

CAPLINK DLL/Web Services Test Application

User Guide

INTRODUCTION:

The following guide briefly explains how to install and configure the CAPLINK DLL/Web Service Test Application (CAPLINKviaCTA). The CAPLINKviaCTA is a simple .NET application that allows the CAPLINK DLL and the CAPLINK Web Service interfaces to be tested. It is designed to give developers an understanding of how the CAPLINK application processed payments and is a good way for developers to test the formation of their XML payloads.

Before developing with CAPLINK, the developer must choose between using the DLL and the Web Service interface. The DLL and Web Service interfaces both support the same functionality; hence their supported methods are essentially identical. The Web Service method is the most preferred interface as it allows a single CAPLINK client machine to be a host to multiple workstations on a given network without any requirement for the CAPLINK software on the remote workstation PC's. The DLL on the other hand requires the CAPLINK application and DLL to be installed on each workstation PC and hence only supports windows based systems.

For more information on the DLL and Web Service interface see the CAPLINK SDK.

Testing the DLL

To test the DLL you must install the DLL application with this test application on your development machine.

Testing the Web Services

To eliminate the need to install the Web Services interface, Anthem Software has established a public test server for third party developers at www.chuditch.com.

It allows developers to create sample Authorisation Requests and submit them to the web services for processing.

Note: In normal CAPLINK deployments the URL will be a local network URL, often a machine IP of a local PC where the CAPLINK Client server and Web services are installed. Any developer using the Web Services should allow the base URL of the web service call to be configured upon installation at the client site. Do not hard code the www.chuditch.com base URL into the application. This is for testing purposes only.

INSTALLATION:

To install the application you need a Windows based PC with .NET framework installed. Simply click on the msi installation file to install. The default installation directory is C:\Program Files\Anthem\Test_CapLinkViaWS.

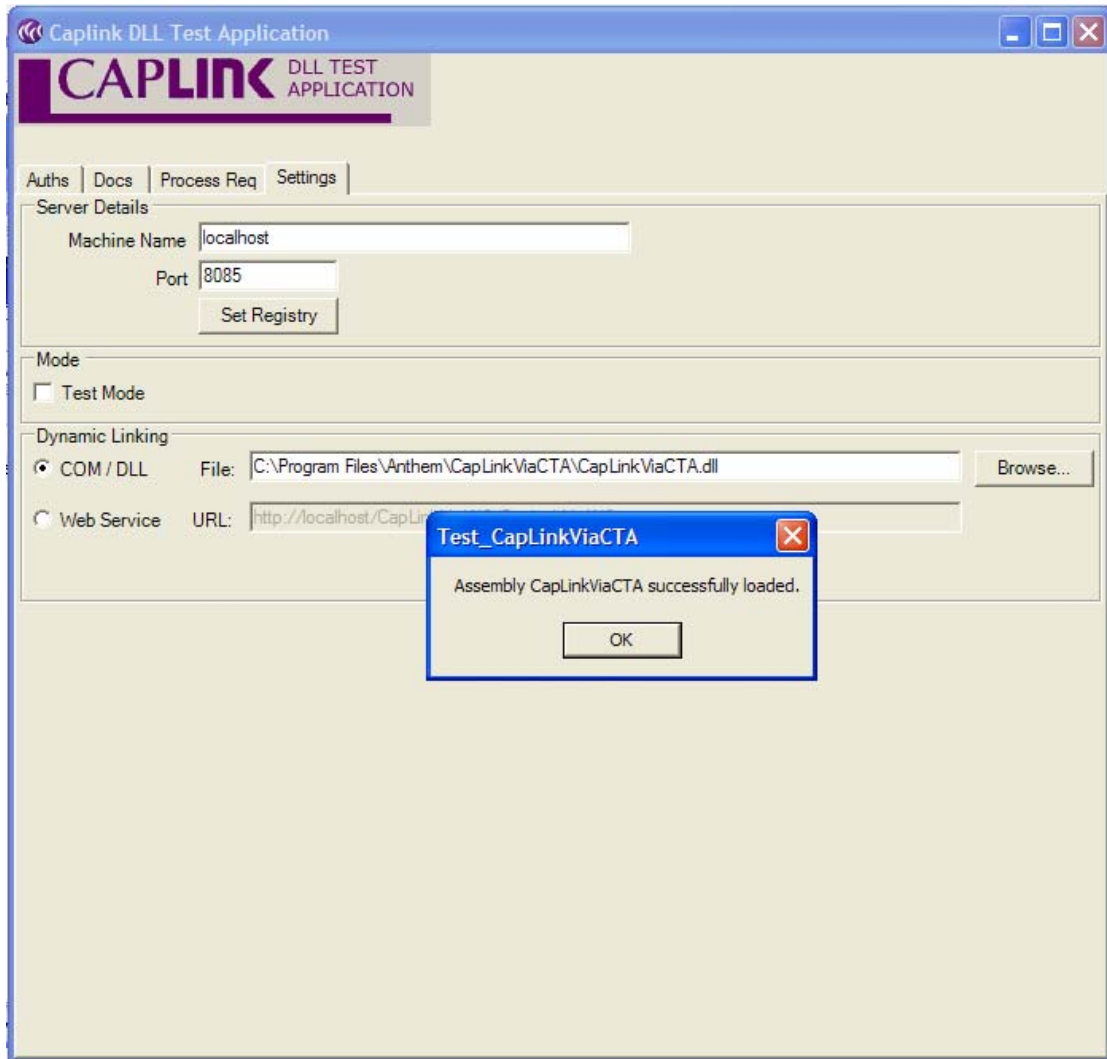
Create a shortcut to the Test_CapLinkViaCTA.exe file or simply launch from this location by double clicking on the icon.

