Technical Notes for Porting Set 8.4c.02



Copyright © 2008 Infor

All rights reserved. The word and design marks set forth herein are trademarks and/or registered trademarks of Infor and/or related affiliates and subsidiaries. All rights reserved. All other trademarks listed herein are the property of their respective owners. www.infor.com.

Important Notices

The material contained in this publication (including any supplementary information) constitutes and contains confidential and proprietary information of Infor Global Solutions.

By gaining access to the attached, you acknowledge and agree that the material (including any modification, translation or adaptation of the material) and all copyright, trade secrets and all other right, title and interest therein, are the sole property of Infor Global Solutions and that you shall not gain right, title or interest in the material (including any modification, translation or adaptation of the material) by virtue of your review thereof other than the non-exclusive right to use the material solely in connection with and the furtherance of your license and use of software made available to your company from Infor Global Solutions pursuant to a separate agreement ("Purpose").

In addition, by accessing the enclosed material, you acknowledge and agree that you are required to maintain such material in strict confidence and that your use of such material is limited to the Purpose described above.

Although Infor Global Solutions has taken due care to ensure that the material included in this publication is accurate and complete, Infor Global Solutions cannot warrant that the information contained in this publication is complete, does not contain typographical or other errors, or will meet your specific requirements. As such, Infor Global Solutions does not assume and hereby disclaims all liability, consequential or otherwise, for any loss or damage to any person or entity which is caused by or relates to errors or omissions in this publication (including any supplementary information), whether such errors or omissions result from negligence, accident or any other cause.

Trademark Acknowledgements

All other company, product, trade or service names referenced may be registered trademarks or trademarks of their respective owners.

Publication Information

Document code: U9530B US

Release: Infor Enterprise Server

Publication date: November 08

Table of Contents

Chapter 1 Introduction	1-1
End-of-service notifications	1-1
SQL Server 2000	1-1
Oracle 10.1	1-1
IBM DB2 V8	1-2
IBM Informix IDS 9.40	1-2
Sun Solaris 9	1-2
Platform support: x86 based	1-2
Virtual Server support	1-3
VMWare	1-3
HP Integrity VM	1-3
Support matrix Infor ERP LN 6.1 and Infor ERP Baan 5.2a*	1-4
Support matrix Infor ERP 5.0b and 5.0c	1-5
Chapter 2 Operating System Notes	2-1
HP PA-RISC HP-UX	2-1
Required OS patches	2-1
Java support	2-1
HP IA64 (Itanium 2) HP-UX	2-2
Required OS patches	2-2
Java support	2-3
Oracle	2-3
IBM System i / System p AIX	2-4
Required OS patches	2-4
DB2 UDB	2-4

Java	2-4
Linux x86 Suse	2-4
MySQL	2-5
Linux x86 RedHat	2-5
MySQL	2-5
Microsoft x86 Windows	2-5
Java support	2-5
Sun Sparc Solaris	2-6
Required OS patches	2-6
Java 1.4 and 1.5 support	2-6
Chapter 3 RDBMS Notes	3-1
IBM DB2	
IBM Informix	
Informix 9.40, Windows only	
Informix 7.31	
Microsoft SQL Server	
SQL Server 2005	
Oracle	
Oracle RAC support	
MySQL	3-3
Chapter 4 Java Support	4.4
Chapter 4 Java Support	
Supported Java versions	4-1
Chapter 5 Installation Procedure for Infor ERP LN 6.1 and Infor ERP Baan 5.2a	5-1
Minimum SLM Client and Server 7.1	5-1
[UNIX/Linux] Shared memory allocation changed	5-1
Unicode on Oracle [upgrading from 8.2b or earlier]	5-2
Effect for existing users	5-2
Security file installation [upgrading from 7.6b.01 or earlier]	5-2
Other users	5-3
Infor Adapter for ERP	5-3

ERP LN without any Adapter	5-3
ERP LN with Adapter for ERP LN 2.6 or 2.7	5-4
Installation procedure	5-4
Porting set installation	5-5
Chapter 6 Installation Procedure for Infor ERP Baan 5.0b/c	6-1
Minimum SLM Client and Server 7.0	6-1
Installation notes for Windows-Porting Set	6-2
Installation notes for DB-Connector	6-2
DB-Connector on Windows/ERP5c	6-2
[UNIX/Linux] Shared memory allocation changed	6-2
Porting set installation procedure	6-3
Prerequisites	6-3
Preparation	6-3
Installation	6-4
Chapter 7 Known Issues/Points of Attention	7-1
Known issues	7-1
Multi language enabling: ODBC/JDBC doesn't work with old lang	uages codes7-1
Using multiple VM's on one VMWare ESX Server	7-1
Windows/Oracle environments; potential locking issues [solved in	1 8.4c.02]7-2
Windows: BIRT reporting environment variables	7-2
DB2: possible deadlock	7-2
8.4b and later	7-3
"Maintenance of software product was not licensed"	7-3
Multilanguage data support and Oracle	7-3
8.4a.02 and later	7-3
DB2: bidirectional indexes	7-3
shmvalues6.2 removed	7-4
Known issue – AIX account expiration does not work using Blogin da with porting set 8.4c>	
Porting set 8.4a and later	
Dump format changed	
Known issue – HP-UX	

