Release Bulletin
OmniCONNECT™ Release 10.5
for Digital OpenVMS VAX

1. Product Summary

Enclosed is OmniCONNECT release 10.5, which is compatible with the following platform and operating system configurations:

- DEC VAX OpenVMS versions 5.4-1a – 6.0

1.1. Operating System Patch

The following operating system patch is **required** for all systems that perform a lot of paging and is **recommended** for other systems as well:

Patch Number: CSCPAT_1084_018

Engineering Cross Reference:
AXPSMUP01_010,VAXSMUP01_U2055, AXPSYS02_010, AVMASYS013015, AXPSYS03_015

This patch is for the page management bug fix. It can be applied on OpenVMS VAX versions 5.0–5.5.2. It **cannot** be applied on OpenVMS VAX version 5.43, 5.5-1, or 5.5-2 if you have installed patch number CSCPAT_2026 or CSCPAT_2027.

2. Special Installation Instructions

The following installation instructions should be noted. They are not described in the *OmniCONNECT Installation Guide.*

2.1. Primary and Secondary Installations

It is important to define the SYBASE_SYSTEM logical properly in order to avoid overwriting existing installations as discussed in Chapter 2 of the *OmniCONNECT Installation Guide*.

The following examples define the SYBASE_SYSTEM logical for primary and secondary installations.

2.1.1. Use System Logicals for Primary Installations

In this example the target location for the rooted system logical is device *DUA0* in the named directories.

```
DEFINE /SYSTEM /EXECUTIVE /TRANSLATION=(CONCEALED, TERMINAL) -
OMNIMAIN DUA0:[PRODUCTION.REL105.]

DEFINE /SYSTEM /EXECUTIVE SYBASE_SYSTEM OMNIMAIN
```

2.1.2. Use Process Logicals for Secondary Installations

The target location for a rooted process logical is a different location than the primary installation.

```
DEFINE /TRANSLATION=(CONCEALED, TERMINAL) -
OMNITEST DUA2:[BETATEST.REL1051.]

DEFINE SYBASE_SYSTEM OMNITEST
```

2.2. Upgrading and *sp_configure*

If you are migrating data from OmniSQL Server release 10.1.2 to OmniCONNECT release 10.5, note that configuration variables existing in the old OmniSQL Server release 10.1.2 will not automatically be propagated to the new OmniCONNECT release 10.5. If you want to change configuration variables in the new server, run sp_configure.

3. Technical Support

If you have any questions about this installation or need assistance during the installation process, please contact Sybase Technical Support or the Sybase subsidiary in your area.

Please contact the distributor from which your software was purchased if you do not know how to contact Sybase Technical Support.

4. Documentation Updates and Clarifications

The following updates and clarifications should be noted.

4.1. *defgen*

defgen maps *smallmoney* and *money* datatypes to *float*, and the *smalldatetime* datatype to *datetime* for SYBASE SQL Server™ release 4.9 and Microsoft SQL Server 4.21 tables.

The datatype mapping can be used as is, or the SQL script produced by defgen can be modified to use the native SQL Server datatypes.

4.2. Oracle and Ingres Access

OmniCONNECT is designed to access Oracle and Ingres databases through DirectCONNECT™ servers that are defined with server class *access_server*. These DirectCONNECT products are not available yet.

Sites requiring immediate access to Oracle and Ingres databases can use OmniSQL Server™ release 10.1.2. Configure OmniCONNECT 10.5 to access the 10.1.2 server as server class *sql_server*.

This configuration should be limited to read-only access. Transactional integrity is not guaranteed and users may encounter deadlocks during updates and deletes.

The migrate utility will not be able to migrate OmniSQL Server 10.1.2 Oracle and Ingres objects into OmniCONNECT 10.5 until the DirectCONNECT servers are available and installed.

4.3. Informix Access

OmniCONNECT 10.5 is fully compatible with the OmniSQL Server Informix Access Module 10.1.2. This access module should be defined to your OmniCONNECT with server class *generic*.

This OmniCONNECT configuration has specific Informix Access Module EBF-level requirements, depending on the platform where

the OmniSQL Server Informix Access Module release 10.1.2 is running.

- HP – EBF 5377
- Sun4 – EBF 5378
- AIX – EBF 5379

4.4. Rdb Access

OmniCONNECT 10.5 is fully compatible with the OmniSQL Server Rdb Access Module 10.1.2. This access module should be defined to your OmniCONNECT with server class *generic*.

