); */
   Value,1;

/* **********DbvUnit format************* */
/* Title,UnitSystem (Inter) */
   UnitSystem, -1,"a Unitsystem string";

/* Title,UnitType; */
   UnitType;
/* **********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";

/* **********END SNT_String****** */

/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format*************** */

/* Title,Unit; */
   Unit;
/* **********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";

/* **********END SNT_String****** */

/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format*************** */

/* Title,ScaleFactor (integer); */
   ScaleFactor,1;

/* **********END DbvUnit format************** */

/* **********END DbvIntUnit format************** */

/* Title,Number of Permissions (integer); */
   Number of Permissions,1;
```

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```
/* N * DbvPermissions */
/* if N=0 then structure not completed */

/* **********DbvPermissions format************** */

/* Title,UserId (Inter); */
   UserId,-1,"UserId string";

/* Title,Number of AllowableFunctions (integer); */
   Number of AllowableFunctions,2;

/* N * DbvPermAllowableFunctions */

/* Title,DbvPermAllowableFunctions (enum);
        (PAF_Delete,PAF_ModifyContents,PAF_ModifyPermisssions,
         PAF_Present,PAF_Invoke) */
   AllowableFunctions1,"PAF_Delete";

/* Title,DbvPermAllowableFunctions (enum);
        (PAF_Delete,PAF_ModifyContents,PAF_ModifyPermisssions,
         PAF_Present,PAF_Invoke) */
   AllowableFunctions2,"PAF_ModifyContents";

/* **********END DbvPermissions format************** */

/* Title,Description (Inter); */
   Description,-1,"Description string";

/* Title,OriginSpecificParameter_External file name (string); */
   OriginSpecificParameter_External file name,"Authentication_External";

/* Title, DbvExtServicesWaitAction (enum);
        (ESWA_Wait,ESWA_WaitIfPossible,ESWA_DontWait,ESWA_DontReturnPackage)
*/
   WaitAction,"ESWA_Wait";

/* Title,Elements (Inter); */
   Elements,-1,"Element string";

/* Title,OtherInformation format */
  OtherInformation format, "COMPLETED";
  InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;*/
  DbvInformationType, "IT_CharacterInfo";*/
  CharacterInfo type, -1, "This is a character info type string";*/

/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

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4.2.9 DbvCloseRequest()

Read From: closereq_(in)valid

Result To: closereq_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvCloseReq structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"CloseReq reference Id";
/* Title,CloseReason (enum);
   (CR_Finished,CR_ShutDown,CR_SystemProblem,
   CR_CostLimit,CR_Resources,CR_SecurityViolation,
   CR_ProtocolError,CR_LackOfActivity,CR_PeerAbort,CR_Unspecified) */
   CloseReason,"CR_Finished";
/* Title,DiagnosticInformation (Inter); */
   DiagnosticInformation,-1,"DiagnosticInformation string";
/* Title,ResourceReportFormat (OID string); */
   ResourceReportFormat,"OID string";
/* **********ResourceReport format********** */
/* Title,External file name (string); */
   ResourceReport file name,"FileName_External";
/* **********END ResourceReport format****** */
/* Title,OtherInformation format */
   Other Information;
/* Other Information: see OtherInformation format explanation and place here */
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

Examples:

```
/* 1, DbvAssocId (integer); */
   1, 1;
/* DbvCloseReq structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"CloseReq reference Id";

/* Title,CloseReason (enum);
   (CR_Finished,CR_ShutDown,CR_SystemProblem,
   CR_CostLimit,CR_Resources,CR_SecurityViolation,
   CR_ProtocolError,CR_LackOfActivity,CR_PeerAbort,CR_Unspecified) */
   CloseReason,"CR_Finished";

/* Title,DiagnosticInformation (Inter); */
   DiagnosticInformation,-1,"DiagnosticInformation string";

/* Title,ResourceReportFormat (OID string); */
   ResourceReportFormat,"1.2.840.10003.7.1";

/* **********ResourceReport format********** */
/* Title,External file name (string); */
   ResourceReport file name,"Authentication_External";

/* **********END ResourceReport format****** */

/* Title,OtherInformation format */
```

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```
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
DbvInformationType, "IT_BinaryInfo";
Octetstring, -1, "This is a binary info type sting thing";

/* 3, SIError; (output parameter) */
    3, "OUT_PARAM";
```

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4.2.10 DbvCloseResponse()

Read From: closersp_(in)valid

Result To: closersp_(in)valid_result

Script Format:
```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvCloseRsp structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"CloseRsp reference Id";
/* Title,CloseReason (enum);
   (CR_Finished,CR_ShutDown,CR_SystemProblem,
   CR_CostLimit,CR_Resources,CR_SecurityViolation,
   CR_ProtocolError,CR_CR_LackOfActivity,CR_PeerAbort,CR_Unspecified) */
   CloseReson,"CR_Finished";
/* Title,DiagnosticInformation (Inter); */
   DiagnosticInformation,-1,"DiagnosticInformation string";
/* Title,ResourceReportFormat (OID string); */
   ResourceReportFormat,"OID string";
/* **********ResourceReport format********** */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END ResourceReport format****** */
/*Title,OtherInformation format */
  Other Information;
/* Other Information: see OtherInformation format explanation and place here */
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

Examples:
```
/* 1, DbvAssocId (integer); */
   1, 1;
/* DbvCloseRsp structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"CloseRsp reference Id";

/* Title,CloseReason (enum);
   (CR_Finished,CR_ShutDown,CR_SystemProblem,
   CR_CostLimit,CR_Resources,CR_SecurityViolation,
   CR_ProtocolError,CR_LackOfActivity,CR_PeerAbort,CR_Unspecified) */
   CloseReason,"CR_Finished";

/* Title,DiagnosticInformation (Inter); */
   DiagnosticInformation,-1,"DiagnosticInformation string";

/* Title,ResourceReportFormat (OID string); */
   ResourceReportFormat,"1.2.840.10003.7.1";

/* **********ResourceReport format********** */
/* Title,External file name (string); */
   ResourceReport file name,"Authentication_External";

/* **********END ResourceReport format****** */

/* Title,OtherInformation format */
```

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```
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
DbvInformationType, "IT_BinaryInfo";
Octetstring, -1, "This is a binary info type sting thing";

/* 3, SIError; (output parameter) */
    3, "OUT_PARAM";
```

4.2.11 DbvReceiveDataOrigin()

Read From: recreq_(in)valid

Result To: recreq_(in)valid_result

Script Format:

```
/* Format for ReceiveDataOrigin() function */

/* 1, DbvAssocId; (integer) */
1, 1;

/* 2, DbvSecs; (secs string) */
2, "CALL_BLOCKING";

/* 3, DbvOriginData; (output parameter) */
3, "OUT_PARAM";

/* 4, SIError; (output parameter) */
4, "OUT_PARAM";
```

Examples:

1, 1;

2, "CALL_BLOCKING";

3, "OUT_PARAM";

4, "OUT_PARAM";

5 TARGET SCRIPT FILE FORMATS

5.1 Target Association Handling

5.1.1 DbvReceiveAssociateRequest()

Read From: reassocreq_(in)valid

Result To: reassocreq_(in)valid_result

Script Format:

```
/* 1, DbvAssocId; (output parameter) */
1, "OUT_PARAM";
/* 2, DbvSecs; (secs string) */
2, "CALL_BLOCKING";
/* 3, OriginAddress; (output parameter) */
3, "OUT_PARAM";
/* 4, DbvApplicationProtocol; (output parameter) */
4, "OUT_PARAM";
/* 5, SIError; (output parameter) */
5, "OUT_PARAM";
```

Examples:

1, "OUT_PARAM";

2, "CALL_BLOCKING";

3, "OUT_PARAM";

4, "OUT_PARAM";

5, "OUT_PARAM";

5.1.2 DbvAssociateResponse()

Read From: assocresp_(in)valid

Result To: assocresp_(in)valid_response

Script Format:

```
/* 1, DbvAssocId; (integer) */
1, 1;
/* 2, DbvAssociateRsp; (string) */
2, "Accepted";
/* 3, SIError; (output parameter) */
3, "OUT_PARAM";
```

Examples:

Association Accepted:

```
1, "OUT_PARAM";
2, "Accepted";
3, "OUT_PARAM";
```

Associated Rejected:

```
1, "OUT_PARAM";
2, "Rejected_Permanent";
3, "OUT_PARAM";
```

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5.1.3 DbvReleaseResponse()

Read From: relresp_(in)valid

Result To: relresp_(in)valid_response

Script Format:

```
/* 1, DbvAssocId; (integer) */
1, 1;
/* 2, DbvReleaseRsp; (string - "NULL") */
2, "NULL";
/* 3, SIError; (output parameter) */
3, "OUT_PARAM";
```

Examples:

1,1;

2,"NULL";

3,"OUT_PARAM";

5.1.4 DbvAbortRequest()

Read From: abortreq_(in)valid

Result To: abort_req_(in)valid_response

Script Format:
```
/* 1, DbvAssocId; (integer) */
1, 1;
/* 2, SIError; (output parameter) */
2, "OUT_PARAM";
```

Examples:

1, 1;

2, "OUT_PARAM";

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5.2 Target SR-/Z39.50 Functions

5.2.1 DbvInitializeResponse()

Read From: initrsp_(in)valid

Result To: initrsp_(in)valid_result

Script Format:
```
/* 1, DbvAssocId; (integer) */
1, 1;
/* DbvInitializeResponse structure detailed below */
/* 2, ReferenceId (octet), */
2, -1, "InitReq reference Id",
/* ProtocolVersion (string), */
     "1100000000000000",
/* pcOptions (string), */
     "1100000000000000",
/* PreferredMessageSize, (integer) */
        5200,
/* MaximumMessageSize; (integer) */
        5200;
/* Result, (bool-string) */
     "DBV_TRUE",
/* ImplementationId (Inter), */
       -1, "ImplementationId string",
/* ImplementationName (Inter), */
       -1, "ImplementationName string",
/* ImplementationVersion (Inter), */
       -1, "ImplementationVersion string";
/* UserInformationField Format */
/* Title, External file name (string); */
UserInformationField, "UserInformationField_External";
/* End of UserInformationField Format */

/* Other Information: See OtherInformation format explanation */

/* 3, SIError; (output parameter) */
3, "OUT_PARAM";
```

Examples:
```
/*
initresp_valid
*/

/* Specify valid input parameters for InitializeResponse here */

/* AssocId (integer ) */
1, 1;

2, -1, "InitReq reference Id", "1100000000000000", "1100000000000000",
5200, 5200, "DBV_TRUE", -1, "ImpId", -1, "ImpName", -1, "ImpVer";

UserInformationField,"UserInformationField_External";
```

```
OtherInformation, "NULL";

/* SIError */
3, "OUT_PARAM";
```

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5.2.2 DbvSearchResponse()

Read From: srchrsp_(in)valid

Result To: srchrsp_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvSearchRsp structure detailed below */
/*   2,ReferenceId (octet);*/
   2,-1,"SearchRsp reference Id";
/* ResultCount (integer), */
   5200,
/* NumberOfRecordsReturned (integer), */
   5200,
/* NextResultSetPosition (integer); */
   5200;
/* SearchStatus (bool); */
   "DBV_TRUE";
/* Title,ResultSetStatus (enum); (RSS_Subset,RSS_Interim,RSS_None) */
   ResultSetStatus,"RSS_Subset";
/* Title,PresentStatus (enum); (PS_Success,PS_Partial_1,PS_Partial_2,
       PS_Partial3,PS_Partial4,PS_Failure) */
   PresentStatus,"PS_Success";
/*  ********DbvRecords format**************** */
/* Title,Completed; */
   DbvRecords,"COMPLETED";
/* DbvRecords structure completed if "COMPLETED" */
/* Title,RecordType (enum),Completed;
   (RT_Response,RT_NonSurrDiagnostics,RT_MultipleNonSurrDiagnostics) */
   RecordType,"RT_Response","COMPLETED";
/* uRecord UNION completed if "COMPLETED" */
/* Now choose one of above listed three */
/* ***********RT_Response******************** */
/* Title,Number of NamePlusRecords (integer); */
   Number of NamePlusRecords=,1;
/* N * NamePlusRecord */
/* if N=0 then structure not completed */
/* ***********NamePlusRecord format******************** */
/* Title,DatabaseName (Inter); */
   DatabaseName,-1,"Databasename string";
/* Title,DbRecordType (enum),COMPLETED; (DRT_Retrieval,DRT_SurrogateDiagnostics,
   DRT_StartingFragment,DRT_IntermediateFragment,DRT_FinalFragment) */
   DbRecordType,"DRT_SurrogateDiagnostics","COMPLETED";
/* uDbRecord union completed if COMPLETED */
/* Now choose one of above listed five */
/* **********DRT_Retrieval********** */
/* RetrievalRecord */
/* Title,External file name (string); */
   DRT_Retrieval_External file name,"Authentication_External";
/* **********END DRT_Retrieval****** */
/* **********DRT_SurrogateDiagnostics********** */
/* SurrogateDiagnostic */
/* **********DbvDiagRec format**************** */
/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */
```

