

CALYX SOFTWARE®

WebConnect

Technical Integration Guide

February 2016





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Preface

The purpose of this guide is to provide you with the information that you need to develop your interface with the Calyx WebConnect platform. WebConnect offers an embedded interface so that Point users can access your products directly through Path. The WebConnect interface takes advantage of the data standardization offered by MISMO.

This information consists of the following topics:

- Chapter 1, [Technical overview](#), provides a high-level overview of the architecture.
- Chapter 2, [Point user interface](#), describes the Point user interface.
- Chapter 3, [Profiles](#), describes how to define the configurable characteristics of your interface.
- Chapter 4, [Embedded web browser](#), explains the embedded WebConnect browser.
- Chapter 5, [SDK](#), provides installation instructions and other important information about how to use the WebConnect Software Development Kit
- Chapter 6, [Methods](#), describes the WebConnect method names.
- Chapter 7, [Data format notes](#), describes the interface rollout procedures.
- Chapter 8, [Interface updates](#), describes the Calyx I-Update process.
- Chapter 9, [Transaction registration](#), describes the billing interface used when a Point user places an order.

Product assistance and support

Important

The following information is provided for vendor integration purposes only. This information is not intended for Point users and therefore, we respectfully request that this information remain confidential.

The following resources are available for sales, support, and general questions:

Issue	Contact information
Accounting/collections	408.997.5525 ext. 3003 tiffany_yee@calyxsoftware.com
Interface technical support/implementation	214.252.5603 interfacesupport@calyxsoftware.com
I-Update support	214.252.5607 interfacesupport@calyxsoftware.com
Marketing	214.252.5636 jenny_harlowe@calyxsoftware.com
Point user support	800.342.2599 support@calyxsoftware.com
Integration sales/general questions	214.252.5610 vicki_stover@calyxsoftware.com

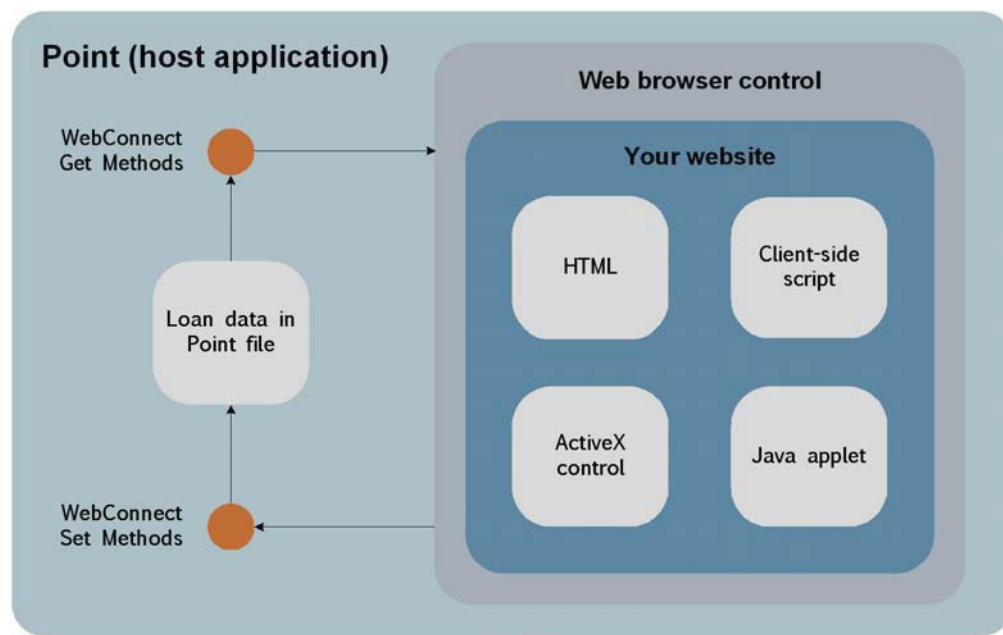
Technical overview

1

Point uses Microsoft Internet Explorer Web Browser Control as a host application for the interface. In most cases, Internet Explorer is the host application for the control, but Microsoft allows other applications, such as Point, to be a host application.

This architecture allows your client-side HTML script to invoke the methods of the Point host application in real time by referring to **window.external.<method>**.

These methods are used to read data from the currently open Point file and return it to the caller, or write data the caller passes to the Point file. The following diagram shows a high-level overview of Point hosting the web browser control, with WebConnect methods made available to your HTML code.



Point user interface 2

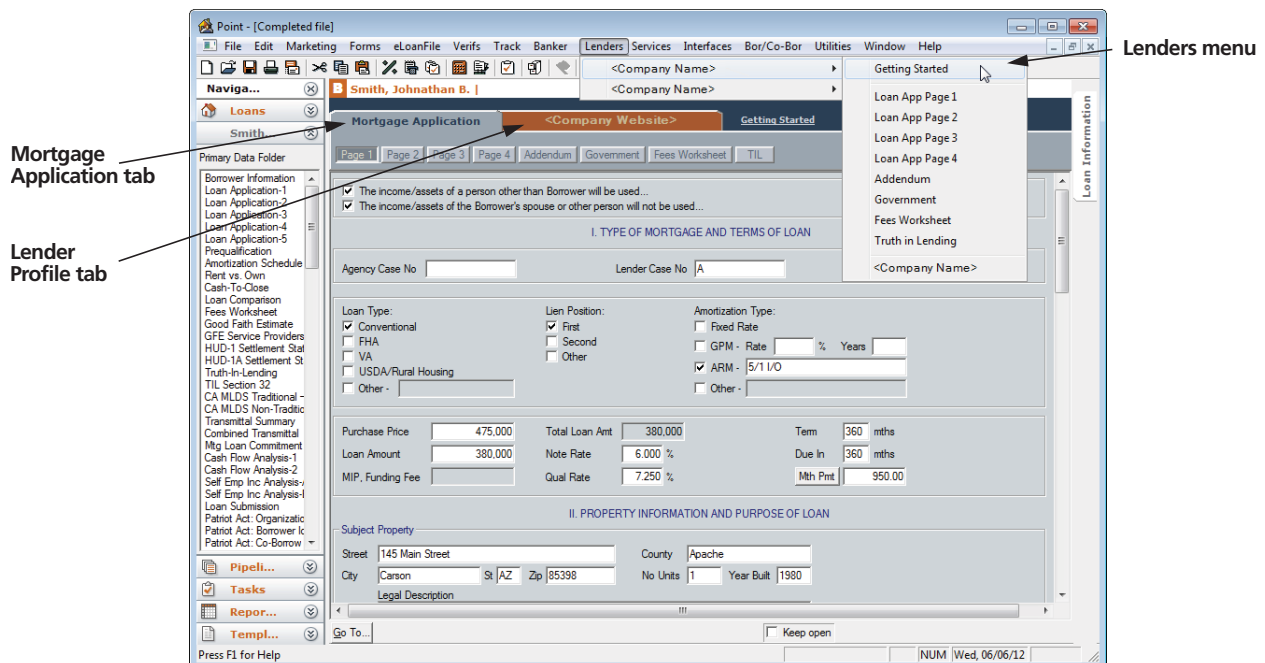
The WebConnect platform is available to both lenders and service providers. Although the GUI (graphical user interface) is different for lenders and service providers, the underlying functionality of the product is the same. Refer to the appropriate section for your reference.

In this topic

- [Lenders menu navigation](#)
- [Interfaces menu navigation](#)
- [Profile screen functions](#)

Lenders menu navigation

The lender WebConnect interface is available from the **Lenders** menu in Point. Lenders are listed in ascending alphabetical order.



Generic company references on this screen and throughout this information, for example <Company Name> and <Company Website>, are used as place holders for examples shown in this document. When you complete your Interface Submission Form that contains all of your company profile information such as name, website name, and loan ID label, the information that you specified will display instead.

Related information

Refer to the [WebConnect Project Management Guide](#) for information about the Interface Submission Form.

Menu options and tabs

Getting Started

When the user selects **Lenders > <Company Name> > Getting Started** the web page URL that you specified in your profile is launched in a browser. This menu option is designed to quickly connect customers with you so they can learn how to set up an account, obtain contact information, and find answers to any other questions that they might have.

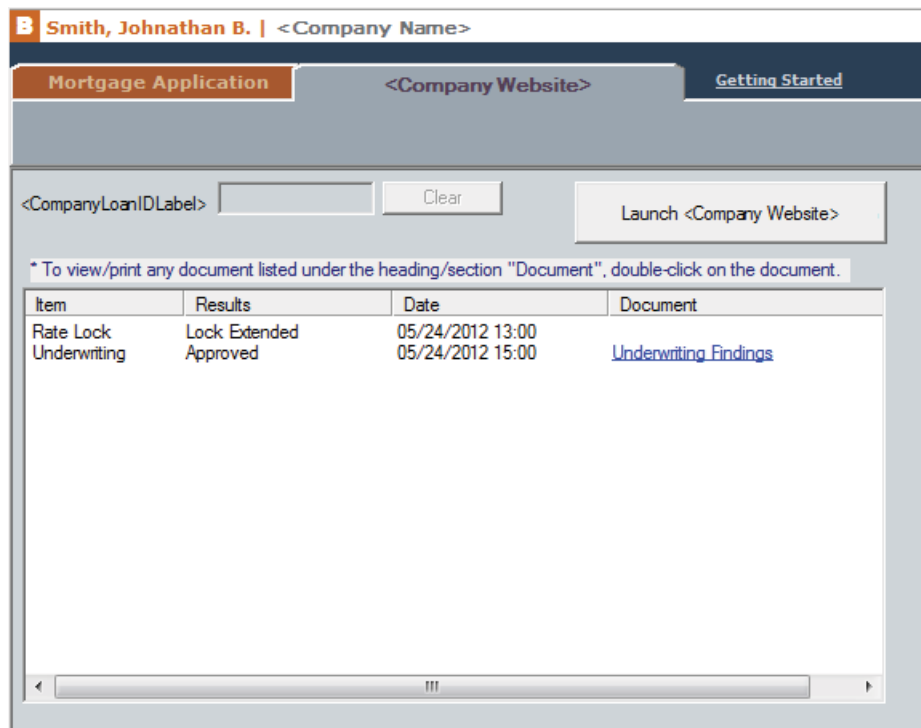
Other options on the menu navigate to the remaining interface which is comprised of a self-contained area with two top-level tabs.

Mortgage Application tab

The **Mortgage Application** tab contains buttons to access data entry screens for each page of the **Loan Application**, the **Fees Worksheet**, and **Truth-in-Lending (TIL)**. An **Addendum** screen and a **Government** screen are also provided because they contain MISMO data elements that are not included in the **Loan Application**, **Fees Worksheet**, and **Truth-in-Lending** screens, which is the primary orientation of WebConnect.

Lender Profile tab

<Company WebSite> is your company website name.



Interfaces menu navigation

Service providers are accessible from the **Interfaces** menu in their specific service category.

Services providers also utilize data that is entered on the following screens:

- **Forms > Loan Application, pages 1 through 4**
- **Forms > Fees Worksheet**
- **Forms > Good Faith Estimate**

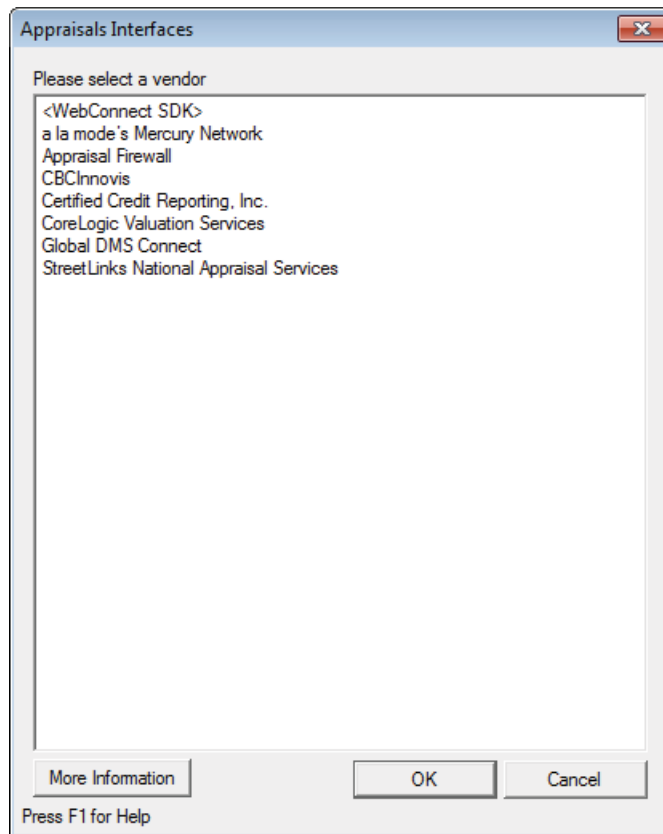
- **Forms > Truth-In-Lending**
- **eLoanFile > Property**
- **eLoanFile > Loan Program**
- **eLoanFile > Additional Loan Data**
- **Track > Registration & Rate Lock**
- **Track > HMDA Reporting**
- **Track > Agent List**
- **Track > Branch Team**
- **Banker > Secondary Marketing**
- **Banker > Conditions**
- **Banker > Closing Documents (all screens)**

These data entry screens encapsulate most of the MISMO data for WebConnect integration.

A Point user would use the following steps to select a service provider in Point:

- 1 Select **Interfaces > (Service category)**.

The **Interfaces** dialog box for that service category is displayed which contains a list of companies, in ascending alphabetical order, that provide that service.