	[Informix] IDS 10.00.xC6	7-5
	[Informix] IDS 10 FC5	7-5
	Porting set 8.3a or later	7-5
	Shared memory management	7-5
	Porting set 8.2b or later installed: No license to run object	7-6
	Java – Crashes JIT compiler	7-7
	Oracle 10.2	7-7
	IBM AIX and Java 1.4 / Adapter for ERP LN	7-7
	Informix IDS 10	7-8
	Oracle 10.1.0.4	7-8
	Range expression validation 7.6b	7-8
	HP-UX – host name length limited to a maximum of 20 characters in length	7-9
Cł	napter 8 Features	8-1
	8.4a.02 LOCK_RETRY functionality has been replaced	8-1
	8.4a – clean up shared memory	8-1
	8.4a – combo driver support for UNIX/Linux platforms	8-1
	8.3a – dynamic shared memory allocation	8-2
	8.3a – Informix array insert performance improvement	8-2
	8.2b – Informix statistics	8-3
	8.2b – PAM Pluggable Authentication Module(s)	8-3
	8.2b – configurable log size	8-3
	8.2b – Getting the JVMI version	8-3

About this Guide

This document provides technical notes about Infor Enterprise Server Porting Set 8.4c.02.

Send us your comments

We continually review and improve our documentation. Any remarks/requests for information concerning this document or topic are appreciated. Please e-mail your comments to documentation@infor.com.

In your e-mail, refer to the document code and title. More specific information will enable us to process feedback efficiently.

This chapter describes the operating system and database combinations supported to deploy the following:

- Infor ERP LN 6.1.
- Infor ERP Baan 5.2a.
- Infor ERP 5.0b and 5.0c.

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

Example: Infor will continue to provide support for IBM AIX 5.2 on this porting set if IBM continues standard support for AIX 5.2.

End-of-service notifications

SQL Server 2000

On April 8, 2008, Microsoft ended mainstream support for SQL Server 2000. Customers are advised to plan upgrade to a later version.

Oracle 10.1

January 2009, Oracle will end premium support for Oracle Database 10.1. Customers are advised to plan upgrade to a later version.

IBM DB2 V8

On April 30, 2009, IBM will end the support for IBM DB2 Universal Database 8.1 and 8.2. Customers are advised to plan upgrade to a later version

IBM Informix IDS 9.40

April 30, 2009, IBM will end the support for IBM Informix IDS 9.40. Customers are advised to plan upgrade to a later version

Sun Solaris 9

Second calendar quarter of 2009, Sun will announce the End of Life for Solaris 9. Customers a re advised to plan upgrade to a later version.

Platform support: x86 based

ERP LN solutions, such as Infor ERP 5.0c and Infor ERP LN 6.1, are supported on Intel and AMD-based x86, AMD64, and EM64T under the following conditions:

The operating system must be an ERP LN-supported platform.

Note: Infor currently supports the 32-bit variants of Windows. Windows 64 is supported when used with SQL Server.

For Linux RedHat and Suse, both 32 and 64-bit are supported. Note that the ERP LN solutions are 32-bit applications and need the 32-bit clients of the selected database.

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

The hardware must be supported by the operating system vendor.

Note: Ensure that other required software, such as the RDBMS, is also supported on the platform of your choice.

For Windows, check the Microsoft HCL list:

http://www.microsoft.com/whdc/hcl/default.mspx

For Suse Linux, check Novell's hardware requirements.

http://www.novell.com/products/server/sysregs.html

Note: Infor cannot guarantee the information will be available on the provided links. The information is provided for your convenience.

Virtual Server support

VMWare

The following statements apply to the Infor ERP LN 6.1 and ERP 5 Microsoft Windows x86 distribution and Linux x86 distribution:

With Enterprise Server 8.3 and later, you can run these distributions on VMWare Server for demo and test purposes. However, benchmarks show that ERP LN in OS environments directly on the hardware performs much better than ERP LN in a VMWare Server environment; therefore Infor will not handle performance support calls when ERP LN runs on a VMWare Server environment.

With Enterprise Server 8.3 and later, it is supported to run the distributions on VMWare ESX and ESXi for all purposes, including production. When you size the system, take the overhead of VMWare ESX/ ESXi into account. For guidelines, refer to the ERP LN Sizing guide.

32 and 64 bits Windows and 32 and 64 bits Linux are both supported in combination with VMWare.

Note: Since the Infor SLM Server (Solution License Manager) is not supported in a virtual server environment it must be setup on a separate non-virtual server.

HP Integrity VM

With Enterprise Server 8.3 and porting set 8.3a.01 or later, it is supported to run ERP LN 6.1 with HP-UX on HP Integrity VM for demo and test purposes.

OnePoint Support will not handle performance related inquiries about running ERP LN with HP-UX in a HP Integrity VM environment; support is limited to test and demo environments.

HP Integrity Virtual Machines with the ERP LN 6.1 HP-UX IA64 distribution are supported.

Note that the Infor SLM Server (Solution License Manager) is not supported in a virtual server environment.

Support matrix Infor ERP LN 6.1 and Infor ERP Baan 5.2a*

	Supported OS	Oracle	IBM Informix IDS	IBM DB2	SQL Server	MySQL ⁿ
		10.1, 10.2, 11.1	9.40, 10, 11.1, 11.5 ⁱ	8.1, 8.2, 9.1, 9.5	2005 SP1, SP2	5.0
HP PA_RISC HP-UX	11i v1, v2, v3	√ u	√ m			
HP IA64 HP-UX	11i v2, v3	10.1, 10.2 ^u	10, 11 ^m			
Sun Sparc Solaris	9, 10	√ u	√ m			
IBM Power AIX	5.2, 5.3, 6.1	√ u	√ m	√ u m		
Linux x86 Suse	SLES 9 SP3, 10 SP1 & SP2	√ u	√ m	√ u m		√ m
Linux x86 RedHat	ES/AS 4, 5	√ u	√ m	√ u m		√ m
Microsoft x86 Windows	2003 SP1, SP2 + R2	√ u 32			√u	

Notes:

 $\sqrt{\ }$: supported (only if supported by the actual vendor)

number: supported for the mentioned database version

i: IDS 11.5 not supported for new installs of ERP, only for upgrades

Databases are supported in 32 and 64 bits version unless noted otherwise:

m: no multi-byte support

ⁿ Infor ERP Baan 5.2a is not supported on Linux/MySQL. MySQL is Controlled Available.