This OmniCONNECT configuration has specific Rdb Access Module EBF-level requirements, depending on the platform where the OmniSQL Server Rdb Access Module release 10.1.2 is running.

- AXP/VMS – EBF 4498
- VAX/VMS – EBF 4499

4.5. *update statistics* without *checkpoint*

If you perform update statistics to enable the optimizer to choose the proper join order but do not immediately execute checkpoint or perform an orderly shutdown afterwards, then you could lose the update statistics information. Conditions such as kill (or STOP/ID), or Ctrl-C (or Ctrl-Y) which terminate the server in a non-orderly fashion, cause the update statistics information to be lost.

If a checkpoint is issued within the database where the update statistics is invoked, then all statistics information will be preserved.

4.6. OmniCONNECT Rejects Connect Request

A connection to OmniCONNECT may be rejected with no error or warning message under the circumstances described.

When OmniCONNECT is started, there is a platform-specific maximum number of connections that can be established. This is determined by the operating system. OmniCONNECT provides the sp_configure option maximum ctlib connections. There is a default value, and the number can be explicitly configured to a higher or lower value. If the operating system value is less than the sp_configure value,

OmniCONNECT rejects all connection requests exceeding the operating system configuration.

4.7. Optimization for Remote Views

OmniCONNECT release 10.5 requires indexes on tables in order to optimize queries. Since views cannot have indexes, when an OmniCONNECT release 10.5 table is mapped to a remote view no indexes will be found. Hence, OmniCONNECT will not be able to properly optimize access to the table.

To help OmniCONNECT optimize access to remote views the 9808 trace flag should be used. This trace flag instructs OmniCONNECT to do the following on the receipt of a create index command:

*   create the index in OmniCONNECT catalogs

*   Do **not** create indexes on remote data source

*   After creating all indexes on the table, perform the update statistics command on the table. This will cause OmniCONNECT to build and save distribution statistics on the table. These statistics will be used during query optimization in order to pick the most efficient index on a table and to choose the proper join order.

The result is that a local index is created in OmniCONNECT, but an index is not created on the remote data source. OmniCONNECT can then use the index for query optimization.

Note that the 9808 trace flag should be turned off after the required indexes are created.

The following is an example:

```
1> dbcc traceon (9808)
2> go
1> create unique clustered index au_id_ind
on authors(au_id)
2> go
1> dbcc traceoff (9808)
2> go
1> update statistics authors
2> go
```

5. Highlighted Known Problems

5.1. *create table* and Primary Key

OmniCONNECT release 10.5 will generally ignore the primary key attribute in a create table statement. However, when creating tables using the RMS access method, the primary key attribute is not completely ignored. As a result OmniCONNECT thinks there is an index, although no index was created. In addition, it is not possible to create the index because OmniCONNECT thinks it already exists. The workaround is to remove the primary key attribute prior to creating the tables.

5.2. Limitations on Packet Size

The /tdspacketsize option specifies the network packet size to be used for an isql or bcp session. The maximum packet size currently supported is 32,256 bytes. Specification of a packet size of 32,768 bytes or greater will result in errors similar to the following:

In the OmniCONNECT error log:

```
kernel nast_readpost: Invalid tdslength (-32768), socket 1,
listener 0
```

In the client error log:

```
SYSTEM-F-LINKDOXCON, network partner disconnected logical link
DB-LIBRARY error: Write to OmniCONNECT failed.
SYBASE-E-BCPFAIL, BCP has failed.
```

5.3. *bcp* Batch Size

When running the bcp utility against OmniSQL Server, errors occur if the bcp batch size is non-zero.

5.4. Implicit Conversions Involving *datetime*

A query containing a join between dissimilar *datetime* columns may generate unpredictable results. For example:

select * from t1 where smalldatetimecol = datetimecol

will not always result in the correct number of rows returned.

5.5. *sp_statistics* and Access Module for DB2

OmniCONNECT sites that include the OmniSQL Access Module for DB2 (SYRT) in a configuration may experience a problem with the sp_statistics catalog stored procedure issued by the DB2 Access Module.

One symptom can be incorrect column names for a table when a create existing table command is issued. This happens when the underlying table and index names are the same as another table and index set, but have a different creator.

The user can issue an sp_help command against the table and check for accurate indexes.