Note

The **More Information** button launches a separate Internet Explorer browser that displays your Getting Started page which you specified on the Interface Submission Form.

- 2 Select a company name and click **OK**.

The profile page for that service provider is displayed.

Smith, Johnathan B. | Credit Reporting Interfaces - <Company Name>

Credit Report # [Getting Started](#)

* To view/print any document listed under the heading/section "Document", double-click on the document.

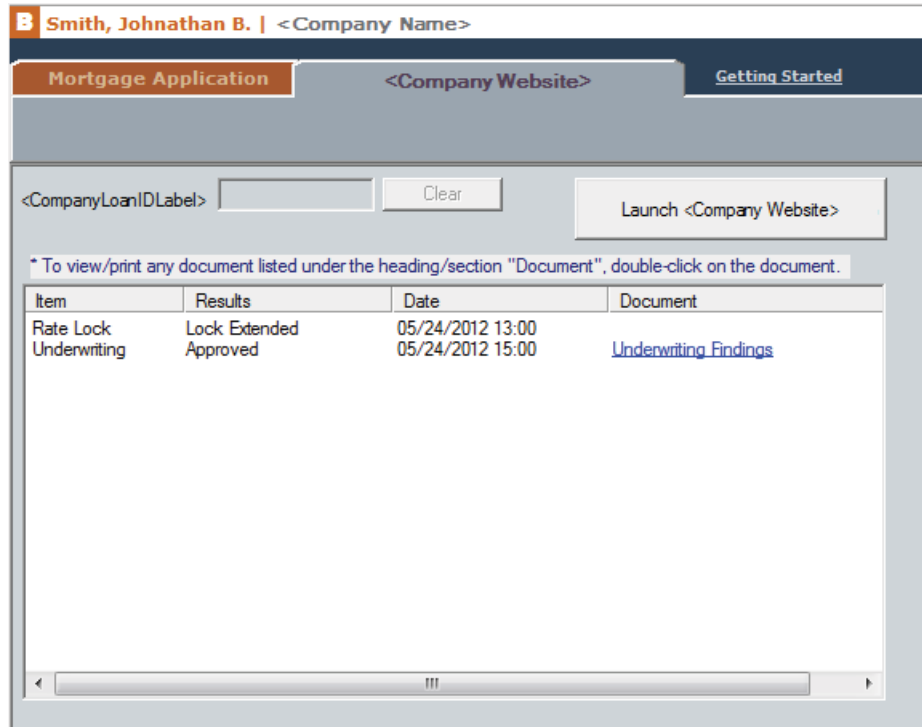
Item	Results	Date	Document
------	---------	------	----------

Important

If you have two WebConnect interfaces in the same category, they must each have a unique company name. You can specify the distinction between the company listings on the WebConnect Interface Submission Form.

Profile screen functions

The profile page setup is described below.



Getting Started link

When the Point user clicks the *Getting Started* link, the web page URL that you specified in your profile is launched in a browser. This menu option is designed to quickly connect customers with you so they can learn how to set up an account, obtain contact information, and find answers to any other questions that they might have.

Company Loan ID Label

The *CompanyLoanIDLabel* is a read-only field that identifies the loan or order number to the Point user as it is referenced in your system. You can use any alphanumeric code for the Loan ID which can change throughout the loan process.

Clear/Edit button

The **Clear/Edit** button is a toggle. The **Clear** button is used to delete the existing data that links the Point file and your website by clearing the loan ID prior to when the Point user copies the file for another loan. Before the data is deleted, a confirmation dialog box is displayed.

When the **Edit** button is clicked, the field is enabled for the Point user to enter a loan ID. The interface website identifies the loan and Point imports existing data and documents from the interface.

Table of statuses and documents

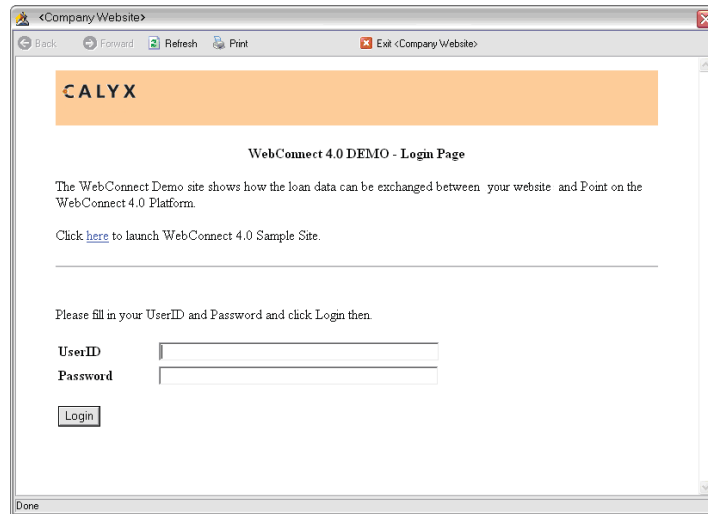
The table of statuses (i.e., Rate Lock, Lock Extended, 05/24/2012, 13:00) and documents (i.e., Underwriting Findings, Credit Report, Title Commitment, etc.) are specific loan elements that are stored with the loan file.

Documents and statuses are sent through the WebConnect functions, and are displayed on this screen.

You can configure the status to display with or without a corresponding document. However, if documents and statuses are saved, they are associated with the currently open Point file. If documents are sent by your website to be stored with the Point file, these documents are also automatically stored in the document repository, available from the **eLoanFile > Document Management** menu option.

Launch <Company Website> button

When clicked, the <Company Website> button saves the current Point file and launches your website in an embedded Internet Explorer browser within a modal dialog box on Point.



The URL contains three parameters from Point. For example:

<https://www.company.com/landing.html?CalyxPlatform=4.0&CalyxLoanGUID=ABC&CompanyLoanID=123>

CalyxPlatform

This parameter is obsolete. Do not use.

CalyxLoanGUID

The internal globally-unique identifier for the open Point file. It is also the primary ID that is used for monthly billing.

Note

This ID can also be used to verify billing and check for duplicate loans, identification (for example, the Point Loan GUID and Company Loan ID).

CompanyLoanID

An identifier for your loan record that corresponds to the Point file. Initially it is blank, but once it is assigned, it is provided to your website on subsequent launches so you can establish the matching loan context in your website.

You can pass these parameters between your system and Point at anytime by calling the methods *GetCompanyLoanID* and *GetCalyxLoanGUID* during the time the user is browsing your website.

Important

Your website must be secured by HTTPS to protect the data that might be exchanged through the browser inside Point.

After the user launches your website, they are able to browse your website normally but with the capability of dynamically exchanging data between your website and the currently open Point file.

When the user clicks **Exit <Company Website>** the website and the dialog box close, the user is returned to Point, and the Point file is saved. When these actions are complete, Point sends the billing information to the Calyx Transaction Management Server.

Related information

Refer to Chapter 6, [Transaction registration](#), for information about the Calyx Transaction Management Server.

The profile information for interface and service providers is included in this topic.

In this topic

- [Interface provider profile information](#)
- [Interface menu category](#)

Interface provider profile information

The following characteristics define the information in your interface. Use the Interface Submission Form to specify these settings.

Setting	Description	Valid values
AccountID	The Calyx-assigned, unique identifier of your company.	(any string)
CompanyName	How your company name is to be displayed on Point screens.	(any string)
CompanyWebsite	How your website name is to be displayed on Point screens.	(any string)
CompanyGettingStartedLink	Your marketing web page URL that is specifically designed to sign up Point users and provide them technical support.	(any URL)
CompanyProcessURL	The landing page where the user is directed in the embedded web browser in Point.	(any URL)
CompanyLoanIDLabel	The text label for the field that contains the company loan ID that the company assigned for this loan.	(any string)

Interface menu category

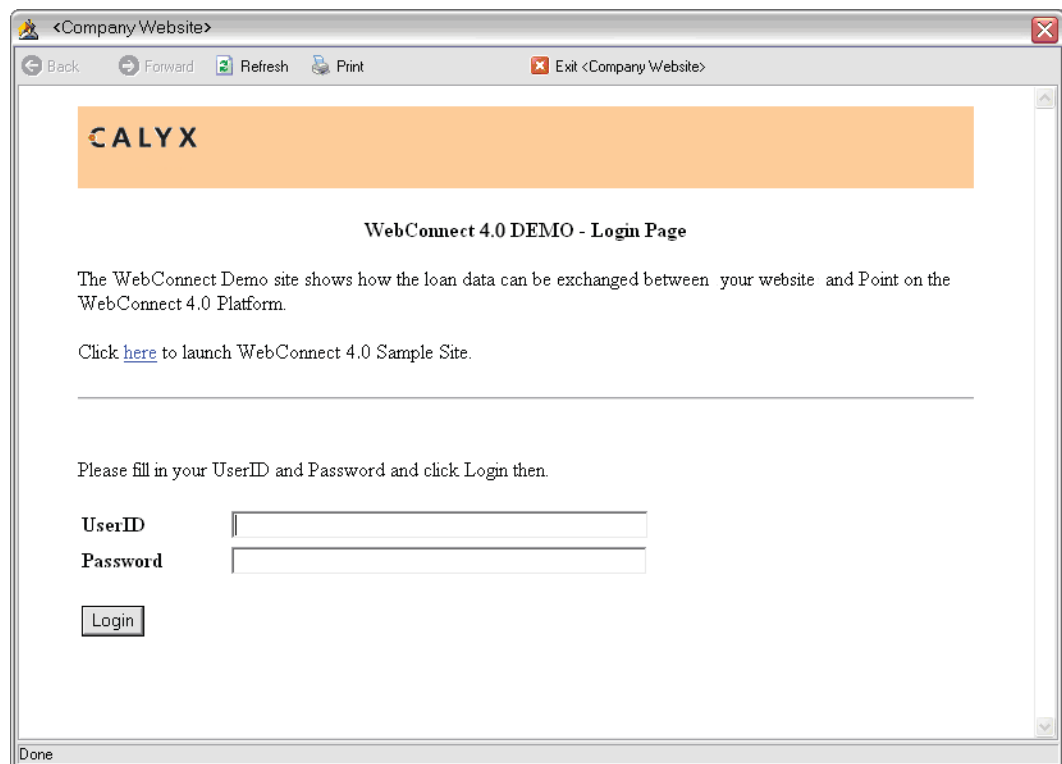
Interface menu categories are determined by Calyx and are modified in the monthly I-Updates. Non-lending providers that use WebConnect must classify their interface under one of the existing categories on the Interfaces menu. A provider can list their interface under multiple categories. However, each listing is considered a separate interface in regard to fees and certification.

Important

Calyx reserves the right to change the Interface menu categories at any time and move an interface to a different category if necessary.

Setting	Description	Valid values
CalyxCategory	The category where company is contained. Company can select any category on the interfaces menu.	Categories defined by Calyx

The embedded web browser (WebConnect browser) uses the Internet Explorer (IE) Web Browser Control 6.0 or later (whichever is currently installed on the Point user's machine along with Internet Explorer). It is a special host application of the browser control embedded in Point to expose WebConnect methods to the external calls (for example, your website client-side script). The browser control is also used by Internet Explorer as another host application. Since the WebConnect browser uses the same control as Internet Explorer, most of their settings are shared. There are, however, differences between certain settings in the WebConnect browser and Internet Explorer.



WebConnect browser restrictions

The WebConnect browser works the same as the standard Internet Explorer browser, however, for security reasons, the following restrictions apply:

Menu

The browser enables the following five functions (all other functions are disabled):

- Back
- Forward
- Refresh
- Print
- Save As

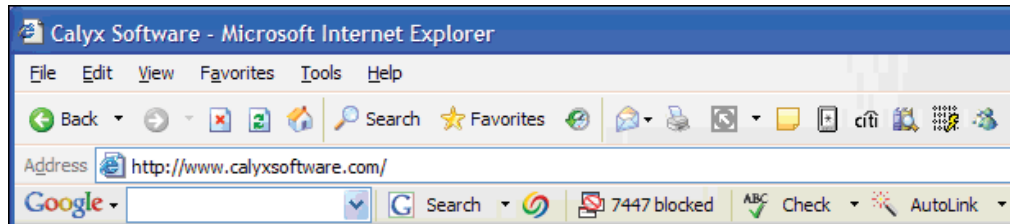
Address bar

The Address bar is hidden in the browser.

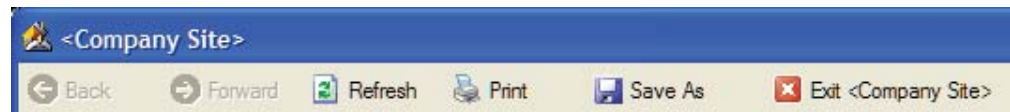
Restriction

Because random websites can access or update loan data from the open Point file by calling WebConnect methods, you must restrict access to any functions that allow the user to browse to any arbitrary sites from the WebConnect browser.

The following graphic shows an example of an Internet Explorer browser.



The following graphic shows an example of a WebConnect browser.



Plug-ins

Plug-ins (for example, Google Toolbar) are not available in the WebConnect browser.

Ctrl-N (new window)

The hotkey to spawn a new Internet Explorer browser from the same process is disabled in the WebConnect browser.

Ctrl-O (open)

The hotkey to open a file or URL is disabled in the WebConnect browser.

