

ellucian™

# Banner General Banner Pre-Installation Guide

Release 8.4  
December 2010



Banner®, Colleague®, PowerCAMPUS®, Luminis® and Datatel® are trademarks of Ellucian or its affiliates and are registered in the U.S. and other countries. Ellucian, Advance, DegreeWorks, fsaATLAS, Course Signals, SmartCall, Recruiter, MOX, ILP, and WCMS are trademarks of Ellucian or its affiliates. Other names may be trademarks of their respective owners.

©2008-2010 Ellucian. All rights reserved. The unauthorized possession, use, reproduction, distribution, display or disclosure of this material or the information contained herein is prohibited.

Contains confidential and proprietary information of Ellucian and its subsidiaries. Use of these materials is limited to Ellucian licensees, and is subject to the terms and conditions of one or more written license agreements between Ellucian and the licensee in question.

In preparing and providing this publication, Ellucian is not rendering legal, accounting, or other similar professional services. Ellucian makes no claims that an institution's use of this publication or the software for which it is provided will insure compliance with applicable federal or state laws, rules, or regulations. Each organization should seek legal, accounting and other similar professional services from competent providers of the organization's own choosing.

Prepared by: Ellucian  
4375 Fair Lakes Court  
Fairfax, Virginia 22033  
United States of America

## Revision History

Publication Date	Summary
December 2010	New version that supports Banner 8.4 software.

# Contents

---

<b>Banner 8.0 Pre-Installation Steps</b> . . . . .	<b>5</b>
Install Required Oracle Software . . . . .	5
UNIX/Linux Installation . . . . .	5
Windows Installation . . . . .	5
Migrate Your Database to UTF8. . . . .	5
Converting with csscan and scaltr . . . . .	6
Install International Components for Unicode (ICU) . . . . .	6
UNIX/Linux Installation . . . . .	6
Windows Installation . . . . .	7
More Information . . . . .	8
C Translation Support . . . . .	8
Modify Environment Settings . . . . .	8



# Banner 8.0 Pre-Installation Steps

---

This document describes preparatory steps that must be taken before beginning the Banner 8.0 upgrade process.

## Install Required Oracle Software

Oracle Server Enterprise Edition 10.2.0.1 software should be installed and upgraded to 10.2.0.3.

### UNIX/Linux Installation

Download and install patch 5874989 from Metalink. This patch will fix the problem with datapump importing duplicate rows in the database.

The `changePerm.sh` file changes permissions in the Oracle source code tree that allows SGHE software to read shared objects. If this is not run, you will get permission errors on compiles.

### Windows Installation

Download and install the opatch patch p4898608. This will allow you to apply patch 18 (p6812783). This patch will fix the problem with datapump importing duplicate rows in the database.

Datapump errors details can be found at metalink Note 473426.1.

To prevent ORA-39104, ORA-39029 and ORA-31672 errors during datapump export, issue the following commands in your donor database:

```
SQL> alter system set events '38066 trace name context forever, level 2';
SQL> alter system set "_complex_view_merging" = false;
SQL> alter system set "_optimizer_cost_based_transformation"=off
```

Restart the datapump export.

## Migrate Your Database to UTF8

You must migrate your database to the UTF8 character set using the datapump method described below.

1. Export the original database using Oracle datapump `expdp` command.
2. Create new temporary database character set AL32UTF8.

3. After the database has been created, change the value of `nls_length_semantics` to *character*. This will enable the internal storage of the columns in the tables to be multi-byte character set.

```
alter system set NLS_LENGTH_SEMANTICS='CHAR' scope=both;
```

4. Import database from a donor database using Oracle `datapump impdp` command.

## Converting with `csscan` and `csaltr`

An alternative method for database migration uses the `csscan`/`csaltr` procedures to convert a database to UTF8. This method has produced undesirable results in some cases, and therefore SunGard Higher Education recommends the `datapump` method described above for all Banner clients.

The `csscan`/`csaltr` method can be used if the database stores mostly ASCII characters and is currently using the WE8ISO8859P1, WE8ISO8859P15 or WE8MSWIN1252 character sets.

The `csscan` utility takes the current character set and future character set and determines if the conversion can be made successfully without the truncation of data. The `csaltr` script will alter any problem table identified in the `csscan` script. Details of this method can be found in MetaLink Note 260192.1.

## Install International Components for Unicode (ICU)

You must install ICU libraries that support the transition from 8-bit C to 16-bit C as part of supporting Unicode in Banner 8.

