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Banner Document Management Suite Release Guide

Release 8.4
May 2012



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Revision History

Publication Date	Summary
May 2012	New version that supports Banner Document Management Suite 8.4 software.

Contents

Introduction	5
Multi-Entity Processing (MEP) - Functional	7
Benefits of MEP	7
BDMS and MEP	7
Prerequisites	8
Baseline MEP implementation and configuration	8
BDMS prerequisite	9
Other Ellucian product prerequisites	9
Third-party product prerequisite	10
Additional documentation	10
Multi-Entity Processing (MEP) - Technical	11
New packages	11
Changed packages	11
New data loading scripts	12
Changed data loading scripts	12
New triggers	13
Changed triggers	13
Changed library	14

Certification on Oracle 11gR2	15
Miscellaneous Enhancements	17
RPE 1-7G2E7N - Improved logoff	17
RPE 1-E0LHRR - Support for PERIOD index field in B-R-TREQ	17
Other enhancements	18
Problem Resolutions	19



Introduction

This guide documents the enhancements, RPEs, and problem resolutions in Banner® Document Management Suite (BDMS) 8.4. The primary enhancement in this release is support for Multi-Entity Processing (MEP).

BDMS 8.4 is a cumulative release that also includes enhancements and problem resolutions that were delivered in BDMS 8.1, 8.2, and 8.3. Refer to the associated release guides for details about the 8.1, 8.2, and 8.3 releases.

Release Number	Contents	Release Date
8.1	BDMS integration with Banner Travel and Expense Management Certification of ApplicationXtender 5.40 SP1 Product name change for Internet-Native Banner toolbar buttons	December 2008
8.2	Product name change for student admissions requirements BDMS integration with Banner Enterprise Identity Services BDMS support of Banner I18N changes for SURNAME_PREFIX Certification of Oracle Database 11g	September 2009
8.3	Support for financial aid tracking requirements by term Support for JOURNAL VOUCHER in B-F-DOCS BDMS events changes for Banner Workflow integration	December 2009



1 Multi-Entity Processing (MEP) - Functional

Multi-Entity Processing (MEP) provides the architecture and processes that enable two or more entities to coexist in a single application architecture. MEP facilitates data segmentation and business processing so that entities can function as autonomous units while taking advantage of shared concepts and architecture when appropriate.

All Banner products can implement MEP functionality by using Oracle's Virtual Private Database (VPD), which implements row-level security using Fine Grained Access Control (FGAC).

Benefits of MEP

MEP incorporates data from all affiliated entities within the region or consortium into a single system. MEP provides the following benefits:

- Allows you to host multiple institutions from one location, centralizing technical administration and support
- Effectively uses technology resources by reducing the distribution of hardware and system administration resources
- Reuses system and security administration models across products
- Preserves familiar user experiences and business processes
- Improves data aggregation for reporting purposes

BDMS and MEP

BDMS in a MEP environment allows you to segregate documents by the entities (campuses, institutions, locations, and so on) that you define in your MEP environment.

To accomplish this, all BDMS-delivered applications now include a `VPDI_CODE` index field. To enable a BDMS application for VPD/MEP, VPD policies must be applied to the `VPDI_CODE` index field of the application. Enabling a BDMS application for VPD/MEP ensures that Banner table data integrates appropriately with the BDMS application based on the `VPDI_CODE`.

If a BDMS application is enabled for VPD/MEP, the VPDI_CODE for a document index is populated with an institution code, based on the data source under which the user logged in to ApplicationXtender (Document Manager or Web Access).

Flexibility is built into BDMS. You can choose which BDMS applications to enable for VPD/MEP, based on which Banner tables are enabled for VPD/MEP. If a BDMS-delivered application is enabled for VPD/MEP, you need to enable a user-defined list for the application only if the Banner table that is used to populate the user-defined list is enabled for VPD/MEP.

In addition, you can choose to enable ApplicationXtender batches for MEP. This allows you to enforce an additional layer of security to batch creation and processing based on a BDMS user's institution privileges as defined in your MEP environment.

If BDMS is integrated with Banner Workflow, you must perform an additional step when you create the BDMS Workflow administration user in ApplicationXtender. This additional step is described in the "Administration" section of the *Banner Document Management Suite Multi-Entity Processing Implementation Guide*.

For more details on implementing BDMS in a MEP environment, refer to the *Banner Document Management Suite Multi-Entity Processing Implementation Guide*. This document is available on the Ellucian Customer Support Center.

Prerequisites

BDMS in a MEP environment has the following prerequisites.

Baseline MEP implementation and configuration

Before implementing BDMS in a MEP environment, you must set up and configure a MEP environment for your university or college by performing the following steps in Banner General.