F11 (full screen)

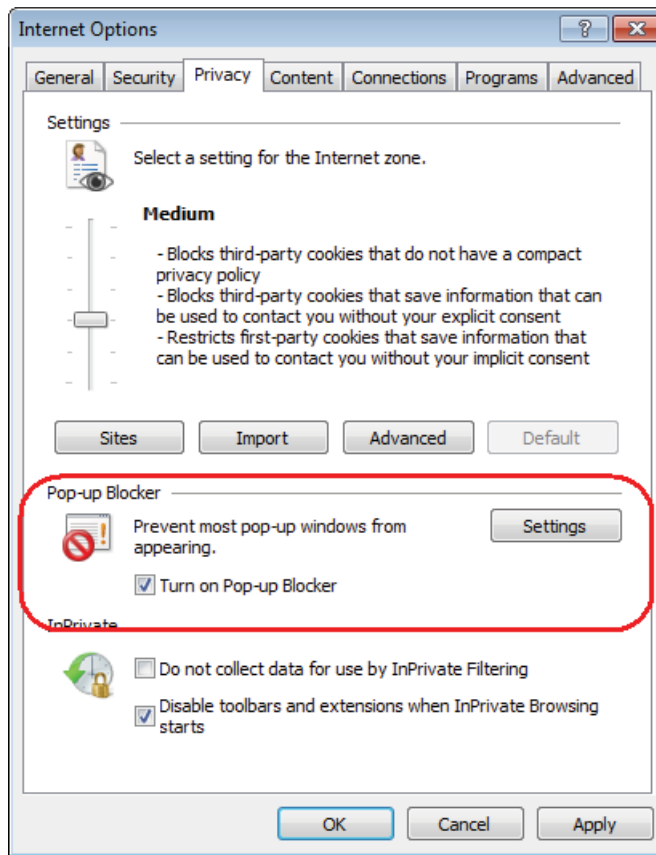
The hotkey to toggle to full screen mode is disabled in the WebConnect browser.

Pop-ups

Every pop-up created in the WebConnect browser is displayed in child WebConnect browsers. Each child WebConnect browser inherits the same session from its parent instance of the WebConnect browser. When the parent WebConnect browser is closed, any associated child WebConnect browsers are forced to close and the user is returned to Point.

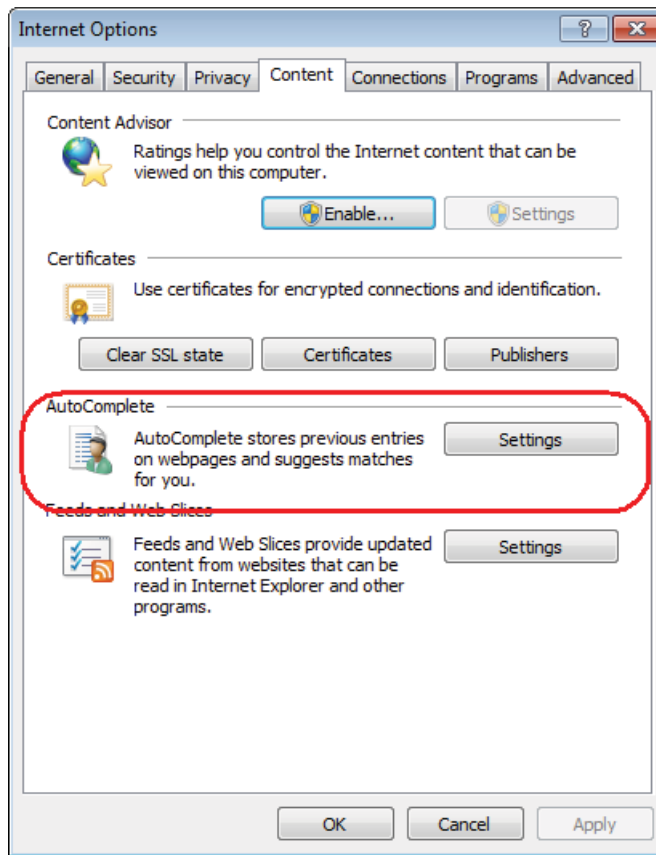
Pop-up blocker

The Pop-up blocker provided by Internet Explorer 6.0 SP2, or later, is not available in the WebConnect browser.



Auto Complete

The Auto Complete feature provided by Internet Explorer is not available in the WebConnect browser.



After a contract is signed, Calyx Software will provide you with the *Calyx WebConnect SDK*, a special plug-in for Point. It is a three-step installation:

- 1 Install the latest version of Point.
- 2 Install the WebConnect SDK plug-in so the WebConnect SDK menus are enabled in Point.
- 3 Extract the zip file that contains all of the WebConnect documentation, mapping information, and sample files.

The Calyx WebConnect SDK functions the same as the Point version in Production, except that the menu options focus solely on setting up and defining your profile. The launch behaviors for the Getting Started link and **Launch <Company Website>** button produce an additional dialog box that contains a field for you to input the URL to launch. Also, you can right click only from the WebConnect SDK-embedded browser window where you can select **View the source file** for debugging purposes.

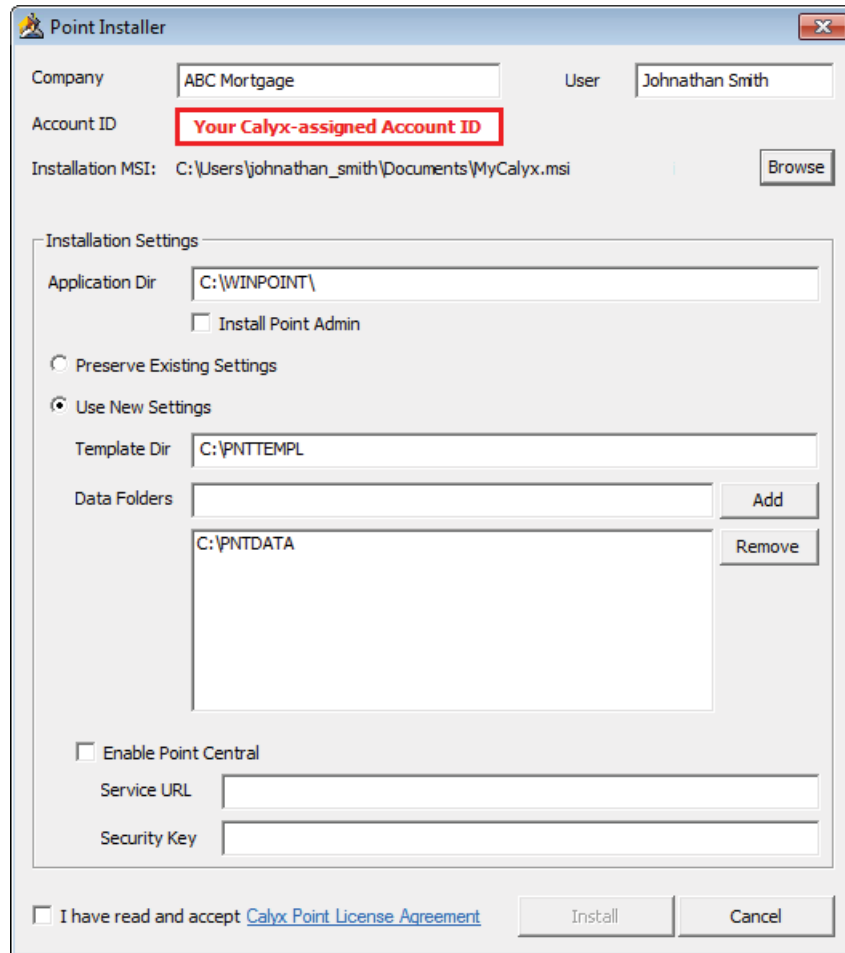
In this topic

- [SDK installation](#)
- [Launching the interface](#)

SDK installation

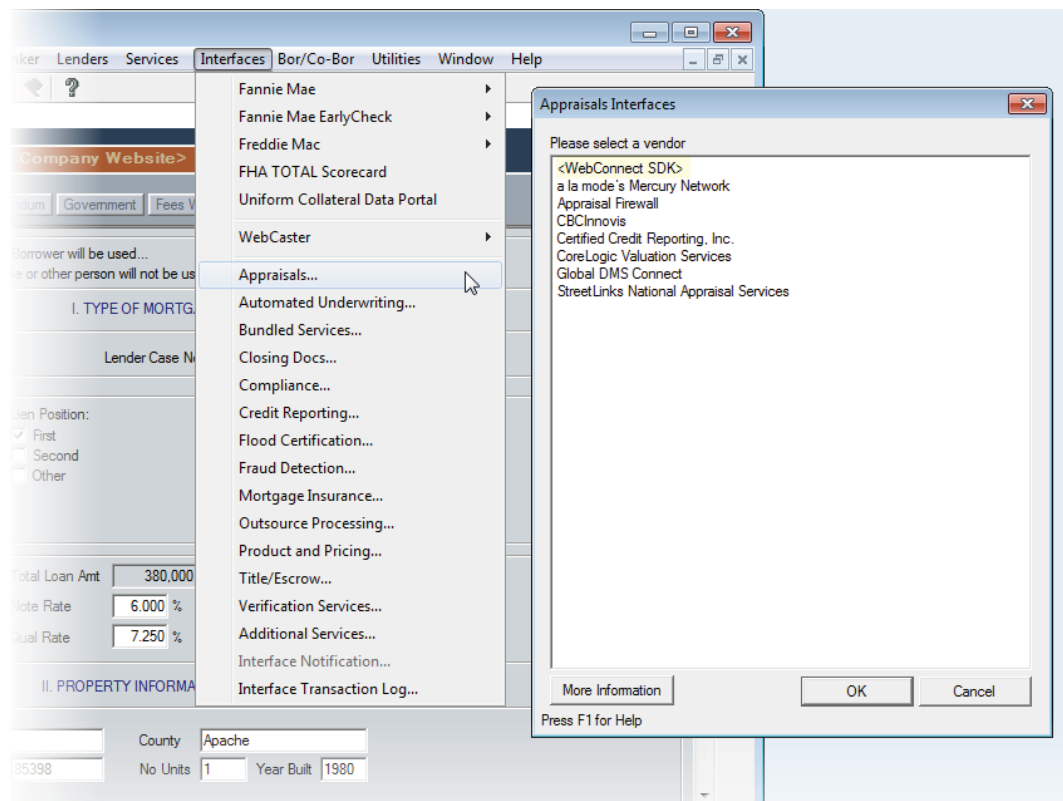
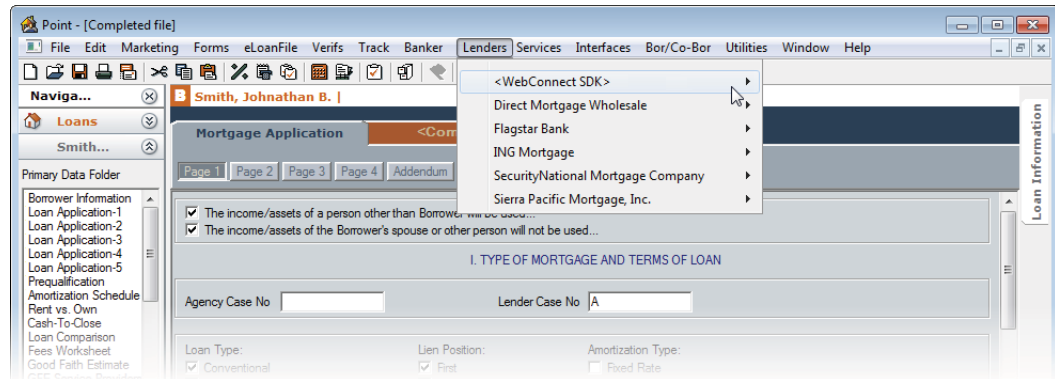
A unique account ID is assigned at the time the Calyx WebConnect SDK is shipped. The account ID is required input during installation. Install Point first from the installation file

and then install the SDK. During Point installation, enter your unique account ID to proceed.



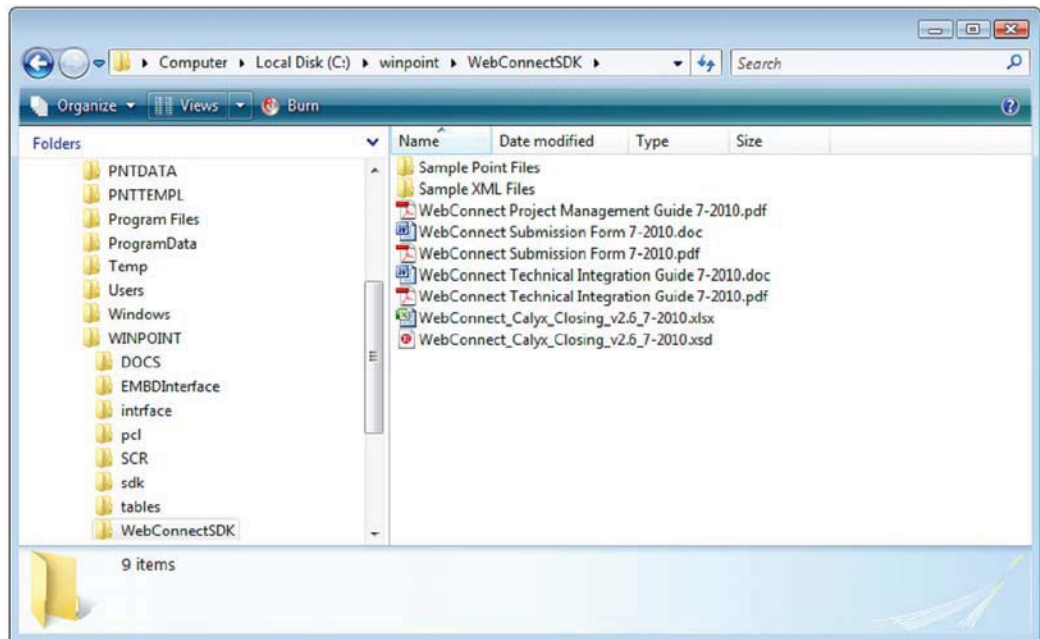
After the Point installation is finished, run WebConnectSdk.exe to install the SDK plug-in on the **Lenders** menu and place an entry in each of the **Interfaces** menu categories. A

separate exe file also installs the WebConnect technical documentation and samples on your system.