Unicode support (Multi language support)
 Not supported for Infor ERP Baan 5.2a

^{*:} Infor ERP Baan 5.2a based on Infor Enterprise Server 8

^{32 32} bits database supported

Support matrix Infor ERP 5.0b and 5.0c

	Supported OS	Oracle	IBM Informix IDS	IBM DB2	SQL Server
		10.1, 10.2, 11.1	7.31, 9.40, 10, 11.1, 11.5 ⁱ		2005 SP1, SP2
HP PA_RISC HP-UX	11i v1,v2, v3	√	√ m	On request (5.0c only)	
HP IA64 HP-UX	11i v2, v3	10.1, 10.2	9.40, 10, 11 ^m		
Sun Sparc Solaris	9, 10	√	√ m	On request (5.0c only)	
IBM Power AIX	5.2, 5.3	√	√ m	√ m	
Linux x86 Suse	SLES 9 SP3, 10 SP1 & SP2	√	√ m		
Linux x86 RedHat	ES/AS 4, 5	√	√ m		
Microsoft x86 Windows	2003 SP1, SP2 + R2	√ 32	√ 32 m	On request (5.0c only)	V

Notes:

 $\sqrt{}$: supported (only if supported by the actual vendor)

Number: supported for the specified database version

Level 1 database drivers are not supported with this porting set.

i: IDS 11.5 not supported for fresh installs, only for upgrades

Databases are supported in 32 and 64 bits version unless noted otherwise:

m: no multibyte support

³² 32 bits database supported

Some porting sets require minimum runtime patches for the OS compiler. Solution 205538 provides basic information about your current runtime patch level.

HP PA-RISC HP-UX

Required OS patches

8.4a.02 was the first porting set built based on HP aC++ A03.73. Ensure you at least install the runtime patches for compiler version A03.73 for HP aC++. See the following link:

http://h21007.www2.hp.com/dspp/tech/tech TechSoftwareDetailPage IDX/1, 1703,1743,00.html

8.2b was the first porting set requiring HP-UX patch PHSS_33033 for HP-UX 11.11; ensure you have it installed.

It is also recommended that you install the core patches distributed on the extension software media.

If you use the Java interface, for example, if you use Infor Integration, check the following link for patches:

http://www.hp.com/products1/unix/java/patches/index.html

Java support

From 8.2b onward, Infor recommends that you add the libjsig.sl to the LD_PRELOAD path.

To enable Java 1.4, complete the following steps to make sure the LD_PRELOAD is set:

1 In folder \$BSE/bin, create a script, for example "bshell_j14", with the following content:

#!/bin/ksh

export DS_AS=bshell_j14

export LD_PRELOAD=/opt/java1.4/jre/lib/PA_RISC2.0/hotspot/libjvm.sl:/opt/java1.4/jre/lib/PA_RISC2.0/hotspot/libjsig.sl

\$BSE/bin/bshell6.2 "\$@"

2 In the \$BSE/lib/ipc_info, create a new bshell entry, such as bshell_j14 that points to the script. To do this, copy the bshell entry and change the entries; an example is as follows:

```
bshell_j14 s 0 0 p ${BSE}/bin/bshell_j14
```

- 3 Ensure the bshell name in the BW configuration is bshell_j14.
- 4 Ensure the file \${BSE}/java/jvm_options exists and contains -Xusealtsigs.
- 5 Ensure the SHLIB_PATH in \${BSE}/lib/bse_vars points to the Java 1.4 libraries:

SHLIB_PATH=/opt/java1.4/jre/lib/PA_RISC2.0:/opt/java1.4/jre/lib/PA_RISC2.0/hotspot:/opt/java1.4/jre/lib/PA_RISC2.0/native_threads

The procedure to enable Java 1.5 is similar to the procedure for Java 1.4.

If you use a Java 1.5 version older than 1.5.0_07, you might need to run the following command once:

```
chatr -B deferred -B nonfatal bshell6.2
```

You must run this program as root, and when you do this, no bshells must be running.

HP IA64 (Itanium 2) HP-UX

Required OS patches

8.4a.02 was the first porting set built based on HP aC++A6.15. Ensure you at least install the *runtime* patches for compiler version A6.15 for HP aC++.

www.hp.com/qo/cpp

Select 'Latest Version and patch information'.

If you use the Java interface, for example, if you use Infor Open Architecture, check the following link for patches:

http://www.hp.com/products1/unix/java/patches/index.html

Java support

To enable Java 1.4, complete the following steps to make sure the LD_PRELOAD is set:

1 In folder \$BSE/bin, create a script, for example "bshell_j14", with the following content:

```
#!/bin/ksh
export DS_AS=bshell_j14
export LD_PRELOAD=/opt/java1.4/jre/lib/IA64N/hotspot/libjvm.so:
/opt/java1.4/jre/lib/IA64N/hotspot/libjsig.so
$BSE/bin/bshell6.2 "$@"
```

2 In the \$BSE/lib/ipc_info, create a new bshell entry, such as bshell_j14, that points to the script. To create this new bshell entry, copy the bshell entry and change the entries; an example is as follows:

```
bshell_j14 s 0 0 p ${BSE}/bin/bshell_j14
```

- 3 Ensure the bshell name in the BW configuration is bshell_j14.
- 4 Ensure the \${BSE}/java/jvm_options file exists and contains -Xusealtsigs.
- 5 Ensure the LD_LIBRARY_PATH in \${BSE}/lib/bse_vars points to the Java 1.4 libraries:

LD_LIBRARY_PATH=/opt/java1.4/jre/lib/IA64N:/opt/java1.4/jre/lib/IA64N /hotspot:/opt/java1.4/jre/lib/IA64N/native_threads

The procedure to enable Java 1.5 is similar to the procedure for Java 1.4.

