Patron Directory Services Upgrade Guide

Version 2.x

CONFIDENTIAL INFORMATION

The information herein is the property of Ex Libris Ltd. or its affiliates and any misuse or abuse will result in economic loss. DO NOT COPY UNLESS YOU HAVE BEEN GIVEN SPECIFIC WRITTEN AUTHORIZATION FROM EX LIBRIS LTD.

This document is provided for limited and restricted purposes in accordance with a binding contract with Ex Libris Ltd. or an affiliate. The information herein includes trade secrets and is confidential.

DISCLAIMER

The information in this document will be subject to periodic change and updating. Please confirm that you have the most current documentation. There are no warranties of any kind, express or implied, provided in this documentation, other than those expressly agreed upon in the applicable Ex Libris contract. This information is provided AS IS. Unless otherwise agreed, Ex Libris shall not be liable for any damages for use of this document, including, without limitation, consequential, punitive, indirect or direct damages.

Any references in this document to third-party material (including third-party Web sites) are provided for convenience only and do not in any manner serve as an endorsement of that third-party material or those Web sites. The third-party materials are not part of the materials for this Ex Libris product and Ex Libris has no liability for such materials.

TRADEMARKS

"Ex Libris," the Ex Libris bridge , Primo, Aleph, Alephino, Voyager, SFX, MetaLib, Verde, DigiTool, Preservation, URM, Voyager, ENCompass, Endeavor eZConnect, WebVoyage, Citation Server, LinkFinder and LinkFinder Plus, and other marks are trademarks or registered trademarks of Ex Libris Ltd. or its affiliates.

The absence of a name or logo in this list does not constitute a waiver of any and all intellectual property rights that Ex Libris Ltd. or its affiliates have established in any of its products, features, or service names or logos.

Trademarks of various third-party products, which may include the following, are referenced in this documentation. Ex Libris does not claim any rights in these trademarks. Use of these marks does not imply endorsement by Ex Libris of these third-party products, or endorsement by these third parties of Ex Libris products.

Oracle is a registered trademark of Oracle Corporation.

UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company Ltd.

Microsoft, the Microsoft logo, MS, MS-DOS, Microsoft PowerPoint, Visual Basic, Visual C++, Win32, Microsoft Windows, the Windows logo, Microsoft Notepad, Microsoft Windows Explorer, Microsoft Internet Explorer, and Windows NT are registered trademarks and ActiveX is a trademark of the Microsoft Corporation in the United States and/or other countries.

Unicode and the Unicode logo are registered trademarks of Unicode, Inc.

Google is a registered trademark of Google, Inc.

Table of Contents

Updates to This Guide

The following update has been made to this guide since the last version was released in October 2010:

■ Support for a new Oracle Real Application Clusters (RAC) option was added. For details, see step 4 of the procedure in **Running the Upgrade Kit** on page **12**.

1

Overview

This section includes:

About This Guide

This guide describes the Patron Directory Services (PDS) topology that was added for PDS version 2.x and explains how to upgrade all of your PDS instances to work with this topology.

NOTES:

- PDS version 2.x is fully backward compatible with PDS version 1.3.
- For an overview of the PDS, a list of the Ex Libris products that work with the PDS, and detailed information on using the PDS, refer to the *Patron Directory Services Guide*.

PDS Topologies

In PDS version 1.3, a single, active PDS instance is part of one of the Ex Libris applications and all the other Ex Libris applications connect to this PDS instance whose local disk contains all of the PDS configuration and session information. If this Ex Libris application is down, all of the applications that connect to this PDS instance are down as well.

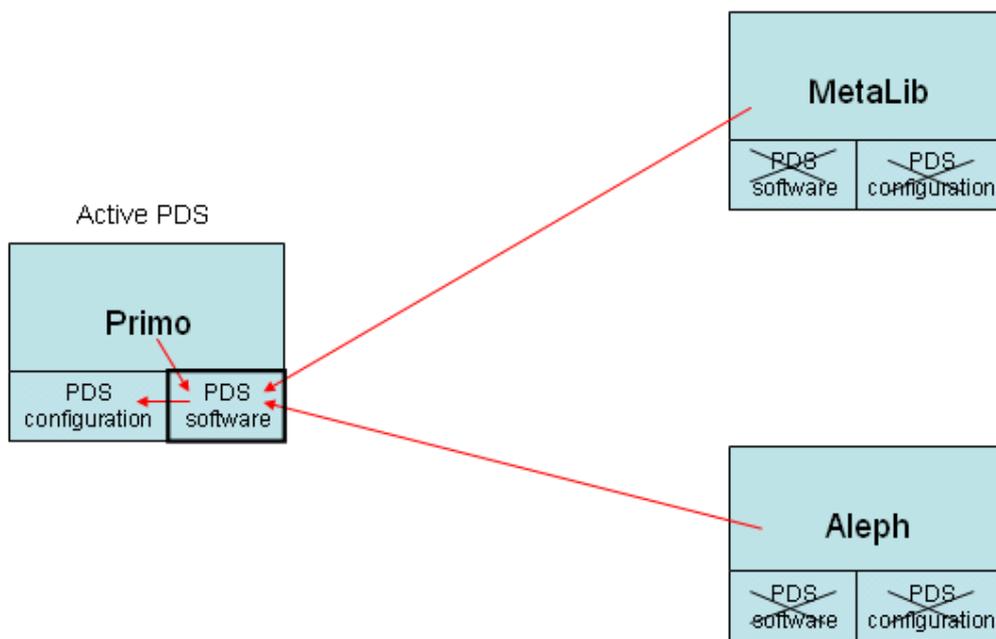The following diagram illustrates the PDS 1.3 topology:

Figure 1: PDS 1.3 Topology

PDS 2.x can work with the above topology or with a new topology that was developed for PDS 2.x. If you upgrade your PDS instances to work with the new topology, each Ex Libris application uses its own local PDS and all PDS instances are active and run separately. The advantage of this topology is that all the PDS instances connect to a shared database, which contains all of the PDS configuration and session information. Thus, if one Ex Libris application is down, there is no effect on the other applications.

The following diagram illustrates the topology that is supported by PDS 2.x:
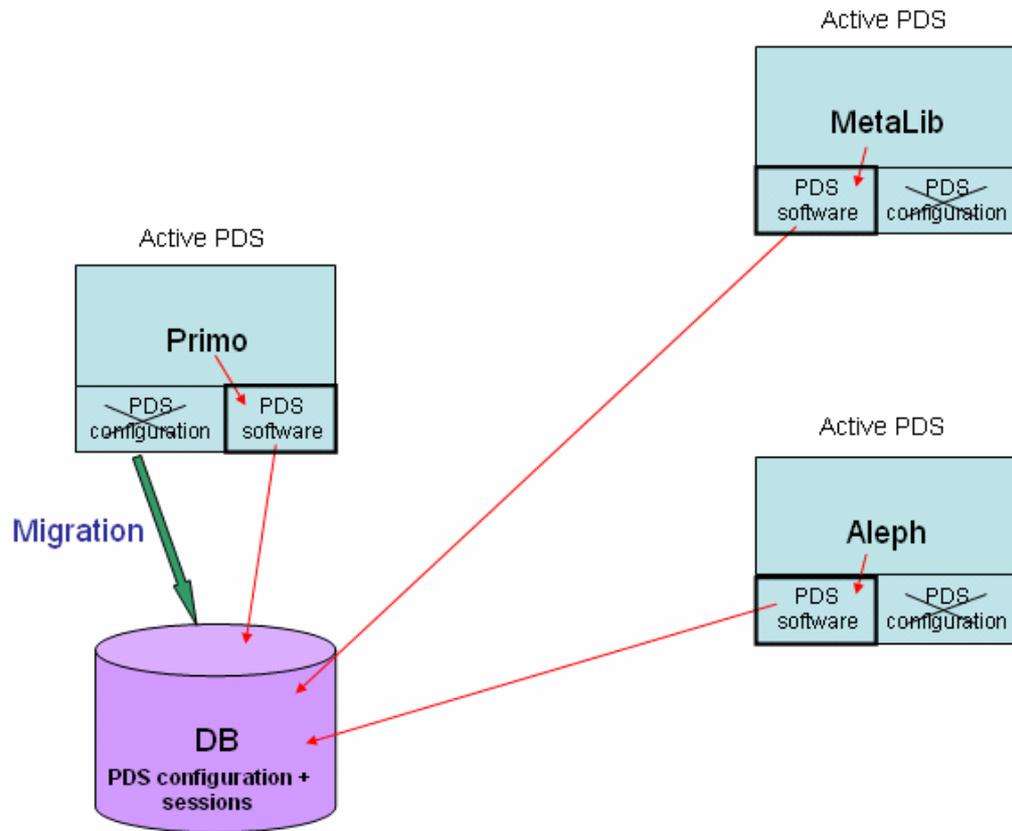

Figure 2: PDS 2.x Topology

NOTE:

It is recommended that you use the same database as one of the applications with an active PDS instance (as illustrated in the above figure).

2

Upgrading the PDS

> This section includes:
>
> - **Overview of the PDS Upgrade** on page **11**
> - **Running the Upgrade Kit** on page **12**
> - **Additional Configuration Steps** on page **14**

Overview of the PDS Upgrade

Your PDS is automatically upgraded from version 1.3 to version 2.x when you install the following Ex Libris applications:

- Aleph 20.2.2 and later
- Primo 3.0.2 and later
- MetaLib 4.4.0 and later
- DigiTool 3.3 and later
- Rosetta 2.1.1 and later
- Voyager 8.0 and later

If you want to work with the PDS 2.x shared Oracle database topology (see **PDS Topologies** on page **7** for details), you must run the PDS upgrade kit, which is located in the `pdsroot/program` directory.

NOTE:
If you are not running the upgrade kit, ensure that your `PDSDefinitions` file is configured properly. Refer to **Example of the PDSDefinitions File** appendix in the *Patron Directory Services Guide* for an example of a properly configured `PDSDefinitions` file.