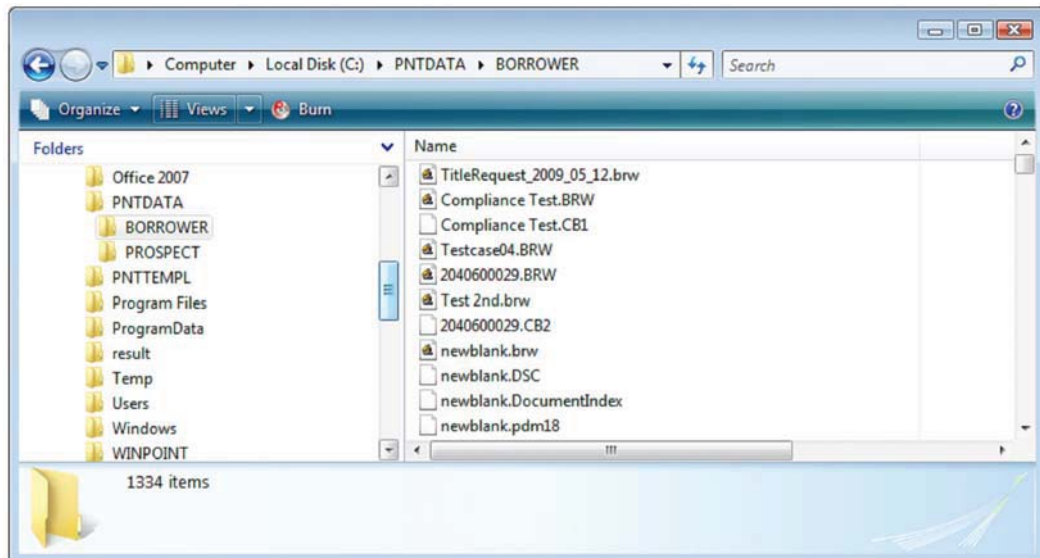


The Point Calyx Closing v2_6_Mapping.xls spreadsheet details the xpaths and export logic for Point data fields. The Calyx Closing version 2.6 is based on the MISMO Closing version 2.6 with Calyx extensions. Calyx Closing 2.6 does not validate against MISMO Closing 2.6 because the MISMO Closing 2.6 DTD denies any extensions. The WebConnect SDK zip file includes a Calyx Closing version 2.6 schema xsd file for defining and validating the XML format.

The samples contain selected exports of Point files to illustrate the various Point datasets. These files are located at C:\WINPOINT\WebConnectSDK\SamplePointFiles.



To use the sample files in Point, copy all of the files to the BORROWER subdirectory in a Point data folder. To use the default Primary Data Folder created during Point installation, copy all of the files to C:\PNTDATA\BORROWER.



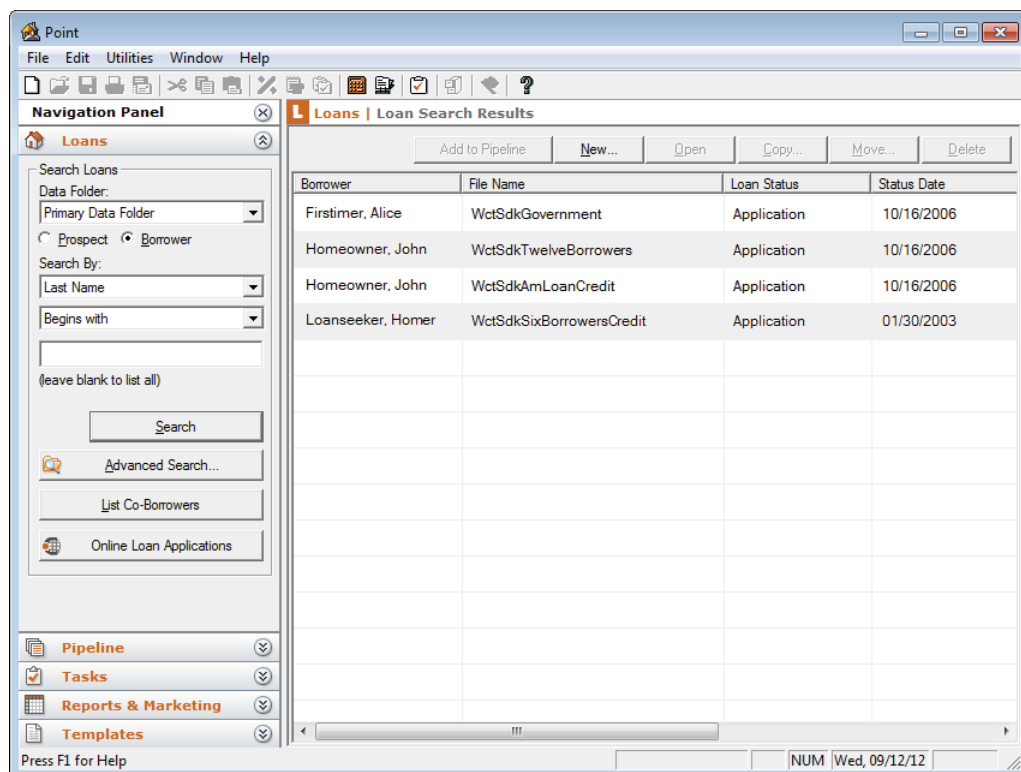
Important

Point uses and maintains an index to provide instant access to potentially thousands of loan files in a data folder. When you copy files directly into a Point data folder, the index is not automatically updated. Therefore, the files are not accessible immediately from Point. To access the files, you must re-index, or rebuild, the data folder.

To rebuild your lists:

- 1 From the **Loans** tab in Point, select **File > Rebuild List**.
The **Rebuild Index** dialog box is displayed.
- 2 Select the **Primary Data Folder** from the **Data Folder** dropdown list.
- 3 Select the **Borrower** check box to indicate the list that you want to rebuild, and click **Start**.
- 4 Click **OK** in the **Rebuild Index** dialog box.
- 5 Click **Close** in the **Rebuild Index** dialog box to return to the list of loans.
- 6 Click search to view the list of loans.

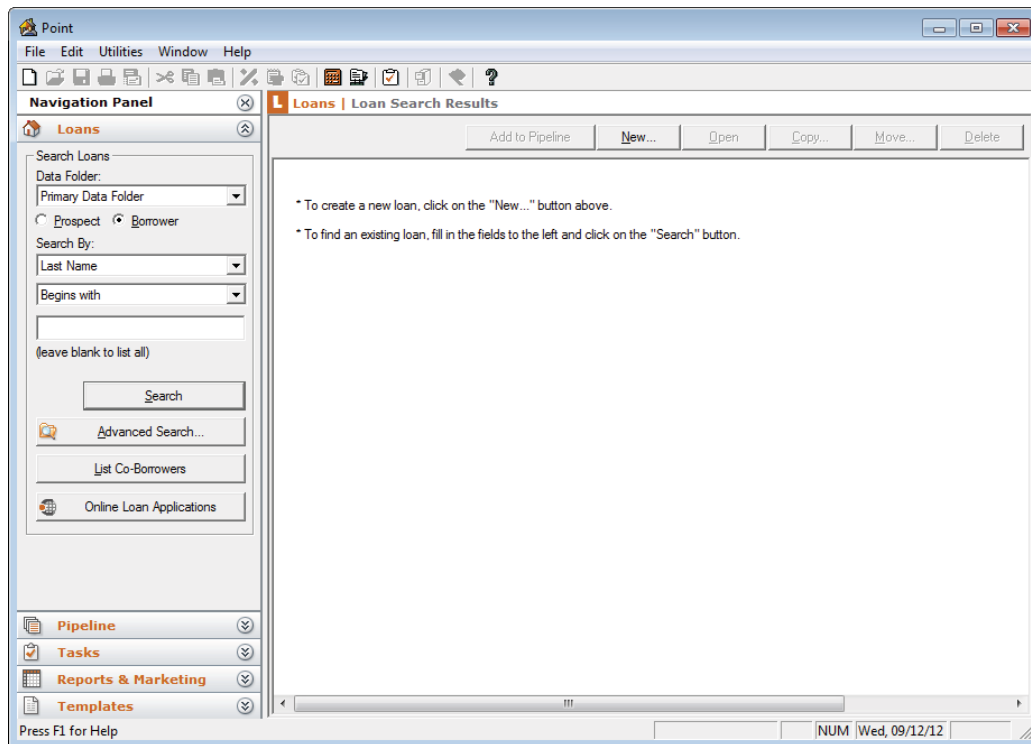
The sample loans are now included in the loan list. Use these examples to view loan data in Point and interact with your WebConnect website, for example, transfer loan data from Point, work with the file on your website, the transfer the data back in to Point.



Launching the interface

After the Calyx WebConnect SDK is successfully installed, complete the following steps to launch your site where the *WebConnect* methods need to be implemented to exchange Point loan data.

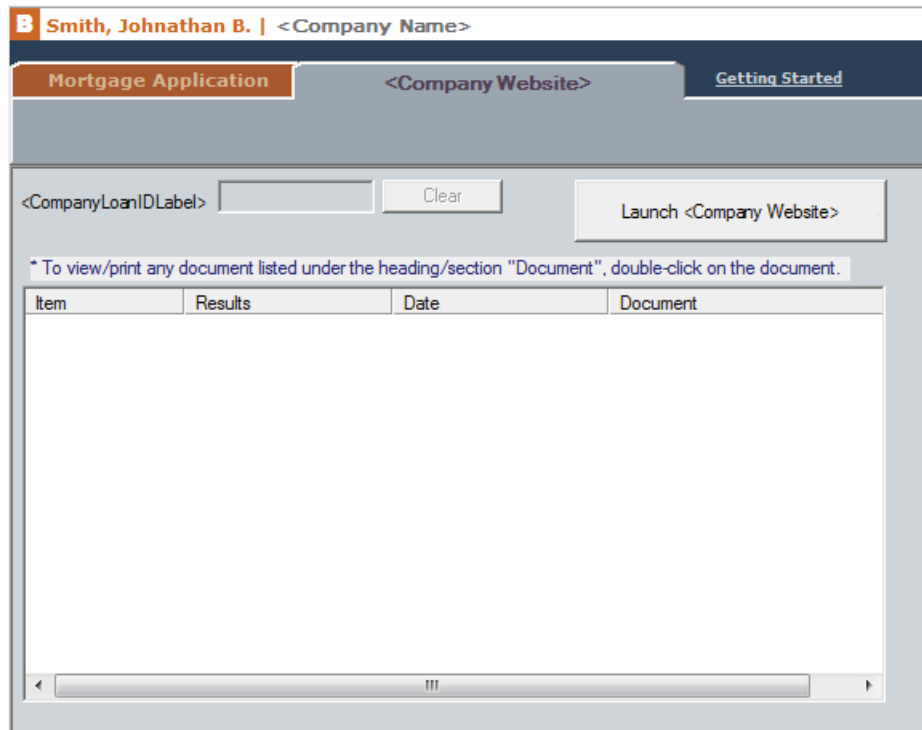
1 Start Point.



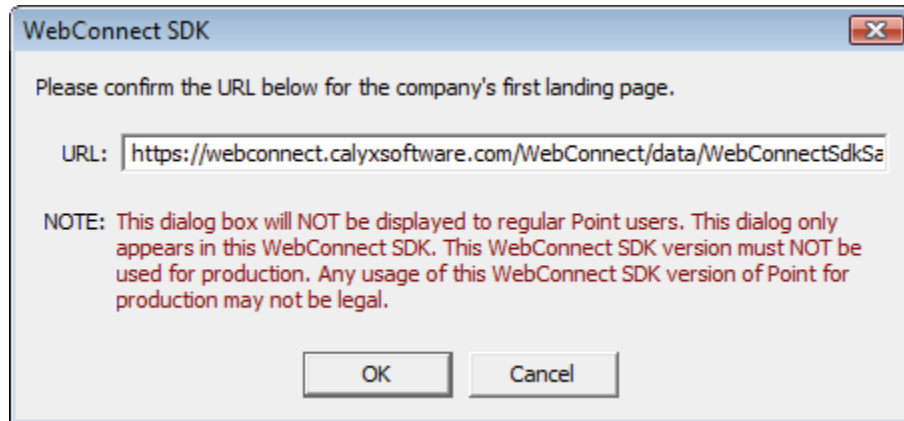
2 Click **Search**.

3 Open a sample loan file from the search result by double-clicking on the loan.

- 4 To use the SDK as a lender:
 - a From an open loan file, select **Lenders** > **<WebConnect SDK>** > **<Company Site>**.

