Infor Enterprise Server Technical Notes for porting set 8.9a.01

Publication Information

Release: Infor Enterprise Server

Publication date: October 1, 2013

Document code: U9814A US

Contents

About this guide

This document provides technical notes about Infor Enterprise Server porting set 8.9a.01.

In this guide these Infor products are mentioned:

- Infor Baan IVc
- Infor Baan 5.0
- Infor Baan 5.2
- Infor LN

If a situation or issue applies to these Infor products, the products are grouped under one name:

- Infor ERP

Intended audience

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

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

Related documents

You can find the documents in the product documentation section of the Infor Xtreme Support portal, as described in "Contacting Infor".

- *Infor LN - Installation Guide (U9498 US)*
- *Infor LN - Performance, Tracing and Tuning Guide (U9357 US)*
- *Infor Baan IVc - SLM Adoption on Infor Baan IVc (U9555 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 Microsoft SQL Server Database Driver (U8173 US)*

Contacting Infor

If you have questions about Infor products, go to the Infor Xtreme Support portal at www.infor.com/inforxtreme.

If we update this document after the product release, we will post the new version on this Web site. We recommend that you check this Web site periodically for updated documentation.

If you have comments about Infor documentation, contact documentation@infor.com.

Chapter 1 Introduction

1

This chapter supplies information about the supported operating system and RDBMS versions for these Infor products:

- Infor LN.
- Infor Baan 5.2a.
- Infor Baan 5.0b and 5.0c.
- Infor Baan IVc.

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 6.1 on this porting set if IBM continues standard support for AIX 6.1.

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

End-of-service notifications

SuSE Linux

On July 31, 2013, SuSE Linux withdrew support for SuSE Linux 10. Infor recommends customers upgrade to a later version.

Red Hat Linux

On Jan 1, 2014, Red Hat will withdraw support for Red Hat Linux 5. Infor recommends customers upgrade to a later version.

HPUX Integrity

On Jan 1, 2014, HP will withdraw support for HPUX Integrity 11.23. Infor recommends customers upgrade to a later version.

Microsoft

On July 1, 2014, Microsoft will withdraw support for MSQL 2008 and MSQL 2008 R2. Infor recommends customers to upgrade to a later version.

On Jan 1, 2015, Microsoft will withdraw support for Windows Server 2008 and Windows Server 2008 R2. This means that as of January 1, 2015 support for the 32-bit porting set for Windows stops. Infor recommends customers to upgrade to a later version.

Infor Porting Set

As of porting set 8.8a.03 Infor will no longer ship the Informix driver as part of the standard porting set. Infor does not commit to certifying newer Informix versions, or newer platform versions in combination with Informix. It will be available until Dec 2014 on request only. Contact Infor Xtreme support for this.

As of Jan 1, 2015 Infor will no longer support a 32-bit porting set for SuSE Linux and Red Hat Linux. Infor recommends customers to upgrade to 64-bit porting set.

The next Feature Pack of LN/Enterprise Server (named as 10.4) does not support 32-bit platforms. Customers must have a 64-bit platform to use the new Feature Pack version.

32-bit and 64-bit support

For UNIX, only the 64-bit porting set is supported.

For Windows and Linux, also a 32-bit porting set is supported. However the support for the 32-bit porting set will stop at the end of 2014. Only 64-bit porting sets are supported after this date.

Note: The 32-bit porting set requires the 32-bit client libraries of the selected database.

A 32-bit porting set can be upgraded to a 64-bit porting set. No additional actions are necessary. As a normal precaution, we recommend to back up the environment before starting the upgrade.

All binaries must be either 32-bit or 64-bit. Note that the diff binary is always a 32-bit binary, also for the 64-bit porting set.

The 64-bit porting set works with 64-bit addresses and, therefore, uses more memory than the 32-bit porting set. For more information on sizing, contact your local account manager.

Note: When using a 64-bit platform and Infor provides a 64-bit porting set, Infor only supports the 64-bit porting set on that platform, not the 32-bit porting set. This also applies to the 8.7b or later convergence porting set for Baan IVc.

On the media only the 64-bits porting sets are available. For 32-bits porting set for Linux or Windows see Infor Xtreme KB 22923520.

Platform support: x86 based

Infor Baan IVc, Infor Baan 5.0c and Infor LN solutions, are supported on Intel and AMD-based x86, AMD64, and EM64T 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.

For 32-bit porting sets, the selected hardware must minimally support the SSE2 instruction set, which is common for modern processors.

For 64-bit porting sets, the OS must also be 64-bit.

Performance and tuning

For more information on performance and tuning, refer to Infor Xtreme KB 22881401.

IPv6

The porting set 8.8a is the first porting set that provides IPv6 support. By default this porting set uses a dual IP stack, and both an IPv4 and IPv6 socket is created. If only IPv6 configuration is needed then the minimum SLM version is SLM 7.3.0.1. The minimum ASM version is 1.7 for IPv6 support.

Support Matrix

For the platform support matrix, the supported Java versions and information about Virtualization support, refer to the latest version of the Infor Enterprise Server Support Matrix for porting set (U9757) in Infor Xtreme KB 1183466.