1. Add the VPDI_CODE column to all required Banner tables.

You can add the column manually, or you can add the column by executing the Database Extension Utility. To manually add the column, log in to the required module owner schema of the table and execute the following commands:

```
ALTER TABLE <table name>  
ADD (<table name>_VPDI_CODE VARCHAR2(6) NOT NULL);
```

Example

Log in to the FAISMGR schema and execute the following commands:


```
ALTER TABLE RRRAREQ
ADD (RRRAREQ_VPDI_CODE VARCHAR2(6) NOT NULL);
```

2. For each required Banner table, check if an index exists:
 - If an index exists, add <table>_VPDI_CODE to the index.
 - If an index does not exist, skip this step.
3. Create institutions and users on the Oracle/Banner VPD Security Maintenance Form (GSAVPDI).
4. Apply the VPD trigger to the selected Banner tables. This trigger populates <table>_VPDI_CODE with the logged in institution code.
5. Apply the VPD policy to the selected Banner tables.

The *Multi-Entity Processing Handbook* (draft) contains additional configuration information. Refer to FAQ 1-NX6VN5 or to the Ellucian Commons (<http://www.edu1world.org/CommonsBanner/40982>) for instructions on how to obtain this handbook.

BDMS prerequisite

BDMS 8.4 is required for implementing BDMS in a MEP environment.

Other Ellucian product prerequisites

BDMS in a MEP environment requires Banner General 8.4.1.2 or later. The following minimum version of other products is also required for those products that are licensed at your university or college:

Product	Required Minimum Version
Banner Advancement	8.1
Banner Finance	8.2
Banner Financial Aid	8.11
Banner Human Resources	8.1
Banner Position Control	8.1
Banner Student	8.1
Banner Travel and Expense Management	8.2
Banner Web Tailor	8.4.2
Banner Workflow	8.0
Luminis® Platform	IV

Third-party product prerequisite

ApplicationXtender 6.50 Patch 1 is the minimum required version for implementing BDMS in a MEP environment.

Additional documentation

Refer to the following documents for more information about MEP and BDMS:

- *Multi-Entity Processing Handbook* (draft) - This document contains information about configuring MEP in Banner General. Refer to FAQ 1-NX6VN5 or to the Ellucian Commons (<http://www.edulworld.org/CommonsBanner/40982>) for instructions on how to obtain this handbook.
- *Banner Document Management Suite Multi-Entity Processing Implementation Guide* - This document contains details on implementing BDMS in a MEP environment. This document is available on the Ellucian Customer Support Center.

2 Multi-Entity Processing (MEP) - Technical



This chapter lists the BDMS 8.4 technical changes that support MEP.

New packages



The following security packages support MEP:

```
esvpvd1.sql  
esvpvds.sql
```

Changed packages



The following packages were updated to support MEP:

```
efkima1.sql  
eok4951.sql  
eok495r.sql  
eok4961.sql  
eok496r.sql  
eok4971.sql  
eok497r.sql  
eokart1.sql  
eokarts.sql  
eokfirt1.sql  
eokfrts.sql  
eokprt1.sql  
eokprts.sql  
eokrrt1.sql  
eokrrts.sql  
eoksrt1.sql  
eoksrts.sql
```



New data loading scripts

The following new scripts synchronize Banner data into ApplicationXtender:

```
ei508ai.sql  
ei509ai.sql  
ei510ai.sql  
ei511ai.sql  
ei512ai.sql
```

Changed data loading scripts

The following scripts were updated to synchronize Banner data into ApplicationXtender:

```
ei495ai.sql  
ei496ai.sql  
ei497ai.sql  
eiadtai.sql  
eiaul.sql  
eifdtai.sql  
eiful.sql  
eipdtai.sql  
eipul.sql  
eirdtai.sql  
eirf498.sql  
eirf499.sql  
eirf506.sql  
eirul.sql  
eisul.sql  
eiul495.sql  
eiul496.sql  
eiul497.sql  
eiul498.sql  
eiul499.sql  
ul507_13_080300_01.sql
```

New triggers

The following new triggers support MEP:

<code>aeai_appid_080300_02.sql</code>	Creates trigger on AE_AI tables
<code>aeai_appid_080300_02.sql</code>	Creates trigger on AE_DT tables
<code>aeai_appid_080300_02.sql</code>	Creates trigger on AE_RF tables
<code>aeai_appid_080300_02.sql</code>	Creates trigger on AE_BS tables

Changed triggers

The following triggers were updated to support MEP:

`eagtgift1.sql`
`eagtgpay1.sql`
`eagtpldg1.sql`
`efatinvh1.sql`
`efgtjvch1.sql`
`efptpohd1.sql`
`efptreqh1.sql`
`efrtgrnt1.sql`
`efrtprop1.sql`
`efttcoas1.sql`
`efttfsyr1.sql`
`enbt fisc1.sql`
`enbt jobs1.sql`
`enbt posh1.sql`
`enttpcls1.sql`
`epatappl1.sql`
`epetempl1.sql`
`epetfcnt1.sql`
`epttecls1.sql`
`erftbase0.sql`
`erftbase1.sql`
`erotinst1.sql`
`errtareq0.sql`
`errtareq1.sql`
`errtareq2.sql`
`ertbprds0.sql`
`ertbprds1.sql`

```
ertttreq0.sql  
ertttreq1.sql  
ertttrst1.sql  
esatchkl1.sql  
esctcrse1.sql  
esftstcr1.sql  
eshtdgm1.sql  
esstsect1.sql  
esttadmr1.sql  
esttsubj1.sql  
esttterm1.sql  
esttterm3.sql
```

Changed library

The `eoqep1s.pll` library was updated to support MEP. This library object is used in Internet-Native Banner (INB) to pass the institution code based on the data source.

3 Certification on Oracle 11gR2



BDMS is now certified on Oracle 11gR2, in addition to being certified on Oracle Application Server 10.1.3.x.



4 Miscellaneous Enhancements

BDMS 8.4 includes the following miscellaneous enhancements.

RPE 1-7G2E7N - Improved logoff

Previously, the INB-ApplicationXtender Bridge had to be manually terminated through Task Manager when a user logged off Banner and ApplicationXtender. The INB-ApplicationXtender Bridge now terminates automatically when a user logs off Banner and ApplicationXtender.

RPE 1-E0LHRR - Support for PERIOD index field in B-R-TREQ

In Banner Financial Aid 8.9, the `PERIOD` column replaced the `TERM CODE` column as part of the key to the `RRRAREQ` table. The Financial Aid Tracking Requirement (B-R-TREQ) application now uses `PERIOD` instead of `TERM CODE` in the index structure. This allows financial aid tracking requirements in `RRRAREQ` to be updated correctly when BDMS creates, updates, or deletes indexes for B-R-TREQ. New BDMS packages build and maintain the user-defined list for `PERIOD`, based on the Financial Aid `ROBPRDS` table.

The following objects were updated to implement this enhancement:

```
efkimal.sql
eokrln1.sql
eokrlnk.sql
eokrtr1.sql
eokrtrs.sql
eoksrt1.sql
eoksrts.sql
ERALINK
ERBLINK
errtareq0.sql
errtareq1.sql
errtareq2.sql
```

ertbprds0.sql
ertbprds1.sql
ul507_13_080300_01.sql

Other enhancements

BDMS 8.4 includes the following miscellaneous enhancements:

Object	Summary
bdmsluminis_6.50.124.zip	This file contains the objects used to integrate Luminis Platform with ApplicationXtender Web Access 6.50.
BEIS_AX_6.50.124.zip	This file contains the objects used to integrate Banner Enterprise Identity Services with ApplicationXtender 6.50.
ETVAXAP	New comments were added on the following columns: ETVAXAP_SSN_PRIVACY_IND ETVAXAP_DOB_PRIVACY_IND
extdbpr.sql	Database procedures and triggers were added.
extform.bat extform.shl	These scripts were modified to incorporate the Cleartext password resolution.

5 Problem Resolutions

BDMS 8.4 includes the following problem resolutions.

 **Note**

For detailed problem, impact, and resolution information for all defects corrected in this release, refer to the problem resolutions file (`bdms80400resolutions.txt`) delivered with this release guide. Information in the text file is extracted from the Customer Support Center immediately before release of the product and may include additional defects that were resolved after this document was finalized. ■

Object	Defect Number	Summary
<code>efkima1.sql</code>	CMS-DFCT99285	Under certain circumstances, an index could be saved with an invalid Banner ID and a valid PIDM and name. This caused problems in AE_RFSCCT if that ID was eventually used in Banner and the ID pointed to the wrong PIDM.
<code>eokwtol.sql</code>	1-6V982H	The Count Matched Documents option on the INB Tools menu sometimes returned invalid information.
<code>efkima1.sql</code>	1-FXV32A	An error sometimes occurred when deleting documents in BDMS applications that were integrated with Banner Workflow.
<code>eirf506.sql eokfrt1.sql</code>	1-DCANZ6	Journal voucher data was incorrectly populated in BDMS.
<code>eokfrt1.sql</code>	1-C8SQI4	A Banner Finance user who was not authorized for a fund or organization could view a journal voucher document in BDMS for that fund or organization.