Oracle

Oracle 11 is currently not supported because 32-libraries are formally not supported by Oracle and required for the integration with the ERP database driver.

IBM System i / System p AIX

Required OS patches

8.4c was the first porting set built based on XL C/C++ ED V9.0.0.5. Ensure the required XL C/C++ Enterprise Edition V9.0.0.5 library runtime patches or later are installed:

http://www-306.ibm.com/software/awdtools/xlcpp/support/

Ensure that you have your AIX on a supported maintenance level:

http://www-933.ibm.com/eserver/support/fixes/fixcentral/pfixpacks/52

http://www-933.ibm.com/eserver/support/fixes/fixcentral/pfixpacks/53

With porting set 8.4c.02 or later the minimum is maintenance level 5200-08.

DB2 UDB

Ensure the shared library search path LIBPATH of the environment points to the DB2 libraries.

Java

When using the java integration of Adapter for ERP, ensure you disable the JIT compiler. This is an AIX specific issue.

\$BSE/java/jvm_options:

-Djava.compiler=NONE

Linux x86 Suse

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

The supported OS version:

Enterprise Edition

MySQL

MySQL is controlled available.

Linux x86 RedHat

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

MySQL

MySQL is controlled available.

Microsoft x86 Windows

The supported OS version is as follows:

- Standard Edition
- Enterprise Edition
- Small Business Server

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

Java support

Take following steps to install the Sun JRE

- 1 Download the Sun JRE versions at http://java.sun.com.
- 2 Ensure the System Environment PATH variable contains the following paths:
 - Required paths of the JRE, for example < JRE install dir>\bin.
 - Required path of the jvm.dll, for example < JRE install dir>\bin\client.
 - %BSE%\shlib
 - %BSE%\bin

Sun Sparc Solaris

Required OS patches

8.4c was the first built-on Sun Studio 11. Ensure the required patches for your Solaris version are installed.

http://docs.sun.com/source/819-3052/patches.html

Java 1.4 and 1.5 support

Ensure the file \${BSE}/java/jvm_options exists and contains -Xusealtsigs.

Ensure the LD_LIBRARY_PATH in \${BSE}/lib/bse_vars points to the Java libraries.

IBM DB2

The following are supported: DB2

- Enterprise Edition
- Express
- DB2 V8: validated are fix packs: 13, 14, 15, 16. 17
- DB2 V9.1: validated are fix packs: 3, 4
- DB2 V9.5: validated is fix pack 1, fix pack 2

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

IBM Informix

The following are supported: Informix IDS 7.31, 9.40, 10, 11.1, 11.5 Enterprise Edition.

Informix IDS 11.5 is currently not supported for new installs, only for upgrading existing installs to IDS 11.5. The reason is that the Informix Server Administrator is not supported anymore with Informix IDS 11.5 while the ERP installer is dependent on that.

Do not use Informix IDS 10.FC5.

Informix 9.40, Windows only

Before you start the installation, you must start Regedit.

Go to Hkey Local Machine Software Informix <a h

Make the following string value:

InformixSQLHosts=\\<Servername>

This problem is caused by the Informix software, and will be resolved in a future Informix 9.40 release.

Informix 7.31

The minimum patch level required is IDS 7.31.FD1.

Microsoft SQL Server

The following are supported:

- Standard Edition
- Enterprise Edition

SQL Server 2005

If you migrate to SQL Server 2005, ensure you install SQL_DMO as part of the SQL Server 2005 installation, because ERP LN requires this module for SQL Server administration.

Oracle

The following are supported:

• Standard Edition, Enterprise Edition, and Standard Edition One.

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.

MySQL

MySQL is Controlled Available.

The following are supported:

- MySQL 5.0.
- MySQL 5.0 Pro Certified Server,

Minimal required MySQL 5.0.19.

The Solution License Manager product-id for MySQL is 7080. Register as a server license.

Chapter 4 Java Support

Java options

Raise the maximum heap size; set following value in \$BSE/java/jvm_options:

-Xmx256m

Supported Java versions

For this porting set, version J2SE 1.4.2.x is recommended. Use the latest available minor version of a major release; for example, from the major release 1.4, the latest minor release is currently 1.4.2.

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

Ensure you install the 32 bits version of the java runtime, because the ERP LN application is a 32 bits application.

os	Java 1.4.2	Java 1.5.1
HP PA-RISC HP-UX	Yes	Yes
HP IA64 HP-UX	Yes	Yes
IBM Power AIX	Yes	Yes
Microsoft x86 Windows	Sun JRE	Sun JRE
Linux x86 Suse/RedHat	Sun JRE	Sun JRE
Sun SPARC Solaris	Yes	Yes

Chapter 5 Installation Procedure for Infor ERP LN 6.1 and Infor ERP Baan 5.2a

Minimum SLM Client and Server 7.1

Porting set 8.4b and later require as a minimum SLM 7.0 (License Manager). It is required to install SLM 7.1.0.2 or later before upgrading the porting set.