Chapter 2 Operating System Notes

2

Some porting sets require minimum runtime patches for the OS compiler. Infor Xtreme KB 22895665 provides basic information about your current runtime patch level.

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

HPUX Integrity

Required OS patches

8.6a.03 is the first porting set build based on HP aC++A6.25. Ensure that you install the runtime patches for compiler version A6.25 for HP aC++.

Download/install only the *runtime* patches for your operating system version/architecture from the HP website. The runtime patches are usually marked in italics on this Web site. Read the information on the Web page for details.

If you use the Java interface, for example, if you use Infor Integration, check if the last OS patches are installed.

IBM System p AIX

Required OS patches

8.8a is the first porting set build based on XL C/C++ ED V11.1 with the August 2012 PTF applied. Therefore, you must install the *C++ Runtime Environment, August 2012 PTF* or later. To download this runtime, go to http://www-01.ibm.com/support/docview.wss?rs=2239&uid=swg21110831 and select the “C++ Runtime Environment” section in the table that is displayed.

IBM replaced the C++ runtime environment with version V12.1.

Ensure that your AIX version is on a supported technology level:

http://www-933.ibm.com/eserver/support/fixes/fixcentral/pfixpacks/

With porting set 8.8a or later, the minimum technology level for AIX 6.1 is 6100-06.

For AIX 7.1, TL0 is the minimum version.

Linux x86

Required OS patches

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:

- gcc-4.1.0-28.4
- gcc-c++-4.1.0-28.4
- glibc-2.4-31.2
- libstdc++-4.1.0-28.4

Linux x86 SUSE and Red Hat

The hardware must minimally support the EMT64/AMD64 instruction set, which is common for modern processors.

Microsoft x86 Windows

The hardware must minimally support the SSE2 instruction set, which is common for modern processors.

Porting set 8.9a.01 is not certified for Windows 2012 cluster configurations. Therefore these cluster configurations are not supported with this version of the porting set.

Sun SPARC Solaris

Required OS patches

8.6a is the first porting set build based on Sun Studio 12 Update 1. Ensure the required patches for your Solaris version are installed.

http://download.oracle.com/docs/cd/E19205-01/820-7601/gptch/index.html

Only the shared library patch for C++ is needed (patch 119963).

Chapter 3 RDBMS Notes

3

IBM DB2

For Unicode the minimum database version is DB2 V9.5 FP2

IBM Informix

As of December 2012 Infor no longer ships the Informix driver as part of the standard porting set. The driver will be available until Dec 2014 on request only. For more information contact Infor Xtreme support.

Request for the Informix driver is only available for Informix Ultimate Edition 11.5 and 11.7.

For IDS 11.70 on IBM Power AIX, the minimum version is IDS11.70xC3. For the other platforms, the minimum version is IDS 11.70xC2.

Microsoft SQL Server

SQL Server Management Objects

As of porting set 8.7a, SQL Server Management Objects (SQL-SMO) is used to create and maintain the SQL Server database. The SQL-SMO package will be installed automatically by the Installation Wizard during the installation or update of the porting set. Microsoft's .NET must be installed.

SQL-SMO can also be installed manually. This package consists of two .msi files: SQLSysClrTypes.msi and SharedManagementObjects.msi. These files are in the top directory of the porting set Installable Unit.

SQL Server Native Client

As of porting set 8.7a, the SQL Server Native Client is used to access SQL Server instead of the Microsoft Data Access Components (MDAC). The SQL Server Native Client improves the performance and scaling. If the SQL Server database resides on a different system to which the

porting set runs, the SQL Server Native Client must be installed on the same system as the porting set.

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 clear arrangement about this with a consulting organization. An 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 11.2 support on 32-bit porting set

Starting with Oracle 11.2, the 64-bit Oracle software does no longer contain a 32-bit client interface.

Customers who cannot use a 64-bit Infor LN porting set, and keep on using a 32-bit porting set, must install a separate 32-bit Oracle client software. Refer to the Oracle installation guides for more details.

An Oracle Database Net service must be configured in such a way that the 32-bit Oracle client installation can access the Oracle database.

The setup of the Infor LN Oracle driver must be based on the resources ORACLE_HOME (of the 32-bit Oracle client installation) and ORACLE_SERVICE_NAME (the Oracle Database Net service name of the database).

A connection between a 32-bit porting set and an Oracle 11.2 database based on ORACLE_HOME and ORACLE_SID is not possible.

Oracle Character Set

For a Single Byte and Multi Byte installation choose an appropriate character set (NLS_CHARACTERSET) that matches your main language.

Do not choose AL32UTF8. The value of the national character set (NLS_NCHAR_CHARACTERSET) is not relevant for Infor LN.

In case of a Unicode installation the value of the character set (NLS_ CHARACTERSET) is not relevant for Infor LN.

Choose AL16UTL16 as value of the national character set (NLS_NCHAR_CHARACTERSET).