The upgrade kit includes the following three stages:

1   Creating the PDS Oracle database schema

2   Migrating the PDS configuration and session information to the Oracle database

3   Updating the `PDSDefinitions` file with the details of the Oracle database

The upgrade kit migrates all the data, as is, from the database tables on the local disk to the Oracle database. Only the following configuration changes are performed:

■   LDAP configuration file names are changed to a standard format of `ldap_<ldap_name>.conf`. For example, if the file name before migration is `univ.conf`, after migration the name in the Oracle record will be `ldap_univ.conf`.

■   Old Aleph programs, such as `aleph_16.pl` and `aleph_152.pl`, are replaced with the standard `aleph.pl` program, which is backward compatible.

■   The `remote_cgi_demo` configuration file, which is used for sanity tests, is changed to a string instead of a file. The user name/password pairs are separated by semicolons.

After you run the upgrade kit, you must perform a number of additional steps. For details, see **Additional Configuration Steps** on page **14**.

Running the Upgrade Kit

Steps 1, 2, and 3 of the upgrade kit should be run from the application machine with an active PDS instance whose Oracle database you want to share with your other PDS instances. After you have run all steps of the upgrade kit on this application machine, you should run step 3 only on the other application machines.

To run the upgrade kit:

1   From the application machine with an active PDS instance whose Oracle database you want to share with your other PDS instances, run the

pds_upgrade_kit program located in the pdsroot/program directory. The following menu is displayed:

```
PDS Upgrade Kit - Main Menu
===========================

0. Exit
1. Create Oracle schema
2. Load PDS configuration to Oracle
3. Create PDS Oracle connection

Select [0]:
```

2   Type 1. The following is displayed:

```
PDS Upgrade Kit - Creating Oracle Schema for PDS
================================================

Read Oracle connection details from file? (Y/[N])
```

3   Type n.

4   Enter the following when prompted:

a   the full host name of the database server

b   the database name (the host name, unless you are working with a TWO_TASK connection)

c   the Oracle listener port

d   Y or N, depending on whether or not you want to use an Oracle Real Application Clusters (RAC) connection

e   the direct connection to RAC (if you want to use this, instead of the standard variables, $db_host and $db_name to build the Oracle RAC connection string)

f   the Oracle system user name and password

You should then receive the following message:

```
Creating Oracle schema for PDS...           Success
```

5   Press ENTER to continue. The main menu is displayed once again.

6 Type 2 to migrate the PDS configuration and session information to the Oracle database. The following should be displayed:

```
PDS Upgrade Kit -
Migrating configuration and sessions from disk to Oracle
========================================================

Opening directory conf_table

tab_service.mub ..... Success
tab_service.uwa ..... Success
ldap_mub.conf ..... Success

Opening directory pds_files ...          Success
```

7 Press ENTER to continue. The main menu is displayed once again.

8 Type 3 to update the application machine's PDSDefinitions file with the details of the Oracle database. After a few minutes, the following message should be displayed:

```
Updating PDSDefinitions with Oracle connections details... Success
```

9 On each of the other application machines, run the pds_upgrade_kit program located in the pdsroot/program directory. When the main menu is displayed, type 3 to update the application machine's PDSDefinitions file with the details of the Oracle database. Enter the details of the Oracle database server when prompted.

NOTE:
At this point, if you need to roll back to use the local disk topology, you can still do so by setting the use_oracle option to N in the PDSDefinitions file. This instructs the PDS to use the configuration and session files from the local disk.

Additional Configuration Steps

After you run the upgrade kit, perform the following additional steps:

1 Configure each Ex Libris application to point to its local PDS instance. For instructions:

- If you are working with Aleph or MetaLib, refer to the **Configuring the Calling Applications** section of the *Patron Directory Services Guide*.

- If you are working with Rosetta, refer to the *Rosetta System Administrator's Guide*.

- If you are working with Primo, refer to the *Primo Back Office Guide*.

2 Open the `PDSDefinitions` file on each application machine and verify that the following variables are pointing to the machine's local PDS instance:

- `$server_httpd`
- `$server_httpsd`
- `$server_pds`

3 If the application machine whose Oracle database you are sharing with your other PDS instances is using Shibboleth, install and configure the Shibboleth SP (service provider) on each of the other application machines. Ensure that each Shibboleth SP is working as on the original application machine.

4 If the application machine whose Oracle database you are sharing with your other PDS instances is using CAS authentication, perform steps 1-5 (excluding the option of checking users after step 5) in the **CAS Authentication** section of the *Patron Directory Services Guide*.

5 In each application machine's Apache `httpd.conf` file, add the following lines:

```
PassEnv LD_LIBRARY_PATH
PassEnv ORACLE_HOME
```

6 Copy all customized HTML files (such as customized versions of the different PDS pages) located in the `./html_form` directory of the application machine whose Oracle database you are sharing with your other PDS instances to all the other application machines.

7 On each application machine, restart Apache.

Your Ex Libris applications are now set to work with the PDS 2.x shared Oracle database topology (see **PDS Topologies** on page **7** for details).