



Alma Sandbox Environments

Ex Libris Confidential

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 , Alma, Primo, Aleph, Alephino, Voyager, SFX, MetaLib, Verde, DigiTool, Preservation, Rosetta, URM, 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.

iPhone is a registered trademark of Apple Inc.

Copyright Ex Libris Limited, 2015. All rights reserved.

Document released: January 2015

Web address: <http://www.exlibrisgroup.com>

Ex Libris Confidential

Working with the Alma Sandbox Environments

This section includes:

- [Overview of the Alma Sandbox Environments](#) on page 3
- [Differences Between the Standard and Premium Sandboxes](#) on page 5
- [Differences Between the Alma Sandbox and Production Environments](#) on page 7
- [Alma-Primo Integration Configuration Post-“Go Live”](#) on page 9

Overview of the Alma Sandbox Environments

Alma sandbox environments allow for development, testing, and training without compromising the data in your production environment. Sandboxes are completely isolated from your Alma production environment, so that any actions performed in the sandboxes do not affect your production environment and any actions performed in your production environment do not affect the sandboxes.

As part of Alma’s standard offering, Ex Libris provides a **Standard** sandbox. This sandbox contains a significant amount of Ex Libris data (about 70,000 records) that you can use for staff training and testing Alma business scenarios, new enhancements, and integrations with other systems, without affecting your production environment.

After “Go Live,” as an alternative environment, Alma offers a **Premium** sandbox (for an additional annual fee). This sandbox contains a full replication of your data and configurations, and can therefore be used to facilitate the smooth deployment of new developments to your production environment.

NOTES:

- It is recommended that you continue working with the Standard sandbox after “Go Live.” Note that you cannot have both a Standard sandbox and a Premium sandbox simultaneously. The Premium sandbox is relevant only in specific cases, as detailed below in [Differences Between the Standard and Premium Sandboxes](#) on page 5.
 - The sandbox environments are updated with the new Alma monthly release a week before the general release (that is, on the last Sunday of each month).
-

Sandboxes for Consortia

For consortia, one Standard sandbox per implementation cohort is provided as part of the Alma standard subscription. Typically, five institutions are considered to be a “minimum cohort.” Thus, if your consortium consists of 30 institutions, you receive six Standard sandboxes, one of which serves as the Network Zone institution.

A consortium acquiring the Premium sandbox option can choose the number of Premium sandboxes to acquire. Typically, the consortium will purchase a Network Zone sandbox institution and several Premium sandboxes, representing copies of several member institutions. At a minimum, it is recommended that you purchase a Network Zone sandbox and two Premium sandboxes, representing copies of two member institutions.

Alma Sandbox Environments and the Implementation Timeline

During the initial phase of implementation, Ex Libris provides you with access to the Alma Standard sandbox, which you use to learn and become familiar with Alma as your institution is undergoing Alma training.

As you progress in your implementation of Alma, you continue to use the Alma Standard sandbox for training purposes, focusing on end-to-end business processes and preparing your project team for the review of product functionality and data migration testing following Ex Libris’ delivery of your Alma production environment. After you receive your Alma production environment, you can use the Standard sandbox to assist you in setting up your required integrations and authentication system, and performing internal staff training.

If you purchased a Premium sandbox, you can request the replacement of your Standard sandbox with a Premium sandbox, which contains all of your institution’s data and configurations, following “Go Live.”

Differences Between the Standard and Premium Sandboxes

The following table lists the differences between the Standard and Premium sandboxes for several key areas and tasks within Alma.