This table shows some examples for SB/MB:

West European	WE8ISO8859P1 / WEMSWIN1252
East European	EE8ISO8859P2
Cyrillic	CL8ISO8859P5
Japanese	JA16SJIS
Simplified Chinese	ZHS16GBK
Korean	Ko16KSC5601 / KO16MSWIN949

Chapter 4 Java Support

4

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.

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

JVMI-2 on UNIX and Linux

To enable Java for use with Infor Integration, ensure that the path is pointing to the correct JRE, for example, <*JRE install dir*>\bin.

Note for IBM System p AIX: With JVMI it was required to have –Djava_compiler=NONE set. During testing of JVMI-2, this setting was no longer required. However, if you experience problems, ensure that the ${BSE}/java/jvm_options file exists and contains –Djava_compiler=NONE; setting this will cost performance.

Note for HP Integrity: With JVMI it was required to have –Xusealtsigs set. During testing of JVMI-2, this setting was no longer required. However, in case you experience problems, ensure that the ${BSE}/java/jvm_options file exists and contains -Xusealtsigs.

JVMI-2 on Windows

To enable Java for use with Infor Integration:

1 Download the Oracle JRE versions at http://www.oracle.com/technetwork/java/index.html.

2 Ensure that the System Environment path is pointing to the correct JRE, for example, <*JRE install dir*>\bin

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.

- On UNIX platforms, specify JAVA_HOME in bse_vars.
- On Windows platforms, specify JAVA_HOME in “Infor Manager snapin”.

Chapter 5 Installing Infor LN or Infor Baan 5.2a

5

This chapter describes some requirements or issues you must take into account when installing Infor LN or Infor Baan 5.2a.

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.
- Before you upgrade to the 32-bit porting set, you must install SLM 7.1.0.2 or later.
- Before you upgrade to the 64-bit porting set, you must install SLM 7.1.0.4 or later.

The latest version of the SLM software can be retrieved via Infor Xtreme KB 22881484.

Unicode on Oracle [upgrading from 8.2b or earlier]

This release note is relevant for customers on Oracle using the Unicode mode, upgrading from a porting set 8.2b or earlier.

In porting set 8.3a, a change is made in the default mapping of the DB.STRING data type to the Oracle data type. From porting set 8.3a onwards, it will be mapped to the Oracle NCHAR data type when the porting set runs in Unicode mode. For single and multi-byte mode the mapping remains unchanged.

Effect for existing users

This change has some effect for the existing sites running in Unicode mode with databases created with porting set 7.6b or 8.2a.

Because the database still contains the Oracle CHAR data type, and the porting set now uses the NCHAR data type for data binding, performance problems will occur after the porting set upgrade; The database will no longer use some indexes because of the need of an internal Oracle conversion from CHAR to the NCHAR data type.

There are two solutions to prevent the performance problems caused by this type mismatch:

- Reorganize the whole Infor LN database (export/import on Infor LN level) All tables will be recreated with the new data type.
- In the $BSE/lib/defaults/db_resource file, set the **ora_use_nchar:0** resource. When this value is set, the driver falls back to the default behavior of the previous porting sets.

Security file installation [upgrading from 7.6b.01 or earlier]

This note is not applicable for Infor LN 6.1 FP2 users.

When using Infor Enterprise Server 8.2 (tt_7.6_a2, tools version that came with Infor LN 6.1 FP2) and your application version is:

- Infor LN 6.1 SP0.
- Infor LN 6.1 SP1.
- Infor Baan 5.2a.

Install Infor Xtreme KB 22911304. If you do not have this solution installed, you will encounter licensing problems with the application sessions.

Other users

For users of versions prior to Infor Enterprise Server 8.2 (tt_7.6_a or tt_7.6_a1) and whose application version is:

- Infor LN 6.1 SP0.
- Infor LN 6.1 SP1.
- Infor Baan 5.2a.

Install Infor Xtreme KB 22822831 and run the correction program mentioned *before* installing porting set 8.2. If you do not have this solution installed, you might not be able to access the environment anymore. Infor Xtreme KB 22822831 also describes a workaround for this situation.

Adapter for Infor ERP (a.k.a.tmboaserver)

This note is only applicable for customers who use the Adapter for ERP (tmboaserver/tmbdserver).

Since porting set 8.2b, the Adapter for Infor LN is delivered as part of the Infor LN application itself; as part of the porting set and Tools.

Because of the new delivery, conflicts with existing installations, such as 2.6 and 2.7, can arise. The following sections describe the various scenarios users can encounter.

Infor LN without any Adapter

If you are not using Integration Adapters, do not take action:

- Upgrading the porting set to 8.2b or later delivers the files ow.jar, ow3p.jar, and owconfig.properties.
- Installing the Infor Enterprise Server AddOn Installable Unit delivers all the Infor LN sessions and API, such as tmboaserver, tmbdeserver, and so on.

Infor LN with Adapter for Infor LN 2.6 or 2.7

If you are using Adapter for Infor LN 2.6 or 2.7:

- Upgrading porting set to 8.2b or later delivers the files ow.jar, ow3p.jar, and owconfig.properties.

