
Alma Sandbox Environments

You can safely test changes in Alma (or Leganto) using the *Alma sandbox* environment, and changes in Primo VE using both your Alma and Primo VE sandbox environments. The Alma and Primo VE sandboxes provide a means for you to develop, test, and train without making your changes visible to patrons and compromising the data in your production environment. The sandbox environments are completely isolated from your production environment. 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.

If you are working with Primo and not Primo VE, see [Alma-Primo Sandbox Integration](#).

As part of a standard Alma and Primo VE offering, Ex Libris provides a *standard* sandbox for both Alma and Primo VE. The standard sandbox contains a significant amount of data (about 70,000 records) provided by Ex Libris that you can use for staff training and testing business scenarios, new enhancements, and integration with other systems, without affecting your production environment. Changes in the Alma sandbox can be seen within the Primo VE sandbox.

After "Go Live", Ex Libris also offers an Alma *premium* sandbox (for an additional annual fee). This sandbox contains a full replication of the data and configurations from your Alma and Primo VE production environment. It can also be used for training, testing, and development purposes. When you purchase the premium sandbox, it replaces your standard sandbox. Note that with the Alma February 2019 release, Ex Libris introduced a new premium sandbox policy. For information on the new policy, see [Ex Libris Premium Sandbox Policy: Frequently Asked Questions](#).

Note

- Most Alma customers use the standard sandbox available from Ex Libris as part of the standard offering. The premium sandbox may be relevant in specific cases, as described below in [Differences Between the Standard and Premium Sandboxes](#).
- A single institution cannot have both a standard sandbox and a premium sandbox simultaneously. You also cannot mix grades of Alma and Primo VE sandboxes. For example, if you have an Alma premium sandbox, you must also have a Primo VE premium sandbox.
- The sandbox environments are updated with the new monthly releases two weeks before the general release to the production environments (typically, this means that the sandbox environments are updated on the second to last Sunday of each month; refer to the exact release schedule published by Ex Libris).
- APAC customers must use the accelerated Alma domain for production only. The sandbox does not support the accelerated Alma domain.

Alma Sandbox Environments and the Implementation Timeline

During the initial phase of implementation, Ex Libris provides access to the Alma standard sandbox, which you use to learn and become familiar with Alma as your institution is undergoing Alma training. For more information on logging into Alma and Alma domains, see [Your Alma Domains](#)

As you progress in your implementation of Alma, you continue to use the Alma standard sandbox for training purposes. During training, focus on end-to-end business processes and prepare your project team to review product functionality and test data migration following the delivery of the Alma production environment. After you receive your Alma production

environment during the implementation phase, the majority of your implementation work will take place on the Alma production environment until "Go-Live." However, it is still common to continue to use the standard sandbox to assist in configuring your required integration and authentication setup, and to perform internal staff training. Upon "Go-Live," when your Alma production environment contains your "live" data, the sandbox remains an especially useful environment for ongoing staff training and testing new features with each Alma release, before using these features on your live Alma production environment.

Note

If you are using your sandbox for authentication with one of your IdP authentication systems, you must ensure that your sandbox domain/URL is recognized by your IdP system.

A premium sandbox, which replaces your standard sandbox and contains all of your institution's data and configurations, is not available during implementation.

Alma Sandbox Refresh Request

Institutions with an Alma standard sandbox are entitled to request a refresh from the clean, standard Ex Libris training data up to once every quarter. Each sandbox refresh is not performed automatically; you must request one explicitly. To request a sandbox refresh, you must open a support case in the Ex Libris customer center CRM indicating your institution's name and the desired time frame for the sandbox refresh. You must provide at least 30 days notice between the request and the desired refresh date (refresh requests may not be for future quarter schedules). Ex Libris will schedule the standard sandbox refresh based on the request and availability of cloud operation scheduling, and will update you with the final planned schedule through the CRM support case. During the actual refresh process (which typically lasts up to 4-5 days, depending on the institution size), the sandbox will be unavailable. Once completed, the CRM support case is updated accordingly.

Note

Sandbox configurations are not retained in a Standard sandbox refresh.

Premium sandboxes are automatically refreshed by Ex Libris twice a year, in February and August, on the Sunday after the Alma release on production environments. For more information, see [Ex Libris New Premium Sandbox Policy: Frequently Asked Questions](#).