```
/* **********DT_DefaultFormat format***************** */
/* **********Default format************* */
/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"1.2.840.10003.4.1";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format ********************/
/* Title,ProtocolVersionInforce (enum),completed; (PVIF_Version2,PVIF_Version3)
*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */
/* Now choose either PVIF_Version2 or PVIF_Version3 */
/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format***************** */
/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
   V3,-1,"V3 string";
/* **********END PVIF_Version3 format***************** */
/* **********END AdditonalInfo format ********************/
/* **********END Default format************* */
/* **********END DT_DefaultFormat format***************** */
/* **********DT_ExternallyDefined format***************** */
/* ExternallyDefined */
/* **********DbvASN1External format***************** */
/* Title,External file name (string); */
   ExternalllyDefined_External file name,"Authentication_External";
/* **********END DbvASN1External format***************** */
/* **********END DT_ExternallyDefined format***************** */
/* **********END DbvDiagRec format***************** */
/* **********END DRT_SurrogateDiagnostics****** */
/* **********DRT_StartingFragment************* */
/* **********DbvFragmentSyntax format********* */
/* Title,FragmentSyntaxType (enum),COMPLETED;
        (FST_ExternallyTagged,FST_NotExternallyTagged) */
   FragmentSyntaxType,"FST_ExternallyTagged","COMPLETED";
/* uFragmentSyntax union is completed if COMPLETED */
/* Now choose either FST_ExternallyTagged,FST_NotExternallyTagged */
/* **********FST_ExternallyTagged********* */
/* **********DbvASN1External format***************** */
/* Title,External file name (string); */
   ExternallyTagged_External file name,"Authentication_External";
/* **********END DbvASN1External format***************** */
/* **********END FST_ExternallyTagged********* */
/* **********FST_NotExternallyTagged********* */
/* Title,NotExternallyTagged (octet); */
   NotExternallyTagged,-1,"a string";
/* **********END FST_NotExternallyTagged********* */
/* **********END DbvFragmentSyntax format********* */
/* **********END DRT_StartingFragment********* */
/* **********DRT_IntermediateFragment********* */
/* **********DbvFragmentSyntax format********* */
/* Title,FragmentSyntaxType (enum),COMPLETED;
        (FST_ExternallyTagged,FST_NotExternallyTagged) */
   FragmentSyntaxType,"FST_ExternallyTagged","COMPLETED";
/* uFragmentSyntax union is completed if COMPLETED */
/* Now choose either FST_ExternallyTagged,FST_NotExternallyTagged */
```

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```
/* **********FST_ExternallyTagged********* */
/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   FST_ExternallyTagged_External file name,"FileName_External";
/* **********END DbvASN1External format**************** */
/* **********END FST_ExternallyTagged********* */
/* **********FST_NotExternallyTagged********* */
/* Title,NotExternallyTagged (octet); */
   NotExternallyTagged,-1,"a string";
/* **********END FST_NotExternallyTagged********* */
/* **********END DbvFragmentSyntax format********* */
/* **********END DRT_IntermediateFragment****** */
/* **********DRT_FinalFragment**************** */
/* **********DbvFragmentSyntax format********* */
/* Title,FragmentSyntaxType (enum),COMPLETED;
        (FST_ExternallyTagged,FST_NotExternallyTagged) */
   FragmentSyntaxType,"FST_ExternallyTagged","COMPLETED";
/* uFragmentSyntax union is completed if COMPLETED */
/* Now choose either FST_ExternallyTagged,FST_NotExternallyTagged */
/* **********FST_ExternallyTagged********* */
/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   ExternallyTagged_External file name,"FileName_External";
/* **********END DbvASN1External format**************** */
/* **********END FST_ExternallyTagged********* */
/* **********FST_NotExternallyTagged********* */
/* Title,NotExternallyTagged (octet); */
   NotExternallyTagged,-1,"a string";
/* **********END FST_NotExternallyTagged********* */
/* **********END DbvFragmentSyntax format********* */
/* **********END DRT_FinalFragment************ */
/* **********END NamePlusRecord format****************** */
/* **********END RT_Response******************* */
/* **********RT_NonSurrDiagnostics******************* */
/* **********DbvDefaultDiagFormat format************ */
/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"1.2.840.10003.4.1";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format *******************/
/* Title,ProtocolVersionInforce (enum),completed; (PVIF_Version2,PVIF_Version3)
*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */
/* Now choose either PVIF_Version2 or PVIF_Version3 */
/* **********PVIF_Version2 format**************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format**************** */
/* **********PVIF_Version3 format**************** */
/* Title,V3 (Inter); */
   V3,-1,"V3 string";
/* **********END PVIF_Version3 format**************** */
/* **********END AdditonalInfo format *******************/
/* **********END DbvDefaultDiagFormat format************ */
/* **********END RT_NonSurrDiagnostics******************* */
/* **********RT_MultipleNonSurrDiagnostics******************* */
/* Title,Number of DiagRec (integer); */
/*   Number of DiagRec=,1;*/
```

```
/* N * DiagRec */
/* if N=0 then structure is not completed */
/* **********DbvDiagRec format***************** */
/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */
/* **********DT_DefaultFormat format**************** */
/* **********Default format************ */
/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"1.2.840.10003.4.1";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format ******************/
/* Title,ProtocolVersionInforce (enum),completed; (PVIF_Version2,PVIF_Version3)
*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */
/* Now choose either PVIF_Version2 or PVIF_Version3 */
/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format***************** */
/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
   V3,-1,"V3 string";
/* **********END PVIF_Version3 format***************** */
/* **********END AdditonalInfo format ******************/
/* **********END Default format************ */
/* **********END DT_DefaultFormat format**************** */
/* **********DT_ExternallyDefined format**************** */
/* ExternallyDefined */
/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   ExternallyDefined_External file name,"FileName_External";
/* **********END DbvASN1External format**************** */
/* **********DT_ExternallyDefined format**************** */
/* **********END DbvDiagRec format**************** */
/* ***********END RT_MultipleNonSurrDiagnostics******************** */
/*   ********END DbvRecords format**************** */
/*Title,AdditionalSearchInformation format */
  AdditionalSearchInformation format, "COMPLETED";
  InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
  DbvInformationType, "IT_BinaryInfo";
  Octetstring, -1, "This is a binary info type string thing";
/*Title,OtherInformation format */
  OtherInformation format, "COMPLETED";
  InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
  DbvInformationType, "IT_BinaryInfo";
  Octetstring, -1, "This is a binary info type string thing";
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

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Examples:

```
 1, 1;
 2,-1,"SearchRsp reference Id";
 5200,
 5200,
 5200;
 "DBV_TRUE";
 ResultSetStatus,"RSS_Subset";
 PresentStatus,"PS_Success";
 DbvRecords,"COMPLETED";
 RecordType,"RT_Response","COMPLETED";
 Number of NamePlusRecords=,1;
 DatabaseName,-1,"Databasename string";
 DbRecordType,"DRT_SurrogateDiagnostics","COMPLETED";
 DiagnosticsType,"DT_DefaultFormat","COMPLETED";
 DiagnosticSetId,"1.2.840.10003.4.1";
 Condition,1;
 ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
 V2,"V2 string";

AdditionalSearchInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
DbvInformationType, "IT_BinaryInfo";
Octetstring, -1, "This is a binary info type string thing";

OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
DbvInformationType, "IT_BinaryInfo";
Octetstring, -1, "This is a binary info type string thing";