Table 1. Alma Standard vs. Premium Sandbox

Area of Alma	Task	Supported Sandbox Type
Training	Alma training during implementation	Standard (Premium not available before "Go Live")
	Trying out and learning new functionalities and features following a release; ongoing training following "Go Live"	Both Standard and Premium
Data services	Loading patron records	<ul style="list-style-type: none"> ■ Standard – up to 10K additional records (beyond the standard sandbox data) ■ Premium – unlimited
	Importing of bibliographic data NOTE: Publishing to Primo is not supported from the Alma sandbox environments. Rather, it is supported directly from your Alma production environment, as detailed in Alma-Primo Integration Configuration Post-"Go Live" on page 9 .	<ul style="list-style-type: none"> ■ Standard – up to 100K additional records (beyond the standard sandbox data) ■ Premium – fully supported
	Performing global data changes	Both Standard and Premium
	Searching for records in the Community Zone (CZ), seeing what e-records are available, activating global e-inventory in the Institution Zone (IZ)	Both Standard and Premium
Fulfillment	Testing changes to fulfillment such as fulfillment configuration, loans, requests, fine/fee assignment, and notices	Both Standard and Premium

Table 1. Alma Standard vs. Premium Sandbox

Area of Alma	Task	Supported Sandbox Type
Acquisitions	Performing trial runs of EDI and EOD	Both Standard and Premium
	Performing trial runs of fiscal period closure	Both Standard and Premium
	Testing acquisition workflows, such as purchase order claims and cancellations, or returns of material	Both Standard and Premium
	Exporting requests for payment	Both Standard and Premium
System administration	Testing changes to authentication settings	Both Standard and Premium
	Testing changes to configuration settings	Both Standard and Premium
API integrations testing	Testing Alma API developments	Both Standard and Premium
	<p>NOTE:</p> <p>Analytics APIs are an exception and are not available on either a Standard or Premium sandbox. They are available only in a production environment.</p>	
Data and configuration refresh	<p>Refresh the sandbox data and configuration:</p> <ul style="list-style-type: none"> ■ Standard – to the default data that Ex Libris has provided ■ Premium – to the copy of your most recent production data and configuration 	Both Standard and Premium – up to once per quarter
	<p>NOTE:</p> <p>The refresh is handled by opening a customer services request to Ex Libris Support.</p>	
Logo customization	Customize the sandbox with your own logo and color scheme. Note that sandbox refresh resets the customization.	Both Standard and Premium

Additional Considerations

The following are additional considerations to take into account regarding the Alma sandboxes:

- Neither the Alma Premium nor the Alma Standard sandbox includes Alma Analytics. Analytics has no impact on your production environment and therefore does not require a sandbox environment.
- In an Alma Standard sandbox environment, your configurations are reset with every sandbox refresh. In an Alma Premium sandbox environment, your configurations are copied from your production environment as part of a refresh.
- If you purchase the ability to manage digital objects, both the Alma Premium and Alma Standard sandboxes may include metadata for digital objects. However, the actual digital objects that are uploaded to the Ex Libris cloud are not replicated in either sandbox environment.
- Both the Alma Premium and Alma Standard sandboxes are limited to 30 users.
- You cannot have both a Standard and a Premium sandbox environment. Following “Go Live,” you must choose between these two options.

Differences Between the Alma Sandbox and Production Environments

As discussed in [Overview of the Alma Sandbox Environments](#) on page 3, the Alma sandbox environment is completely separate from your production environment and cannot impact it. This provides you with a safe environment for training and testing.

The following table delineates the main differences between the Alma sandbox (both Standard and Premium) and your production environments.

Table 2. Alma Sandbox vs. Production Environment

Area of Alma	Alma Production	Alma Sandbox
Email services	Email services are active by default, using real email addresses that were loaded to Alma from SIS and other sources	Email services are disabled by default. However, you can activate the email services (for testing purposes) by entering email addresses in the Email Include List mapping table (see the Configuring Allowed Emails section in the <i>Alma Administration Guide</i>). Email services are handled in this manner in order to prevent unintended emails from being sent.
Alma Analytics	Provided as part of Alma and accessible to Alma users. Alma Analytics supports the creation and testing of new reports without distributing them, providing limited access to specific users. This enables you to test new reports prior to their distribution.	Alma Analytics is not part of the sandbox. Instead, new reports can be safely created and tested in your production environment before distributing them to production users. Analytics APIs can also be used with a production environment and are read-only in nature.
Number of users	Limited according to your subscription parameters	Limited to 30 users
Integrations with third-party systems	All integration interfaces are available and enabled by default.	<p>By default, integrations involving FTP are disabled. However, you can enable specific FTP addresses for communication by entering FTP host names/IP addresses in the FTP Include List mapping table (see the Configuring Allowed S/FTP Connections section in the <i>Alma Administration Guide</i>). This enables the testing of FTP-related integrations with third-party systems.</p> <p>All other integration interfaces are available and enabled by default.</p>