  This setup can conflict with the existing b3.jar and owxml.jar files; therefore, you must remove these files, after which, Infor LN will continue to work with 2.7 Infor LN code and Integration 6.x java code.
- Installing the Infor Enterprise Server AddOn Installable Unit delivers all the Infor LN sessions and API, such as tmboaserver, tmbdeserver, and so on, based on Adapter for LN version 6.x.

Installation procedure

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

Stop the Infor ERP environment, by using $BSE/etc/rc.stop on UNIX or the Infor Manager on Windows. All other binaries running against this environment must also be stopped; otherwise the Installation Wizard cannot replace them.

For an update of the Windows porting set, the event viewer must be closed.

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

Porting set installation

As a minimum, installation of this porting set requires Infor Installation Wizard 15.4.4.1. This version also supports a secure ftp connection.

1. Download the appropriate porting set and Installation wizard Installable Units to a temporary clean folder on your client.

   Download both Installable Units from generic Infor Xtreme KB 22923520.

2. Start the Staging Wizard from your existing Staging Area.

   You can start the Staging Wizard from <*Staging Area*>\Start\StagingWizard.bat.

3. On the **Welcome** screen, click **Next**.

4. At the Source directory, select the name of the temporary folder to which the Installable Units of the Installation Wizard and porting set are downloaded.

5. Click **Next**.

6. Select both Installable Units and click **Next**.

7. Select Yes, Start the Infor Installation Wizard, and click Next.

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

9. A progress bar will display, and then the Installation Wizard **Welcome** screen will appear. Click **Next**.

10. Select the environment to update and click **Next**.

11. Select the Installable Unit of the porting set 8.x and click **Next**.

12. 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 - Installation Guide (U9498 US)*.

Chapter 6 Installing Infor Baan 5.0b/c

6

This porting set can only be used for Infor Baan 5.0b or 5.0c in combination with the 5.0c tools, when the conditions for upgrading from the 7.1d porting set line are met. For more information, see *User's Guide to Upgrade to Porting Set 8.2b or Later* (U8985 US).

This document is available at Infor Xtreme KB 22923519.

Ensure you use Infor Installation Wizard 15.4.4.1 or later, this version also supports a secure ftp connection.

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.
- Before you upgrade to the 32-bit porting set, you must install SLM 7.1.0.2 or later.
- Before you upgrade to the 64-bit porting set, you must install SLM 7.1.0.4 or later.

The latest version of the SLM software can be retrieved via Infor Xtreme KB 22881484.

For customers still using a 7.1d.xx porting set, you must complete the procedure described in *Upgrade to Porting Set 8.2b or Later* (U8985 US) before upgrading to an 8.x porting set. This document is available through Infor Xtreme KB 22923519.

[UNIX/Linux] Shared memory allocation changed

As of porting set 8.4a, it is only required that you define a memory segment that is large enough.

To check if you must make adjustments after the installation of the porting set, complete these steps:

1 Before upgrading to the new porting set, run this command:

shmmanager6.2 –s 2>&1 | grep USED

Information will be returned, for example:

USED BYTES 35857640 FREE BYTES 14474008 SHMID 3 NO ATTCH 90

If there are multiple lines, sum up the number of ‘USED BYTES’ and remember that quantity; at this moment, this is the used shared memory.

if the sum of the USED BYTES higher than 100663296 (96 MB) adjust $BSE/lib/shm_config later. It is advised to run with a single shared memory segment.

2 Install the porting set.

3 Start the environment.

If the used shared memory is higher than 96 Mb, adjust $BSE/lib/shm_config. Uncomment and raise the value of shm_segment_size to at least the number noted in step 1.

4 Restart the environment.

Adapter for Infor ERP (a.k.a. tmboaserver)

This note is only applicable for customers who use the Adapter for ERP (tmboaserver).

Since porting set 8.2b, the java part of Adapter for Infor ERP is delivered as part of the porting set.

Because of the new delivery, conflicts with existing installations, such as 2.6 and 2.7, can arise. The following sections describe the various scenarios users can encounter.

Infor Baan 5.0 without any Adapter

If you are not using Integration Adapters, do not take action:

- Upgrading the porting set to 8.2b or later delivers the files ow.jar, ow3p.jar, and owconfig.properties.

Infor Baan 5.0 with Adapter for Infor ERP 2.6 or 2.7

If you are using Adapter for Infor ERP 2.6 or 2.7;

- Upgrading porting set to 8.2b or later delivers the files ow.jar, ow3p.jar, and owconfig.properties.

  This setup can conflict with the existing b3.jar and owxml.jar files; therefore, you must remove these files, after which, Infor Baan 5.0 will continue to work with 2.7 Infor LN code and Integration 6.x java code.

Infor Baan 5.0 with Adapter for Infor ERP 2.5 or older

If you are using Adapter for Infor ERP 2.5 or older;

- Upgrading porting set to 8.2b or later delivers the files ow.jar, ow3p.jar, and owconfig.properties.

  These files are incompatible with the existing Adapter for Infor ERP 2.5 components.

  Therefore it is mandatory to upgrade the tm package to version 2.6 or 2.7. For details, see KB 22917206 “Integration 6.x Adapter for BaanIV, BaanERP 5.0 and BaanERP 5.2 (tmboaserver)”.