The SLM software is available via solution 227527 on www.infor365.com.

Be aware that the version of the SLM Server must always be equal or higher to the version of the SLM Clients.

[UNIX/Linux] Shared memory allocation changed

With porting set 8.3a.01, the allocation of a shared memory segment changed; the memory segments are allocated dynamically instead of based on the predefined addresses in \$BSE/lib/shm param with a default fixed size.

Use previous shared memory manager behavior

It is also possible to fall back to the previous shared memory behavior by using the parameter file \$BSE/lib/shm_param.

The binary shm_values6.2 is removed, so you can no longer generate a new shm_param file. To fall back to the previous shared memory behavior you can change \$BSE/lib/defaults/all by adding the following line:

shm_compat_mode:1

On AIX, this can give a problem with default start 30000000 value because of the link option maxdata=20000000 ->

Start value might need to go to e0000000.

Unicode on Oracle [upgrading from 8.2b or earlier]

This release note is only 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 has been 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; this is because 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 ERP LN database (export/import on ERP LN level), so that 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 ERP LN 6.1 FP2 users.

If you use Infor Enterprise Server 8.2 (tt_7.6_a2, tools version that came with Infor ERP LN 6.1 FP2) and your application version is any of the following,

you must have installed solution 206321. If you do not have this solution installed, you will encounter licensing problems with the application sessions:

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

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 any of the following, you must have installed solution 208211 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. Solution 208211 also describes a workaround for this situation.

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

Infor Adapter for ERP

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

Since porting set 8.2b, the Adapter for ERP LN is delivered as part of the ERP 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 might encounter.

ERP LN without any Adapter

If you are not using Integration Adapters, you do not need to 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 8.3 AddOn delivers all the ERP LN sessions and API, such as tmboaserver, tmbdeserver, and so on.

ERP LN with Adapter for ERP LN 2.6 or 2.7

If you are using Adapter for ERP LN 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, ERP LN will continue to work with 2.7 ERP LN code and Integration 6.x java code.

 Installing the Infor Enterprise Server 8.3 AddOn delivers all the ERP LN sessions and API, such as tmboaserver, tmbdeserver, and so on, based on Adapter for ERP 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, else the Installation Wizard cannot replace them.

Note 1: For an update of the Windows porting set, the eventviewer must be closed.

Note 2: For an update on UNIX, you must also stop the baanlogin process.

Warning - for Windows installations only:

For porting set 8.4a and higher, a new vcredist_x86.exe has been distributed. Before you start the Installation Wizard, this file should be run, to install the Visual Studio 2005 runtime files.

The file can be found in the root directory of the porting set Installable Unit.

Warning for Windows installs: For porting set 8.4a, a new vcredist_x86.exe has been distributed. For details on what to do with this executable, on the installation media, look at the file VCRedist.Readme.

Porting set installation

As a minimum, installation of this porting set requires Infor Installation Wizard 13.5.4

Download the Installation Wizard and the appropriate porting set installable unit. For convenience, store the Wizard and the installable unit in the same folder.

Note: You can download both installable units from http://www.infor365.com generic solution 148218.

2 Start the Staging Wizard for the environment you want to update.

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

- On the **Welcome** screen, click **Next**.
- 4 As the **Source** directory, select the name of the directory to which the installable units of the installation wizard and porting set are downloaded.
- 5 Click Next.
- Select both installable units and click **Next**.
- 7 Select Yes, Start the Infor Installation Wizard, and click Next.

Note: If your currently installed porting set is older than 8.4a, before you start the Installation Wizard you must install the Visual Studio 2005 runtime files.

To install these runtime files, run the file vcredist x86.exe, which is provided in the root directory of the porting set Installable Unit. Then, start the Installation Wizard.

- 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**.\
- [porting set 8.4b specific] If you plan to use Reporting Service, pdf printing, or Cognos integration, ensure that you install the additional files ssa-xml.jar and iTextAsian.jar files in \$BSE/java provided by the 8.4b porting set solution 148218.

The remainder of the steps varies by platform and is rather basic. For information on these steps, refer to the installer Help or *Overall Installation Guide for ERP LN products – New installation* (U8204 US).

Chapter 6 Installation Procedure for Infor ERP Baan 5.0b/c

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

This document is available at solution 105618 at http://www.infor365.com.

Be sure to use Infor Installation Wizard 13.5.4 or later

Minimum SLM Client and Server 7.0

Porting set 8.4b and later require as a minimum SLM 7.0 (License Manager). It is advices to install SLM 7.1.0.2

The SLM software is available via solution 227527 on www.infor365.com.

Be aware that the version of the SLM Server must always be equal or higher to the version of the SLM Clients.

For customers still on a 7.1d.xx porting set, be sure to complete the procedure as described in "Upgrade to Porting Set 8.2b or Later (U8985 US)" before upgrading to an 8 porting set. This document is available vai solution 105618 on www.infor365.com.

Installation notes for Windows-Porting Set

When you upgrade the portingset on a Windows platform with ERP 5c, ensure that you backup the file %BSE%\java\owconfig.properties because the installer will overwrite this file.

Restore the file after the Porting Set installation is performed.

TCS 800-166497

Installation notes for DB-Connector

DB-Connector on Windows/ERP5c

When you use the DB-Connector on a Windows platform with ERP 5c, ensure you backup the file \$BSE\java\owconfig.properties, because the installer will overwrite this file.

After the DB-Connector installation is performed, restore the file.

[UNIX/Linux] Shared memory allocation changed

With porting set 8.3a, the allocation of a shared memory segment is changed. Memory segments are allocated dynamically instead of based on the predefined addresses in \$BSE/lib/shm_param with a default fixed size. When the ERP LNs SHM size was larger than this size, some manual action had to be taken.