See [Recommended Configuration to Account for Sandbox Refresh](#) for one-time steps to perform so that authentication on your sandbox continues to work seamlessly after every refresh without any additional configuration, or with minimal configuration.

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.

Alma Standard vs. Premium Sandbox

Area of Alma	Task	Supported Sandbox Type
Training	Alma training during implementation	Standard (premium not available before "Go Live")
	Try out and learn new functionalities and features following a release; ongoing training following "Go Live"	Both standard and premium
Data services	Load patron records	<ul style="list-style-type: none"> • Standard – Up to 10K additional records (beyond the standard sandbox data) • Premium – Up to 50% or 100K (whichever is less) additional patron records beyond the total managed on the production environment
	Import bibliographic data (including e-books, digital resource metadata, and authority records)	<ul style="list-style-type: none"> • Standard – Up to 100K additional records (beyond the standard sandbox data) • Premium – Up to 20% or 500K (whichever is less) additional records beyond the total number of bibliographic records managed in the production environment.
	Publish bibliographic data to the Primo sandbox	<ul style="list-style-type: none"> • Primo: <ul style="list-style-type: none"> ◦ Standard – Publishing records to Primo not allowed ◦ Premium – Up to 10K records, by selected set • Primo VE: <ul style="list-style-type: none"> ◦ Standard – A representation of the standard Alma sandbox data ◦ Premium – A full representation of the Alma premium data which was replicated from production <p>Note that changes to records in the Alma sandbox will be seen within the Primo VE sandbox.</p>
	Classification and heading enrichment	<ul style="list-style-type: none"> • Standard – Not supported. • Premium – Data copied from production is enriched. New data, created in the sandbox, is not enriched.

Area of Alma	Task	Supported Sandbox Type
	<p>Load digital objects to the Alma cloud storage (Amazon S3)</p> <hr/> <p>Note</p> <p>For the premium sandbox, files that belong to records that are refreshed from the production environment can be viewed, but cannot be modified.</p> <hr/>	<ul style="list-style-type: none"> Standard – Up to 10Gb total storage size Premium – Up to 50Gb total storage size
	Perform global data changes	Both standard and premium
	Search for records in the Community Zone, see what e-records are available, activate global e-inventory in the Institution Zone	Both standard and premium
Fulfillment and courses	Test changes to fulfillment such as fulfillment configuration, loans, requests, fine/fee assignment, notices, and courses	<p>Both standard and premium</p> <p>Standard is limited to 1,000 reading lists (including Leganto).</p>
Acquisitions	Perform trial runs of EDI and EOD	Both standard and premium
	Perform trial runs of fiscal period closure	Both standard and premium
	Test acquisition workflows, such as purchase order claims and cancelations, or returns of material	Both standard and premium
	Export requests for payment	Both standard and premium
System administration	Test changes to authentication settings	Both standard and premium
	Test changes to configuration settings	Both standard and premium
API integrations testing	<p>Test Alma API developments</p> <hr/> <p>Note</p> <p>Analytics APIs are not available on either a standard or premium sandbox. They are available only in a production environment.</p> <hr/>	Both standard and premium
Data and configuration refresh	<p>Refresh the sandbox data and configuration. This deletes all data and configuration (see the note below for exceptions) on the sandbox and replaces it with:</p> <ul style="list-style-type: none"> Standard – The standard data and configuration that Ex Libris provides (handled by opening a support case in the Ex Libris customer center CRM) Premium – The copy of your most recent production data and configuration (handled automatically twice a year, in February and August, on the Sunday after the Alma release on production environments) <hr/> <p>Note</p> <p>The Allowed Emails and Allowed S/FTP Configuration lists are kept during the Premium Sandbox (PSB) refresh.</p> <hr/>	Both standard and premium, as stipulated