 3, "OUT_PARAM";
```

5.2.3 DbvPresentResponse()

Read From: presrsp_(in)valid

Result To: presrsp_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvPresentRsp structure detailed below */
/* 2,ReferenceId (octet), */
   2,-1,"PresentRsp reference Id",
/* NumberOfRecordsReturned (integer), */
   5200,
/* NextResultSetPosition (integer); */
   5200;
/* Title,PresentStatus (enum); (PS_Success,PS_Partial_1,PS_Partial_2,
       PS_Partial3,PS_Partial4,PS_Failure) */
   PresentStatus,"PS_Success";
/* ********DbvRecords format************** */
/* Title,Completed; */
   DbvRecords,"COMPLETED";
/* DbvRecords structure completed if "COMPLETED" */
/* Title,RecordType (enum),Completed; */
   (RT_Response,RT_NonSurrDiagnostics,RT_MultipleNonSurrDiagnostics) */
   RecordType,"RT_Response","COMPLETED";
/* uRecord UNION completed if "COMPLETED" */
/* Now choose one of above listed three */
/* **********RT_Response******************* */
/* Title,Number of NamePlusRecords (integer); */
   Number of NamePlusRecords=,1;
/* N * NamePlusRecord */
/* if N=0 then structure not completed */
/* **********NamePlusRecord format**************** */
/* Title,DatabaseName (Inter); */
   DatabaseName,-1,"Databasename string";
/* Title,DbRecordType (enum),COMPLETED; (DRT_Retrieval,DRT_SurrogateDiagnostics,
    DRT_StartingFragment,DRT_IntermediateFragment,DRT_FinalFragment) */
   DbRecordType,"DRT_Retrieval","COMPLETED";
/* uDbRecord union completed if COMPLETED */
/* Now choose one of above listed five */
/* **********DRT_Retrieval********** */
/* RetrievalRecord */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END DRT_Retrieval****** */
/* **********DRT_SurrogateDiagnostics********** */
/* SurrogateDiagnostic */
/* **********DbvDiagRec format************** */
/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */
/* **********DT_DefaultFormat format*************** */
/* **********Default format************ */
/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"OID string";
/* Title,Condition (integer); */
```

```
   Condition,1;
/* **********AdditonalInfo format ********************/
/* Title,ProtocolVersionInforce (enum),completed;
     (PVIF_Version2,PVIF_Version3) */
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */
/* Now choose either PVIF_Version2 or PVIF_Version3 */
/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format***************** */
/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
   V3,-1,"V3 string";
/* **********END PVIF_Version3 format***************** */
/* **********END AdditonalInfo format ********************/
/* **********END Default format************* */
/* **********END DT_DefaultFormat format**************** */
/* **********DT_ExternallyDefined format**************** */
/* ExternallyDefined */
/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END DbvASN1External format**************** */
/* **********DT_ExternallyDefined format**************** */
/* **********END DbvDiagRec format**************** */
/* **********END DRT_SurrogateDiagnostics****** */
/* **********DRT_StartingFragment************** */
/* **********DbvFragmentSyntax format********* */
/* Title,FragmentSyntaxType (enum),COMPLETED;
        (FST_ExternallyTagged,FST_NotExternallyTagged) */
   FragmentSyntaxType,"FST_ExternallyTagged,"COMPLETED";
/* uFragmentSyntax union is completed if COMPLETED */
/* Now choose either FST_ExternallyTagged,FST_NotExternallyTagged */
/* **********FST_ExternallyTagged********* */
/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END DbvASN1External format**************** */
/* **********END FST_ExternallyTagged********* */
/* **********FST_NotExternallyTagged********* */
/* Title,NotExternallyTagged (octet); */
   NotExternallyTagged,-1,"a string";
/* **********END FST_NotExternallyTagged********* */
/* **********END DbvFragmentSyntax format********* */
/* **********END DRT_StartingFragment********* */
/* **********DRT_IntermediateFragment********* */
/* **********DbvFragmentSyntax format********* */
/* Title,FragmentSyntaxType (enum),COMPLETED;
        (FST_ExternallyTagged,FST_NotExternallyTagged) */
   FragmentSyntaxType,"FST_ExternallyTagged,"COMPLETED";
/* uFragmentSyntax union is completed if COMPLETED */
/* Now choose either FST_ExternallyTagged,FST_NotExternallyTagged */
/* **********FST_ExternallyTagged********* */
/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END DbvASN1External format**************** */
/* **********END FST_ExternallyTagged********* */
```

```
/* **********FST_NotExternallyTagged********* */
/* Title,NotExternallyTagged (octet); */
   NotExternallyTagged,-1,"a string";
/* **********END FST_NotExternallyTagged********* */
/* **********END DbvFragmentSyntax format********** */
/* **********END DRT_IntermediateFragment****** */
/* **********DRT_FinalFragment***************** */
/* **********DbvFragmentSyntax format********** */
/* Title,FragmentSyntaxType (enum),COMPLETED;
         (FST_ExternallyTagged,FST_NotExternallyTagged) */
   FragmentSyntaxType,"FST_ExternallyTagged,"COMPLETED";
/* uFragmentSyntax union is completed if COMPLETED */
/* Now choose either FST_ExternallyTagged,FST_NotExternallyTagged */
/* **********FST_ExternallyTagged********* */
/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END DbvASN1External format**************** */
/* **********END FST_ExternallyTagged********* */
/* **********FST_NotExternallyTagged********* */
/* Title,NotExternallyTagged (octet); */
   NotExternallyTagged,-1,"a string";
/* **********END FST_NotExternallyTagged********* */
/* **********END DbvFragmentSyntax format********** */
/* **********END DRT_FinalFragment************* */
/* **********END NamePlusRecord format****************** */
/* **********END RT_Response******************* */
/* **********RT_NonSurrDiagnostics******************** */
/* **********DbvDefaultDiagFormat format************ */
/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"OID string";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format ******************/
/* Title,ProtocolVersionInforce (enum),completed;
(PVIF_Version2,PVIF_Version3)*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */
/* Now choose either PVIF_Version2 or PVIF_Version3 */
/* **********PVIF_Version2 format**************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format**************** */
/* **********PVIF_Version3 format**************** */
/* Title,V3 (Inter); */
   V3,-1,"V3 string";
/* **********END PVIF_Version3 format**************** */
/* **********END AdditonalInfo format ******************/
/* **********END DbvDefaultDiagFormat format************ */
/* **********END RT_NonSurrDiagnostics******************** */
/* **********RT_MultipleNonSurrDiagnostics******************** */
/* Title,Number of DiagRec (integer); */
   Number of DiagRec=,1;
/* N * DiagRec */
/* if N=0 then structure is not completed */
/* **********DbvDiagRec format*************** */
/* Title,DiagnosticsType (enum),COMPLETED;
         (DT_DefaultFormat,DT_ExternallyDefined) */
```

```
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */
/* **********DT_DefaultFormat format***************** */
/* **********Default format************* */
/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"OID string";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format *******************/
/* Title,ProtocolVersionInforce (enum),completed;
(PVIF_Version2,PVIF_Version3)*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */
/* Now choose either PVIF_Version2 or PVIF_Version3 */
/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format***************** */
/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
   V3,-1,"V3 string";
/* **********END PVIF_Version3 format***************** */
/* **********END AdditonalInfo format *******************/
/* **********END Default format************* */
/* **********DT_ExternallyDefined format***************** */
/* ExternallyDefined */
/* **********DbvASN1External format***************** */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END DbvASN1External format***************** */
/* **********DT_ExternallyDefined format***************** */
/* **********END DbvDiagRec format***************** */
/* **********END RT_MultipleNonSurrDiagnostics******************** */
/*   **********END DbvRecords format***************** */
/*Title,OtherInformation format */
   Other Information;
/* Other Information: see OtherInformation format explanation and place here */
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

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Examples:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvPresentRsp structure detailed below */
/* 2,ReferenceId (octet), */
   2,-1,"PresentRsp reference Id";
/* Title,NumberOfRecordsReturned (integer); */
   NumberOfRecordsReturned,5200;
/* Title,NextResultSetPosition (integer); */
   NextResultSetPosition,5200;

/* Title,PresentStatus (enum); (PS_Success,PS_Partial_1,PS_Partial_2,
      PS_Partial3,PS_Partial4,PS_Failure) */
   PresentStatus,"PS_Success";

/*  ********DbvRecords format***************** */

/* Title,Completed; */
   DbvRecords,"COMPLETED";
/* DbvRecords structure completed if "COMPLETED" */

/* Title,RecordType (enum),Completed;
   (RT_Response,RT_NonSurrDiagnostics,RT_MultipleNonSurrDiagnostics) */
   RecordType,"RT_Response","COMPLETED";
/* uRecord UNION completed if "COMPLETED" */

/* Now choose one of above listed three */

/* **********RT_Response******************** */
/* Title,Number of NamePlusRecords (integer); */
   Number of NamePlusRecords=,1;

/* N * NamePlusRecord */
/* if N=0 then structure not completed */

/* ***********NamePlusRecord format******************** */

/* Title,DatabaseName (Inter); */
   DatabaseName,-1,"Databasename string";

/* Title,DbRecordType (enum),COMPLETED; (DRT_Retrieval,DRT_SurrogateDiagnostics,
    DRT_StartingFragment,DRT_IntermediateFragment,DRT_FinalFragment) */
   DbRecordType,"DRT_Retrieval","COMPLETED";
/* uDbRecord union completed if COMPLETED */

/* Now choose one of above listed five */

/* *********DRT_Retrieval********* */
/* RetrievalRecord */
/* Title,External file name (string); */
   TT_External file name,"Authentication_External";

/* **********END DRT_Retrieval****** */

/* *********DRT_SurrogateDiagnostics********* */
/* SurrogateDiagnostic */

/* **********DbvDiagRec format*************** */
```

```
/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
/*   DiagnosticsType,"DT_DefaultFormat","COMPLETED";*/
/* uDiagnostics is completed if COMPLETED */
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */

/* **********DT_DefaultFormat format**************** */

/* **********Default format************* */

/* Title,DiagnosticSetId (OID string); */
/*   DiagnosticSetId,"OID string";*/
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format *******************/
/* Title,ProtocolVersionInforce (enum),completed; (PVIF_Version2,PVIF_Version3)
*/
/8   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";*/
/* uAdditionalInfo is completed if COMPLETED */

/* Now choose either PVIF_Version2 or PVIF_Version3 */

/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
/*   V2,"V2 string";*/
/* **********END PVIF_Version2 format***************** */

/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
/*   V3,-1,"V3 string";*/
/* **********END PVIF_Version3 format***************** */

/* **********END AdditonalInfo format *******************/

/* **********END Default format************* */

/* **********END DT_DefaultFormat format**************** */

/* **********DT_ExternallyDefined format**************** */
/* ExternallyDefined */

/* **********DbvASN1External format***************** */
/* Title,External file name (string); */
/*   TT_External file name,"Authentication_External";*/
/* **********END DbvASN1External format***************** */

/* **********DT_ExternallyDefined format**************** */


/* **********END DbvDiagRec format**************** */

/* **********END DRT_SurrogateDiagnostics****** */

/* **********DRT_StartingFragment************* */

/* **********DbvFragmentSyntax format********* */
/* Title,FragmentSyntaxType (enum),COMPLETED;
        (FST_ExternallyTagged,FST_NotExternallyTagged) */
   FragmentSyntaxType,"FST_ExternallyTagged","COMPLETED";
/* uFragmentSyntax union is completed if COMPLETED */
```

```
/* Now choose either FST_ExternallyTagged,FST_NotExternallyTagged */

/* **********FST_ExternallyTagged********* */

/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   External file name,"Authentication_External";
/* **********END DbvASN1External format**************** */

/* **********END FST_ExternallyTagged********* */

/* **********FST_NotExternallyTagged********* */

/* Title,NotExternallyTagged (octet); */
/*   NotExternallyTagged,-1,"FST_NotExternallyTagged string";*/

/* **********END FST_NotExternallyTagged********* */

/* **********END DbvFragmentSyntax format********** */

/* **********END DRT_StartingFragment********** */

/* **********DRT_IntermediateFragment********** */

/* **********DbvFragmentSyntax format********** */
/* Title,FragmentSyntaxType (enum),COMPLETED;
        (FST_ExternallyTagged,FST_NotExternallyTagged) */
   FragmentSyntaxType,"FST_NotExternallyTagged","COMPLETED";
/* uFragmentSyntax union is completed if COMPLETED */

/* Now choose either FST_ExternallyTagged,FST_NotExternallyTagged */

/* **********FST_ExternallyTagged********* */

/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
/*   External file name,"Authentication_External";*/
/* **********END DbvASN1External format**************** */

/* **********END FST_ExternallyTagged********* */

/* **********FST_NotExternallyTagged********* */

/* Title,NotExternallyTagged (octet); */
   NotExternallyTagged,-1,"FST_NotExternallyTagged string";

/* **********END FST_NotExternallyTagged********* */

/* **********END DbvFragmentSyntax format********** */

/* **********END DRT_IntermediateFragment****** */

/* **********DRT_FinalFragment**************** */

/* **********DbvFragmentSyntax format********** */
/* Title,FragmentSyntaxType (enum),COMPLETED;
        (FST_ExternallyTagged,FST_NotExternallyTagged) */
   FragmentSyntaxType,"FST_NotExternallyTagged","COMPLETED";
/* uFragmentSyntax union is completed if COMPLETED */
```

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```
/* Now choose either FST_ExternallyTagged,FST_NotExternallyTagged */

/* **********FST_ExternallyTagged********* */

/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
/*   External file name,"Authentication_External";*/
/* **********END DbvASN1External format**************** */

/* **********END FST_ExternallyTagged********* */

/* **********FST_NotExternallyTagged********* */

/* Title,NotExternallyTagged (octet); */
   NotExternallyTagged,-1,"FST_NotExternallyTagged string";

/* **********END FST_NotExternallyTagged********* */

/* **********END DbvFragmentSyntax format********* */

/* **********END DRT_FinalFragment************ */

/* **********END NamePlusRecord format****************** */

/* **********END RT_Response****************** */

/* **********RT_NonSurrDiagnostics****************** */

/* **********DbvDefaultDiagFormat format************ */

/* Title,DiagnosticSetId (OID string); */
/*   DiagnosticSetId,"1.2.840.10003.4.1";*/
/* Title,Condition (integer); */
/*   Condition,1;*/
/* **********AdditonalInfo format ******************/
/* Title,ProtocolVersionInforce (enum),completed; (PVIF_Version2,PVIF_Version3)
*/
/*   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";*/
/* uAdditionalInfo is completed if COMPLETED */

/* Now choose either PVIF_Version2 or PVIF_Version3 */

/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
/*   V2,"V2 string";*/
/* **********END PVIF_Version2 format***************** */

/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
/*   V3,-1,"V3 string";*/
/* **********END PVIF_Version3 format***************** */

/* **********END AdditonalInfo format ******************/

/* **********END DbvDefaultDiagFormat format************ */

/* **********END RT_NonSurrDiagnostics****************** */

/* **********RT_MultipleNonSurrDiagnostics****************** */

/* Title,Number of DiagRec (integer); */
```

```
/*  Number of DiagRec=,1;*/

/* N * DiagRec */
/* if N=0 then structure is not completed */

/* **********DbvDiagRec format***************** */

/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
/*   DiagnosticsType,"DT_DefaultFormat","COMPLETED";*/
/* uDiagnostics is completed if COMPLETED */
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */

/* **********DT_DefaultFormat format***************** */

/* **********Default format************* */

/* Title,DiagnosticSetId (OID string); */
/*  DiagnosticSetId,"1.2.840.10003.4.1";*/
/* Title,Condition (integer); */
/*   Condition,1;*/
/* **********AdditonalInfo format ******************** */
/* Title,ProtocolVersionInforce (enum),completed; (PVIF_Version2,PVIF_Version3)
*/
/*   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";*/
/* uAdditionalInfo is completed if COMPLETED */

/* Now choose either PVIF_Version2 or PVIF_Version3 */

/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
 /*  V2,"V2 string";*/
/* **********END PVIF_Version2 format***************** */

/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
/*   V3,-1,"V3 string";*/
/* **********END PVIF_Version3 format***************** */

/* **********END AdditonalInfo format ******************** */

/* **********END Default format************* */

/* **********END DT_DefaultFormat format***************** */

/* **********DT_ExternallyDefined format***************** */
/* ExternallyDefined */

/* **********DbvASN1External format***************** */
/* Title,External file name (string); */
/*   External file name,"Authentication_External";*/
/* **********END DbvASN1External format***************** */

/* **********DT_ExternallyDefined format***************** */


/* **********END DbvDiagRec format***************** */

/* **********END RT_MultipleNonSurrDiagnostics******************** */
```

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```
/*  ********END DbvRecords format************** */

/*Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";

/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

5.2.4 DbvDeleteResultSetResponse()

Read From: delrsp_(in)valid

Result To: delrsp_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvDeleteResultsetRsp structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"DeleteResultSetRsp reference Id";
/* Title,DeleteOperationStatus (DbvDeleteSetStatus (enum));
   (DSS_Success,DSS_ResultSetDidNotExist,DSS_PeviouslyDeletedByTarget,
    DSS_SystemProblemAtTarget,DSS_AccessNotAllowed,DSS_ResourceControlAtOrigin,
    DSS_ResourceControlAtTarget,
    DSS_BulkDeleteNotSupported,DSS_NotAllSetsDeletedOnBulkDlt,
    DSS_NotAllRequestedSetsDeleted,DSS_ResultSetInUse) */
   DeleteOperationStatus,"DSS_Success";
/* Title, Number of DeleteListStatuses */
   Number of DeleteListStatuses,1;
/* N * DbvListStatus*/
/* *********DbvListStatus format************** */
/* Title, ResultSetId (Inter); */
   ResultSetId, -1, "A ResultSetId string";
/* Title,DeleteSetStatus (DbvDeleteSetStatus (enum));
   (DSS_Success,DSS_ResultSetDidNotExist,DSS_PeviouslyDeletedByTarget,
    DSS_SystemProblemAtTarget,DSS_AccessNotAllowed,DSS_ResourceControlAtOrigin,
    DSS_ResourceControlAtTarget,DSS_BulkDeleteNotSupported
    ,DSS_NotAllSetsDeletedOnBulkDlt,
    DSS_NotAllRequestedSetsDeleted,DSS_ResultSetInUse) */
   DeleteSetStatus,"DSS_Success";
/* *********END DbvListStatus format********** */
/* Title,NumberNotDeleted (Inter); */
   NumberNotDeleted,"0";
/* Title, Number of BulkStatuses */
   Number of BulkStatuses, 1;
/* N * DbvListStatus*/
/* *********DbvListStatus format************** */
/* Title, ResultSetId (Inter); */
   ResultSetId, -1, "A ResultSetId string";
/* Title,DeleteSetStatus (DbvDeleteSetStatus (enum));
   (DSS_Success,DSS_ResultSetDidNotExist,DSS_PeviouslyDeletedByTarget,
    DSS_SystemProblemAtTarget,DSS_AccessNotAllowed,DSS_ResourceControlAtOrigin,
    DSS_ResourceControlAtTarget,DSS_BulkDeleteNotSupported
    ,DSS_NotAllSetsDeletedOnBulkDlt,
    DSS_NotAllRequestedSetsDeleted,DSS_ResultSetInUse) */
   DeleteSetStatus,"DSS_Success";
/* *********END DbvListStatus format********** */
/* Title,DeleteMessage  (Inter); */
   DeleteMessage, -1, "a DeleteMessage string";

/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";
```