As of porting set 8.4a, it is only required to have a large enough memory segment defined.

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

1 Before upgrading to the new porting set, run the following:

shm_manager6.2 -s 2>&1 | grep USED

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 number is more than 50331648 (48 MB) you must adjust \$BSE/lib/shm config later.

- 2 Install the porting set.
- 3 Start the environment. If the used shared memory is higher than 48 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.

Porting set installation procedure

This procedure describes how to install the porting set in an existing Infor ERP Baan 5.0b or 5.0c environment already upgraded to porting set 8.2b or later.

The installation will be performed using the Infor Installation Wizard, which runs on Windows. For ERP Baan running on Windows, the install must be performed on that system; a local install. For UNIX, the installation is a remote installation performed from a Windows client.

Prerequisites

You need the following:

- The porting set Installable Unit for your platform.
- Infor Installation Wizard 13.5.4.0 or later.

Preparation

Inform the users the environment will go down, and do the following.

- 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.

Installation

Note: 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, complete the following steps:

- 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

Note: If your currently installed porting set is older than 8.4a, before you start the Installation Wizard you must install the Visual Studio 2005 runtime files.

To install these runtime files, run the file vcredist_x86.exe, which is provided in the root directory of the porting set Installable Unit. Then, start the Installation Wizard.

Note: 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 need to 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 On the Welcome screen, click Next.
- 4 On the **Environment** screen, provide an 'environment' name, and then 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' screen, select the appropriate porting set and click Next.
- On the "Infor Environment Location" screen, the choice will be 'local' for a Windows update and 'remote' for a UNIX/Linux update. Click **Next**.
- 7 On the 'Host name' screen, do the following: Windows: check the Hostname and loginname and click Next. UNIX/Linux: provide the following information and click Next.
 - Hostname.

- Loginname: commonly bsp.
- Password (or loginname).
- Super User password (root password).
- 8 On the 'Destination directory', provide the installation directory of the ERP environment.

The default destination directory "/Infor/ERPLN/bse" must be changed to the correct destination directory by clicking "Change". Click Next'

- 9 Assuming you do not want to change the existing settings, on the 'Configuration Files' screen, 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' screen will appear. For information about where logging information can be found, click Log info.

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

> Note: The installation wizard will try to start the environment after finishing the installation; however, it executes the \$BSE/etc/rc.start script with the "NoPdaemon" option. So, in case you need the Printer Daemon running, you should manually start it using \$BSE/etc/rc.start_pdaemon

12 [porting set 8.4b specific] If you plan to use pdf printing or Cognos integration, ensure that you install the additional files ssa-xml.jar and iTextAsian.jar files in \$BSE/java provided by the 8.4b porting set solution 148218.

Chapter 7 Known Issues/Points of Attention

Known issues

Multi language enabling: ODBC/JDBC doesn't work with old languages codes

When using Multi language enabling for the data languages and still using the ISO 639-2 standard for languages codes, the ODBC/JDBC integration with ERP LN will not work on MLE data. Errors you may get are:

SQLServer: SqlState=QP999, 'database error 102', NativeError=1102

Oracle: SqlState=QP999, 'database error 911', NativeError=1911

To resolve this issue, upgrade to the ISO 639-1/ISO 3166-1 standard for languages codes as described in chapter 15 "To migrate data languages" of the Infor Enterprise Server 8.4.2 Administrator's Guide (U8854F US)

Using multiple VM's on one VMWare ESX Server

Infor benchmarks with multiple virtual machines on 1 ESX server showed a huge performance decrease when Hyperthreaded core sharing is set to any. Therefore, Infor recommends to set HT core sharing to none.

Advanced Server Configuration for Hyperthreading

You can specify how the virtual CPUs of a virtual machine can share physical cores on a hyper-threaded system. Two virtual CPUs share a core if they are both running on logical CPUs of the core at the same time. You can set this for individual virtual machines, as follows:

- In the VI Client's inventory panel, right-click the virtual machine and choose Edit Settings.
- Click the Resources tab, and click Advanced CPU.
- Choose from the pull-down menu to specify hyperthreading for this virtual machine to 'none'.

Windows/Oracle environments; potential locking issues [solved in 8.4c.02]

For Windows/Oracle customers, in case a porting set version 8.4.a.01 or lower is being used, the advise not to upgrade to this 8.4.c.01 version, but to wait until porting set 8.4c.02 is released (Expected: end October 2008)

It might occur that the retry_delay mechanism is not fully covering the locking issues.

This problem has been identified, and a solution will be made available with porting set 8.4c.02.

Windows: BIRT reporting environment variables

The Windows porting set does not read required environment variables from the \$BSE/lib/bse_vars file. The current ERP Installer defines required environment variables in this file. To have BIRT reporting work with an ERP LN environment on Windows, those environment variables must be defined in a different place. The possibilities are as follows:

- a. To set the variables in the client configuration file (WebTop/Worktop).
- b. To configuring these setting in the registry by using baanman snapin.

The variables to be manually defined are as follows:

- BSE CLASSPATH=<BSE environment>\birt-runtime\ReportEngine\lib
- BIRT_HOME=<BSE environment>\birt-runtime\ReportEngine

TCS 800-166499

DB2: possible deadlock

Symptoms:

If MultiConnect=3 mode (in db2cli.ini) was enabled for one single DB2 session, such as one bshell session, DB2 might run into a deadlock. This

problem appears in DB2 versions currently supported (made on March 2008). To get a fix for listed APARs shown below, contact your IBM support contact.