  Also the existing b3.jar and owxml.jar files must be removed, after which, Infor Baan 5.0 will continue to work with 2.7 Infor Baan 5.0 code and Integration 6.x java code.

Porting set installation procedure

This procedure describes the porting set upgrade process on an Infor Baan 5.0b/5.0c environment with porting set version 8.2b or later pre-installed.

The upgrade process must be fulfilled with the Infor Installation Wizard, which runs on Windows.

If you are upgrading the porting set on a Windows server, you must run the wizard on the Windows server where the Infor Baan environment is running (Local install). For UNIX and Linux, you must perform the installation process from a Windows client (remote install).

Prerequisites

These components are required:

- The porting set Installable Unit for your platform
- Infor Installation Wizard 15.4.4.1 or later

Preparation

Inform the users the environment will be brought down, and complete these steps.

- Create a temporary directory, such as tempinstall.
- Unpack the Installation Wizard in a subfolder of the temp folder, such as tempinstall\IW.
- Unpack the porting set in the temp folder, such as tempinstall.
  The porting set itself will be unpacked as a subfolder.
- Ensure the file permissions in $BSE/etc are correct:
  User bsp needs read access to all files in the directory, and write access on the directory itself. With older environments, the $BSE/etc directory is often only accessible and readable for user root.
- During a porting set update for Baan5c these files are overwritten:

- - $BSE/java/owconfig.properties
- - $BSE/etc

Installation

Logging information will be available in the folder “Logging Files”. This folder is available on the same level as the temporary created directory.

To install the porting set:

1. Stop the environment by using the standard procedures.
2. Start the Installation Wizard by starting **setup.exe** in the IW folder.
   For example, tempinstall\IW\setup\setup.exe

   Upon startup, the Installation Wizard will scan the parent folders for the availability of Installable Units. If these are not found, it will ask you where the Installable Unit can be found; here, you must specify the folder where the file InstallableUnit.info is located. It is better to ensure the porting set Installable Unit is in the folder structure as described in ‘preparation’.
3. The **Welcome** screen displays, click **Next**.
4. On the **Environment** dialog box, specify an ‘environment’ name, and click **Next**.

   The given ‘environment name’ is only used in the context of this installation and can be found in the ‘logging files’ folder.
5. On the ‘**Select Installable Units’** dialog box, select the appropriate porting set and click **Next**.
6. On the “**Infor Environment Location**” dialog box, select ‘local’ for a Windows update and ‘remote’ for a UNIX/Linux update. Click **Next**.
7. The ‘**Host name’** dialog box displays. For Windows: check the Hostname and login name and click **Next**. For UNIX/Linux: specify this information:
   - Host Name.
   - Loginname: commonly bsp.
   - Password (of login name).
   - Super User password (root password).
8. The ‘**Destination directory’** dialog box displays. Specify the installation directory of the Infor environment.

   Click Change to change the default destination directory to the correct destination directory and click **Next’**
9. The **Configuration Files** dialog box displays. If you do not want to change the existing settings click **Next.**
10. On the ‘**Ready to Install’** screen, check the settings and click **Install**.

    If the installation fails, save the error-message and the ‘Installation Failed’ dialog box will appear. For information about where logging information can be found, click **Log info**.

11 On the '**Installation completed'** screen, click **Finish**.
The environment can be given to the users again.

The Installation Wizard will try to start the environment after finishing the installation; however, it runs the $BSE/etc/rc.start script with the "NoPdaemon" option. In case you need the Printer Daemon running, you must manually start the environment using $BSE/etc/rc.start_pdaemon.

Chapter 7 Installing Infor Baan IVc

7

This porting set can only be used for Infor Baan IVc when the conditions for upgrading from the 6.1c.xx porting set are met. For more information, refer to *Baan IVc - User's Guide to Upgrade to Porting Set 8.7b or Later* (U9677 US).

This document is available at Infor Xtreme KB 22923521.

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.
- Porting set 8.7b.01 and later requires, as a minimum, SLM 7.1.
- If you have an Infor Xtreme support maintenance contract, add product-id 10365 and request for new license activation through Infor Validation.
- SLM requires the installation of these updates:
  - Infor Xtreme KB 22914879: containing 4GL Tools updates.
  - Infor Xtreme KB 22927504 and Infor Xtreme KB 22911301: containing the security files for the Tools and Application packages. These KBs were not available yet at the release of porting set 6.1c.08.

The latest version of the SLM software can be retrieved via Infor Xtreme KB 22881484.

To adopt the SLM license manager, refer to *Infor Baan IVc - SLM Adoption on Infor Baan IVc (U9555 US)* guide.

Adapter for Infor ERP (a.k.a. tmboaserver)

This note is only applicable for customers who use the Adapter for ERP (tmboaserver).

Since porting set 8.2b, the java part of Adapter for Infor ERP is delivered as part of the porting set.

Because of the new delivery, conflicts with existing installations, such as 2.6 and 2.7, can arise. The following sections describe the various scenarios users can encounter.