/* 3, SIError; (output parameter) */
  3, "OUT_PARAM"

Examples:
```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvDeleteResultsetRsp structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"DeleteResultSetRsp reference Id";

/* Title,DeleteOperationStatus (DbvDeleteSetStatus (enum));
   (DSS_Success,DSS_ResultSetDidNotExist,DSS_PeviouslyDeletedByTarget,
    DSS_SystemProblemAtTarget,DSS_AccessNotAllowed,DSS_ResourceControlAtOrigin,
    DSS_ResourceControlAtTarget,DSS_BulkDeleteNotSupported,
    DSS_NotAllSetsDeletedOnBulkDlt,
    DSS_NotAllRequestedSetsDeleted,DSS_ResultSetInUse) */

   DeleteOperationStatus,"DSS_Success";

/* Title, Number of DeleteListStatuses */
   Number of DeleteListStatuses,1;

/* N * DbvListStatus*/

/* *********DbvListStatus format*************** */


/* Title, ResultSetId (Inter); */
   ResultSetId, -1, "A ResultSetId string";

/* Title,DeleteSetStatus (DbvDeleteSetStatus (enum));
   (DSS_Success,DSS_ResultSetDidNotExist,DSS_PeviouslyDeletedByTarget,
    DSS_SystemProblemAtTarget,DSS_AccessNotAllowed,DSS_ResourceControlAtOrigin,

DSS_ResourceControlAtTarget,DSS_BulkDeleteNotSupported,DSS_NotAllSetsDeletedOnBu
lkDlt,
    DSS_NotAllRequestedSetsDeleted,DSS_ResultSetInUse) */
   DeleteSetStatus,"DSS_Success";

/* *********END DbvListStatus format*********** */

/* Title,NumberNotDeleted (Inter); */
   NumberNotDeleted,"0";

/* Title, Number of BulkStatuses */
   Number of BulkStatuses, 1;

/* N * DbvListStatus*/

/* *********DbvListStatus format*************** */


/* Title, ResultSetId (Inter); */
   ResultSetId, -1, "A ResultSetId string";

/* Title,DeleteSetStatus (DbvDeleteSetStatus (enum));
   (DSS_Success,DSS_ResultSetDidNotExist,DSS_PeviouslyDeletedByTarget,
```

```
   DSS_SystemProblemAtTarget,DSS_AccessNotAllowed,
   DSS_ResourceControlAtOrigin,DSS_ResourceControlAtTarget,
   DSS_BulkDeleteNotSupported,DSS_NotAllSetsDeletedOnBulkDlt,
   DSS_NotAllRequestedSetsDeleted,DSS_ResultSetInUse) */
 DeleteSetStatus,"DSS_Success";

/* *********END DbvListStatus format********** */

/* Title,DeleteMessage  (Inter); */
   DeleteMessage, -1, "a DeleteMessage string";

/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";

/* 3, SIError; (output parameter) */
   3, "OUT_PARAM"
```

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5.2.5 DbvScanResponse()

Read From: scanrsp_(in)valid

Result To: scanrsp_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvScanRsp structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"ScanRsp reference Id";
/* Title,StepSize (integer); */
   Stepsize,"1";
/* Title,ScanStatus (enum);
   (SCS_Success,SCS_Partial_1,SCS_Partial_2,SCS_Partial_3,SCS_Partial_4,
    SCS_Partial_5,SCS_Failure) */
   ScanStatus,"SCS_Success";
/* Title,NumberOfEntriesReturned (integer); */
   NumberOfEntriesReturned,1;
/* Title,PositionOfTerm (integer); */
   PositionOfTerm,"1";
/* Entries */
/* ******DbvListEntries format********** */
/* ******** DbvEntryType *******  */
/* Title, Number of Entries; */
   Number of Entries=,1;
/* N * DbvEntry format; */
/* if N=0 then structure not completed */
/* ******DbvEntry format************** */
/* Title,EntryType (enum),Completed; (ET_TermInfo,ET_SurrogateDiagnostic) */
   EntryType,"ET_TermInfo","COMPLETED";
/* Now choose either ET_TermInfo,ET_SurrogateDiagnostic: */
/* *********ET_TermInfo****************** */
/* DbvTerm sTerm */
/* **********DbvTerm format*************************** */
/* DbvTermType */
/* Title,DbvTermType (enum) (1 of 8, either General,Numeric,SimpleCharacter
   ,ObjectIdentifier,DateTime,External,IntegerAndUnit or Null); */
   DbvTermType,"TT_General";
/* Now choose one of the following: */
/* **********TT_General********** */
/* Title,TT_General (octet); */
   TT_General, -1, "This is General string";
/* **********END TT_General***** */
/* **********TT_Integer********** */
/* Title,TT_Integer (integer); */
   TT_Integer, 1;
/* **********END TT_Integer***** */
/* **********TT_SimpleCharacter********** */
/* Title,TT_SimpleCharacter (Inter); */
   TT_SimpleCharacter, -1, "This is a Simplecharacter string";
/* **********END TT_SimpleCharacter***** */
/* **********TT_ObjectIdentifier********** */
/* Title,TT_ObjectIdentifier (string); */
   TT_ObjectIdentifer,"OID string";
/* **********END TT_ObjectIdentifier***** */
/* **********TT_GeneralizedTime********** */
/* Title,TT_GeneralizedTime (string); */
```

```
    TT_GeneralizedTime,"a GeneralizedTime string";
/* **********END TT_GeneralizedTime****** */
/* **********TT_External********* */
/* Title,External file name (string); */
    TT_External file name,"Authentication_External";
/* **********END TT_External****** */
/* **********TT_IntegerAndUnit********* */
/* **********DbvIntUnit format***********/
/* Title,Value (integer); */
    Value,1;
/* **********DbvUnit format************ */
/* Title,UnitSystem (Inter) */
    UnitSystem, -1,"a Unitsystem string";
/* Title,UnitType; */
    UnitType;
/* ***********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
    StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */
/* **********SNT_String********* */
/* Title, String (Inter); */
    SNT_String,-1,"a SNT_String";
/* **********END SNT_String****** */
/* **********SNT_Numeric********* */
/* Title, Numeric (integer); */
    SNT_Numeric,1;
/* **********END SNT_Numeric****** */
/* **********END DbvStringOrNumeric format*************** */
/* Title,Unit; */
    Unit;
/* ***********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
    StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */
/* **********SNT_String********* */
/* Title, String (Inter); */
    SNT_String,-1,"a SNT_String";
/* **********END SNT_String****** */
/* **********SNT_Numeric********* */
/* Title, Numeric (integer); */
    SNT_Numeric,1;
/* **********END SNT_Numeric****** */
/* **********END DbvStringOrNumeric format*************** */
 /* Title,ScaleFactor (string); */
    ScaleFactor,"1";
/* **********END DbvUnit format*************** */
/* **********END DbvIntUnit format*************** */
/* **********END TT_IntegerAndUnit****** */
/* **********TT_Null********* */
/* Title,TT_Null (string); */
    TT_Null, "Null";
/* **********END TT_Null****** */
/* **********END DbvTerm format*********** */
/* Title, Number of Attribute Elements; */
    Number of Attribute Elements=,1;
/* N * DbvAttributeElement format; */
/* if N=0 then structure not completed */
/* DbvAttributeElement **ppsAttributeElement */
```

```
/* ***********DbvAttributeElement format****************; */
/* Title,AttributeSetId (string); */
   AttributeSetId,"1.2.840.10003.3.1";
/* Title,AttributeType (integer); */
   AttributeType,1;
/* ***********DbvAttributeValue format***************** */
/* Title,DbvAttributeValueType (enum) (AVT_Numeric or AVT_Complex) ; */
   DbvAttributeValueType,"AVT_Numeric";
/* Now choose between AVT_Numeric or AVT_Complex */
/* **********AVT_Numeric********** */
/* Title, Numeric (integer); */
   AVT_Numeric,1;
/* **********END AVT_Numeric****** */
/* **********AVT_Complex********** */
/* ComplexValue */
/* Title, Number of Lists; */
   Number of Lists=,1;
/* N * DbvStringOrNumeric format; */
/* if N=0 then structure not completed */
/* ***********DbvStringOrNumeric format***************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */
/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";
/* **********END SNT_String****** */
/* **********SNT_Numeric********** */
     SNT_Numeric,1;
/* **********END SNT_Numeric****** */
/* **********END DbvStringOrNumeric format************** */
/* Title, Number of SemanticAction; */
   Number of SemanticAction=,2;
/* if N=0 then list not completed */
/* Title, N * SemanticAction (integer); */
   SemanticAction,1,2;
/* **********END AVT_Complex****** */
/* **********END DbvAttributeValue format***************** */
/* **********END DbvAttributeElement format**************** */
/* Title, Number of AlternativeTerms; */
   Number of AlternativeTerms=,1;
/* N * DbvAttributesPlusTerm format; */
/* DbvAttributesPlusTerm **ppsAlternativeTerm */
/* *************AttributesPlusTerm format****************; */
/* Title, Number of Attribute Elements; */
   Number of Attribute Elements=,1;
/* N * DbvAttributeElement format; */
/* if N=0 then structure not completed */
/* ***********DbvAttributeElement format****************; */
/* Title,AttributeSetId (string); */
   AttributeSetId,"1.2.840.10003.3.1";
/* Title,AttributeType (integer); */
   AttributeType,1;
/* ***********DbvAttributeValue format***************** */
/* Title,DbvAttributeValueType (enum) (AVT_Numeric or AVT_Complex) ; */
   DbvAttributeValueType,"AVT_Numeric";
/* Now choose between AVT_Numeric or AVT_Complex */
/* **********AVT_Numeric********** */
/* Title, Numeric (integer); */
   AVT_Numeric,1;
```