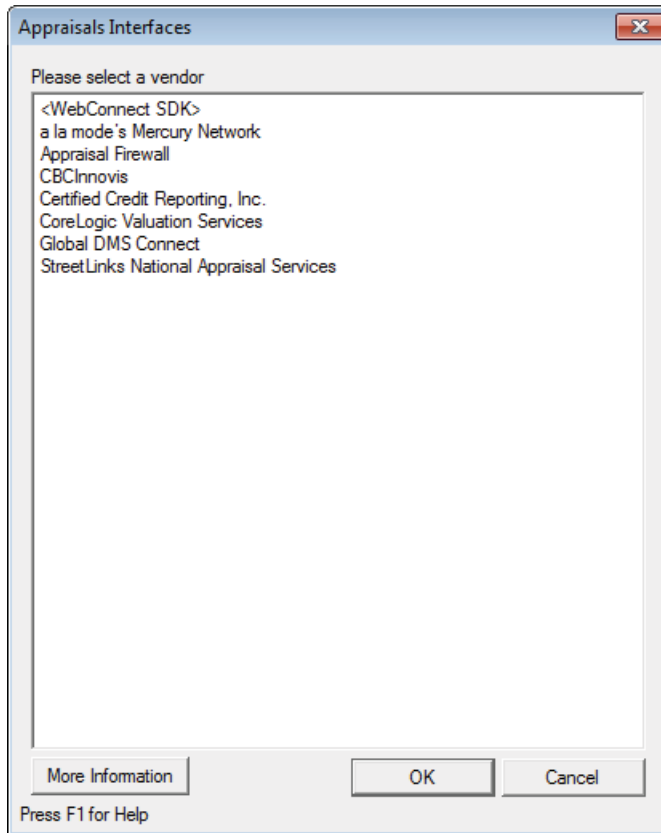


- b Click the **Launch <Company Website>** button to access the URL confirmation dialog box.



- 5 To use the SDK as a service provider:
 - a From an open loan file, select **Interfaces** > **<Category>**.

The dialog box with the providers for the selected interface is displayed.



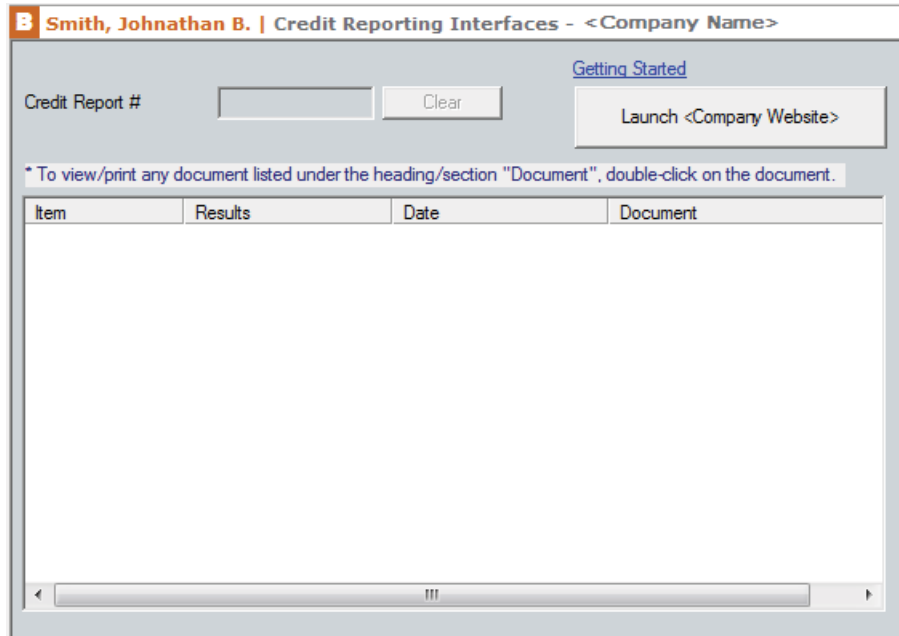
Important

If you plan to list your company under multiple categories, the following information applies:

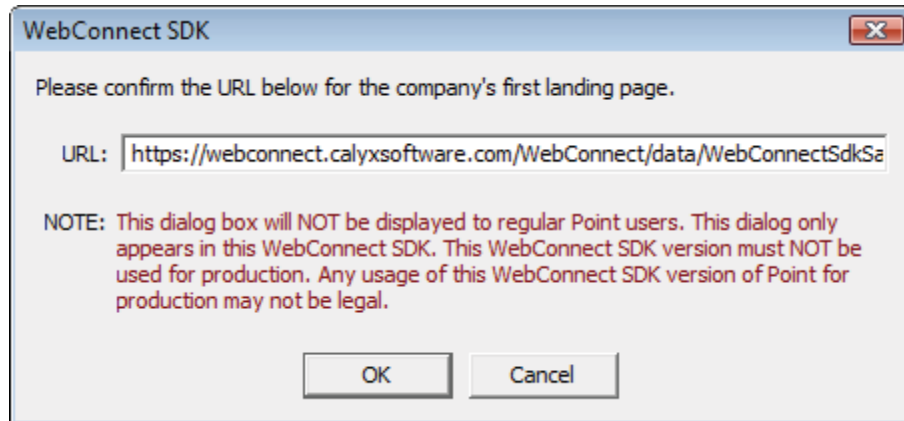
- *You must use a unique company name for each category.*
- *You must specify the categories and URLs on the Interface Submission Form.*
- *Your agreement must allow for multiple listings in Point as multiple listings incur additional costs.*

- b** Select **<WebConnect SDK>** from the list.

Your profile page is displayed.



- c Click the **Launch <Company Website>** button to access the URL confirmation dialog box.



This dialog box does not exist in the Point production environment and is not visible to the Point user. *Calyx WebConnect SDK* opens this dialog box to confirm the URL you want the *WebConnect* browser to launch. The most recent URL entered in this dialog box is remembered.

Calyx provides a test page for use with the WebConnect SDK. You can access this site from the following link:

<https://webconnect.calyxsoftware.com/WebConnect/data/WebConnectSdkSample.html>

- 6 Enter the URL of the web page that you want to launch when the Point user clicks the **Launch** button on your **<Company Website>** page and click **OK** or click **OK** to accept the existing URL.

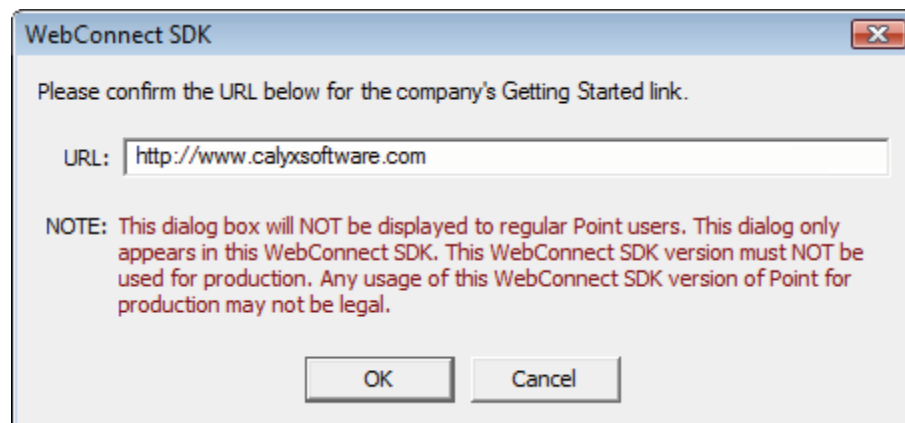
You can use this dialog box to work in different environments, for example, development, integration, and QA at the implementation stage.

You can also customize the *Getting Started* link to point to your development *Getting Started* page rather than the default Calyx Software page. The *Getting Started* link is used in the SDK version only to aid with your development. The dialog box does not exist in the production environment and the link goes directly to the *CompanyGettingStartedLink* that you specified in your profile.

7 Access the *Getting Started* link dialog box.

- If you are a lender, access the *Getting Started* link dialog box by selecting **Lenders > <WebConnect SDK> > Getting Started**.
- If you are a service provider, select **Interfaces > Category**, select the *<WebConnect SDK>* option from the list, and click the **More Information** button.

The *Getting Started* link on the **<Company Website>** page immediately opens an Internet Explorer browser window to the URL that was specified in your company profile for the *Getting Started* link. The Point loan data is not accessible from this window.



Your running website can interact with Point and the current loan file by having the client-side script call methods referenced by **window.external.<methodname>**.

The WebConnect methods are available only when your site is launched through the embedded web browser. The methods are NOT available if the sites are accessed directly from Internet Explorer, so your website scripts should properly handle the error.

The general format of the method is **[out] Integer window.external.<method name>([parameter])**.

There is always a return value for every method to indicate success or error. If success, it returns 0, otherwise it returns an error code. The error message can be retrieved by the function *GetCalyxErrorMessage* (Error Code, Error Message).

All the functions that retrieve data (functions starting with Get) will return a result in string type if the functions were executed successfully and the result can be retrieved by the *GetResult()* function.

For example:

```
iReturn = window.external.GetCalyxLoanData( 1); // to get loan data
if( iReturn == 0)
{
    result = window.external.GetResult(); // get result of the function previously called
}
else
{
    error = windows.external.GetCalyxErrorMessage( i); // get error message
}
```

In this topic

- [Method names](#)
- [Samples](#)
- [Versions](#)

Method names

When calling methods, keep in mind which methods are billable and which ones are not. Most methods are except those that return fields give to your initial landing page.

Method	Billable
GetCalyxLoanData()	Yes
SetCalyxLoanData()	Yes
SetCompanyStatusDocs()	Yes
GetCompanyLoanID()	No
SetCompanyLoanID()	Yes
GetCalyxLoanGUID()	No
GetCalyxApplicationName()	No

Method	Billable
GetCalyxApplicationVersion()	No
GetCalyxApplicationBuild()	No
GetCalyxApplicationUpdateVersions()	No

Calyx counts your billable transactions by the number of Point Loan GUIDs (unique physical Point files) on which you call billable methods. Once you call any billable method on a Point file, that Point Loan GUID will be considered a billable transaction, so you can call other billable methods on that Point file without incurring additional transaction fees (if done within the time-frame specified in the contract).

Note

Unsuccessful method calls are not billable.

To easily reconcile transactions easily with Calyx, the following actions are recommended:

- Whenever you call a billable method on a Point file, make sure you also call *SetCompanyLoanID()* if that Point file doesn't already have a Loan ID stored in it. In doing so, Calyx will be able to echo back to you your own Loan ID in the monthly billable transactions report we send you.
- Whenever you call a billable method on a Point file, you might want to log the Point Loan GUID involved. In doing so, you can easily reconcile the monthly billable transactions report we send you, as we count billable transactions by the Point Loan GUIDs on which you call billable methods.

GetResult()

Return Value

GetResult() returns the result of the previously called function if its return value was zero. The value will be returned in string type.

Comments

- Call this function right after the function for which the caller wants to get the result and before any other functions get called.
- Call this function only when the previous function has a return value of zero.

GetCalyxLoanData(format)**Parameters**

Name	In/Out	Type	Description
format	Input	Integer	Receive loan data in the specified format: <ul style="list-style-type: none"> • 2: Fannie Mae DU 3.2 • 3: Fannie Mae DU 3.0 • 6: Calyx Closing 2.4 • 7: Calyx Closing 2.6** ** (Available in Point 7.3) • 8: Calyx Closing 2.6 with TRID extensions

Return value

Code	Message	Description
0	[Empty String]	The data was retrieved successfully.
1	Invalid data format type	The indicated format type is not valid or no longer supported.
2	Failed to retrieve loan data	Internal error.

Comments

- This function is to capture the open Point file as a single string in the specified format.
- You are required to implement this function for at least one of your pages in order to make sure that the transactions really occur via the WebConnect interfaces.
- You are required to implement this function meaningfully on your website, to ensure that your WebConnect interface is functional to the end user.
- End of life (EOL) data formats described in the versions section of this document are still available from this function but should not be used for new implementations and should be phased out of existing implementations. The end of life data formats might be removed in the future.

SetCalyxLoanData(loandata)

Parameters

Name	In/Out	Type	Description
loandata	Input	String	<p>XML string with data to be updated in the currently open Point file. The data format of loandata is automatically detected from loandata.</p> <ul style="list-style-type: none"> CALYX CLOSING 2.6 data format is identified by: <ul style="list-style-type: none"> Root element: //LOAN/ //LOAN/_APPLICATION/_DATA_INFORMATION /DATA_VERSION[@_Name="CalyxDataFormat"]/@_Number="CalyxClosing" //LOAN/@CalyxVersionIdentifier="2.6" (Additional data formats or versions of existing data formats might be added in the future.)

