Infor Enterprise Server Technical Notes for porting set 9.5e

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About this guide

This document provides technical notes about Infor Enterprise Server porting set 9.5e for Infor LN.

Intended audience

This guide is intended for system administrators and consultants who are responsible for implementing or updating Infor LN. This document contains:

- New features of this porting set.
- Known issues in the porting set.
- Possible performance optimizations.

Related documents

You can find these documents on docs.infor.com:

- *Infor LN - Installation Guide (U9498 US)*
- *Infor LN - Performance, Tracing and Tuning Guide (U9357 US)*
- *Infor Enterprise Server - Technical Reference Guide for DB2 Database Driver (U7829 US)*
- *Infor Enterprise Server - Technical Reference Guide for Oracle Database Driver (U7076 US)*
- *Infor Enterprise Server Technical Reference Guide for SQL Server Database Driver (U8173 US)*
- *Infor Enterprise Server Technical Reference Guide for Enterprise DB Database Driver*
- *Infor Enterprise Server Unicode Migration Guide (U8887 US)*

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For the latest documentation, go to Documentation Central at docs.infor.com. We recommend that you check this website periodically for updated documentation. If you have comments about Infor documentation, contact documentation@infor.com.

Chapter 1 Introduction

This chapter supplies information about the supported operating system and RDBMS versions for Infor LN.

The support described in this document is restricted by the standard support provided by the actual vendor.

Example: Infor will continue to provide support for IBM AIX 7.2 on this porting set if IBM continues standard support for AIX 7.2.

When path names are mentioned in this document, forward slashes (/) and back slashes (\) are used. Use back slashes on Windows OS and forward slashes on UNIX OS and Linux OS.

Platform support: x64 based

Infor LN solutions are supported on Intel and AMD-based x64, AMD64, and EMT64 under these conditions:

- The operating system must be an Infor LN-supported platform.
- The hardware must be supported by the operating system vendor.
- Ensure that other required software, such as the RDBMS, is also supported on the platform of your choice.

Support Matrix

For the platform support matrix, the supported Java versions, the end-of-service notifications, and information about Virtualization support, see the latest version of the *Infor Enterprise Server Support Matrix for porting set (U9757)* in Infor Customer Portal KB1183466.

Chapter 2 Operating System Notes

Some porting sets require minimum runtime patches for the OS compiler. Infor Customer Portal KB2895665 provides basic information about your current runtime patch level.

You must install only the runtime patches for the compiler; the compiler itself is not required.

Microsoft Windows

Required OS patches

A new version of Visual C++ Redistributable Runtime (`vcredist`) could be delivered with the porting set. This new `vcredist` version is installed by the installation wizard when the porting set is installed. To avoid a forced reboot during the installation process, we recommend that you manually install the new `vcredist` version before installation of the porting set. You can find the `vcredist` installable in the porting set zip file: `vc_redist.x64.exe`.

IBM System AIX

Required OS patches

As of porting set 9.4i, the porting set has been built on AIX 7.2 with the XL C/C++ V16.1.0.10 compiler. Therefore, you must install the accompanying V16.1.0.10 C++ Runtime environment. To download this runtime, go to http://www-01.ibm.com/support/docview.wss?uid=swg21110831.

Ensure that your AIX version is at a supported technology level. The lowest supported level progresses as time advances. For more information, see https://www-945.ibm.com/support/fixcentral/aix/selectFixes?release=7.1&function=release. At the time of publishing this document, the lowest supported technology levels are AIX 7.2 TL5 and AIX 7.3 TL0.

Linux x64

Required OS patches

The 9.4e porting set is built on a new runtime version, so check the version. The porting set has been built with a C++ compiler. Ensure you install, as a minimum, the required RUNTIME for compiler version but not the compiler itself:

- glibc-2.28-251.el8
- libstdc++-8.5.0-22.el8

Chapter 3 RDBMS Notes

Oracle

Oracle RAC support

Oracle RAC can be used for high-available systems or solutions where one system cannot handle the load. Customers who implement RAC are expected to solve their own configuration and performance issues concerning RAC or have a clear arrangement about this with a consulting organization. A RAC environment is more complex than a non-RAC environment. Measurements show that locking can take longer, and more total CPU power is required.

Oracle RAC One Node can be used as active-passive solution with LN, and as such a better performance can be expected than with the Oracle RAC active-active solution.

Oracle Character Set

Unicode installation:

The national character set (NLS_NCHAR_CHARACTERSET) should always be set to AL16UTF16.

The character set (NLS_CHARACTERSET) is not relevant.

Microsoft SQL Server

ODBC 18

The SQLServer database driver uses ODBC to interface with Microsoft SQLServer.
Both ODBC 17 and ODBC 18 can be used, but customers must be aware of changes in the default configuration settings between ODBC 17 and ODBC 18 when upgrading.

See https://learn.microsoft.com/en-us/sql/connect/odbc/windows/features-of-the-microsoft-odbc-driver-for-sql-server-on-windows?view=sql-server-ver16.

The Linux porting set requires ODBC 17, but the Win64 porting set uses the highest version of ODBC installed on the system.