```
/* **********END AVT_Numeric****** */
/* **********AVT_Complex********** */
/* ComplexValue */
/* Title, Number of Lists; */
   Number of Lists=,1;
/* N * DbvStringOrNumeric format; */
/* if N=0 then structure not completed */
/* **********DbvStringOrNumeric format***************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */
/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";
/* **********END SNT_String****** */
/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;
/* **********END SNT_Numeric****** */
/* **********END DbvStringOrNumeric format************* */
/* Title, Number of SemanticAction; */
   Number of SemanticAction=,2;
/* if N=0 then list not completed */
/* Title, N * SemanticAction (integer); */
   SemanticAction,1,2;
/* **********END AVT_Complex****** */
/* **********END DbvAttributeValue format**************** */
/* **********END DbvAttributeElement format*************** */
/* **********DbvTerm format****************************** */
/* DbvTermType */
/* Title,DbvTermType (enum) (1 of 8, either General,Numeric,SimpleCharacter
   ,ObjectIdentifier,DateTime,External,IntegerAndUnit or Null); */
   DbvTermType,"TT_General";
/* Now choose one of the following: */
/* **********TT_General********** */
/* Title,TT_General (octet); */
   TT_General, -1, "This is General string";
/* **********END TT_General****** */
/* **********TT_Integer********** */
/* Title,TT_Integer (integer); */
   TT_Integer, 1;
/* **********END TT_Integer********** */
/* ********** TT_SimpleCharacter****** */
/* Title,TT_SimpleCharacter (Inter); */
   TT_SimpleCharacter, -1, "This is a Simplecharacter string";
/* **********END TT_SimpleCharacter****** */
/* **********TT_ObjectIdentifier********** */
/* Title,TT_ObjectIdentifier (string); */
   TT_ObjectIdentifer,"1.2.840.10003.3.1";
/* **********END TT_ObjectIdentifier****** */
/* **********TT_GeneralizedTime********** */
/* Title,TT_GeneralizedTime (string); */
   TT_GeneralizedTime,"a GeneralizedTime string";
/* **********END TT_GeneralizedTime****** */
/* **********TT_External********** */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END TT_External****** */
```

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```
/* **********TT_IntegerAndUnit********** */
/* **********DbvIntUnit format***********/
/* Title,Value (integer); */
   Value,1;
/* **********DbvUnit format*********** */
/* Title,UnitSystem (Inter) */
   UnitSystem, -1,"a Unitsystem string";
/* Title,UnitType; */
   UnitType;
/* **********DbvStringOrNumeric format************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */
/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";
 /* **********END SNT_String****** */
 /* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;
 /* **********END SNT_Numeric****** */
 /* **********END DbvStringOrNumeric format************** */
/* Title,Unit; */
   Unit;
/* **********DbvStringOrNumeric format************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
   StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */
/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";
/* **********END SNT_String****** */
/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;
/* **********END SNT_Numeric****** */
/* **********END DbvStringOrNumeric format************** */
/* Title,ScaleFactor (string); */
   ScaleFactor,"1";
/* **********END DbvUnit format*************** */
/* **********END DbvIntUnit format*************** */
/* **********END TT_IntegerAndUnit****** */
/* **********TT_Null********** */
/* Title,TT_Null (string); */
   TT_Null, "Null";
/* **********END TT_Null****** */
/* **********END DbvTerm format*********** */
/* **********END AttributesPlusTerm format*********** */
/* Title,GlobalOccurences (integer); */
   GlobalOccurences,"1";
/* ********DbvOccurenceByAttributes format********* */
/* Title,ByAttributes,COMPLETED;*/
   ByAttributes,"COMPLETED";
/* Title, Number of Attribute Elements; */
   Number of Attribute Elements=,1;
/* N * DbvAttributeElement format; */
/* if N=0 then structure not completed */
/* **********DbvAttributeElement format**************; */
/* Title,AttributeSetId (string); */
   AttributeSetId,"1.2.840.10003.3.1";
```

```
/* Title,AttributeType (integer); */
   AttributeType,1;
/* ***********DbvAttributeValue format***************** */
/* Title,DbvAttributeValueType (enum) (AVT_Numeric or AVT_Complex) ; */
   DbvAttributeValueType,"AVT_Numeric";
/* Now choose between AVT_Numeric or AVT_Complex */
/* **********AVT_Numeric********** */
/* Title, Numeric (integer); */
   AVT_Numeric,1;
/* **********END AVT_Numeric****** */
/* ComplexValue */
/* Title, Number of Lists; */
   Number of Lists=,1;
/* N * DbvStringOrNumeric format; */
/* if N=0 then structure not completed */
/* ***********DbvStringOrNumeric format***************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
  StringOrNumeric,"SNT_String";
/* Now choose between SNT_String or SNT_Numeric */
/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";
/* **********END SNT_String****** */
/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
   SNT_Numeric,1;
 /* **********END SNT_Numeric****** */
/* **********END DbvStringOrNumeric format************** */
/* Title, Number of SemanticAction; */
/*   Number of SemanticAction=,2;*/
/* if N=0 then list not completed */
/* Title, N * SemanticAction (integer); */
/*   SemanticAction,1,2;*/
/* **********END AVT_Complex****** */
/* **********END DbvAttributeValue format***************** */
/* **********END DbvAttributeElement format*************** */
/* ***********DbvOccurence format***************** */
/* Title,OccurenceType (enum); (OT_Global,OT_ByDataBase) */
   OccurenceType,"OT_Global";
/* Now choose either OT_Global or OT_ByDataBase */
/* *********OT_Global*********** */
/* Title,Global (integer); */
   Global,1;
/* *********END OT_Global*********** */
/* *********OT_ByDataBase******* */
/* Title,Number of OccurenceByDb (integer); */
   Number of OccurenceByDb,1;

/*   N * DbvOccurenceByDb */
/* if N=0 then structure is not completed */
/* ***********DbvOccurenceByDb format*************** */
/* Title,DatabaseName (Inter); */
   DatabaseName,-1,"DatabaseName string";
/* Title,Number (string); */
   Number,"1";
/* Title,OtherInformation format */
 OtherInformation format, "COMPLETED";
 InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
 DbvInformationType, "IT_CharacterInfo";
```

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```
 CharacterInfo type, -1, "This is a character info type string";
/* **********END DbvOccurenceByDb format*********** */
/* *********END OT_ByDataBase******* */
/* ***********End DbvOccurence format***************** */
/* Title,OtherInformation format */
 OtherInformation format, "COMPLETED";
 InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
 DbvInformationType, "IT_CharacterInfo";
 CharacterInfo type, -1, "This is a character info type string";
/* *********END DbvOccurenceByAttributes format********** */
/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";
/* *********END ET_TermInfo****************** */
/* *********ET_SurrogateDiagnostic******** */
/* DbvDiagRec *psSurrogateDiagnostic */
/* **********DbvDiagRec format**************** */
/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */
/* **********DT_DefaultFormat format**************** */
/* **********Default format************* */
/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"1.2.840.10003.4.1";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format ******************/
/* Title,ProtocolVersionInforce (enum),completed; (PVIF_Version2,PVIF_Version3)
*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */
/* Now choose either PVIF_Version2 or PVIF_Version3 */
/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format***************** */
/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
   V3,-1,"V3 string";
/* **********END PVIF_Version3 format***************** */
/* **********END AdditonalInfo format ******************/
/* **********END Default format************* */
/* **********END DT_DefaultFormat format*************** */
/* **********DT_ExternallyDefined format*************** */
/* ExternallyDefined */
/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   External file name,"Authentication_External";
/* **********END DbvASN1External format**************** */
/* **********DT_ExternallyDefined format**************** */
/* **********END DbvDiagRec format**************** */
/* **********END ET_SurrogateDiagnostic******** */
/* **********END DbvEntry format************** */
/* **********DbvDiagRec format**************** */
/* DbvDiagRec **ppsNonSurrogateDiagnostics */
```

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```
/* Title,Number of DiagRecs (integer) */
   NumberofDiagRecs=,1;
/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */
/* **********DT_DefaultFormat format**************** */
/* **********Default format************** */
/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"1.2.840.10003.4.1";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format ********************/
/* Title,ProtocolVersionInforce (enum),completed; (PVIF_Version2,PVIF_Version3)
*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */
/* Now choose either PVIF_Version2 or PVIF_Version3 */
/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format***************** */
/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
   V3,-1,"V3 string";
/* **********END PVIF_Version3 format***************** */
/* **********END AdditonalInfo format ********************/
/* **********END Default format************** */
/* **********END DT_DefaultFormat format**************** */
/* **********DT_ExternallyDefined format**************** */
/* ExternallyDefined */
/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   External file name,"Authentication_External";
/* **********END DbvASN1External format**************** */
/* **********DT_ExternallyDefined format**************** */
/* **********END DbvDiagRec format**************** */
/* ******END DbvListEntries format********* */
/* Title,AttributeSetId (OID string); */
   AttributeSetId,"1.2.840.10003.3.1";
/* Title,OtherInformation format */
  OtherInformation format, "COMPLETED";
  InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
  DbvInformationType, "IT_CharacterInfo";
  CharacterInfo type, -1, "This is a character info type string";
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

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Examples:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvScanRsp structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"ScanRsp reference Id";

/* Title,StepSize (integer); */
   Stepsize,1;

/* Title,ScanStatus (enum);
   (SCS_Success,SCS_Partial_1,SCS_Partial_2,SCS_Partial_3,SCS_Partial_4,
    SCS_Partial_5,SCS_Failure) */
   ScanStatus,"SCS_Success";

/* Title,NumberOfEntriesReturned (integer); */
   NumberOfEntriesReturned,1,

/* Title,PositionOfTerm (integer); */
   PositionOfTerm,1;

/* Entries */

/* ******DbvListEntries format********* */

/* ******** DbvEntryType *******  */

/* Title, Number of Entries; */
   Number of Entries=,1;

/* N * DbvEntry format; */
/* if N=0 then structure not completed */

/* ******DbvEntry format************** */

/* Title,EntryType (enum),Completed; (ET_TermInfo,ET_SurrogateDiagnostic) */
   EntryType,"ET_TermInfo","COMPLETED";

/* Now choose either ET_TermInfo,ET_SurrogateDiagnostic: */

/* *********ET_TermInfo***************** */
/* DbvTerm sTerm */

/* **********DbvTerm format**************************** */
/* DbvTermType */
/* Title,DbvTermType (enum) (1 of 8, either General,Numeric,SimpleCharacter
   ,ObjectIdentifier,DateTime,External,IntegerAndUnit or Null); */
   DbvTermType,TT_General;

/* Now choose one of the following: */

/* **********TT_General********** */
/* Title,TT_General (octet); */
   TT_General, -1, "This is General string";

/* **********END TT_General****** */

/* **********TT_Integer********** */
/* Title,TT_Integer (integer); */
/*   TT_Integer, 1;*/
```

```
/* **********END TT_Integer****** */

/* **********TT_SimpleCharacter********** */
/* Title,TT_SimpleCharacter (Inter); */
/*   TT_SimpleCharacter, -1, "This is a Simplecharacter string";*/

/* **********END TT_SimpleCharacter****** */

/* **********TT_ObjectIdentifier********** */
/* Title,TT_ObjectIdentifier (string); */
/*  TT_ObjectIdentifer,"OID string";*/

/* **********END TT_ObjectIdentifier****** */

/* **********TT_GeneralizedTime********** */
/* Title,TT_GeneralizedTime (string); */
/*   TT_GeneralizedTime,"a GeneralizedTime string";*/

/* **********END TT_GeneralizedTime****** */

/* **********TT_External********** */
/* Title,External file name (string); */
/*   TT_External file name,"Authentication_External";*/

/* **********END TT_External****** */

/* **********TT_IntegerAndUnit********** */

/* **********DbvIntUnit format***********/

/* Title,Value (integer); */
 /*  Value,1;*/

/* **********DbvUnit format************ */
/* Title,UnitSystem (Inter) */
 /*  UnitSystem, -1,"a Unitsystem string";*/

/* Title,UnitType; */
/*   UnitType;*/
/* **********DbvStringOrNumeric format*************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
/*   StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********** */
/* Title, String (Inter); */
/*   SNT_String,-1,"a SNT_String";*/

/* **********END SNT_String****** */

/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
/*  SNT_Numeric,1;*/

/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format************** */

/* Title,Unit; */
```

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```
/*    Unit;*/
/* **********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
/*    StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */

/* *********SNT_String********** */
/* Title, String (Inter); */
/*    SNT_String,-1,"a SNT_String";*/

/* *********END SNT_String****** */

/* *********SNT_Numeric********** */
/* Title, Numeric (integer); */
/*    SNT_Numeric,1;*/

/* *********END SNT_Numeric****** */

/* *********END DbvStringOrNumeric format*************** */

/* Title,ScaleFactor (string); */
/*    ScaleFactor,"1";*/

/* *********END DbvUnit format*************** */

/* *********END DbvIntUnit format*************** */

/* *********END TT_IntegerAndUnit****** */

/* *********TT_Null********** */
/* Title,TT_Null (string); */
/*    TT_Null, "Null";*/

/* *********END TT_Null****** */

/* *********END DbvTerm format*********** */


/* Title, Number of Attribute Elements; */
   Number of Attribute Elements=,1;
/* N * DbvAttributeElement format; */
/* if N=0 then structure not completed */

/* DbvAttributeElement **ppsAttributeElement */

/* **********DbvAttributeElement format***************; */

/* Title,AttributeSetId (string); */
   AttributeSetId,"AttributeSetId string";

/* Title,AttributeType (integer); */
   AttributeType,1;

/* **********DbvAttributeValue format**************** */
/* Title,DbvAttributeValueType (enum) (AVT_Numeric or AVT_Complex) ; */
   DbvAttributeValueType,"AVT_Numeric";
/* Now choose between AVT_Numeric or AVT_Complex */

/* *********AVT_Numeric********** */
/* Title, Numeric (integer); */
   AVT_Numeric,1;
```

```
/* **********END AVT_Numeric****** */

/* **********AVT_Complex********** */
/* ComplexValue */
/* Title, Number of Lists; */
/*   Number of Lists=,1;*/

/* N * DbvStringOrNumeric format; */
/* if N=0 then structure not completed */

/* **********DbvStringOrNumeric format***************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
/*   StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********** */
/* Title, String (Inter); */
   SNT_String,-1,"a SNT_String";

/* **********END SNT_String****** */

/* **********SNT_Numeric********** */
/*     SNT_Numeric,1;   */

/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format*************** */

/* Title, Number of SemanticAction; */
/*   Number of SemanticAction=,2; */

/* if N=0 then list not completed */

/* Title, N * SemanticAction (integer); */
/*   SemanticAction,1,2; */

/* **********END AVT_Complex****** */
/* **********END DbvAttributeValue format***************** */
/* **********END DbvAttributeElement format*************** */


/* Title, Number of AlternativeTerms; */
   Number of AlternativeTerms=,1;
/* N * DbvAttributesPlusTerm format; */

/* DbvAttributesPlusTerm **ppsAlternativeTerm */

/* *************AttributesPlusTerm format****************; */

/* Title, Number of Attribute Elements; */
   Number of Attribute Elements=,1;
/* N * DbvAttributeElement format; */
/* if N=0 then structure not completed */