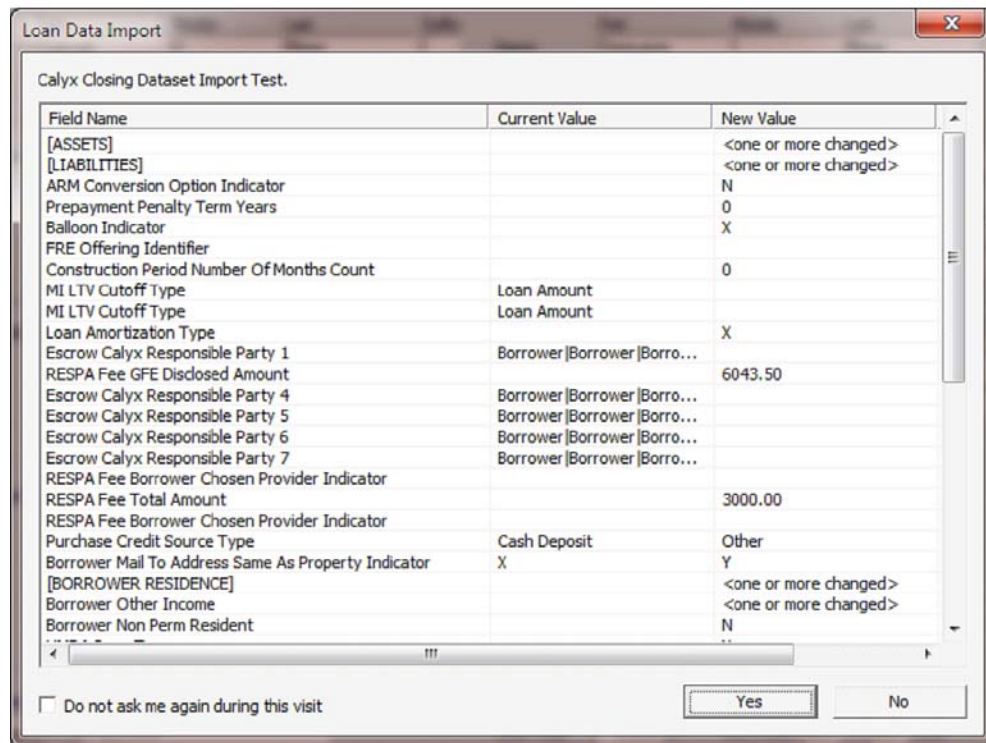
Return value

Code	Message	Description
0	[Empty String]	The data was updated successfully.
11	Invalid data format	The data format is incorrect or cannot be read.
12	Primary SSN does not match	When the primary SSN of Point file is not blank and the SSN does not exist in the data.
13	Updating the loan data was denied by the user	The user doesn't accept the update
14	Failed to update the loan data	Internal error
91	The currently open Point file is read-only.	By Point security setting, the current Point file is open as read-only mode. You cannot update any data to the Point file.

Comments

- It is possible to do the update only when the primary Social Security Number (SSN) in the Point file is blank or the SSN exists in data *and* the user accepts

the changes. The user is prompted to accept the update with the following dialog box whenever this method is called:



- For single-occurrence fields (for example, *Loan Amount*), the values in the string are *overlaid* into the Point file. Accordingly, fields that are not included in the string are left untouched in the Point file.
- For multiple-occurrence fields (for example, *Liabilities*), the items in Point are first removed, then *replaced* by the items in the string. The following sections, among others, are considered as multiple-occurrence. See the element headers in the mapping spreadsheet for more detail.
 - ASSET
 - LIABILITY
 - REO_PROPERTY
 - EMPLOYER
 - BORROWER/_RESIDENCE
 - HMDA_RACE/@_Type
- Point will automatically re-calculate all of the necessary values following updated data (if needed).
- The description for the loandata parameter for the CALYX CLOSING 2.6 data format from above, repeated here, is a concise statement of how the CALYX CLOSING 2.6 data format is automatically detected. In simpler terms, for the data format to be identified as CALYX CLOSING 2.6, the root element in the XML must be //LOAN/, the DATA_VERSION element for _Name="CalyxDataFormat" must have _Number="CalyxClosing" and the version of the format, CalyxVersionIdentifier, must be "2.6". CALYX CLOSING 2.6 data format is identified by:

- Root element: //LOAN/

- //LOAN/_APPLICATION/_DATA_INFORMATION
/DATA_VERSION[@_Name="CalyxDataFormat"]/
@_Number="CalyxClosing"
- //LOAN/@CalyxVersionIdentifier="2.6"

SetCompanyStatusDocs(docdata)

Parameters

Name	In/Out	Type	Description
docdata	Output	String	XML string of the documents and statuses that you want to update in the currently open Point file.

Return value

Code	Message	Description
0	[Empty String]	The data was updated successfully.
41	XML is in invalid format.	Point can't retrieve the data from the XML
42	Failed to set the documents and statuses	Internal error.
91	The currently open Point file is read-only.	By Point security setting, the current Point file is open as read-only mode. You can not update any data to the Point file.

Comments

- This function accepts a Calyx-defined XML string to update statuses and documents in the currently open Point file. The new values are “overlaid” into the Point file, so items not included in the XML string are left untouched in the Point file.
- Point will use `_ID` in STATUS to determine if new values are overlaid or appended.
- Attribute `_DateTime` values must end with Z.
- `_DateTime="2001-08-03T18:12:51Z"` with indicating the UTC (UTC+0) time zone. Time zone offsets are not allowed after the “Z” since they are ignored. If the Z is missing, the time is set as a local time which is ambiguous when the loan file is interpreted in different time zones. Date and time should always be exchanged in UTC with the client application applying the local time adjustment at display time based on the user’s time zone.
- The document file format will accept PDF, HTML, and TXT.

Note

PDF should be encoded with Base64.

- Sample XML string.

```

<!ELEMENT STATUS_DOCS (STATUS*)>
<!ATTLIST STATUS_DOCS
    CompanyLoanID CDATA #IMPLIED
>
<!ELEMENT STATUS (EMBEDDED_FILE)>
<!ATTLIST STATUS
    _Name CDATA #IMPLIED
    _Results CDATA #IMPLIED
    _DateTime CDATA #IMPLIED
    _ID CDATA #IMPLIED
    _DocAttached (Y | N) #IMPLIED
>
<!ELEMENT EMBEDDED_FILE (DOCUMENT)>
<!ATTLIST EMBEDDED_FILE
    _Type CDATA #IMPLIED
    _EncodingType CDATA #IMPLIED
    _Description CDATA #IMPLIED
>
<!ELEMENT DOCUMENT ANY>

```

```

<?xml version="1.0" encoding="UTF-8"?>
<STATUS_DOCS CompanyLoanID="123456789">
  <STATUS_ID="LOCK1234" _Name="Lock Confirmation" _Results="Lock extended" _DateTime="2001-08-03T18:12:51Z" _DocAttached="Y">
    <EMBEDDED_FILE _Type="PDF" _EncodingType="Base64" _Description="Confirmation Letter">
      <DOCUMENT>base64 file data</DOCUMENT>
    </EMBEDDED_FILE>
  </STATUS>
  <STATUS_ID="TITLE1234" _Name="Title" _Results="Ordered/Not Received" _DateTime="2001-08-03T18:12:51Z" _DocAttached="N"/>
  <STATUS_ID="MI1234" _Name="MI" _Results="Received" _DateTime="2001-08-03T18:12:51Z" _DocAttached="Y">
    <EMBEDDED_FILE _Type="TEXT" _EncodingType="CDATA" _Description="Title Letter">
      <DOCUMENT><![CDATA[... ]]></DOCUMENT>
    </EMBEDDED_FILE>
  </STATUS>
</STATUS_DOCS>

```

WebConnect Statuses and Documents

The argument, “docdata” in `SetCompanyStatusDocs(docdata)` represents an XML string that includes all the status and document information. This topic provides an explanation of the attributes that are included in “docdata” that is sent to Point with `SetCompanyStatusDocs`, based on the sample XML above.

<STATUS_DOCS CompanyLoanID="123456789">

Include the Loan ID with the xml sent to Point to insure that the statuses and documents are not sent to the wrong Point data file. The Calyx WebConnect SDK sample test site requires that the Loan ID in the status xml match the Loan ID already in Point before statuses or documents can be set in Point.

<STATUS_ID="LOCK1234"

The status ID is determined by your system, not by Calyx, and can be set to any string. If on a second visit to the website, a status or document has the same status ID as on the first visit, then that status or document will be replaced by the new information. If on a second visit, the website creates a new status ID for the new status/document information, then it will leave the previous statuses/docs in Point and add new statuses/docs to the list. This allows your website to either update an existing document by replacing it or simply add the updated document as an additional updated version. It is usually recommended that prior statuses not be overwritten so that the list of statuses will preserve a record of what happened with the loan and preserves when the user's visits occurred.

_Name and _Results

The Name attribute is for a name of the status or document and the Results attribute is the actual status or purpose of the status or document. A description is a separate attribute for each document. These attributes are defined by the interface company and they fill in the corresponding columns on the Profile screen in Point.

DateTime="2001-08-03T18:12:51Z"

The intent of this date and time is to display the website server's time when a status or document was updated. Point assumes the time format is in Coordinated Universal Time (UTC) as Zero Meridian time zone. So, the local servers time should be converted to the Zero Meridian time and the Z added to indicate this when the status or document is sent to Point. Then when Point receives the time Point converts to the local user's time zone. In this way the time will reflect correct times for when the statuses or documents changed on the website. If the Z is missing on the end of the time string, Point will display it as is, which will usually be incorrect for the user's time zone. Refer to question [Step 14 in FAQs](#), on page 53, for more clarification on the date/time format.

GetCompanyLoanID()

Parameters

No.

Return value

Code	Message	Description
0	[Empty String]	The data was retrieved successfully.
51	Failed to get the company loan id	Internal error.

Comments

- This function returns your Loan ID that was set in the open Point file by the function, *SetCompanyLoanID*.
- This is passed to you at the time of initial URL launch.

SetCompanyLoanID(companyloanid)**Parameters**

Name	In/Out	Type	Description
companyloanid	Input	String	The Loan ID that you want to set for this loan.

Return value

Code	Message	Description
0	[Empty String]	The data was set successfully.
61	Failed to set the company loan id	Internal error.
91	The currently open Point file is read-only.	By Point security setting, the current Point file is open as read-only mode. You can not update any data to the Point file.

Comments

- This function accepts an alphanumeric string to set the Loan ID in the currently open Point file.
- It is important to set this as soon as a new number is assigned, so subsequent launches of the website are able to reference it.
- The Loan ID will be passed when the website is launched. It also can be retrieved anytime by calling the function *GetCompanyLoanID*.
- It is recommended that you implement this function on your website.

GetCalyxLoanGUID()**Parameters**

No.

Return value

Code	Message	Description
0	[Empty String]	The data was retrieved successfully.
71	Failed to get the loan GUID	Internal error.

Comments

- This function returns the Calyx Loan GUID of the currently open Point file.
- The Calyx Loan GUID is passed to you at the time of initial URL launch.
- Calyx will be using the Calyx Loan GUID to count the number of loans transacted for the billing; the GUID will be unique for each physical Point file.

GetCalyxErrorMessage(code)

Parameters

Name	In/Out	Type	Description
Code	Input	Integer	The error code that was returned from the methods called.

Return value

This function returns a string of error message(s) that correspond to the input code with string type.

Comments

The error messages returned by this might not be suitable to display on your website since it contains minimal information. In this case, you will need to handle the error case(s) properly by the error code.

GetCalyxApplicationName()

Parameters

No.

Return value

Code	Message	Description
0	[Empty String]	The data was retrieved successfully.
81	Failed to get the application name.	Internal error

Results (via GetResults())

Code	Message	Description
	String	Application name. The value <i>Point</i> is currently the only application using WebConnect. Other applications might be added in the future.

Comments

- This function returns the name of the Calyx application that provides the WebConnect browser.
- Calyx might extend the functions available from the WebConnect interface within a Calyx application in the future. The application name is one of the factors that determines what functionality is available.

GetCalyxApplicationVersion()

Parameters

No.

Return value

Code	Message	Description
0	[Empty String]	The data was retrieved successfully.
81	Failed to get the application version.	Internal error.

Results (via GetResults())

Code	Message	Description
	String	Application version, for example, "7.3", "7.2", "7.1", etc.

Comments

- This function returns the version of the Calyx application that provides the WebConnect browser.
- Calyx might extend the functions available from the WebConnect interface in the future. The application version is one of the factors that determines what functionality is available.
- This function is most useful for displaying the version to a user. The easiest way to test for a minimum version is to use `GetCalyxApplicationBuild()`.

Important

The version used by the Point Application is an alphanumeric string, not a number. Make sure your website is looking for a string for this method call.

GetCalyxApplicationBuild()**Parameters**

No.

Return value

Code	Message	Description
0	[Empty String]	The data was retrieved successfully.
81	Failed to get the application version.	Internal error

Results (via GetResults())

Code	Message	Description
	String	Application build, for example, 785. Point uses numeric build numbers that increase incrementally with each build.

Comments

- This function returns the build of the Calyx Application providing the WebConnect browser.

- Calyx might extend the functions available from the WebConnect interface in the future. The application build is one of the factors in determining what functionality is available.
- This function is the easiest way to test for a minimum version. Refer to [Versions](#), on page 44, for code samples.

GetCalyxApplicationUpdateVersions()

Parameters

No.

Return value

Code	Message	Description
0	[Empty String]	The data was retrieved successfully.
81	Failed to get the application version.	Internal error

Results (via GetResults())

Code	Message	Description
	String	Application update versions, for example, <i>I-Update 34</i> ; Possible future component update versions. Semi-colon space separated list of component update versions. Currently the only component update version is I-Update.

Comments

- This function returns the semi-colon space, that is, “; “, separated list of component update versions of the Calyx application that provide the WebConnect browser.
- You can omit the semi-colon space, “; “, when there is only one component update version.
- I-Update is currently the only component in Point with an update version. Calyx might add update versions for new components in the future.