Object	Defect Number	Summary
EOKFRTS	CMS-DFCT95127	BDMS objects became invalidated after an application was modified in ApplicationXtender. This caused issues with the BDMS triggers that update BDMS tables.
eokprt1.sql	1-HX98Q3	An error was written to the EXRRSLT table when a record was updated on SPAIDEN and the HR Faculty Load and Compensation (B-H-FLAC) application was not installed.
EOKRFSY	1-4W4IPU	EOKRFSY tried to execute BDMS packages for Banner products that were not installed.
eokrln1.sql	1-MJQ0KJ	An Oracle bug caused the BDMS package EOKRLNK to not compile after new columns were added to support the extended database enhancement.
eoksln1.sql	1-2HOCVZ	If the Allow Checklist Requirement Undo flag on ESALINK was unchecked for a requirement and you modified the index of a document linked to a Student Admissions record with that requirement in ApplicationXtender, the SARCHKL record was not updated accordingly.
eoksln1.sql eokslnk.sql	1-2MV3VH	A student admissions requirement was not always updated/inserted correctly when a BDMS document index was created in ApplicationXtender and the scope modifier on ESALINK was set to A (All).
eokrs11.sql eokuti1.sql	1-CSR3MR	BDMS stored procedures did not compile after new columns were added to support the extended database enhancement.

Object	Defect Number	Summary
eoqepls.pll eoqrpls.pll	1-EFKYZC	An error occurred if a BDMS toolbar button in Internet-Native Banner was pressed when the cursor was in a field that had more than 120 characters.
ESALINK	1-J554H1	An incorrect error message was displayed for an invalid entry in From Term .
ETVDTYP	1-BGFS3P	An unfriendly Oracle error message was displayed when a document type code was larger than the field length for the index field in the application.
ETVDTYP	1-C4E5OE	Document type codes were not synchronized correctly.
ETVDTYP	LN70-0035-5873	Document type codes could not be deleted from ETVDTYP.
eulai507.sql	1-AWXHK2	The script contained hard-coded passwords for BANINST1 and OTGMGR.
ewkwrsl1.sql	1-I29QYH	The Banner Web Tailor parameter for UI_MINIFY was not available to the BDMS Self-Service Banner page. Users could not switch between the minified and non-minified files. This changes depends on Banner Web Tailor 8.4.1.
ewkwrsl1.sql etwgbparmi_080300_01.sql	1-U588B9	Under certain circumstances, strings could be entered in certain fields, resulting in unexpected output.
EXAUPRF.FMB	1-CSR3R6	The form failed to compile after new columns were added to support the extended database enhancement.

Object	Defect Number	Summary
jre 1.6.0.2	1-F510KP	When a BDMS toolbar button was clicked in Internet-Native Banner (INB), the ApplicationXtender Web Access browser window opened behind the INB window instead of in front of the INB window.
setup.msi	1-ENQBN9	The INB-AX Bridge 6.5 did not work in Windows 7 (both 32 and 64 bit).
eextraxpai_080400.sql eextrbcxti_080400.sql ecxrulei_080400.sql extraxpa_080400_09.sql extraxpa_080400_10.sql extraxpa_080400_11.sql	1-11G7LBT	Banner Financial Aid needs analysis forms for aid year 1213 (2012-2013) needed context and parameter rules.
eokwtol.sql	1-7CL21J	The Count Matched Documents option on the INB Tools menu sometimes returned invalid information.
eextraxpai_080400.sql eextrbcxti_080400.sql ecxrulei_080400.sql extraxpa_080400_01.sql extraxpa_080400_02.sql extraxpa_080400_03.sql extraxpa_080400_04.sql extrbcxt_080400_01.sql extrbcxt_080400_02.sql extrbcxt_080400_03.sql extrbcxt_080400_04.sql	1-9RGRQB	Banner Financial Aid needs analysis forms for aid year 1011 (2010-2011) needed context and parameter rules.
INBAXbridge.exe	1-AYCA2N	The INB-AX Bridge had to be manually terminated through Task Manager when a user logged off Banner and ApplicationXtender.
FAQ 1-N7K1T9	1-C4E5NA	BDMS objects became invalidated after an application was modified in ApplicationXtender. This caused issues with the BDMS triggers that update BDMS tables.

Object	Defect Number	Summary
eicxtrules.sql eextraxpai_080400.sql eextrbcxti_080400.sql ecxrlei_080400.sql extraxpa_080400_05.sql extraxpa_080400_06.sql extraxpa_080400_07.sql extraxpa_080400_08.sql extrbcxt_080400_05.sql extrbcxt_080400_06.sql extrbcxt_080400_07.sql extrbcxt_080400_08.sql	1-GC9EHX	Banner Financial Aid needs analysis forms for aid year 1112 (2011-2012) needed updated context and parameter rules.