/* **********DbvAttributeElement format***************; */

/* Title,AttributeSetId (string); */
   AttributeSetId,"AttributeSetId string";
```

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```
/* Title,AttributeType (integer); */
   AttributeType,1;

/* ***********DbvAttributeValue format***************** */
/* Title,DbvAttributeValueType (enum) (AVT_Numeric or AVT_Complex) ; */
   DbvAttributeValueType,"AVT_Numeric";
/* Now choose between AVT_Numeric or AVT_Complex */

/* **********AVT_Numeric********** */
/* Title, Numeric (integer); */
   AVT_Numeric,1;

/* **********END AVT_Numeric****** */

/* **********AVT_Complex********** */
/* ComplexValue */
/* Title, Number of Lists; */
/*   Number of Lists=,1;*/

/* N * DbvStringOrNumeric format; */
/* if N=0 then structure not completed */

/* ***********DbvStringOrNumeric format***************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
/*   StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********** */
/* Title, String (Inter); */
/*   SNT_String,-1,"a SNT_String";*/

/* **********END SNT_String****** */

/* **********SNT_Numeric********** */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format*************** */

/* Title, Number of SemanticAction; */
/*   Number of SemanticAction=,2;*/

/* if N=0 then list not completed */

/* Title, N * SemanticAction (integer); */
/*   SemanticAction,1,2;*/

/* **********END AVT_Complex****** */
/* **********END DbvAttributeValue format***************** */
/* **********END DbvAttributeElement format*************** */


/* **********DbvTerm format**************************** */
/* DbvTermType */
/* Title,DbvTermType (enum) (1 of 8, either General,Numeric,SimpleCharacter
   ,ObjectIdentifier,DateTime,External,IntegerAndUnit or Null); */
   DbvTermType,TT_General;

/* Now choose one of the following: */
```

```
/* **********TT_General********** */
/* Title,TT_General (octet); */
   TT_General, -1, "This is General string";

/* **********END TT_General****** */

/* **********TT_Integer********** */
/* Title,TT_Integer (integer); */
/*   TT_Integer, 1;*/

/* **********END TT_Integer****** */

/* **********TT_SimpleCharacter********** */
/* Title,TT_SimpleCharacter (Inter); */
/*   TT_SimpleCharacter, -1, "This is a Simplecharacter string";*/

/* **********END TT_SimpleCharacter****** */

/* **********TT_ObjectIdentifier********** */
/* Title,TT_ObjectIdentifier (string); */
/*  TT_ObjectIdentifer,"1.2.840.10003.3.1";*/

/* **********END TT_ObjectIdentifier****** */

/* **********TT_GeneralizedTime********** */
/* Title,TT_GeneralizedTime (string); */
/*   TT_GeneralizedTime,"a GeneralizedTime string";*/

/* **********END TT_GeneralizedTime****** */

/* **********TT_External********** */
/* Title,External file name (string); */
/*   TT_External file name,"FileName_External";*/

/* **********END TT_External****** */

/* **********TT_IntegerAndUnit********** */

/* **********DbvIntUnit format***********/

/* Title,Value (integer); */
/*   Value,1;*/

/* **********DbvUnit format************ */
/* Title,UnitSystem (Inter) */
/*   UnitSystem, -1,"a Unitsystem string";*/

/* Title,UnitType; */
/*   UnitType;*/
/* **********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
/*   StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********** */
/* Title, String (Inter); */
/*   SNT_String,-1,"a SNT_String";*/

/* **********END SNT_String****** */
```

```
/* *********SNT_Numeric********* */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* *********END SNT_Numeric****** */

/* *********END DbvStringOrNumeric format*************** */

/* Title,Unit; */
/*   Unit;*/
/* *********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
/*   StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */

/* *********SNT_String********* */
/* Title, String (Inter); */
/*   SNT_String,-1,"a SNT_String";*/

/* *********END SNT_String****** */

/* *********SNT_Numeric********* */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* *********END SNT_Numeric****** */

/* *********END DbvStringOrNumeric format*************** */

/* Title,ScaleFactor (string); */
/*   ScaleFactor,"1";*/


/* *********END DbvUnit format*************** */

/* *********END DbvIntUnit format*************** */

/* *********END TT_IntegerAndUnit****** */

/* *********TT_Null********* */
/* Title,TT_Null (string); */
/*   TT_Null, "Null";*/

/* *********END TT_Null****** */

/* *********END DbvTerm format*********** */

/* *********END AttributesPlusTerm format*********** */


/* Title,GlobalOccurences (integer); */
   GlobalOccurences,1;

/* ********DbvOccurenceByAttributes format********* */
/* Title,ByAttributes, */
   ByAttributes,
/* Title, Number of Attribute Elements; */
   Number of Attribute Elements=,1;
/* N * DbvAttributeElement format; */
/* if N=0 then structure not completed */
```

```
/* DbvAttributeElement **ppsAttributeElement */

/* *************AttributesPlusTerm format****************; */

/* Title, Number of Attribute Elements; */
   Number of Attribute Elements=,1;
/* N * DbvAttributeElement format; */
/* if N=0 then structure not completed */

/* ***********DbvAttributeElement format***************; */

/* Title,AttributeSetId (string); */
   AttributeSetId,"AttributeSetId string";

/* Title,AttributeType (integer); */
   AttributeType,1;

/* ***********DbvAttributeValue format**************** */
/* Title,DbvAttributeValueType (enum) (AVT_Numeric or AVT_Complex) ; */
   DbvAttributeValueType,"AVT_Numeric";
/* Now choose between AVT_Numeric or AVT_Complex */

/* **********AVT_Numeric********* */
/* Title, Numeric (integer); */
   AVT_Numeric,1;

/* **********END AVT_Numeric****** */

/* **********AVT_Complex********* */
/* ComplexValue */
/* Title, Number of Lists; */
/*   Number of Lists=,1;*/

/* N * DbvStringOrNumeric format; */
/* if N=0 then structure not completed */

/* ***********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
/*   StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */

/* **********SNT_String********* */
/* Title, String (Inter); */
/*   SNT_String,-1,"a SNT_String";*/

/* **********END SNT_String****** */

/* **********SNT_Numeric********* */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* **********END SNT_Numeric****** */

/* **********END DbvStringOrNumeric format************** */

/* Title, Number of SemanticAction; */
/*   Number of SemanticAction=,2;*/

/* if N=0 then list not completed */
```

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```
/* Title, N * SemanticAction (integer); */
/*   SemanticAction,1,2;*/

/* **********END AVT_Complex****** */
/* **********END DbvAttributeValue format***************** */
/* **********END DbvAttributeElement format*************** */


/* **********DbvTerm format****************************** */
/* DbvTermType */
/* Title,DbvTermType (enum) (1 of 8, either General,Numeric,SimpleCharacter
   ,ObjectIdentifier,DateTime,External,IntegerAndUnit or Null); */
   DbvTermType,TT_General;

/* Now choose one of the following: */

/* **********TT_General********** */
/* Title,TT_General (octet); */
   TT_General, -1, "This is General string";

/* **********END TT_General****** */

/* **********TT_Integer********** */
/* Title,TT_Integer (integer); */
/*   TT_Integer, 1;*/

/* **********END TT_Integer****** */

/* **********TT_SimpleCharacter********** */
/* Title,TT_SimpleCharacter (Inter); */
/*   TT_SimpleCharacter, -1, "This is a Simplecharacter string";*/

/* **********END TT_SimpleCharacter****** */

/* **********TT_ObjectIdentifier********** */
/* Title,TT_ObjectIdentifier (string); */
/*  TT_ObjectIdentifer,"1.2.840.10003.3.1";*/

/* **********END TT_ObjectIdentifier****** */

/* **********TT_GeneralizedTime********** */
/* Title,TT_GeneralizedTime (string); */
/*   TT_GeneralizedTime,"a GeneralizedTime string";*/

/* **********END TT_GeneralizedTime****** */

/* **********TT_External********** */
/* Title,External file name (string); */
/*   TT_External file name,"FileName_External";*/

/* **********END TT_External****** */

/* **********TT_IntegerAndUnit********** */

/* **********DbvIntUnit format***********/

/* Title,Value (integer); */
/*   Value,1;*/

/* **********DbvUnit format************* */
```

```
/* Title,UnitSystem (Inter) */
/*   UnitSystem, -1,"a Unitsystem string";*/

/* Title,UnitType; */
/*   UnitType;*/
/* **********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
/*   StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */

/* *********SNT_String********* */
/* Title, String (Inter); */
/*   SNT_String,-1,"a SNT_String";*/

/* *********END SNT_String****** */

/* *********SNT_Numeric********* */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* *********END SNT_Numeric****** */

/* *********END DbvStringOrNumeric format************** */

/* Title,Unit; */
/*   Unit;*/
/* **********DbvStringOrNumeric format**************** */
/* Title DbvStringOrNumericType (enum) (SNT_String or SNT_Numeric); */
/*   StringOrNumeric,"SNT_String";*/
/* Now choose between SNT_String or SNT_Numeric */

/* *********SNT_String********* */
/* Title, String (Inter); */
/*   SNT_String,-1,"a SNT_String";*/

/* *********END SNT_String****** */

/* *********SNT_Numeric********* */
/* Title, Numeric (integer); */
/*   SNT_Numeric,1;*/

/* *********END SNT_Numeric****** */

/* *********END DbvStringOrNumeric format************** */

/* Title,ScaleFactor (string); */
/*   ScaleFactor,"1";*/


/* *********END DbvUnit format************** */

/* *********END DbvIntUnit format************** */

/* *********END TT_IntegerAndUnit****** */

/* *********TT_Null********* */
/* Title,TT_Null (string); */
/*   TT_Null, "Null";*/

/* *********END TT_Null****** */
```

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```
/* **********END DbvTerm format*********** */

/* **********END AttributesPlusTerm format*********** */


/* **********DbvOccurence format**************** */
/* Title,OccurenceType (enum); (OT_Global,OT_ByDataBase) */
   OccurenceType,"OT_Global";

/* Now choose either OT_Global or OT_ByDataBase */

/* *********OT_Global********** */
/* Title,Global (integer); */
   Global,1;
/* *********END OT_Global********** */

/* *********OT_ByDataBase******* */
/* Title,Number of OccurenceByDb (integer); */
/*   Number of OccurenceByDb,1; */

/*   N * DbvOccurenceByDb */
/* if N=0 then structure is not completed */

/* **********DbvOccurenceByDb format************** */

/* Title,DatabaseName (Inter); */
/*   DatabaseName,-1,"DatabaseName string";*/

/* Title,Number (string); */
/*   Number,"1";*/

/* Title,OtherInformation format */
/*OtherInformation format, "COMPLETED";*/
/*InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;*/
/* DbvInformationType, "IT_CharacterInfo"; */
/* CharacterInfo type, -1, "This is a character info type string";*/

/* **********END DbvOccurenceByDb format*********** */


/* *********END OT_ByDataBase******* */

/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";

/* **********DbvOccurence format**************** */

/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";

/* *********END DbvOccurenceByAttributes format********** */

/* Title,OtherInformation format */
 OtherInformation format, "COMPLETED";
```

```
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";

/* *********END ET_TermInfo****************** */

/* *********ET_SurrogateDiagnostic******** */

/* DbvDiagRec *psSurrogateDiagnostic */

/* **********DbvDiagRec format**************** */

/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
/*   DiagnosticsType,"DT_DefaultFormat","COMPLETED";*/
/* uDiagnostics is completed if COMPLETED */
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */

/* **********DT_DefaultFormat format**************** */

/* **********Default format************ */

/* Title,DiagnosticSetId (OID string); */
/*   DiagnosticSetId,"OID string";*/
/* Title,Condition (integer); */
/*   Condition,1;*/
/* *********AdditonalInfo format ******************* */
/* Title,ProtocolVersionInforce (enum),completed; (PVIF_Version2,PVIF_Version3)
*/
 /*  ProtocolVersionInforce,"PVIF_Version2","COMPLETED";*/
/* uAdditionalInfo is completed if COMPLETED */

/* Now choose either PVIF_Version2 or PVIF_Version3 */

/* **********PVIF_Version2 format**************** */
/* Title,V2 (string); */
/*   V2,"V2 string";*/
/* **********END PVIF_Version2 format*************** */

/* **********PVIF_Version3 format**************** */
/* Title,V3 (Inter); */
/*   V3,-1,"V3 string";*/
/* **********END PVIF_Version3 format*************** */

/* **********END AdditonalInfo format ******************/

/* **********END Default format************ */

/* **********END DT_DefaultFormat format*************** */

/* **********DT_ExternallyDefined format*************** */
/* ExternallyDefined */

/* **********DbvASN1External format*************** */
/* Title,External file name (string); */
/*   External file name,"Authentication_External";*/
/* **********END DbvASN1External format*************** */

/* **********DT_ExternallyDefined format*************** */
```

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```
/* **********END DbvDiagRec format**************** */

/* **********END ET_SurrogateDiagnostic******** */

/* **********END DbvEntry format************** */


/* **********DbvDiagRec format**************** */
/* DbvDiagRec **ppsNonSurrogateDiagnostics */

/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */

/* **********DT_DefaultFormat format**************** */

/* **********Default format************* */

/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"1.2.840.10003.4.1";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format *******************/
/* Title,ProtocolVersionInforce (enum),completed; (PVIF_Version2,PVIF_Version3)
*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */

/* Now choose either PVIF_Version2 or PVIF_Version3 */

/* **********PVIF_Version2 format**************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format**************** */

/* **********PVIF_Version3 format**************** */
/* Title,V3 (Inter); */
/*   V3,-1,"V3 string";*/
/* **********END PVIF_Version3 format**************** */

/* **********END AdditonalInfo format *******************/

/* **********END Default format************* */

/* **********END DT_DefaultFormat format**************** */

/* **********DT_ExternallyDefined format**************** */
/* ExternallyDefined */

/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
/*   External file name,"FileName_External";*/
/* **********END DbvASN1External format**************** */

/* **********DT_ExternallyDefined format**************** */


/* **********END DbvDiagRec format**************** */
```

```
/* ******END DbvListEntries format********** */

/* Title,AttributeSetId (OID string); */
   AttributeSetId,"1.2.840.10003.3.1";

