



XDOC Integration API

Three Steps to integrate XDOC into your Mortgage Loan Processing Application

XDOC is a powerful Electronic Document Management (EDM) system built with the latest technology to enable fast and full-function application integration. XDOC's Integration API is simple to implement, yet extremely powerful. It allows you to seamlessly integrate XDOC's document management features and user interfaces into your Loan Processing Application and processes. XDOC's Integration API is proven at over 100 installations in the mortgage banking industry. It provides your Application with XDOC's full functionality out of the box in three simple integration steps.

In addition to the XDOC Integration API, XDOC also provides frameworks and tools for advanced customization of user interfaces, workflow, and document processing functions for customers who want to expand XDOC's features or change its look and feel.

This document discusses the general features of the XDOC Integration API and the specific steps required to connect XDOC to your Application.

XDOC Integration Architecture

The XDOC Integration API is designed to provide your application with all of XDOC's document management and rapid display functionality using a non-intrusive architecture.

XDOC's integration architecture provides the following key features:

- XDOC and your Application appear as one integrated software package and not two separate systems.
- XDOC does not require duplicate user accounts. User credentials and authentication remain completely in your Application, which passes authentication tokens to XDOC when required.
- XDOC queries your Application data in real time when required and does not need to synchronize and store duplicate copies of this data.
- XDOC's user interfaces such as the Loan Document Viewer can be invoked directly from your Application by simply opening a browser to an XDOC web URL, without requiring a separate logon or navigation through XDOC menus.
- XDOC invokes your Application search screens when the end user needs to assign a document to a loan. This gives you full control of what search fields and loan attributes are displayed while providing a search experience that is consistent with the rest of your Application.

XDOC document viewers and other user interfaces and features can be invoked seamlessly from your Application using integrated security credentials. XDOC can access your Application data when needed for display, document delivery (e.g. email, investor delivery), archiving, and other functions. For example, loan properties such as borrower name and loan number will be retrieved in real time from your Application for display in XDOC's loan viewer title bar and generated email notifications.

XDOC Integration Steps

Integrating your Application with XDOC is a simple 3-step process:

- Step 1. *User Authentication* - implementation of the standard .NET Authentication web pipeline event and .NET Forms Authentication model.
- Step 2. *Loan Container Data Provider* - implementation of a simple XDOC .NET Interface class definition that defines methods needed by XDOC to lookup loan attributes and borrower lists for user interface display and document processing.
- Step 3. *Loan Search Web Page* - implementation of a web page allowing the user to enter loan search criteria and search for a loan in your Application. This web page is launched by the XDOC user interface when the user needs to assign a document to a loan. The web page can be implemented in .NET and placed under XDOC or an external website.

STEP 1 - User Authentication

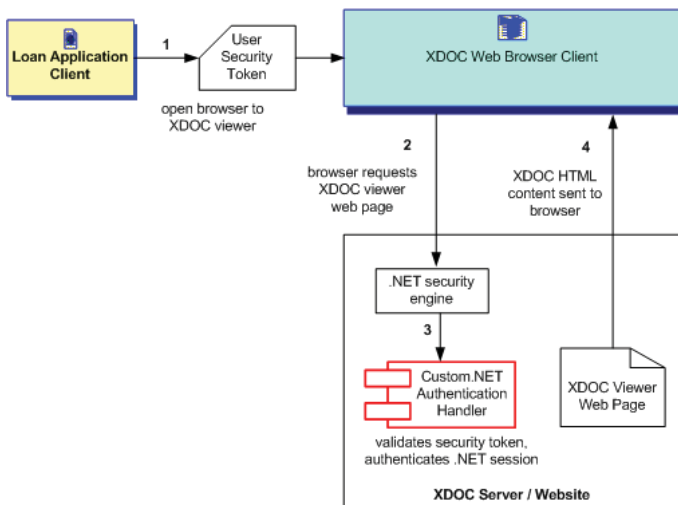
There are two scenarios for user authentication integration.

- Authentication Credential Passing - occurs when XDOC web pages are launched directly from your Application, where the user is already logged on and authenticated.
- Authentication Logon Page - occurs when XDOC web pages are launched from outside your Application and user authentication must occur.

Both scenarios are handled by using standard .NET web Authentication handlers that are independent of the XDOC system. These handlers are registered in the .NET web.config file and get invoked prior to XDOC picking up the web requests.

AUTHENTICATION CREDENTIAL PASSING

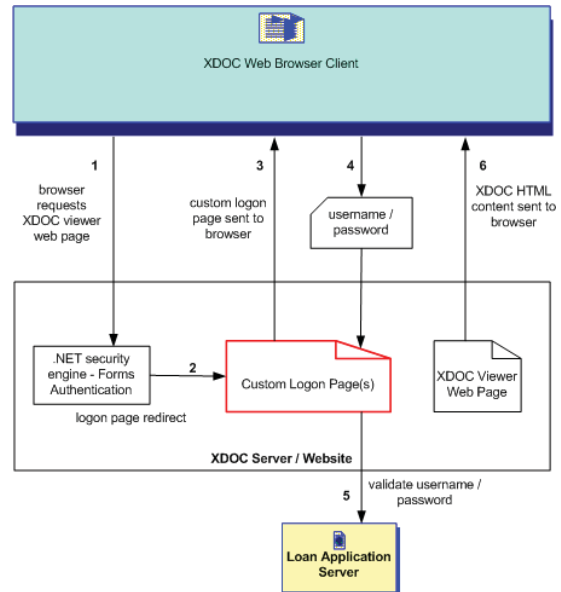
Authentication Credential Passing is handled by implementing a standard .NET Authentication Request handler, either in the global.asax file or via an HTTP handler in the web.config. Your handler simply provides a security handshake with your Application. The handler inspects the web request and looks for an authentication token passed from your Application. If a valid authentication token is found, the handler will set the .NET Forms Authentication token and the request gets automatically passed along to XDOC.