Area of Alma	Task	Supported Sandbox Type
Data anonymization	<p>Acquisitions and patron data anonymization, as follows:</p> <ul style="list-style-type: none"> • Patron anonymization: <ul style="list-style-type: none"> ◦ Patron primary Id/username, first name, middle name and last name are scrambled, and the original characters are truncated to a certain number of characters and reversed. ◦ Patron emails are set to fixed placeholder emails. ◦ Patron phone numbers are set to fixed placeholder phone numbers. ◦ Patron addresses are set to fixed placeholder addresses. ◦ All user related notes, identifiers and attachments (notifications) are deleted. ◦ All request-related names, emails and attachments (notifications) are deleted. ◦ Patron search index is re-set with the newly anonymized data, so the original pre-anonymized patron-related data is not searchable. ◦ Patron history is truncated. • Acquisitions anonymization: <ul style="list-style-type: none"> ◦ Acquisitions tables (FUND, FUND TX, PO, POL, INVOICE, PURCHASE_REQUESTS, INVOICE_LINE) are cleared of data, so the Sandbox data does not match the production data. <hr/> <p>Note</p> <p>Data anonymization is available only for consortias and not for Alma standalone institutions.</p> <hr/> <p>Data anonymization is optional, and can be done for only for Patron data or Acquisitions data or both (or none, in which case, all data is copied to sandbox as-is). You can modify the data anonymization behavior that was set for your institution (handled by opening a support case in the Ex Libris customer center CRM).</p> <hr/> <p>Note</p> <p>If an institution has enabled patron anonymization, they must set up accounts with Record Type= "Staff" in Production. These accounts are not anonymized when copied to the PSB. As a result, they are the only accounts that can log in to the PSB after a refresh, as the identifiers of all other accounts are scrambled.</p> <hr/> <p>Note</p> <p>Data anonymization is not reversible until the following scheduled refresh.</p> <hr/>	Premium
Logo customization	Customize the sandbox with your own logo and color scheme. Note that a sandbox refresh resets all customizations performed on the sandbox.	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. Alma Analytics runs on top of a designated data warehouse (not on top of production data), in a read-only mode. Since production data is not impacted, it is safe to use the Alma Analytics available using the production environment to test and develop new reports (a sandbox is not required).
- Standard sandboxes can be set up to share the Primo Central Index with production. Then when testing with the sandbox's Primo instance, you will have the same records (bibliographic, portfolios, authorities, etc) available to that search. You can also choose to have separate indexes, in which case the Sandbox index will start with only the standard records, and all maintenance going forward will have to be done manually, since scheduled jobs do not run automatically in the sandbox.
- In an Alma standard sandbox, data and configurations on the sandbox are reset with every sandbox refresh. In an Alma premium sandbox, all data and configurations are copied from your production environment as part of a refresh. These replace any data and configurations on the sandbox.
- Both the Alma premium and Alma standard sandboxes are limited to 30 active/distinct users who may log in (you may create generic users for sandbox login such as TEST_1, TEST_2, and so forth).
- A single institution cannot have both a standard and a premium sandbox environment. Following "Go Live", you must choose between these two options.
- Passwords for internal users are stored in the Identity Service and not in the Alma database (see [Developer Network](#)). If there is a sandbox refresh after a user changes their password on Alma production, the following occurs:
 - The premium sandbox user will not have a password in the Alma database (since it was cloned from the production Alma).
 - The user will also not have a password in the 'Sandbox' Identity service.

Therefore when logging in to the premium sandbox for the first time as an internal user you will need to reset your password using the [reset password link](#). Once the password for a premium sandbox internal user has been set, it will not be modified by a sandbox refresh.

Multiple Sandboxes in a Collaborative Network

For a collaborative network, Ex Libris provides two Alma and two Primo VE standard sandboxes as part of a standard subscription. If your collaborative network implements a Network Zone, Ex Libris provides an additional Alma and an additional Primo VE standard sandbox for the Network Zone, which is linked to the two sandbox members. A collaborative network acquiring the premium sandbox option can choose the number of premium sandboxes to acquire (based on sandbox guidelines noted below). Typically, a collaborative network implementing a Network Zone purchases a Network Zone premium sandbox (a copy of the Network Zone), and several premium sandboxes to serve as copies of selected representative member institutions. If any member institution opts to acquire a premium sandbox, you must purchase a Network Zone premium sandbox as well. Standard and premium sandboxes cannot be mixed within a collaborative network (they must be all standard or all premium). If one institution member opts for a premium sandbox, all of the other entitled sandboxes in the network, including the Network Zone, must upgrade to premium as well. Similarly, decisions regarding the number of member sandboxes are relevant for both Alma and Primo VE.

Additional Information

To simulate production-like results in an Alma sandbox when performing a search, holdings of all members are included, including the holdings of members that do not have a premium sandbox.