/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";

/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

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5.2.6 DbvResourceReportResponse()

```
Read From: rescrsp_(in)valid
Result To: rescrsp_(in)valid_result
Script Format:
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvResourceReportReq structure detailed below */
/* 2,DbvResourceReportReq ReferenceId (octet); */
   2,-1,"reference Id";
/* Title,ResourceReportstatus (enum);
   (RRS_Success,RSS_Partial,RSS_Failure_1,RSS_Failure_2,RSS_Failure_3,
   RSS_Failure_4,RSS_Failure_5,RSS_Failure_6) */
   ResourceReportstatus,"RRS_Success";

/* Title,Resource Report External file name (string); */
   ResourceReport_External file name,"FileName_External";
/* Title,OtherInformation format */
   Other Information;
/* Other Information: see OtherInformation format explanation and place here */

/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

Examples:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvResourceReportReq structure detailed below */
/* 2,DbvResourceReportReq ReferenceId (octet); */
   2,-1,"ResReq reference Id";

/* Title,OperationId (octet); */
   OperationId,-1,"OperationId";

/* Title,PrefResourceReportFormat (string); */
   PrefResourceReportFormat,"1.2.840.10003.7.1";

/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
DbvInformationType, "IT_BinaryInfo";
Octetstring, -1, "This is a binary info type sting thing";

/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

5.2.7 DbvSortResponse()

Read From: sortrsp_(in)valid

Result To: sortrsp_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
  1, 1;
/* DbvSortRsp structure detailed below */
/* 2,ReferenceId (octet); */
  2,-1,"SortRsp reference Id";
/* Title,SortStatus (enum);
      (SOS_Success,SOS_Partial,SOS_Failure) */
  SortStatus,"SOS_Success";
/* Title,SortResultSetStatus (enum);
      (SRSS_Empty,SRSS_Interim,SRSS_Unchanged,SRSS_None) */
  SortResultSetStatus,"SRSS_Empty";
/* Title,Number of Diagnostics (integer); */
  Number of Diagnistics,1;
/*   N * DbvDiagRec */
/* if N=0 then  structure not completed */
/* **********DbvDiagRec format***************** */
/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
  DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */
/* **********DT_DefaultFormat format**************** */
/* **********Default format************* */
/* Title,DiagnosticSetId (OID string); */
  DiagnosticSetId,"1.2.840.10003.4.1";
/* Title,Condition (integer); */
  Condition,1;
/* **********AdditonalInfo format ******************/
/* Title,ProtocolVersionInforce (enum),COMPLETED; (PVIF_Version2,PVIF_Version3)
*/
  ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */
/* Now choose either PVIF_Version2 or PVIF_Version3 */
/* **********PVIF_Version2 format**************** */
/* Title,V2 (string); */
  V2,"V2 string";
/* **********END PVIF_Version2 format**************** */
/* **********PVIF_Version3 format**************** */
/* Title,V3 (Inter); */
  V3,-1,"V3 string";
/* **********END PVIF_Version3 format**************** */
/* **********END AdditonalInfo format ******************/
/* **********END Default format************* */
/* **********END DT_DefaultFormat format**************** */
/* **********DT_ExternallyDefined format**************** */
/* ExternallyDefined */
/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
  External file name,"FileName_External";
/* **********END DbvASN1External format**************** */
/* **********DT_ExternallyDefined format**************** */
```

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```
/* **********END DbvDiagRec format***************** */
/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

Examples:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvSortRsp structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"SortRsp reference Id";

/* Title,SortStatus (enum);
        (SOS_Success,SOS_Partial,SOS_Failure) */
   SortStatus,"SOS_Success";

/* Title,SortResultSetStatus (enum);
        (SRSS_Empty,SRSS_Interim,SRSS_Unchanged,SRSS_None) */
   SortResultSetStatus,"SRSS_Empty";

/* Title,Number of Diagnostics (integer); */
   Number of Diagnistics,1;

/*   N * DbvDiagRec */
/* if N=0 then  structure not completed */

/* **********DbvDiagRec format***************** */

/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */

/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */

/* **********DT_DefaultFormat format***************** */

/* **********Default format************* */

/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"1.2.840.10003.4.1";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format ******************/
/* Title,ProtocolVersionInforce (enum),COMPLETED; (PVIF_Version2,PVIF_Version3)
*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */

/* Now choose either PVIF_Version2 or PVIF_Version3 */

/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format***************** */
```

```
/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
/*   V3,-1,"V3 string"; */
/* **********END PVIF_Version3 format***************** */

/* **********END AdditonalInfo format ******************/

/* **********END Default format************* */

/* **********END DT_DefaultFormat format**************** */

/* **********DT_ExternallyDefined format**************** */
/* ExternallyDefined */

/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
/*   External file name,"FileName_External"; */
/* **********END DbvASN1External format**************** */

/* **********DT_ExternallyDefined format**************** */


/* **********END DbvDiagRec format**************** */

/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";

/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

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5.2.8 DbvSegmentationRequest()

Read From: segrsp_(in)valid

Result To: segrsp_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvSegmentationReq structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"SegmentationReq reference Id";
/* NumberOfRecordsReturned (integer); */
   1;
/* Title,Number of SegmentRecords (integer); */
   Number of SegmentRecords=,1;
/* N * DbvNamePlusRecord */
/* **********DbvNamePlusRecord format******************** */
/* Title,DatabaseName (Inter); */
   DatabaseName,-1,"Databasename string";
/* Title,DbRecordType (enum),COMPLETED; (DRT_Retrieval,DRT_SurrogateDiagnostics,
    DRT_StartingFragment,DRT_IntermediateFragment,DRT_FinalFragment) */
   DbRecordType,"DRT_Retrieval","COMPLETED";
/* Now choose one of above listed five */
/* **********DRT_Retrieval********** */
/* RetrievalRecord */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END DRT_Retrieval****** */
/* **********DRT_SurrogateDiagnostics********** */
/* SurrogateDiagnostic */
/* **********DbvDiagRec format***************** */
/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */
/* **********DT_DefaultFormat format***************** */
/* **********Default format************* */
/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"OID string";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format ********************/
/* Title,ProtocolVersionInforce (enum),COMPLETED;
    (PVIF_Version2,PVIF_Version3) */
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* Now choose either PVIF_Version2 or PVIF_Version3 */
/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format***************** */
/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
   V3,-1,"V3 string";
/* **********END PVIF_Version3 format***************** */
/* **********END AdditonalInfo format ********************/
/* **********END Default format************* */
/* **********END DT_DefaultFormat format***************** */
/* **********DT_ExternallyDefined format***************** */
```

```
/* ExternallyDefined */
/* **********DbvASN1External format***************** */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END DbvASN1External format***************** */
/* **********DT_ExternallyDefined format***************** */
/* **********END DbvDiagRec format***************** */
/* **********END DRT_SurrogateDiagnostics****** */
/* **********DRT_StartingFragment************** */
/* **********DbvFragmentSyntax format********** */
/* Title,FragmentSyntaxType (enum),COMPLETED;
        (FST_ExternallyTagged,FST_NotExternallyTagged) */
   FragmentSyntaxType,"FST_ExternallyTagged","COMPLETED";
/* Now choose either FST_ExternallyTagged,FST_NotExternallyTagged */
/* **********FST_ExternallyTagged********* */
/* **********DbvASN1External format***************** */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END DbvASN1External format***************** */
/* **********END FST_ExternallyTagged********* */
/* **********FST_NotExternallyTagged********* */
/* Title,NotExternallyTagged (octet); */
   NotExternallyTagged,-1,"a string";
/* **********END FST_NotExternallyTagged********* */
/* **********END DbvFragmentSyntax format********** */
/* **********END DRT_StartingFragment********** */
/* **********DRT_IntermediateFragment********** */
/* **********DbvFragmentSyntax format********** */
/* Title,FragmentSyntaxType (enum);
        (FST_ExternallyTagged,FST_NotExternallyTagged) */
  FragmentSyntaxType,"FST_ExternallyTagged","COMPLETED";
/* Now choose either FST_ExternallyTagged,FST_NotExternallyTagged */
/* **********FST_ExternallyTagged********* */
/* **********DbvASN1External format***************** */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END DbvASN1External format***************** */
/* **********END FST_ExternallyTagged********* */
/* **********FST_NotExternallyTagged********* */
/* Title,NotExternallyTagged (octet); */
   NotExternallyTagged,-1,"a string";
/* **********END FST_NotExternallyTagged********* */
/* **********END DbvFragmentSyntax format********** */
/* **********END DRT_IntermediateFragment****** */
/* **********DRT_FinalFragment***************** */
/* **********DbvFragmentSyntax format********** */
/* Title,FragmentSyntaxType (enum);
        (FST_ExternallyTagged,FST_NotExternallyTagged) */
  FragmentSyntaxType,"FST_ExternallyTagged","COMPLETED";
/* Now choose either FST_ExternallyTagged,FST_NotExternallyTagged */
/* **********FST_ExternallyTagged********* */
/* **********DbvASN1External format***************** */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END DbvASN1External format***************** */
/* **********END FST_ExternallyTagged********* */
/* **********FST_NotExternallyTagged********* */
/* Title,NotExternallyTagged (octet); */
```

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```
   NotExternallyTagged,-1,"a string";
/* **********END FST_NotExternallyTagged********* */
/* **********END DbvFragmentSyntax format********* */
/* **********END DRT_FinalFragment************* */
/* **********END NamePlusRecord format***************** */
/* Title,OtherInformation format,COMPLETED */
/* Other Information: see OtherInformation format explanation and place here */
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

Examples:

```
1, 1;
2,-1,"SegmentationReq reference Id";
NumberOfRecordsReturned,1;
Number of SegmentRecords=,1;
/* N * DbvNamePlusRecord */
/* **********DbvNamePlusRecord format***************** */
DatabaseName,-1,"Databasename string";
/* DbRecordType, "DRT_Retrieval", "COMPLETED";
   RetrievalRecord_External file name,"ResourceReport1_ExternalExample";*/

 DbRecordType, "DRT_SurrogateDiagnostics", "COMPLETED";

/* **********DbvDiagRec format***************** */
   DiagnosticsType,"DT_DefaultFormat", "COMPLETED";
   DiagnosticSetId,"1.2.840.10003.3.1"; Condition,1;
             ProtocolVersionInforce,"PVIF_Version2", "COMPLETED";
                V2,"V2 string";
/*          ProtocolVersionInforce,"PVIF_Version3", "COMPLETED";
                V3,-1,"V3 string"; */

/*   DiagnosticsType,"DT_ExternallyDefined";
        TT_External file name,"ResourceReport1_ExternalExample";
*/
/* **********END DbvDiagRec format***************** */

/* DbRecordType, "DRT_StartingFragment", "COMPLETED";*/

/*      FragmentSyntaxType,"FST_ExternallyTagged","COMPLETED";
               FragmentSyntaxType_External file
name,"ResourceReport1_ExternalExample";*/

/*      FragmentSyntaxType,"FST_NotExternallyTagged","COMPLETED";
               NotExternallyTagged,-1,"a string"; */

/* DbRecordType, "DRT_IntermediateFragment", "COMPLETED";*/
/*      FragmentSyntaxType,"FST_ExternallyTagged","COMPLETED";
               FragmentSyntaxType_External file
name,"ResourceReport1_ExternalExample";

*/
/*      FragmentSyntaxType,"FST_NotExternallyTagged","COMPLETED";
               NotExternallyTagged,-1,"a string";

*/
/* DbRecordType, "DRT_FinalFragment", "COMPLETED";*/
/*      FragmentSyntaxType,"FST_ExternallyTagged","COMPLETED";
```

```
              FragmentSyntaxType_External file
name,"ResourceReport1_ExternalExample";
*/
/*        FragmentSyntaxType,"FST_NotExternallyTagged","COMPLETED";
              NotExternallyTagged,-1,"a string";

*/

/* **********END DbvNamePlusRecord format******************* */

OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";

3, "OUT_PARAM";
```

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5.2.9 DbvExtendedServicesResponse()

Read From: extrsp_(in)valid

Result To: extrsp_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvExtendedServicesRsp structure detailed below */
/* 2,ReferenceId (octet), */
   2,-1,"ExtendedServicesRsp reference Id",
/* Title,DbvExtServicesOperationStatus (enum);
         (ESOS_Done,ESOS_Queued,ESOS_Failure) */
   OperationStatus,"ESOS_Done";
/* Title,Number of Diagnostics (integer); */
   Number of Diagnostics,1;
/* N * DbvDiagRec */
/* if N=0 then structure is not completed */
/* DbvDiagRec **ppsDiagnostics */
/* **********DbvDiagRec format***************** */
/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */
/* **********DT_DefaultFormat format**************** */
/* **********Default format************* */
/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"OID string";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format ******************* */
/* Title,ProtocolVersionInforce (enum),completed;
   (PVIF_Version2,PVIF_Version3) */
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */
/* Now choose either PVIF_Version2 or PVIF_Version3 */
/* **********PVIF_Version2 format**************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format**************** */
/* **********PVIF_Version3 format**************** */
/* Title,V3 (Inter); */
   V3,-1,"V3 string";
/* **********END PVIF_Version3 format**************** */
/* **********END AdditonalInfo format ******************/
/* **********END Default format************* */
/* **********END DT_DefaultFormat format**************** */
/* **********DT_ExternallyDefined format**************** */
/* ExternallyDefined */
/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
   TT_External file name,"FileName_External";
/* **********END DbvASN1External format**************** */
/* **********DT_ExternallyDefined format**************** */
/* **********END DbvDiagRec format**************** */
/* Title,TaskPackage_External file name (string); */
   TaskPackage_External file name,"FileName_External";
```