Download ICU 3.6 for your platform at <http://icu-project.org/download/3.6.html>.

### Note

Before proceeding with ICU installation, check the Customer Support Center for the latest platform-specific ICU installation FAQs. ■

## UNIX/Linux Installation

1. Upgrade GNU if necessary. It is recommended you use GNU 3.80 or above to install ICU on UNIX and GNU 3.3 and above on Linux. The GNU source code must be in your path. To check your current GNU version, enter `gmake --version`.

The latest GNU versions can be downloaded at <http://www.gnu.org>.

2. Download and untar the ICU source code in the `/usr/local/include` directory. This will become your `$ICU_HOME`. The installation will place the ICU library files in the `/usr/local/lib` directory. The `/usr/local/lib` directory must be added to your `LD_LIBRARY_PATH` environment variable for successful installation.

3. SunGard Higher Education delivers a modified ICU header file for Banner 8.0 compiles. After ICU has been downloaded, make a backup of the `msgfmt.h` file in the `/usr/local/include/icu/source/i18n/unicode` directory and copy the `msgfmt.h` file from the **Customer Support Center > Documentation and Download Center > Banner General > ICU Header** directory to the `/usr/local/include/icu/source/i18n/unicode` directory.

After downloading the source code and setting your `LD_LIBRARY_PATH` variable, instructions for installing ICU can be found at:

<http://source.icu-project.org/repos/icu/icu/tags/release-3-6/readme.html#Introduction>

#### Note

It is recommended that you run the `gmake check` (or `make check` if GNU make is the default make on your platform) command before you actually install ICU. This will find any problems in your environment. The `gmake install` (or `make install` if GNU make is the default make on your platform) command will install the ICU software on your server. ■

## Linux Makefile

A new `sctproc_linux.mk` makefile template is delivered for Banner 8.0 compiles. Make a copy of the `sctproc_linux.mk` template, merge any site specific changes into the copy and rename to `sctproc.mk`.

## UNIX Makefile

The `buildmk` process will create a new makefile for the compilation of your C programs. Merge any site specific changes into the new `sctproc.mk`.

## Windows Installation

MSVC 2003 is the minimum compiler required for the Windows ICU installation. A new `ICU_HOME` system variable (for example, `c:\icu`) must be defined pointing to your ICU installation directory.

After downloading the source code and setting your `ICU_HOME` variable, instructions for installing ICU can be found at:

<http://source.icu-project.org/repos/icu/icu/tags/release-3-6/readme.html#Introduction>

SunGard Higher Education delivers a modified ICU header file for Banner 8.0 compiles. After ICU has been downloaded, make a backup of the `msgfmt.h` file in the `$ICU_HOME\local\include\unicode` directory and copy the `msgfmt.h` file from the **Customer Support Center, Documentation and Download Center, Banner General, ICU Header** directory to the `$ICU_HOME\local\include\unicode` directory.

## More Information

Additional information can be found in the following SunGard Higher Education FAQs:

- 1-3GODR4 Banner 8 Pro\*C ICU (International Components for Unicode) Installation and Configuration for Red Hat Linux.
- 1-3GBB8J Banner 8 Installation of ICU on Windows
- 1-38YDKK Common Banner 8.0 C compile errors related to ICU

## C Translation Support

If you need to transform an English-language property file into an internationalized or translated output file, you should use Translation Manager (TranMan).

## Modify Environment Settings

You should modify the LANG and LOCALE environment settings for your desired language. In this example, *en* stands for English.

```
LANG=en_US.UTF-8
LC_ALL=en_US.UTF-8
LC_COLLATE=en_US.UTF-8
LC_CTYPE=en_US.UTF-8
LC_MESSAGES=en_US.UTF-8
LC_MONETARY=en_US.UTF-8
LC_NUMERIC=en_US.UTF-8
LC_TIME=en_US.UTF-8
```



The logo consists of a horizontal bar divided into two sections: a black section on the left and a blue section on the right. Below this bar is a decorative row of small, multi-colored rectangular blocks. The text "SUNGARD HIGHER EDUCATION" is centered horizontally across the bar, with "SUNGARD" in white on the black background and "HIGHER EDUCATION" in white on the blue background.

**SUNGARD** HIGHER EDUCATION

4 Country View Road  
Malvern, Pennsylvania 19355  
United States of America  
[www.sungardhe.com](http://www.sungardhe.com)