Samples

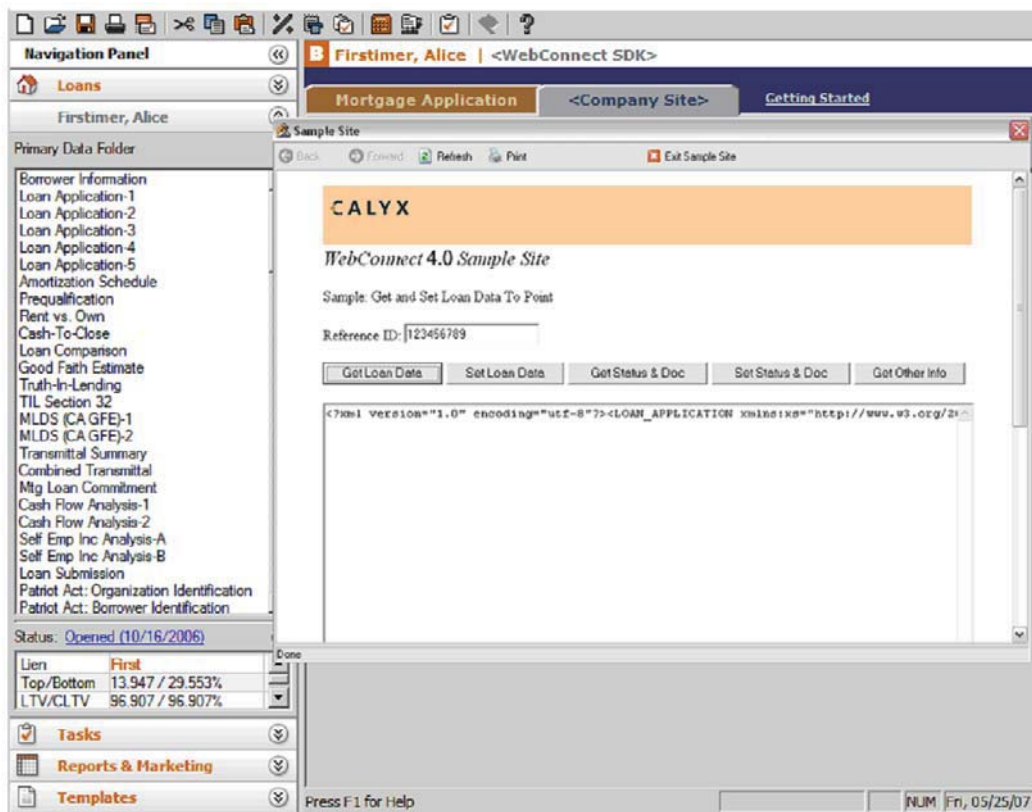
The following sample shows how to implement the server-side code with an example. The sample HTML site has three buttons:

- **Get Loan Data** retrieves the loan data from the currently open Point file and sets the Loan ID into the Point file.
- **Set Loan Data** updates the loan data that can be modified on screen into the Point file.

- **Get Other Info** captures the current Point file GUID.

Note

The simplified XML format that the sample uses handles only a small portion of the entire MISMO.



The three buttons are defined in HTML.

```
<input type="button" name="getdata" value="Get Loan Data" onclick="getdata_onclick()">
<input type="button" name="setdata" value="Set Loan Data" onclick="setdata_onclick()">
<input type="button" name="getinfo" value="Get Other Info" onclick="getinfo_onclick()">
```


Get Loan Data

The **Get Loan Data** button executes the following function to display the retrieved loan data on the text box.

```
function getdata_onclick()
{
  var companyid = "123456789";
  try
  {
    i = window.external.GetCalyxLoanData(7); // Get Point data in Calyx Closing 2.6 format.
    if( i == 0)
    {
      point_file.value = window.external.GetResult();
      window.external.SetCompanyLoanID( companyid);
    }
    else
    {
      alert( window.external.GetCalyxErrorMessage( i));
    }
  }
  catch( e)
  {
    alert( "Calyx WebConnect methods are NOT available.");
  }
}
```

The code should catch the exception to check the availability of WebConnect method. The WebConnect method is only defined when the sites are browsed in the WebConnect browser.

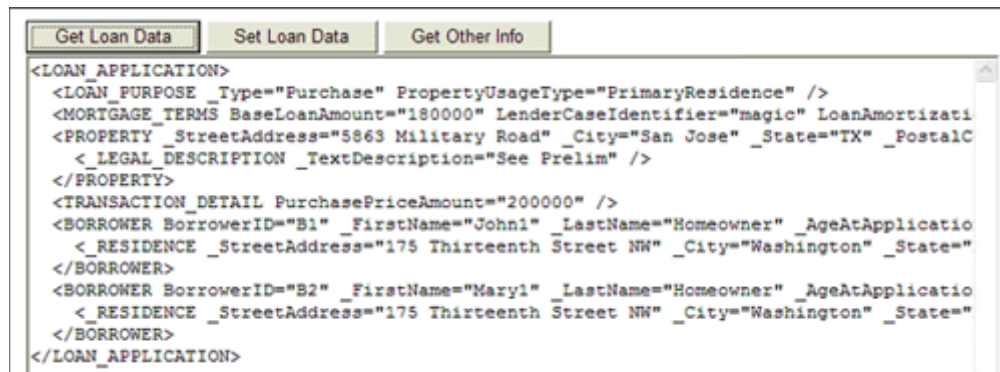
```
function getdata_onclick()
{
  try
  {
    ...
  }
  catch( e)
  {
    alert( "Calyx WebConnect methods are NOT available.");
  }
}
```

If *GetCalyxLoanData* is successfully executed returning 0, *GetResult* will return the result string.

```

i = window.external.GetCalyxLoanData(7); // Get Point data in Calyx Closing 2.6 format.
if( i == 0)
{
    point_file.value = window.external.GetResult();
    ...
}

```

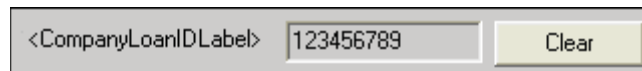


After you receive Point loan data, you might need to set a specific Loan ID to the Point file to establish the connection between the loan data stored on your system and the loan data in the Point file.

```

window.external.SetCompanyLoanID( companyid);

```



If *GetCalyxLoanData* returns an error code, you will need to process the error either by the code or the error message, which can be retrieved from the function *GetCalyxErrorMessage*.

```

i = window.external.GetCalyxLoanData( 1);
if( i == 0)
{
    ...
}
else
{
    alert( window.external.GetCalyxErrorMessage( i));
}

```

Set Loan Data

The **Set Loan Data** button will execute the following function to update the modified loan data into Point.

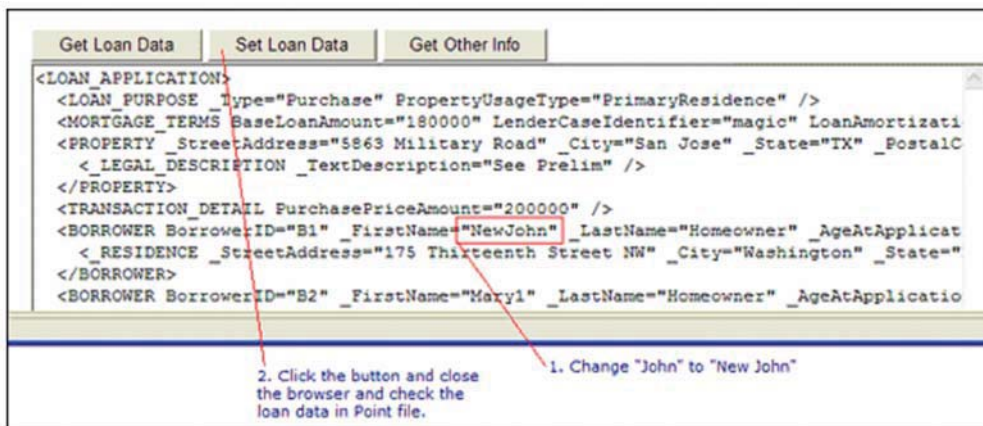
```
function setdata_onclick()
{
  var companyid = "123456789";
  var v = "";
  try
  {
    if( window.external.GetCompanyLoanID() == 0)
    {
      v = window.external.GetResult();
    }
    if( v == companyid || v == "" )
    {
      i = window.external.SetCalyxLoanData( point_file.value);
      if( i == 0)
        alert( "Point file has been successfully updated.");
      else
        alert( window.external.GetCalyxErrorMessage( i));
    }
    else
    {
      alert( "The Company ID in Point file is different from the id of the loan you are trying to update.");
    }
  }
  catch( e)
  {
    alert( "Calyx WebConnect methods are NOT available.");
  }
}
```

Before updating the loan data, you should try to capture the Loan ID from the Point file; if it is not blank and is not the same as the one in your system, the update should not proceed.

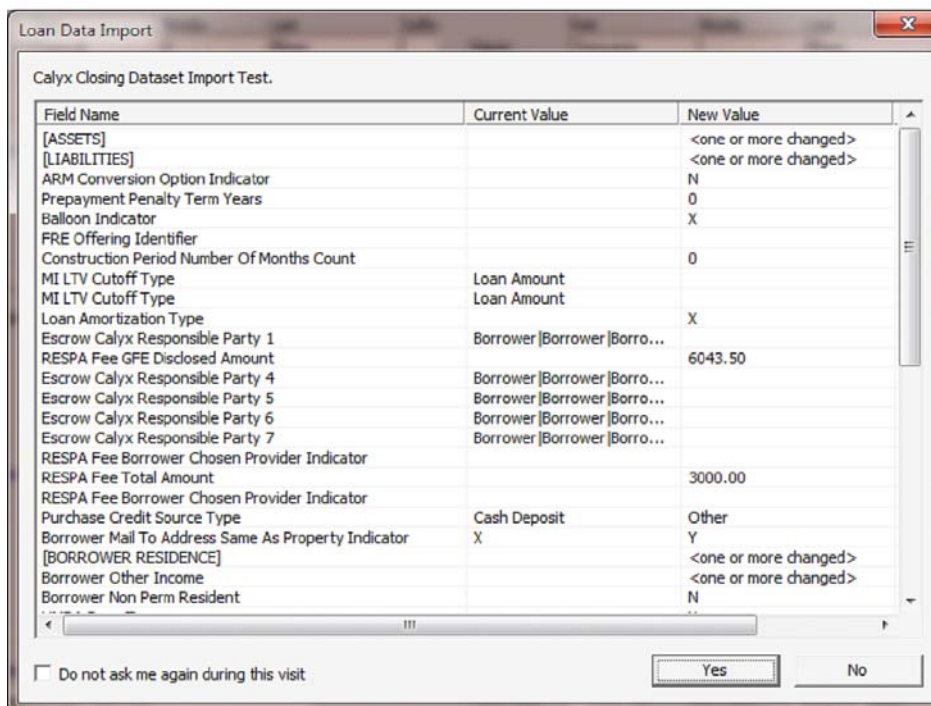
```
var v = " ";
if( window.external.GetCompanyLoanID() == 0)
{
  v = window.external.GetResult();
}

if( v == companyid || v == "" )
{
  ...
}
else
{
  alert( "The Company ID in Point file is different from the id of the loan you are trying to update.");
}
```

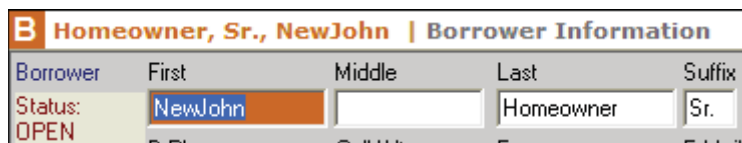
To see how *SetCalyxLoanData* works in the sample HTML, receive the loan data by clicking *Get Loan Data*. Then you can modify values in the XML and click **Set Loan Data**.



Click **Yes** in response to the loan confirmation.



The modified data in the XML is then updated to the Point file.



Get Other Info

The **Get Other Info** button code:

```
function getinfo_onclick()
{
  var guid = "";
  try
  {
    if( window.external.GetCalyxLoanGUID() == 0)
    {
      guid = window.external.GetResult();
    }
    alert( "GUID of the currently open Point file: " + guid);
  }
  catch( e)
  {
    alert( "Point WebConnect methods are NOT available.");
  }
}
```

GetCalyxApplicationBuild()

GetCalyxApplicationBuild() is an easy way to check for a minimum version to determine what functionality is supported.

```
function ShowGetCalyxApplicationBuild() {
  var errorcode;
  try {
    errorcode = window.external.GetCalyxApplicationBuild();
    if ( errorcode == 0 ) {
      appbuild = window.external.GetResult();
      alert( "Calyx application build: " + appbuild);
      // check for minimum functionality here by comparing appbuild with the minimum build number
      that supports the desired functionality, e.g. if (appbuild > 1095) {...Do some neat functionality...}
    }
  }
  catch( e )
  {
    alert( "Point WebConnect methods are NOT available.");
  }
}
```

Versions

The WebConnect interface works with multiple Point versions. You can include your interface in all prior Point versions that are supported in the I-Update that has that type of interface.

To exclude your interface from a particular Point release, verify that the *GetCalyxApplicationName()* setting is *Point* and *GetCalyxApplicationBuild()* is greater (or less) than the desired build number. To deny the interface for some Point versions, issue an appropriate message to the user on your web page. For example:

Solar Bank of Odessa works best with Point8.0 and later. Upgrade to Point 8.0 or later for the best experience and quickly lead your company to greater profits!

GetCalyxApplicationName()	GetCalyxApplicationBuild() Build	GetCalyxApplicationVersion() Version
Point	1095	7.1
Point	1146	7.2
Point	>1228	7.3
Point	>1293	7.4
Point	>1376	7.5
Point	>1416	7.6
Point	>1467	8.0
Point	>1472	8.0 SP1
Point	>1481	8.0 SP2
Point	>1493	8.1
Point	>1507	9.0
Point	>1514	9.0 SP1

Point Version	Data Format Support					
	DU 3.0/3.2	MA 2.3.1	Calyx Data	Closing 2.4 (export only)	Calyx Closing 2.4	Calyx Closing 2.6
7.1	Y	Y	Y	Y	N	N
7.2	Y	EOL	EOL	EOL	Y	N
7.3	Y	EOL	EOL	EOL	EOL	Y
7.4	Y	EOL	EOL	EOL	EOL	Y
7.5	Y	EOL	EOL	EOL	EOL	Y
7.6	Y	EOL	EOL	EOL	EOL	Y
8.0	Y	EOL	EOL	EOL	EOL	Y
8.0 SP1	Y	EOL	EOL	EOL	EOL	Y
8.0 SP2	Y	EOL	EOL	EOL	EOL	Y
8.1	Y	EOL	EOL	EOL	EOL	Y
9.0	Y	EOL	EOL	EOL	EOL	Y
9.0 SP1	Y	EOL	EOL	EOL	EOL	Y

Important

End of Life (EOL) data formats do not have bug fixes or enhancements. Therefore, you should not use EOL data formats for new implementations and should phase them out at your earliest convenience. Refer to previous versions of the WebConnect SDK if you must use an earlier version of an EOL data format.