Infor BaanIVc without any Adapter

If you are not using Integration Adapters, do not take action:

- Upgrading the porting set to 8.2b or later delivers the files ow.jar, ow3p.jar, and owconfig.properties.

Infor BaanIVc with Adapter for Infor ERP 2.6 or 2.7

If you are using Adapter for Infor ERP 2.6 or 2.7, note the following;

- Upgrading porting set to 8.2b or later delivers the files ow.jar, ow3p.jar, and owconfig.properties.

  This setup can conflict with the existing b3.jar and owxml.jar files; therefore, you must remove these files, after which Infor BaanIVc will continue to work with 2.7 Infor LN code and Integration 6.x java code.

Infor BaanIVc with Adapter for Infor ERP 2.5 or older

If you are using Adapter for Infor ERP 2.5 or earlier;

- Upgrading porting set to 8.2b or later delivers the files ow.jar, ow3p.jar, and owconfig.properties.

  These files are incompatible with the existing Adapter for Infor ERP 2.5 components.

  Therefore it is mandatory to upgrade the tm package to version 2.6 or 2.7. For details, refer to KB 22917206 “Integration 6.x Adapter for BaanIV, BaanERP 5.0 and BaanERP 5.2 (tmboaserver)”.

  The existing b3.jar and owxml.jar files must be removed, after which infor BaanIV will continue to work with 2.7 Infor BaanIV code and integration 6.x Java code.

Porting set installation procedure

This section describes the porting set upgrade process on an Infor Baan IVc environment with porting set version 8.7a or later pre-installed.

The upgrade process must be fulfilled with the Infor Installation Wizard, which runs on Windows.

If you are upgrading the porting set on a Windows server, you must run the wizard on the Windows server where the Infor Baan environment is running (local install). For UNIX and Linux, you must perform the installation process from a Windows client (remote install).

For first upgrade, refer to *Baan IVc - User's Guide to Upgrade to Porting Set 8.7b or Later* (U9677 US).

Prerequisites

These components are required:

- Appropriate porting set (version 8.7b.01 or later). You can download the porting set from the Infor support site: http://www.infor.com/inforxtreme. For details, refer to Infor Xtreme KB 22923520.
- Infor Installation Wizard 15.4.4.1 or later, this version also supports a secure ftp connection.

Perform the installation under the same username as the initial installation.

The LN environment to be upgraded is unavailable for users during the upgrade.

Preparation

1. Create a new folder.
2. Unzip the porting set into this folder.
3. Unzip the Installation Wizard into the new folder.

Installation

To install the porting set:

1. Start the Installation Wizard. Double click **setup.exe** in the setup folder.
2. The Installation Wizard displays the **Welcome** screen.
3. Click **Next**.

   The Installation Wizard scans the folder above the installation folder to identify the available Installable Units.

   The **Select the environment** dialog box is displayed.
4. Select the environment that must be updated and click **Next**.

   The **Select Installable Units** dialog box displays.
5. Select the Installable Unit **Infor Enterprise Server Porting Set** and click **Next**.

   The **Select Porting Set** dialog box displays.
6. Select the appropriate porting set and click **Next**.

   The **Infor Environment Location** dialog box displays, in which the **Local** option is selected.

7 Click **Next**. The **Host Name** dialog box displays.

8 Click **Next**. The **Destination Directory** dialog box displays.

9 Complete the information as appropriate and click **Next**.

10 Click **Yes**. The **Configuration Files** dialog box displays.

11 Click **Next** unless you have a specific reason to adjust the configuration files.

The **Ready to Install** dialog box displays.

12 Check the parameters and, if correct, click **Install**.

Note for a Windows server: If services are still running, warnings will appear. In this case, click **OK** to stop these services.

13 Click **Finish** when the installation has completed successfully.

Chapter 8 Known Issues/Points of Attention

8

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

Generic

This section contains the generic notes.

Change in the (Baan) Login Daemon related to environment variable inheritance

The (Baan) Login Daemon is the blogind6.2 executable on UNIX and is called the Infor Logic Service on Windows (rexecd.exe). It is being referred to as blogind.

In porting sets earlier than 8.9a, processes started by blogind, such as bshells and their (command line) processes, inherited their environment variables from blogind itself. As a result, correct and secure functioning of the application was implicitly defined by the environment of the user that started blogind (or the Windows account under which the Logic Service runs). Environment variables that are typically set for blogind are PATH, JAVA_HOME, and CLASSPATH. Especially when calling system or 3rd party binaries, the PATH variable must be set correctly.

Starting with porting set 8.9a, you must explicitly specify the environment variables for bshells and other processes started by blogind. These processes will not inherit their environment variables from blogind anymore by default.

To explicitly specify the environment variables that the bshell and other processes must have, use $BSE/lib/bse_vars on UNIX or the Infor Manager BSE environment property on Windows. This is already possible in earlier porting sets.

To continue with the implicit behavior of environment variable inheritance, invoke blogind with the -inherit option. Although this option was introduced in porting set 8.9a for compatibility reasons, this option is not recommended.