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```
/* Title,OtherInformation format */
   Other Information;
/* Other Information: see OtherInformation format explanation and place here */
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

Examples:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvExtendedServicesRsp structure detailed below */
/* 2,ReferenceId (octet), */
   2,-1,"ExtendedServicesRsp reference Id",

/* Title,DbvExtServicesOperationStatus (enum);
         (ESOS_Done,ESOS_Queued,ESOS_Failure) */
   OperationStatus,"ESOS_Done";

/* Title,Number of Diagnostics (integer); */
   Number of Diagnostics,1;

/* N * DbvDiagRec */
/* if N=0 then structure is not completed */

/* DbvDiagRec **ppsDiagnostics */
/* **********DbvDiagRec format**************** */

/* Title,DiagnosticsType (enum),COMPLETED;
        (DT_DefaultFormat,DT_ExternallyDefined) */
   DiagnosticsType,"DT_DefaultFormat","COMPLETED";
/* uDiagnostics is completed if COMPLETED */
/* Now choose either DT_DefaultFormat or DT_ExternallyDefined */

/* **********DT_DefaultFormat format**************** */

/* **********Default format************* */

/* Title,DiagnosticSetId (OID string); */
   DiagnosticSetId,"1.2.840.10003.4.1";
/* Title,Condition (integer); */
   Condition,1;
/* **********AdditonalInfo format *******************/
/* Title,ProtocolVersionInforce (enum),completed; (PVIF_Version2,PVIF_Version3)
*/
   ProtocolVersionInforce,"PVIF_Version2","COMPLETED";
/* uAdditionalInfo is completed if COMPLETED */

/* Now choose either PVIF_Version2 or PVIF_Version3 */

/* **********PVIF_Version2 format***************** */
/* Title,V2 (string); */
   V2,"V2 string";
/* **********END PVIF_Version2 format***************** */

/* **********PVIF_Version3 format***************** */
/* Title,V3 (Inter); */
/*   V3,-1,"V3 string";*/
/* **********END PVIF_Version3 format***************** */
```

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```
/* **********END AdditonalInfo format ********************/

/* **********END Default format************* */

/* **********END DT_DefaultFormat format**************** */

/* **********DT_ExternallyDefined format**************** */
/* ExternallyDefined */

/* **********DbvASN1External format**************** */
/* Title,External file name (string); */
/*   External file name,"Authentication_External";*/
/* **********END DbvASN1External format**************** */

/* **********DT_ExternallyDefined format**************** */


/* **********END DbvDiagRec format**************** */


/* Title,TaskPackage_External file name (string); */
   TaskPackage_External file name,"Authentication_External";

/* Title,OtherInformation format */
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 576;
DbvInformationType, "IT_CharacterInfo";
CharacterInfo type, -1, "This is a character info type string";


/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

5.2.10 DbvCloseRequest()

Read From: closersp_(in)valid

Result To: closersp_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvCloseReq structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"CloseReq reference Id";
/* Title,CloseReason (enum);
   (CR_Finished,CR_ShutDown,CR_SystemProblem,
   CR_CostLimit,CR_Resources,CR_SecurityViolation,
   CR_ProtocolError,CR_LackOfActivity,CR_PeerAbort,CR_Unspecified) */
   CloseReason,"CR_Finished";
/* Title,DiagnosticInformation (Inter); */
   DiagnosticInformation,-1,"DiagnosticInformation string";
/* Title,ResourceReportFormat (OID string); */
   ResourceReportFormat,"OID string";
/* **********ResourceReport format********** */
/* Title,External file name (string); */
   ResourceReport file name,"FileName_External";
/* **********END ResourceReport format****** */
/* Title,OtherInformation format */
   Other Information;
/* Other Information: see OtherInformation format explanation and place here */
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

Examples:

```
/* 1, DbvAssocId (integer); */
   1, 1;
/* DbvCloseReq structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"CloseReq reference Id";

/* Title,CloseReason (enum);
   (CR_Finished,CR_ShutDown,CR_SystemProblem,
   CR_CostLimit,CR_Resources,CR_SecurityViolation,
   CR_ProtocolError,CR_LackOfActivity,CR_PeerAbort,CR_Unspecified) */
   CloseReason,"CR_Finished";

/* Title,DiagnosticInformation (Inter); */
   DiagnosticInformation,-1,"DiagnosticInformation string";

/* Title,ResourceReportFormat (OID string); */
   ResourceReportFormat,"1.2.840.10003.7.1";

/* **********ResourceReport format********** */
/* Title,External file name (string); */
   ResourceReport file name,"Authentication_External";

/* **********END ResourceReport format****** */

/* Title,OtherInformation format */
```

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```
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
DbvInformationType, "IT_BinaryInfo";
Octetstring, -1, "This is a binary info type sting thing";

/* 3, SIError; (output parameter) */
    3, "OUT_PARAM";
```

5.2.11 DbvCloseResponse()

Read From: closersp_(in)valid

Result To: closersp_(in)valid_result

Script Format:

```
/* 1, DbvAssocid (integer); */
   1, 1;
/* DbvCloseRsp structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"CloseRsp reference Id";
/* Title,CloseReason (enum);
   (CR_Finished,CR_ShutDown,CR_SystemProblem,
   CR_CostLimit,CR_Resources,CR_SecurityViolation,
   CR_ProtocolError,CR_LackOfActivity,CR_PeerAbort,CR_Unspecified) */
   CloseReason,"CR_Finished";
/* Title,DiagnosticInformation (Inter); */
   DiagnosticInformation,-1,"DiagnosticInformation string";
/* Title,ResourceReportFormat (OID string); */
   ResourceReportFormat,"OID string";
/* **********ResourceReport format********** */
/* Title,External file name (string); */
   ResourceReport file name,"FileName_External";
/* **********END ResourceReport format****** */
/* Title,OtherInformation format */
   Other Information;
/* Other Information: see OtherInformation format explanation and place here */
/* 3, SIError; (output parameter) */
   3, "OUT_PARAM";
```

Examples:

```
/* 1, DbvAssocId (integer); */
   1, 1;
/* DbvCloseRsp structure detailed below */
/* 2,ReferenceId (octet); */
   2,-1,"CloseRsp reference Id";

/* Title,CloseReason (enum);
   (CR_Finished,CR_ShutDown,CR_SystemProblem,
   CR_CostLimit,CR_Resources,CR_SecurityViolation,
   CR_ProtocolError,CR_LackOfActivity,CR_PeerAbort,CR_Unspecified) */
   CloseReason,"CR_Finished";

/* Title,DiagnosticInformation (Inter); */
   DiagnosticInformation,-1,"DiagnosticInformation string";

/* Title,ResourceReportFormat (OID string); */
   ResourceReportFormat,"1.2.840.10003.7.1";

/* **********ResourceReport format********** */
/* Title,External file name (string); */
   ResourceReport file name,"Authentication_External";

/* **********END ResourceReport format****** */

/* Title,OtherInformation format */
```

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```
OtherInformation format, "COMPLETED";
InfoCategory, "COMPLETED", "1.2.840.10003.5.1", 999;
DbvInformationType, "IT_BinaryInfo";
Octetstring, -1, "This is a binary info type sting thing";

/* 3, SIError; (output parameter) */
    3, "OUT_PARAM";
```

5.2.12 DbvReceiveDataTarget()

Read From: target_receive_(in)valid

Result To: target_receive_(in)valid_result

Script Format:

```
/* Format for ReceiveDataTarget() function */

/* 1, DbvAssocId; (integer) */
1, 1;

/* 2, DbvSecs; (secs string) */
2, "CALL_BLOCKING";

/* 3, DbvOriginData; (output parameter) */
3, "OUT_PARAM";

/* 4, SIError; (output parameter) */
4, "OUT_PARAM";
```

Examples:

1, 1;

2, "CALL_BLOCKING";

3, "OUT_PARAM";

4, "OUT_PARAM";

6 UTILITY FUNCTION SCRIPT FILE FORMATS

6.1 SIGetEventLocation()

Read From: origin_sievent_(in)valid

Result To: origin_receive_(in)valid_result

Script Format:

```
/* Format for SIGetEventLocation() function */

/* 1, DbvAssocId list; (list of string) (use 1; for 0 DbvAssocIds) */
1, "1","2","3";

/* 2, DbvSecs; (secs string, CALL_BLOCKING, CALL_ASYNCHRONOUS, 1,2,3...) */
2, "CALL_BLOCKING";

/* 3, DbvEventLocation; (output parameter) */
3, "OUT_PARAM";

/* 4, SIError; (output parameter) */
4, "OUT_PARAM";
```

Examples:

1, "1";

2, "CALL_BLOCKING";

3, "OUT_PARAM";

4, "OUT_PARAM";

6.2 SISetACSEFile()

Read From: origin_acse_(in)valid

Result To: origin_acse_(in)valid_result

Script Format:

```
/* 1, Filename (string) */
1, "ACSE_File";

/* 2, SIError; (output parameter) */
2, "OUT_PARAM";
```

Examples:

```
1, "Origin_ACSE_File";
2, "OUT_PARAM";
```

6.3 SIWhichStack()

Read From: origin_stack_(in)valid

Result To: origin_stack_(in)valid_result

Script Format:

```
/* 1, DbvAssocId */
1, 1;

/* 2, peProtocolStack */
2, "OUT_PARAM";

/* 3, SIError; (output parameter) */
3, "OUT_PARAM";
```

Examples:

```
1, 1;
2, "OUT_PARAM";
3, "OUT_PARAM";
```

6.4 SISetTraceParameter()

Read From: origin_trace_(in)valid

Result To: origin_trace_(in)valid_result

Script Format:

```
/* 1, AssocId (integer); */
1, 1;

/* 2, Filename (string); - This file will be opened by the test tool and the
        file descriptor passed into the API function */
2, "Trace_File_1";

/* 3, eTraceLevel - One of: Trace_Off, Trace_Low, Trace_High */
3, "Trace_High";

/* 2, SIError; (output parameter) */
2, "OUT_PARAM";
```

Examples:

```
1, 1;
2, "APDU_Trace_File";
3, "Trace_High";
2, "OUT_PARAM";
```

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7 READING RESULTS FILES

7.1 Introduction

The result files are written by the Test Tool as pure ASCII text. They can be printed out or viewed with a standard UNIX editor such as vi.

All result files from a particular target application have a unique id appended to the end. This id is the process number of the application which produced the file. This allows the user to more easily test multiple associations because the result files will be grouped by application.

8 ADDITIONAL INFORMATION

8.1 Examining the Test Tool source code

At certain times, it may be necessary to examine the test tool source code. This chapter gives a short description of the contents of the source directories.

8.1.1 Source Code Files

The Test Tool consists of the following source code files:

Origin

The origin source code files are situated in the `testtools/origin` directory

- `origin_funcs.c` - Contains the functions which read and write script files associated with the incoming and outgoing Z39.50 APDUs.

- `origin.c` - Contains the `main()` routine, menu system and the functions which read and write script files concerning associations.

- `origin_batch.c` - Contains the code which enables origin specific batch processing.

Target

- `target_funcs.c` - Contains the functions which read and write script files associated with the incoming and outgoing Z39.50 APDUs.

- `target.c` - Contains the `main()` routine, menu system and the functions which read and write script files concerning associations.

- `target_batch.c` - Contains the code which enables target specific batch processing.

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- `apifree.c` - Functions which free the main API structures.

- `FreeC_DbvFuncs.c` - Functions to free compulsory structures (non-pointers).

- `FreeN_DbvFuncs.c` - Functions to free lists (sequences) of structures.

- `Free_DbvFuncs.c` - Functions to free Z39.50 APDU sub structures.

- `external_processing.c` - Reads and writes most things to do with external structures.

- `testy_calls.c` - Contains code to read and write the utility functions, read and write many of the API structures. Also includes the functions to open and close the script files.

- `convert_DbvFuncs.c` - Converts enumerated types between their native format and strings (`char *`).

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- `batch.c` - Contains the batch file processing functions which are common to both the origin and target code.

- `config.c` - The startup configuration of the origin and target.

- `o_*.c and  t_*.c` - These files contain the SR/Z39.50 APDU construction and printing functions. For example `o_init.c` contains the functions to construct an Initialise Request APDU and write out to a file an Initialise Response APDU.

- `memcheck.c, sl_list.c, str_hand.c and tbl.c` - These functions are all concerned with reading and writing the script files and should be of no interest to the tester.

- `get_DbvFuncs.c` - Contains the functions to complete data structures using data read in from the script files.

- `getN_DbvFuncs.c` - Completes lists (sequences) of structures.

- `writeN_DbvFuncs.c` - Writes out lists of structures to result files.

- `write_DbvFuncs.c` - Writes out the data structures to the result files.