V8.2 APAR IZ12146

V9.1 APAR IZ12147

V9.5 APAR IZ12148

8.4b and later

"Maintenance of software product was not licensed"

If you get the error message "Maintenance of software product was not licensed" together with "No license to run object xxx" you have no license for "Infor365 maintenance contract" or this license has expired. Check the SLM licensing for product-id 10365, registered as a concurrent user license. If needed, add the product-id and request a new license activation through Infor Validation.

This issue can occur when you use Enterprise Server 8.4.1 or later.

Multilanguage data support and Oracle

When you use Multilanguage data support (MLE) with Oracle 10.2.0.1, you might encounter oracle crashes (ORA-07445). It is advised that you upgrade to Oracle 10.2.0.3.

8.4a.02 and later

DB2: bidirectional indexes

Starting with porting set 8.4a.02, as default the porting set will use bidirectional indexes for DB2.

Starting with 8.4b, this default will no longer be configurable.

Using bidirectional indexes in DB2 will result in a reduction of used space of about 50 percent in the index table space. The used amount of space in the data table space will not change.

shmvalues6.2 removed

With 8.3a, shared memory allocation was changed. There was no longer a need for bin/shmvalues6.2 and lib/shm_param.

The delivery of shmvalues 6.2 has been dropped with this release.

Known issue – AIX account expiration does not work using Blogin daemon <resolved with porting set 8.4c>

In an AIX environment using local security (/etc/security/user), and when using Blogin daemon for accessing the ERP LN environment, a user can still access the environment when their user account has expired.

Internal reference: TCS 800/159783

Porting set 8.4a and later

Dump format changed

The internal dump format generated by bdbpre, also called using session 'create sequential dump of tables', has improved; older porting sets cannot read this dump format.

Using the environment variable PREVERSION=3 or the resource preversion:3, you can enforce dumping in the old format.

Note: an ERP 5.0 environment with this porting set will continue to generate dumps based on the VERSION=3 format. Infor might adjust in the future.

Known issue – HP-UX

HP patch PHSS_33037 introduces a problem, resulting in a malfunctioning porting set. To correct the problem introduced with PHSS_33037, you must install HP patch PHSS_35379 or its successor.

[Informix] IDS 10.00.xC6

A new feature called INDEX_SELFJOIN, introduced by IBM, can improve the performance of Infor products. This feature must be enabled in the Informix **onconfig** file.

More details can be found on the following link:

http://publib.boulder.ibm.com/infocenter/idshelp/v10/index.jsp?topic=/com.ibm.docnotes.doc/uc6/ids_perf_docnotes_10.0.html

[Informix] IDS 10 FC5

IDS FC5 can sometimes crash or hang. The workaround is to disable the read ahead feature in Informix; therefore, the RA_PAGES parameter in the onconfig file must be set to 0.

Porting set 8.3a or later

Shared memory management

With porting set 8.3a, the memory segments used for shared memory are dynamically allocated during startup of the shared memory manager, instead of being based on the predefined segments defined in \$BSE/lib/shm_param with the earlier porting sets.

During the first start of shared memory, the shared memory manager will log in \$BSE/lib/shm config which size is default taken for the memory segment.

```
An example is as follows: # shm_segment_size:50331648
```

In this example, the segment is 48 Mb.

Default size too small

It is possible that the default is too small for your environment; if so, you will see the following message in the logfile \$BSE/log/log.srdd_init6.2:

```
All memory blocks are used shmmanager6.2 -s
```

USED BYTES 592044 FREE BYTES 16185172 SHMID 13 NO ATTCH 6

Maximum memory allocation allowed

For all UNIX/Linux systems:

The shared memory manager needs to be able (at default) to allocate 50331648 bytes of shared memory or any amount of bytes as specified in \$BSE/lib/shm_config with the shm_segment_size:<size> resource. If the kernel or operating system does not allow allocating the requested amount of shared memory, the shared memory manager will fail to start. The shared memory manager will then return with an error, indicating that allocation of shared memory failed. The kernel settings, which dictate a minimum or maximum, are system specific.

For Linux systems, to run the shared memory manager, the value in /proc/sys/kernel/shmmax must have at least a value of 50331648.

For Solaris, update the shared memory maximum by changing the following line in the /etc/system file:

set shmsys:shminfo_shmmax=<value>, where the value should be at least 50331648.

For other UNIX systems, to adjust the required kernel setting, use the administrative tools for your OS.

Porting set 8.2b or later installed: No license to run object

After the installation of porting set 8.2b or later, under certain conditions it is not possible to run sessions of the 'da' package. Error messages in the logfile are as follows:

No license to run object 'd:\baan6\application\da3.3_b\odaxch\oxch0501' (productld 0). Cannot open Package Security File

For Infor ERP LN 6.1 FP2, install solution 212523.

For Infor ERP Baan 5.0, install solution 208194.

Java - Crashes JIT compiler

If the JIT compiler stops responding when you use the Java interface, disable the JIT compiler; to do this, in \$BSE/java/jvm options, set the following value:

-Djava.compiler=NONE

Oracle 10.2

The first time you use Oracle 10.2, you can receive a message that the shared libraries are unavailable; If so, check the file permissions for group **Others** in the Oracle install directory settings, particularly the **lib** and **client** directories.

IBM AIX and Java 1.4 / Adapter for ERP LN

Note:

This issue was described in the technical notes of a previous porting set, but is resolved as of version 8.2b.; therefore, you are no longer required to set LDR_CNTRL=USERREGS.