Member institutions that do not acquire premium Alma and Primo VE sandboxes are able to test their Primo VE views within the preview sandboxes (to test search functionalities, UI changes, etc.) The preview sandbox uses data that is

copied from the institution's production environment. However, configuration changes can be made only after acquiring a premium sandbox.

Alma Sandbox Topology Guide for Collaborative Networks

Implementing a Network Zone	Default Standard Sandboxes	Recommendations for Premium Sandboxes
Yes	<p>Total of 3:</p> <ul style="list-style-type: none"> • 1 standard for the Network Zone • 2 standard shared by member institutions 	<ul style="list-style-type: none"> • 3 premium to replace the standard sandboxes (Network plus two members) • Additional premium sandboxes can be purchased
No	2 standard shared by all institutions	<ul style="list-style-type: none"> • 2 premium to replace the standard sandboxes • Additional premium sandboxes can be purchased

Differences Between the Alma Sandbox and the Production Environment

As discussed in [Overview of the Alma Sandbox Environments](#), the Alma sandbox and production environments are completely separate from one another and cannot impact one another. The sandbox 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.

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. You can activate the email services (for testing purposes) by entering email addresses in the Email Include List mapping table (see Configuring Allowed Emails). 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 active/distinct users who may log in.
Integrations with third-party	All integration interfaces are available and enabled by default.	FTP for publishing to Primo is available in a modified form (see below). Other integrations involving FTP are disabled by default. You can

Area of Alma	Alma Production	Alma Sandbox
systems		<p>enable specific FTP addresses for communication by entering FTP host names/IP addresses in the FTP Include List mapping table (see Configuring Allowed S/FTP Connections During Testing). 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>
Community Zone contribution jobs	<p>Ability to contribute bibliographic record changes and other electronic resources to the Community Zone is available from the production environment. You can define publishing and other jobs as required.</p>	<p>Sandbox user environments can use the Community Zone, but you cannot make changes or contribute material to the Community Zone from sandbox environments.</p> <p>The sandbox environments do not include any Community Zone updates for activated Community Zone content.</p> <p>If a collection is activated from the Community Zone, the latest content is available, but the content is not automatically updated unless the job is run.</p>
Scheduling of jobs	<p>Ability to automatically schedule jobs according to the available scheduling options.</p>	<p>Automatic job scheduling is unavailable in sandbox environments.</p> <p>You can run jobs manually on demand by selecting Run Now (when 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>
Publishing to Primo and the Primo sandbox	<p>You can define the publishing to Primo job as required.</p>	<p>Primo — The Alma premium sandbox can publish up to 10K selected records to the Primo sandbox (premium or standard)</p> <p>Primo VE — Changes to records in the Alma sandbox will be seen within the Primo VE sandbox.</p>
Environment infrastructure	<p>The Alma production environment runs on a highly scalable infrastructure, using high availability and redundancy capabilities across all layers of the infrastructure.</p> <p>The production infrastructure can scale and accommodate a high performance load.</p>	<p>Sandbox environments use scaled-down infrastructure that provide you with cost-effective testing environments.</p> <p>The sandbox environment does not match the production environment in sizing/strength and cannot be used to benchmark/time batch loading of records or performance of API calls. For more information regarding API threshold for sandboxes, see API Governance Thresholds.</p>
Digital objects in the Ex Libris cloud	<p>The production environment includes the digital resource metadata and all the digital objects loaded to the Ex Libris cloud storage, according to the subscription agreement.</p>	<p>Sandbox environments (premium or standard) do not contain a replication of the digital objects that were loaded by the customer to the Alma production environment. Note that the premium sandbox will contain the digital resource metadata.</p>
Domain name	<p>Alma — you have a domain name with the institution name as a prefix. For example, university.alma.exlibrisgroup.com</p> <p>Primo — you have a domain name with the institution name as a prefix. There is also an option</p>	<p>Both Alma and Primo have the same domain name policy.</p> <p>For standard sandbox, the Ex Libris domain name is used.</p> <p>For premium sandbox, you have a domain name with the institution name as a prefix. For example, university.alma.exlibrisgroup.com</p>

Area of Alma	Alma Production	Alma Sandbox
	to have a custom domain name	custom domain name is not supported for any product