Floating Point Exceptions

As of porting set 8.7a.02 the floating point exception handling is changed. This means that possible issues in the 3GL code are now recognized by the porting set and an error is given. These can be different errors depending on the floating point exception that is seen. For this some changes were needed in the application code, and solutions are made available for that. Refer to the porting set KB 22923520 for these different application solutions.

As of 8.7b.01 this way of floating point exception handling is also used for Baan IV. That means that possible issues in the 3GL code of Baan IV are now recognized by this porting set and an error is given, for example:

[MR_FLT_IN] float exception in 'ppmmmxxxxmxxx', info: Signal SIGFPE raised, code EXCEPTION_FLT_INVALID_OPERATION

In these situations the owner of that application code must be contacted to create a solution.

When the error is in some critical process it's possible to enable a temporary workaround for this problem.

Caution: This must only be done after the problem is reported and accepted, and the solution is not yet available. When the solution is available the workaround must be disabled again.

To disable new floating point checks in the porting set as a temporary workaround it's possible to set the variable FPE_STRICT_ENABLE.

You can set the variable as:

- FPE_STRICT_ENABLE=00767 in the command line
- fpe_strict_enable:0767 in the file $BSE/lib/defaults/**all**

OS specific

This section contains the OS specific notes.

Microsoft Windows

Desktop Heap

Reduced scalability on Windows due to desktop exhaustion

The Microsoft Windows Operating System is designed to put all running processes somewhere in the system. One common thing shared between all these processes is that each process uses a Windows Station and a Desktop (for more technical information, see for example: http://blogs.technet.com/b/askperf/archive/2007/07/24/sessions-desktops-and-windows-stations.aspx). The Infor LN software uses its own, non-interactive desktop for creating processes

(called ‘Baan’ Windows Station, and ‘Baan’ Desktop). This desktop is usually created by the Infor Logic service. If the ‘Baan Windows Desktop Size’ setting is zero (refer to Infor Management snap-in->Logic Service, right-click and choose properties), then the Windows settings are inherited.

At default, the size of this desktop is inherited from Windows settings, unless someone changes the setting in the Infor Management snap-in. If the setting in the Infor management snap-in is non-zero, then this value has precedence over the Windows settings.

If the desktop size is too small, then the Windows event viewer (system log) may complain about desktop exhaustion. Typical symptoms are: user32.dll initialization failures, randomly crashing (Infor) applications, like sort.exe. The default size varies from Windows version to Windows version, but may be as less as 512Kb. This value is usually too less if several hundreds of users run on a single Infor LN Microsoft Windows server.

Starting on Windows 2008, Microsoft provided a method to create a desktop with its own size. In case of desktop exhaustion problems, please check the properties of the Infor Logic Service, using the Infor Management snap-in, and adjust the desktop size to an appropriate value. A reasonable value may be 8192 KB (=8 MB). Enlarge this value, until the previously described symptoms are gone.

If the Infor Application Services Manager (ASM) is also running on the same system, note that the ASM service can create the private ‘Baan’ Windows Station and desktop too. If both the Logic Service and ASM service are started automatically at system startup, then the startup order (defined by Windows itself) determine which service will create the required Windows Station and Desktop. If the Logic Service is 64-bit and the ASM service is not 64-bit, then both applications look in a different part of the Windows registry (as by design of Windows). This problem only occurs on 64-bit Windows versions, and only if the Logic Service and ASM are of different ‘bits’. Because the startup order of services in Windows is not well defined, either the Logic Service or ASM service may start first, resulting in potentially different desktop sizes of the created ‘Baan’ desktop.

To prevent that a too small desktop is created by ASM, change this with the Infor Management snap-in.

Specify an appropriate value (size is in Kb). Use the same value as provided in the 64-bit part in the registry at:

HKEY_LOCAL_MACHINE\SOFTWARE \Baan\Services\Protocols\NonInterActiveDesktopSize.

If the Logic Service and ASM are either 32-bit or 64-bit, then the setting mentioned earlier is not needed. If the Infor Management snap-in is 64-bit, it manages only the 64-bit part of the registry regarding the ‘Baan Windows Desktop Size’ setting.

If a Logic service of version 8.7a or newer is installed and another BSE with a porting set version prior to 8.7a or 6.1c.15 is installed and OpenWorld is used for that BSE, then verifying user password will fail with the following error:

```
session: "tmboaxmlhand ";object: "tmboaxmlhand "; function:
"is.userinfo.correct" verify.user.password; company number: 293

Call to BaanLogin failed: Could not setup socket connection to port: 7150
```

To solve this add the following line to “C:\windows\system32\drivers\etc\services”:

```
BaanLogin  512/tcp                          #Workaround for BaanLogin port
finding issue since 8.7a porting set
```

Windows Performance Counters not supported by 64-bit porting set

The Microsoft Windows Performance Counters are not supported by the 64-bit porting set.

Support for saving BSE environments.

The support for saving BSE environments in Microsoft Active Directory has been removed.

Microsoft Management snap-in for Infor LN

The Microsoft Management snap-in for Infor LN requires administrator rights to be able to start/stop services.