After upgrading to ODBC 18 on Windows, the Win64 might report connection errors such as:

> [Microsoft][ODBC Driver 18 for SQL Server]SSL Provider: [error:1416F086:SSL routines:tls_process_server_certificate:certificate verify failed:self signed certificate]

By default, ODBC 18 driver requires a trusted certificate for the encryption of the communication. That is, SQL Server must use a certificate that is in your trusted certificate store.

As a workaround, you can temporarily set ‘Encrypt=No’ or ‘TrustServerCertificate=yes’ in the resource msql_odbc_custom_parameters, but we recommend configuring a trusted certificate for the encryption of the communication.

Chapter 4 Java Support

Java options

Raise the maximum heap size; set this value in `$BSE/java/jvm_options`:

- -Xmx256m

Supported Java versions

Use the latest available minor version of a major release. For supported major releases, see the support matrix.

If the vendor no longer supports a specific J2SE version, support by Infor will also end.

All platforms: The JAVA_HOME environment variable can be used for JVMI-2 to point to a Java VM. If JAVA_HOME is set to a non-empty value, then the java executable is expected to stay in `<JAVA_HOME>/bin`. If JAVA_HOME is not set or empty, then PATH is used to find the java executable. Specify JAVA_HOME in the `$BSE/lib/bse_vars` file.

Chapter 5 Installation instruction for Infor LN

This chapter describes some requirements or issues you must take into account when installing Infor LN.

Solution License Manager (SLM)

This list shows the SLM Client and Server requirements:

- The version of the SLM Server must be equal to or higher than the version of the SLM Clients.
- The current latest supported version is 7.5.0.8.
- The latest version of the SLM software can be retrieved through Infor Customer Portal KB2881484.

Installation procedure

In case of a porting set update, ensure all Infor LN users have logged off.

Stop the Infor LN environment. To do this, use `$BSE/etc/rc.stop` on UNIX, or the Infor Manager on Windows. You must also stop all other binaries running against this environment; otherwise the Installation Wizard cannot replace them.

For an update of the Windows porting set, you must close the event viewer.

For an update on UNIX, you must also stop the baanlogin process.

Infor Staging wizard

The staging wizard may show this message:

The wizard requires that you restart your computer.

If you click **Next**, your computer is immediately restarted. If you do not want to restart your computer, click **Cancel**.

Updating the Infor LN porting set

As a minimum, installation of this porting set requires Infor Installation Wizard 15.8.33.1.

1 From Infor Customer Portal KB2923520, download the appropriate porting set and installation wizard to a temporary folder.

- On Windows, create a temporary folder on the LN server.
- On UNIX (remote installation), the temporary folder can reside on your client. For Unix installations, you must stop the environment manually using the standard procedures.

2 Stage installable units to your existing staging area.

Double-click `<Staging Area>\Start\StartFirst.exe` to start the update process.

3 In the **Infor Installation** dialog box, click the appropriate link to start the Infor Staging Wizard.

4 The **Welcome to the Infor Staging Wizard** dialog box is displayed, click **Nex**t.

5 In the **Source directory name** field, select the name of the temporary folder to which the Installable Units of the Installation Wizard and porting set are downloaded.

6 Click **Next**.

7 Select the required Installable Units and click **Next**.

8 Verify the summary information. To make adjustments in this dialog box, click **Back**. Otherwise, click **Next**.

9 A progress bar is displayed. When the stage process has successfully installed the Infor Staging area, click **Next**.

10 In the **Infor Installation** dialog box, click the appropriate link to start the Infor Installation Wizard.

11 In the **Welcome to the Infor Installation Wizard** dialog box, click **Next**.

12 Select the LN environment to be updated and click **Next**.

13 Select the **`Infor ES porting Set`** Installable Unit and click **Next**.

14 In the **Select Porting Set** dialog box, select the porting set for the appropriate platform and click **Next**.

The remainder of the steps varies by platform. For information on these steps, see the installer online Help or *Infor LN – Specific Installation Guide - Updates (U9497 US)*.

Chapter 6 Known Issues/Points of Attention

This chapter describes generic and specific issues or points of attention.

Generic

This section contains the generic notes.

Product Life Cycle policy – porting set 9.4a and later

The Product Life Cycle policy of Infor LN is applied to porting set 9.4a and later. For the Product Life Cycle policy, see Infor Customer Portal KB1946498.

For customers who upgrade to porting set 9.4a or later, these conditions apply:

- For customers with a product version in Mainstream Maintenance, there is no difference regarding porting set updates.
- Customers with a product version in Extended Maintenance can use porting set 9.4a or later if they contracted an Extended Maintenance license and the corresponding key is issued (SLM key Product ID 8003, License type = Server).
- Customers with a product version in Extended Maintenance without an Extended Maintenance license, cannot use porting set 9.4a or later. The latest runnable porting set for these customers is 9.3j, which was released in April 2021.
- Customers with a product version in Sustaining Maintenance cannot use porting set 9.4a or later.