Table 2. Alma Sandbox vs. Production Environment

Area of Alma	Alma Production	Alma Sandbox
Jobs	You can define publishing and other jobs as required.	<p>The automatic scheduling of jobs is unavailable on sandbox environments.</p> <p>You can run jobs manually on demand by clicking the Run Now button (if such a button is available) on the profile configuration page, or by selecting Run Now for the job in the Scheduled tab on the Monitor Jobs page (Administration > Monitor Jobs).</p> <p>NOTE: For information on Primo publishing, see the following row in this table.</p>
Publishing to Primo and the Primo sandbox	You can define the publishing to Primo job as required.	Publishing to Primo/Primo sandbox is not supported.

Alma-Primo Integration Configuration Post- "Go Live"

By default, the Primo sandbox is set up to communicate with your Alma production environment. This setup should be maintained for most of the Alma and Primo work that you perform, as it enables you to optimize your ongoing tests (of changes in areas such as Primo normalization rules or the Primo user interface) on the Primo sandbox, using real live data from your Alma production environment. Note that this is the recommended setup regardless of whether you have purchased an Alma Premium sandbox.

NOTE:

There are three types of Primo sandboxes: Standard (containing up to 100,000 records), Advanced (containing up to 1,000,000 records), and Premium (containing a full replication of your data). They are referred to generically as **Primo sandbox** in the diagrams and text below. Note that the Primo sandbox is an add-on option that must be purchased separately from Alma.

In terms of communication with Alma, there are no differences between the three Primo sandboxes. However, there are differences in terms of the

setup required to work with Alma. For the initial population of the Primo Premium sandbox, you use the published tar.gz files from your Alma production environment. For the initial population of the Primo Standard and Advanced sandboxes, you use select tar.gz files published from your Alma production environment. In terms of later refreshes, the Primo Premium sandbox remains current via the ongoing pipes. The Primo Standard and Advanced sandboxes can be refreshed by taking select tar.gz files published from your Alma production environment. (There is no refresh service as with the Alma sandbox.)

The following diagram depicts this setup:

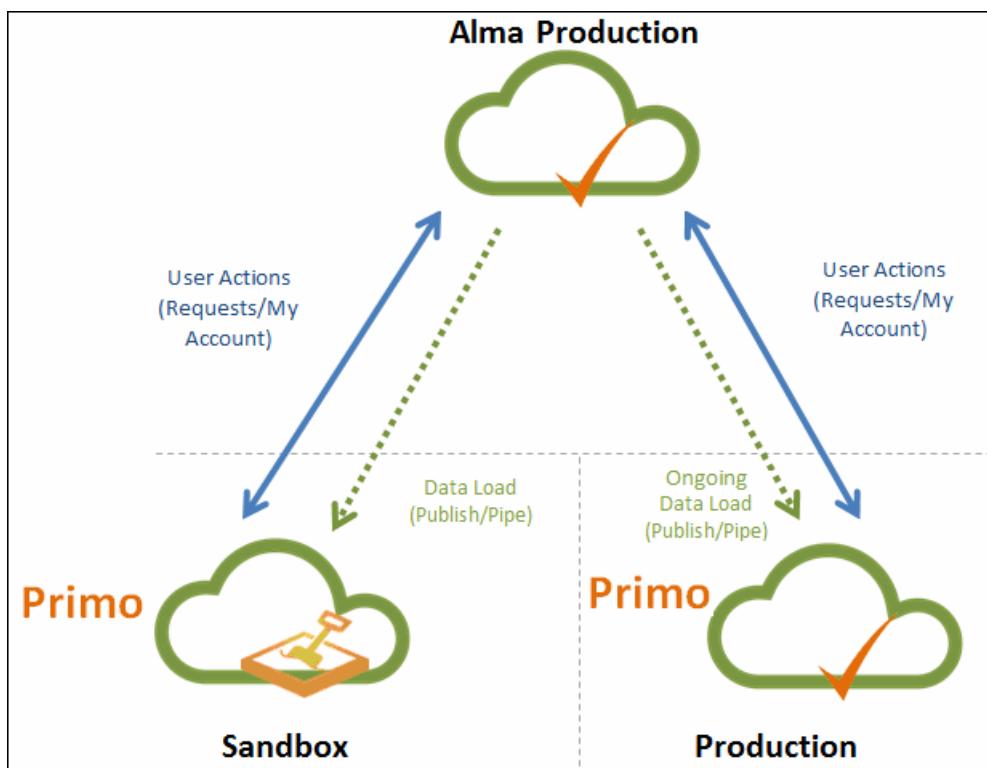


Figure 1: Primo Sandbox Working with an Alma Production Environment

Working with the Alma Sandbox and Primo Sandbox

There are cases in which you cannot see the outcome of a configuration change in your Alma sandbox, however you do not want to configure this change on your Alma production environment (in order to view the change in Primo) because your changes in the Alma production environment would be visible by patrons. This is the case for testing Alma changes in areas such as display logic rules and general electronic services.

In such cases, if you have an Alma Premium sandbox, you can modify your default Alma-Primo setup and configure the Primo sandbox to communicate

with your Alma sandbox in order to test your Alma changes and see how these changes manifest themselves in your Primo sandbox. After you configure this alternative setup, the Primo sandbox communicates with the Alma sandbox for all user actions, such as requests and My Account.

IMPORTANT:

This scenario is for testing purposes only. All data must continue to be published from the Alma production environment, in which data is current (unlike the Alma sandbox environment, in which data is only periodically refreshed).

The following diagram depicts the Primo sandbox's communication with the Alma Premium sandbox:

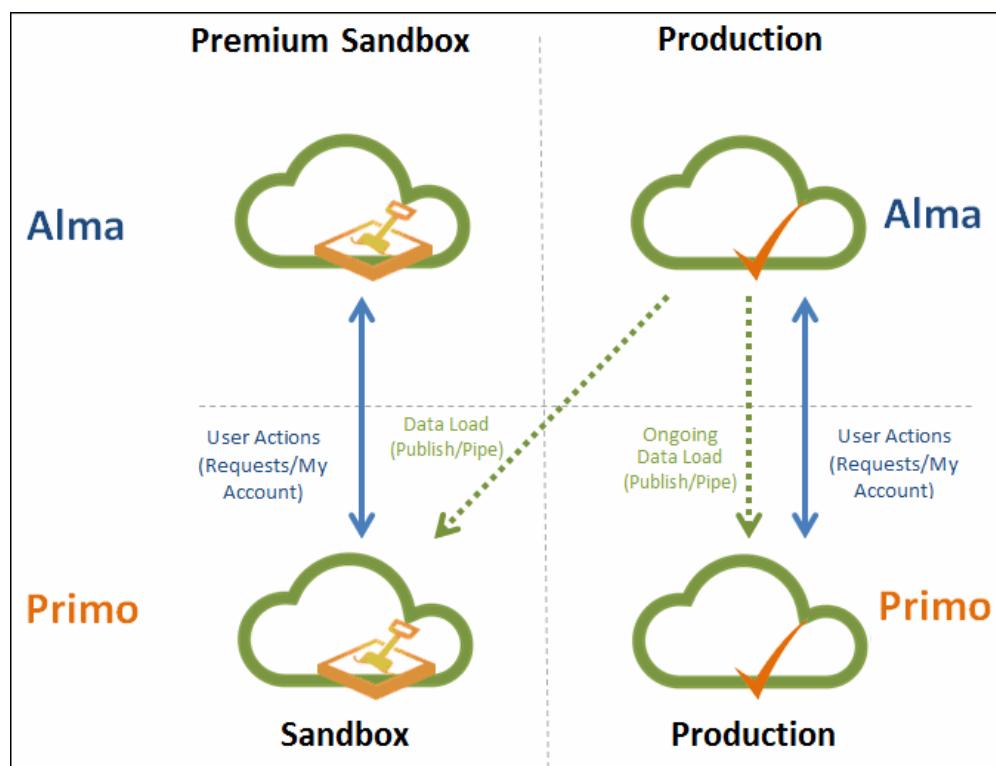


Figure 2: Primo Sandbox Working with the Alma Premium Sandbox

NOTES:

- While the Primo sandbox is configured to work with the Alma sandbox, ensure that you do not export the Primo sandbox configuration to your Primo production environment.

- Your Primo production environment should be configured to work with your Alma production environment at all times.
 - Your Alma Premium sandbox environment is a full replication of your Alma production environment and as such, includes all of your institution's records. Your Primo sandbox environment may have only a partial representation of your institution's records (depending on your Primo sandbox model). Thus, you may have records in your Alma sandbox that are not in your Primo sandbox.
-

To configure the Primo and Alma Premium sandbox environments to work with one another:

- 1 In your Alma environment, configure Alma to use the same PDS as the Primo sandbox in order to verify patron requests from Primo. (To allow successful patron requests from Primo, Alma must know which PDS is used by Primo.) Enter the URL of the Primo sandbox login page, up to pds?, as the value of the **primo_pds_url** parameter (located under **Administration > General Configuration > Configuration Menu > General > Other Settings**).

For example, enter `http://auniversity-primestaging.hosted.exlibrisgroup.com:8991/pds?`, as illustrated below:



Figure 3: Configuration of primo_pds_url Parameter

NOTE:

The value of this parameter is modified to the value of the Primo production PDS when your Alma Premium sandbox environment is synchronized with your Alma production environment. It must therefore be reconfigured following synchronization.

- 2 In your Primo sandbox environment, create an API base URL for the Alma sandbox by adding a new mapping row to the OPAC via Primo – ILS API Configuration mapping table (**Primo Home > Advanced Configuration > All Mapping Tables**) that specifies the URL of your Alma Premium sandbox.

For example:

Create a New Mapping Row				
Adapter ID	Certificate	Match for Holdings	ILS API Base URL	Description
ALMA_01	MainLocation		http://sandbox.alma.exlibrisgroup.com	Alma sandbox
<input type="button" value="Create"/>				

Figure 4: API Base URL Configuration for the Alma Sandbox

Note that this page already contains a mapping row for your Alma production environment (predefined by Ex Libris).

- 3 In your Primo sandbox environment, change all three references to Alma in the Institution Wizard (**Primo Home > Ongoing Configuration Wizards > Institution Wizard**) to refer to your Alma sandbox environment, as illustrated below.

Delivery Base URLs:	
MetaLib	<input type="text"/>
SFX	<input type="text"/>
ILS	<input type="text"/>
Alma	<input type="text"/> http://sandbox.alma.exlibrisgroup.com/view/uresolver/<Alma Institution Code>/openurl
Alma Services Page URL	<input type="text"/>
Digital Repository	<input type="text"/>
Digital Repository 2	<input type="text"/>
Digital Repository 3	<input type="text"/>
RTA	<input type="text"/> http://sandbox.alma.exlibrisgroup.com/view/publish_avail
API	<input type="text"/> http://sandbox.alma.exlibrisgroup.com
EZproxy	<input type="text"/>

Figure 5: Alma References in the Primo Sandbox Institution Wizard

Ensure that you deploy your changes.

To restore your Primo sandbox environment to work with your Alma production environment:

After you have tested your Alma configuration changes, it is strongly recommended that you restore the communication between your Primo sandbox and Alma production environments. To do so, restore the three Alma references in the Primo Institution Wizard (see Step 3 above) to their previous values.

NOTE:

The next time you want your Alma and Primo sandbox environments to work with one another, you need only perform Step 3 above and not Step 1 and Step 2.