In particular situations, the tmboaserver can crash with the following error:

 ${\tt JVMCI200}$ - <code>ERROR: User register saving is not enabled, Garbage Collection could be incorrect.</code>

JVMCI200 - ERROR: because of this the JVM library is explicitly aborting the process

 ${\tt JVMCI200}$ - ERROR: You must either rebuild the executable using "-bM:UR"

JVMCI200 - ERROR: or run with "export LDR_CNTRL=USERREGS"

This appears to be an issue with the latest versions of IBM Java1.4: builds from January 2006 or later.

As a workaround, you can start the bshell with a script that contains the following:

LDR_CNTRL=USERREGS

Informix IDS 10

Before you install ERP LN 6.1, extend the value of SHMADD in your onconfig file to the following:

```
SHMADD 32768 # Size of new shared mem. segments (Kbytes)
```

If you use the standard value (8192), you can reach the maximum number of shared memory segments; consequently, the database stops responding.

Oracle 10.1.0.4

At the time this porting set was released, an issue existed with Oracle 10.1.0.4 patches. After you upgrade to this Oracle patch, you might not be able to log in again and receive error 7413 (ORA-6413).

For the latest information on this issue, check solution 200328.

Range expression validation 7.6b

With porting set 7.6b, the validation of domain range expressions is extended with additional logging.

Until now, the porting set tolerated particular domain range constructions, which were actually incorrect and could lead to undesired behavior.

The validation of domain ranges is now improved, so erroneous range definitions are reported.

Examples of range definitions that are reported include the following:

[c-a]: This issue is reported as a problem because A comes before C.
 During runtime, only c is selected.

Using **[a-c]**, the developer receives the range of A, B, and V.

The expression to specify A or C or hyphen: [c\-a] or [-ac].

[_-.]: Again, in the range dot comes before underscore. At runtime, only the underscore is selected.

Using [.-_], the developer selects the range of dot up to underscore.

Alternatively, the developer might have wanted to have the selection of dot, underscore, and dash; If so, the developer can use [_.\-] [underscore dot backslash dash].

Because a dash is a special character in the range definition, a dash is preceded by a backslash to indicate that the character must be handled as a range character.

Erroneous range definitions are reported as a domain: range expression error 60.

HP-UX – host name length limited to a maximum of 20 characters in length

HP-UX 11.23.05.05 and later support extended host name lengths. ERP LN 6.1 does not support host names greater than 20 characters in length.

8.4a.02 LOCK_RETRY functionality has been replaced.

Since Porting Set 8.4a.02 the lock_retry functionality has been replaced.

The max_retry mechanism has been improved instead and can be easily configured by setting the resource variable in the \$BSE/lib/defaults/all file, and handling of locking issues has been improved by a retry_delay mechanism.

8.4a – clean up shared memory

With previous porting sets, it was required to empty shared memory (BSE/lib/srdd_tab6.2) and restart shared memory before installing new PMC solutions.

The porting set has improved in this area: the shared memory manager will check if objects in shared memory are still valid; if not, because of the installation of new objects, the objects from disk are used.

8.4a – combo driver support for UNIX/Linux platforms

Until now, the bshell and related database driver are running as two separate processes.

It is now possible to have them both running in the context of one process, the so called combo driver.

To have the bshell and database driver run within the context of one process, add an extra entry for the database driver \$BSE/lib/ipc_info for direct connection, represented by a 'd', pointing to the correct shared library:

```
oracle8
            d
                     ora8 srv6.2
oracle8
                     ${BSE}/bin/ora8_srv6.2
            S
informix
                     inf_srv6.2
            d
informix
                     ${BSE}/bin/inf_srv6.2
db2v5
            d
                     db2v5_srv6.2
                     ${BSE}/bin/db2v5_srv6.2
db2v5
mysql
            d
                    mysql_srv6.2
                     ${BSE}/bin/mysql_srv6.2
mysql
            s
```

Note:

In case multiple database instances are referenced in tabledef6.2 file, you must use standalone database driver mode. Infor does not recommend using multiple database instances because there is no transaction control over multiple database instances.

For more information for using combo with Informix check U8781C US "Infor Enterprise Server - Technical Reference Guide for Informix Database Driver"

8.3a - dynamic shared memory allocation

Upon startup, the shared memory manager will create itself a \$BSE/lib/shm_config file showing the defaults used.

The shmmanager.6.2.log will show more detailed information about the memory allocation. There are no longer predefined segments.

The file \$BSE/lib/shm_param and binary \$BSE/bin/shm_values have become obsolete.

8.3a – Informix array insert performance improvement

Importing large datasets can be accelerated by using the array interface.

Set the following values to your db_resource file:

- inf init:0200000
- inf_max_array_insert:100

8.2b – Informix statistics

With these porting set IDS, statistics will be used. To disable usage, set the following parameter in the \$BSE/lib/defaults/db_resource file:

inf update statistics:0

8.2b – PAM Pluggable Authentication Module(s)

Only applicable for the UNIX and Linux flavors:

With this porting set, the blogindaemon is enabled to use PAM authentication if configured on OS level.

8.2b – configurable log size

By default, the size of the logfiles in \$BSE/log is 512k. When the log file exceeds that size, it will move the logifle to type olg and start writing from scratch.

With the newly introduced resource 'log_size', the size of the log files can be adjusted. The default value is: 512.

The parameter can, for example, be set by adding the following line to the \$BSE/lib/defaults/all file:

log_size:1024

8.2b – Getting the JVMI version

To check the version of the jvmi, use the following command:

java -cp bjvmi.jar BJVMIVersion

The response resembles the following:

bjvmi.jar version: 8.2b Port no. : PA.3059 Java version : 1.4.2 OS name : AIX OS arch : ppc

OS version : 5.3