The definitions of the Maintenance stages for the product versions/releases of Infor LN are outlined in the Product Support schedule. This schedule is published in the Infor LN Product Life Cycle policy.

Customers who are not entitled to upgrade to porting set 9.4a or later can remain using previous porting set releases, which continue to be available through the Customer Portal.

NOTE: porting set 9.5e should not be used for BaanIV and Baan50c.

We see some issues in combination with shared memory that cause it to crash:

Task Category: Shmserv

```
Program          : shmserv file \general\lib\al_1\al_wutil.cpp # 560

Message          : Exception C0000005 (Access violation)

          Minidump saved at Z:\Infor\ERPLN\B50c\bse\tmp/shmserv.NLBAVWIPO2.9492.1.dmp

0x0000000140009E07 [shmserv:1:0x00008E07]          ShmReadObject+0x78B

0x000000014000936B [shmserv:1:0x0000836B]          ShmProcessSrddLine+0x2EF

0x0000000140008B6D [shmserv:1:0x00007B6D]          ShmLoad+0x835

0x0000000140010FB4 [shmserv:1:0x0000FFB4]           ShmStartLoad+0x1A8

0x0000000140010AAB [shmserv:1:0x0000FAAB]          ShmInit+0x92F

0x00007FFB203E4CB0 [KERNEL32:1:0x00013CB0]      BaseThreadInitThunk+0x10

0x00007FFB2123ECEB [ntdll:1:0x0007DCEB]  RtlUserThreadStart+0x2B
```

This will be fixed with the next porting set 9.5f.

Environment variable

You should not use the USER environment variable anymore. If it is required to set the user environment variable, you can set BSE_USER.

Infor ES Database Connector

Simultaneously with the release of porting set 9.1a, a new ODBC driver has been introduced for Infor LN/Baan, called the Infor LN ODBC Driver 10.5. This driver is the successor of the OpenWorld-based Infor Integration Connector for ODBC. The Infor LN ODBC Driver 10.5 is available both in 32-bit and 64-bit. This driver is self-contained, that is, it does not require the “DB Connector” and Infor Integration/OpenWorld anymore. The Infor LN ODBC Driver 10.5 supports Unicode and it allows for enhanced security through SSL-based authentication, with self-signed certificates.

As a result of this, the following applies:

1. We strongly recommend that you replace the Infor Integration Connector for ODBC, including the “DB Connector”, with the new Infor LN ODBC Driver 10.5.
2. Choose the 32-bit or 64-bit installation so that it matches with your ODBC Consumer architecture.
3. After the Infor LN ODBC Driver 10.5 has been implemented, the ODBC Client part does not contain any porting set components anymore. So, for example, the `jbdb` executable/binary only runs on the Infor LN/Baan server. Porting set updates are therefore no longer required for the ODBC client part, as used to be the case with the DB Connector. There is no dependency anymore between the Infor LN ODBC Driver and the porting set.

4 The Infor LN ODBC Driver 10.5 also supports JDBC, but changes are required to re-use existing JDBC Clients. For more information, see the *Infor LN ODBC Driver Administration Guide*.

5 The DB Connector installation type of the porting set installable unit has been removed as of porting set 9.1a.

6 If the Infor Integration version of the ODBC driver is installed, including the DB connector, the DB Connector part cannot be updated to porting set 9.1a because it is incompatible. Note that in most cases, the DB connector will not be installed or updated as a separate installable unit because it is silently installed by the Infor ES installer.

7 The Infor Integration Connector for ODBC/JDBC, including the “DB Connector”, will no longer be maintained.

Unicode-only mode for new installations

As of porting set 9.1a, the functionality for new installations will be limited to Unicode installations only. The porting set can be used for current non-Unicode installations as an upgrade. For clean installations, however, the only option will be Unicode.

UTC40

UTC times are expressed as the number of seconds since January 1, 1970. The maximum time that LN can handle is until January 19, 2038. This is solved with the new UTC40 functionality. For more information, see Infor Customer Portal KB1824355.

OS specific

This section contains the OS-specific notes.

Linux x64 SUSE/Red Hat

Setting the OS environment LANG

During a fresh OS installation of Linux, the environment variable LANG is set by default. Unset this variable before installing/starting the Infor LN environment. Otherwise, this variable causes problems with some characters later. For more information, see Infor Customer Portal KB1351800.

Database specific

This section contains database-specific notes.

SQL Server

Collation differences

Symptoms:

Sorting on SQL Server sometimes works a bit differently than expected. For example, see these records:

- 98
- 9-9

When sorting these records on SQL Server in a Unicode environment, the order is:

- 98
- 9-9

When sorting these records on a single byte environment, the order is:

- 9-9
- 98

We cannot fix this problem in our driver; it is dictated by the SQL Server database. The problem is in the Variable Weighting elements. For details, see: http://unicode.org/reports/tr10/#Variable_Weighting. Table 13 of this web page shows a comparison overview of variable ordering.

What is expected based on single-byte ordering, or in other databases, is the ignorable sorting order. However, this option is not provided by SQL Server. At this moment, the only solution for SQL Server is not to use these characters in fields that are used for sorting or that are part of an index.