Authentication Credential Passing.
Custom .NET Authentication handler shown in red.

AUTHENTICATION LOGON PAGE

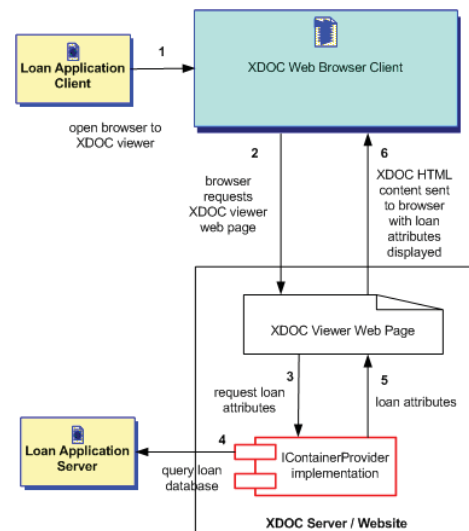
XDOC web pages that are launched directly (not from your Application) require a user to be authenticated. The Authentication Logon Page is a simple web page that authenticates the username and password with your Application security.



Authentication Logon Page.
Custom Logon Pages shown in red.

STEP 2 - Loan Container Data Provider

The XDOC Integration API defines a .NET class interface definition (IContainerProvider) that contains methods that XDOC uses to look up loan attributes and borrower lists from the host Application. The implementation of your loan container provider is usually just a few simple database queries that run against your Application to look up the loan data.



Loan Container Data Provider Integration.
IContainerProvider implementation shown in red.

To implement the container provider:

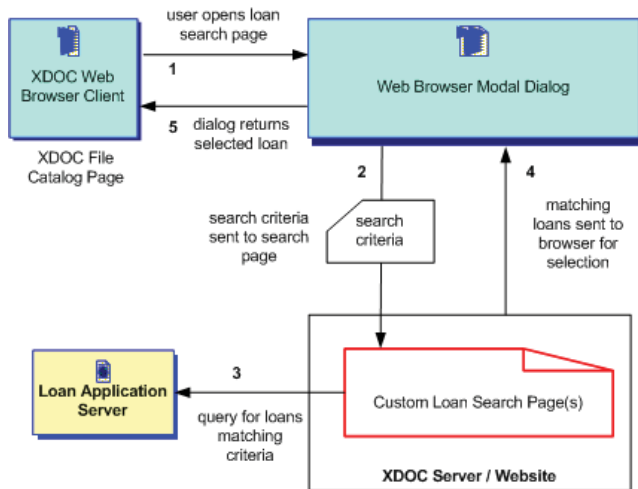
- Compile a .NET dll (any language) with a concrete implementation of the container provider interface: `axacore.xsuite.xdocx.system.IContainerProvider`.
- Copy the dll to the web/bin directory of the XDOC website.
- Update the XDOC configuration settings with your `iContentProvider` class name to access loan attributes and data.

The main methods of the IContainerProvider interface definition are:

XDOC Interface Method	Description
getContainerInfo (pLoanContainerId,pUser)	Returns a container object that contains the attributes and borrower lists for the loan. The <i>pLoanContainerId</i> parameter is your application's internal loan ID. The <i>pUser</i> parameter is included to allow you to apply security based on the current user. The object returned is an XDOC ContainerInfo object, which is already implemented for you.
searchContainerIds (pSearchCriteria,pUser)	Returns a list of loan IDs that match the input search criteria. Used by XDOC's archiving and purge utilities to allow an administrator to correctly identify a set of loan documents for archiving or purging.
getLastContainerIdForUser (pUser)	Returns the last loan that the user was viewing / accessing in your Application. This is used by XDOC as the default loan to display for first time searches, etc.

STEP 3 - Loan Search Web Page

The XDOC File Catalog and Loan Viewer interfaces allow a user to assign (or re-assign) documents to a loan. The Loan Search Web Page is a simple web page that XDOC will launch when a user needs to look up the correct loan to attach the documents.



*Search Page Integration.
Custom search web pages shown in red.*

To implement the loan search web page:

- Create a stand-alone web page that allows a user to enter search criteria and search for loans from within your Application. This web page will be opened by XDOC in a modal browser window.
- Copy the web page to XDOC or an external website.
- Update the XDOC configuration with your search page locator to identify the URL to launch.

Conclusion

The XDOC Integration API provides an efficient and powerful framework for integrating XDOC document management features into your Application in three easy steps.

The integration components provide the connectivity to your application security and loan data that allows XDOC to intelligently and seamlessly display and manage the flow of documents throughout the loan process.

For additional information or details on the Advanced Customization features of XDOC, please contact an Axacore sales representative.

About Axacore, Inc.

Axacore, Inc. is a privately-held core technology provider of faxing and document imaging solutions. Axacore develops solutions that help organizations streamline paper-intensive business processes and automate the flow of documents to team members, customers, partners, and vendors.

Headquartered in San Diego, California, Axacore is committed to excellence in product development and customer support while maintaining a technological edge. Key products include FaxAgent, ScanAgent, and XDOC.

Founded in 1996, Axacore's award-winning solutions are distributed worldwide through a network of partners, OEM providers, and direct sales delivering solutions to a broad range of industries, organizations, and enterprises of any size. For more information, visit the Axacore website at www.axacore.com.