Special behaviors

Attention

Supported fields are subject to change in future versions of Point.

To review the fields that Point supports, refer to the data format mapping spreadsheet that is provided with this guide.

- The mapping spreadsheet contains LDD names in parentheses, for example, (Joint Asset Borrower ID). These names express associations between the data, such as, the liabilities or assets associated with a borrower, matching of liabilities, etc.
These associations are expressed by using XML Identifiers (xs:ID) and XML Identifier Reference (xs:IDREF, xs:IDREFS) that are not included in the LDD but are defined in the DTD.
- Point does not require FirstName or LastName; this deviates from the DTD requirement.
- JointAssetBorrowerID pairs borrowers and co-borrowers that belong together in either borrower or co-borrower files.
- When exporting from Point:
 - Borrowers without Social Security Numbers are exported; which deviates from the DTD requirement.
 - All data available in Point is exported.
 - XML exports from Point are based on XML schema. XML Schema provides many benefits that make DTD's obsolete. For example, a DTD is not a valid XML document. XML and XML schema can be viewed in many applications such as web browsers, XML editors, and other prevalent tools. However, relatively few tools allow the viewing of DTDs. Using XML schema generates these namespace declarations within the XML:

```
<LOAN_APPLICATION xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
CalyxVersionIdentifier="2.6">
```

This deviates from the DTD requirement. If you validate against the DTD, edit your DTD to accept these name space declarations.
- When importing to Point:
 - If imported borrower data matches an existing borrower in Point (based on their Social Security Number), the imported data overwrites the matching data. Data fields that are not in the imported borrower data are unchanged and the sequence of borrowers in Point is unchanged. However, if RESIDENCE or EMPLOYER information is included in the imported borrower data, the existing data of these multiple-occurrence items is replaced by the imported data.
 - If imported borrower data does not match an existing borrower in Point (based on their Social Security Number), the imported borrower populates an empty

borrower file in Point in the sequence that they are received as borrower or co-borrower based on PrintPositionType. New co-borrower files are created as needed and borrower is considered empty if Social Security Number field is missing. If PrintPositionType is missing, the borrower will not be imported.

- Borrowers without Social Security Numbers are not imported.
- Borrowers in Point with Social Security Numbers are never deleted.
- BorrowerID must be populated to associate assets, liabilities, and REOs with the borrower.

Your WebConnect interface is easily added by distributing your profile files in Point. The profile distribution is done by Calyx's I-Update process.

I-Update is an automatic process that was designed for adding and deleting interface service providers and lenders independently from Point releases. You can also make profile updates during I-Updates, however, changes to the underlying WebConnect platform code is not possible.

Calyx maintains the I-Update servers and whenever Point is launched, it checks for updates. When a new update is available, Point automatically downloads the update. When Point is closed, the update is installed. Point users can see the updated lists in the menu the next time they launch Point.

Currently, the I-Update release occurs every month. Based on recent statistics, after Calyx has released a new update, it takes roughly two weeks for most active Point users to receive the update. The I-Update release schedule is located at <http://calyxsupport.com/interface>.

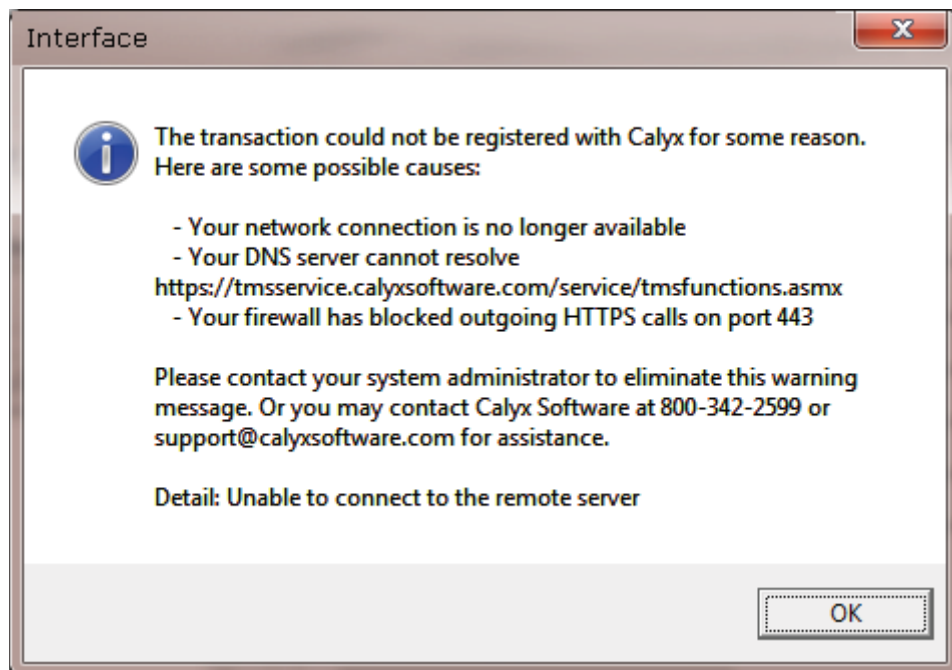
Refer to the WebConnect Project Management Guide for further details about I-Update timelines.

Transaction registration 9

To ensure that accurate transaction billing occurs each month, Point notifies the Calyx Transaction Management Server (TMS) when a Point user orders a report. The following fields are reported:

- Point Version (for example, 8.0)
- Point Account ID (for example, 1234567MS)
- Company Account ID (for example, 1234567CC)
- Company Server Name (for example, (www.abcmortgage.com))
- Company Server IP Addresses
- Client IP Addresses
- Point File GUID and Request GUID
- Report ID
- Product Name and Product Type
- Request Action and Response Status

Because TMS is critical to our billing, if the server cannot be reached for any reason, Point will display the following message:



This information can assist you in your development of the DirectConnect interface. Refer to [Product assistance and support](#), on page vii, for further assistance.

1 What are the general formatting rules for data types within Calyx MISMO?

Date

The MISMO preferred format is YYYY-MM-DD for a date. A month is YYYY-MM and a year is YYYY.

Examples:

- May 4th, 2006: 2006-05-04
- May 2006: 2006-05
- 2006: 2006
- December 25th, 2007: 2007-12-25

Time

Time is in 24 hour format, i.e., *HH:MM:SS*. All fields and digits are required, including leading zeros (0). There is no time zone. Range: 00:00:00 to 23:59:59
Format is XML Schema time datatype.

Examples:

- 12:28 AM: 00:28:00
- 4:49 AM: 04:49:00
- 2:32:01 PM: 14:32:01
- 8:00 PM:: 20:00:00
- 11:59:59 PM: 23:59:59

Number (money, rates, etc.)

There are no restrictions on the number of decimal places.

- 5.000 can be sent as 5, 5.0, or 5.0000

Zip Code

- 5 or 9 digit with or without a hyphen (-)
- 95120
- 95120-3364
- 951203364

2 Can Point accept an entirely empty node? For example, <CONSTRUCTION_REFINANCE_DATA/>. It would be completely empty; no elements or attributes.

Empty elements without child elements or attributes are ignored. It's best MISMO practice to not send empty elements.

3 Can we send you elements that are included in the MISMO DTD, but not listed in the MISMO LDD? For example, /LOAN_APPLICATION/BORROWER/BorrowerID.

We send you and you have to send us BorrowerID when you want to do things like match liabilities to borrowers. MISMO does not include the ID fields in their Logical Data Dictionaries (LDD).

4 How will Calyx handle a code that is sent over that is not available in its options list? For example, for Contact Point, MISMO provides the contact type of *Other*; however,

the Calyx documentation does not indicate that an *Other* contact type is available. If we send *Other* as a contact point type to Calyx, what will happen?

The entire CONTACT_POINT element containing the unsupported value is ignored.

- 5 How does Calyx handle more than the expected number of occurrence being passed to it? For example, if Calyx only expects 0..12 occurrence, and we send 13 values, what will Calyx do? Error off? Only process the first 12? If only processing the first 12, what order should the values be sent in? Or, can Calyx process all 13, but only display the first 12?

The first occurrences are accepted, up to the supported number of occurrences. Subsequent occurrences are ignored. In general, sending more elements than Calyx supports should be avoided since most elements contribute to some calculation. When your system uses more elements in a calculation than Calyx supports then the calculated values in the systems will differ.

- 6 Calyx's documentation indicates that within certain collections only X number of certain types of values should be received. For example, in Liabilities, 0..2 Job Related Expenses should be sent. What happens if 3 are sent to Point? Would all 3 error off? Would all 3 be processed? Would only 2 be processed? If so, which 2?

The first occurrences are accepted, up to the supported number of occurrences. Subsequent occurrences are ignored.

In general, sending more elements than Calyx supports should be avoided since most elements contribute to some calculation. When the company's system uses more elements in a calculation than Calyx supports then the calculated values in the systems will differ.

- 7 Notes found in the mapping spreadsheet indicate that null values should not be sent. For elements, this makes sense. What about for attributes?

MISMO does not support null values. Parameter="" is an empty string which is different from a null value. If the attribute is present and supported, its value will be updated into Point.

- 8 How does Calyx handle null values being passed in? Does it ignore the null value? Or, if there is data already present in the Calyx system, does it delete the data?

MISMO does not support null values. Parameter="" is an empty string which is different from a null value. If the attribute is present and supported, its value will be updated into Point, including the empty string which will overwrite the existing value in Point.

- 9 Are there any rules for number types? When completing the MISMO mortgage application extract for Fannie Mae, there were instances where certain numbers/values had to be sent over with a given format. For example, a given number of decimal places where required.

There are no restrictions on the number of decimal places.

5.000 can be sent as 5, 5.0, 5.0000

- 10 Are we able to test our XML through the Sample Interface application? If our XML is malformed per Calyx standards or errors off, are we able to capture those error messages? If we are not able to test through the Sample Interface application, can we send Calyx an XML file and have them process it for us?

The Sample Interface application is an excellent way to test the XML export and import to Calyx.

You can easily start testing with the Sample Interface application by taking the following actions:

- Enter data in Point
- Launch the Sample Interface site
- Click GetCalyxLoanData to get and review the XML exported by Point
- Modify the XML as desired or cut and paste XML into the Sample Interface site
- Click SetCalyxLoanData to import the modified XML back into Point
- Observe *Loan Data Import* updated fields dialog
- Close the Sample Interface site
- See the updated values in Point.

You can also validate your XML against the schema for that data format provided in the WebConnect SDK using a tool that validates XML like XMLSpy or many others.

11 How do you associate borrowers and co-borrowers when more than one is present?

These determine how borrowers appear on 1003 loan applications (*.brw or *.cb files):

- JointAssetBorrowerID
Borrowers appearing on the same 1003 loan application (*.brw or *.cb file) have the attribute JointAssetBorrowerID referencing (identical value) the BorrowerID of the other borrower on the 1003 (for a joint application).
- PrintPositionType
PrintPositionType determines whether the borrower appears on the left (Borrower) or right (Co-Borrower) of the 1003 loan application.
- 1003 loan application order
Imported borrowers that do not match existing borrowers in the Point file are assigned to 1003 applications in the order of the <BORROWER> elements in the imported XML.

12 What are the string limits for Item, Results, Date, and Document in Point?

- Item – Unlimited in the file, display limited to 259 characters
- Results - Unlimited in the file, display limited to 259 characters
- Date – Limited to valid dates.

Note

When statuses and documents are set to Point, there is no limit on how much data can be sent to be saved with the local Point file. However Point's display only allows you to see a width of 259 characters (done by the user expanding the columns with the mouse). If a long status or document is read by the website after being saved in Point, all the data is available with the Get data function. Only the display in Point is limited.

- Document - Unlimited in the file, display limited to 259 characters

13 If there is not a co-borrower on the Point file, and the user does not select the **Not-Jointly** check box on pg 3 of the Loan Application, will MISMO still include *Jointly*?

Yes. Point will send exactly what is entered in the Point file.

- 14** When setting statuses to Point, are dates converted to the local system time zone?

Point converts times specified in UTC (Zero Meridian) to local time. Any offsets to UTC are ignored.

Example:

2006-09-29T18:41:59Z

A time without a UTC specification is considered local time and displayed without conversion.

Example:

2006-09-29T18:41:59

A good practice is for the web server to specify the time in the UTC Zero Meridian time format so that the user sees it in their local time zone and not the time zone of the web server. For more information about UTC time, see http://en.wikipedia.org/wiki/Coordinated_Universal_Time.

- 15** How can I prevent the same browser session from being used for different loans?

The browser session is associated with the Point process that provides the browser window. Consequently, a user can submit a loan to your site, return to Point and select another loan and then submit that different loan to your site using the same browser session. You can force a new session for each loan submission to your site by using the JavaScript `window.onUnload` event when the user closes the root WebConnect browser to clear the session.

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