A 32-bit snap-in is not shown by a 64-bit mmc.exe

A 32-bit snap-in does not show 64-bit BSEs. A 64-bit snap-in shows 32-bit and 64-bit BSEs.

A 32-bit snap-in is not shown by a 64-bit mmc.exe. To run a 32-bit snap-in, you must start the 32-bit variant of mmc. Use mmc.exe /32, or start mmc.exe from %WindowsDir%\SysWOW64\mmc.exe.

Linux x86 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 on. For more information see Infor Xtreme KB 1351800.

The 32-bit/64-bit PAM library cannot be found

On Linux x86 SUSE/Red Hat, the 32-bit/64-bit PAM library cannot be found by the porting set, because these are not installed by default on Linux.

Ensure that either the 32-bit PAM modules or the 64-bit PAM modules are installed when you use the 32-bit or 64-bit Infor LN application.

Database specific

This section contains database-specific notes.

SQL Server

Collation differences

Symptoms:

Sorting on MSQL is sometimes a bit different than expected. For example, refer to these records:

- 98
- 9-9

When sorting these records on MSQL in a Unicode environment, the order will be:

- 98
- 9-9.

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

- 9-9
- 98

This is not a problem we can fix in our driver, but something that is dictated by the MSQL database. The problem is in the Variable Weighting elements. For details, refer to: http://unicode.org/reports/tr10/#Variable_Weighting

Table 13 of this web page shows an overview of comparison of variable ordering.

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

Oracle

Collation differences

Symptoms:

Oracle could have the same problem as described for MSQL. For Oracle, you can configure this by using the infor_generic_m setting. Without this setting Oracle will sort in the same unexpected sorting order. Refer to Infor Xtreme KB 22853480.

Chapter 9 Features

9

Portingset 8.9a

Parallel process for bdbreconfig.

Starting with porting set 8.9a, bdbreconfig will be started with parallel processes. The default is 4 but with the –J option, with the db_resource bdbreconfig_parallel or with the BDBRECONFIG_PARALLEL environment variable, this can be set to other values. Parallel execution is intended to speed up the reconfiguration process of many tables. Every reconfiguration operation on a single table is seen as a “task”. The minimum value is 1, which will result in the same behavior as the older porting sets. The max is 128. Care must be taken in choosing this value. Too much parallelism can cause system overload and database connection problems.

Advanced Table Compression.

From porting set 8.9a Infor LN supports table compression on SQL Server, Oracle, and DB2 databases.

- **Note:** Table compression may require a certain RDBMS edition and/or license key from the RDBMS vendor. The table compression feature should not be enabled in the BSE if the RDBMS version does not support table compression. You can run into installation errors if there is a mismatch between BSE and RDBMS capabilities.

Table compression is not supported for these products:

- IBM Informix
- Infor Baan4
- Infor Baan5

SQL Server

Infor LN supports page compression on complete tables in SQL Server. An edition is required that supports compression.

Oracle

Infor LN supports only advanced OLTP table compression on Oracle databases.

Caution: Existing index compression will be lost during a database reconfiguration through bdbreconfig.

DB2

We support table compression on DB2 databases. An edition which contains the Storage Optimization feature pack is required. Please make sure you enabled the licenses for the Storage Optimization Package before you start the LN installation.

Deployment

In case of a new Infor LN installation, you can enable table compression in the Installation Wizard.

You can also enable table compression in an existing Infor LN installation. To enable table compression:

1. Start tools session ttdba0132m000 and switch table compression on.
2. Convert the changes to runtime. The storage_param file is updated.
3. Then during the creation of a new table, or reconfig with dump of existing tables, the compression will be used for these tables. To force this action, run the Reorganize Tables (ttaad4225m000) session. Tables must be recreated to enable compression. Therefore select the **Data and Indices** check box.

Portingset 8.8a.01

Starting with porting set 8.8a.01, some new behavior was added:

- 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.
- On UNIX: contrary to previous porting sets, variables specified in the $BSE/lib/bse_vars file, and already existing in the environment, are now overwritten by the value specified in the bse_vars when connecting through a client using rexec or blogin protocol. The value of the variable in the bse_vars file has precedence over the (previous) value of the environment variable. With older porting sets, the value in bse_vars was silently ignored if a variable was already specified in the environment (of the rexecd or blogind process). Variables in the bse_vars file, which are not already set as environment variable, are always added to the environment, similar to previous porting set versions. With this new behavior, it is possible to override the PATH variable. Note that values must be specified as fully qualified values, i.e. no expansion of its own variable is

done. For example, the following construction is invalid: PATH=$PATH:/home/user/mybin, but PATH=/home/user/mybin is valid. But the next expression is also valid: BSE_CLASSPATH=/usr1/testlab/AS/maint/shared_bro/java/com_baan_bclm.jar:${BIRT_HOME}/lib

Porting set 8.8a Document Authorization (DBCM)

With porting set 8.8a, you can introduce business object changes in a controlled manner, used by ION Workflow. See “Document Authorization” of the *Infor Enterprise Administration Guide (U8854).*

Support notes:

- Document Authorization is not supported on the Informix database
- Document Authorization is supported for Microsoft SQL Server 2012 and later