CONFIGURATION:

On load, the test application requires the either the location of the DLL or the URL for the web services.

DLL Configuration:

To set the application to use the DLL, go to the Settings tab. Browse to the location of the DLL as shown and the DLL should be loaded. If you have not installed the full CAPLINK Application and registered the software, you must select Test Mode for the DLL. The DLL will simply pass back sample results.

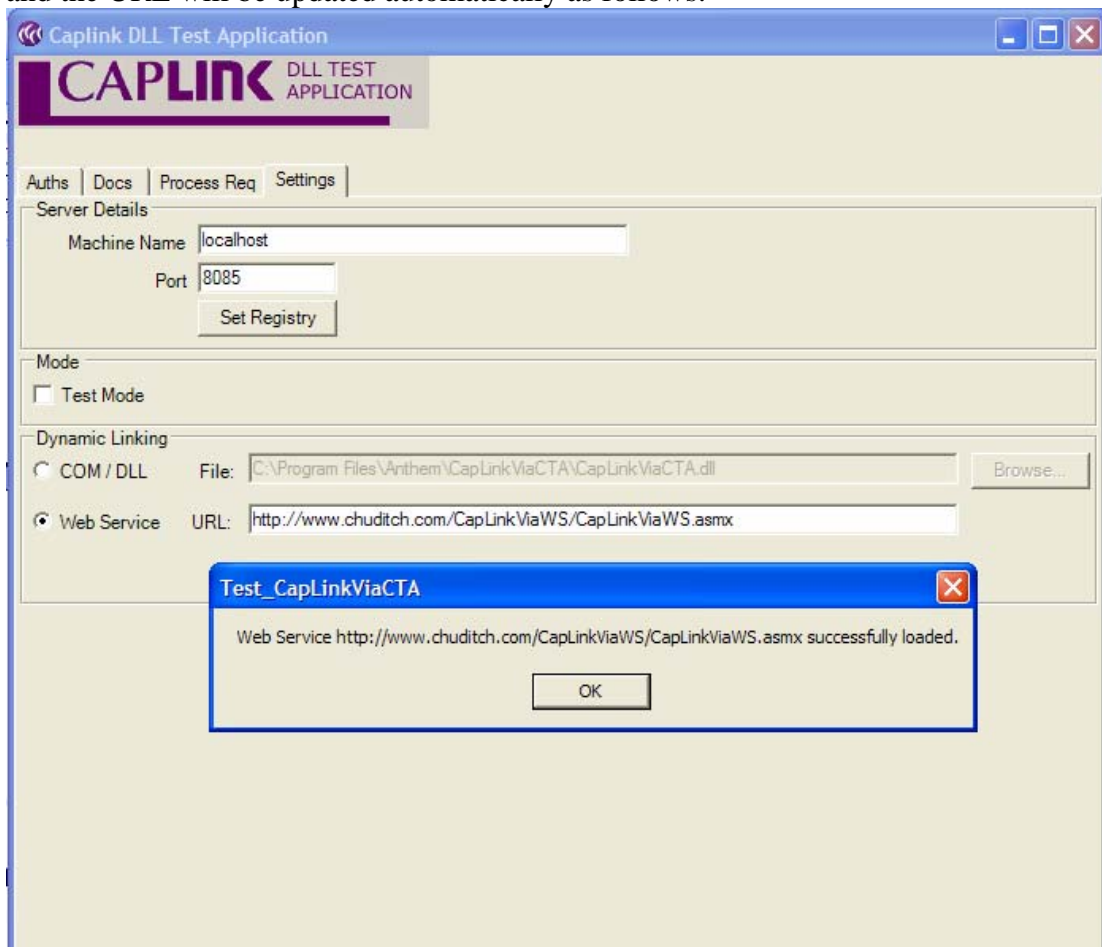


Web Service Configuration:

The web services test site is provided by Anthem Software or if you have installed the full CAPLINK Client application and web service interface you can enter the local URL of the machine.

To set the application to use the Web Service, go to the Settings tab. Change the base URL 'localhost' to www.chuditch.com if using the test site provided by Anthem. If the web services are located on the same machine, leave as 'localhost' else change to

the IP or DNS name of the machine hosting the web services. Click on the Auth tab and the URL will be updated automatically as follows:



Click “OK” to continue.

NOTE: Un-Check the “Test Mode” check box when using the testing URL at www.chuditch.com or if you have installed a fully working version of CAPLINK Client Server.

If the URL is not valid or connection to the URL cannot be made by the local machine, the following message will be displayed.



USING THE TEST APPLICATION

To test the Web Services or DLL you need to do the following steps:

1. Create and Submit Authorisation Request;
2. Create Invoice XML and submit (Push) to Web Services.

Creating and Submitting Authorisation Request

We will use the test application to create our Authorisation request as follows (see screens shot below):

1. Click on the 'Auths' tab;
2. Enter a reference number in the RefID field. (this can be any number or characters);
3. Enter SupplierID = 999002 (you must use this number for SupplierID when using web services at www.chuditch.com);
4. Enter MemberID = 999001 (you can use any valid Capricorn MemberID. 999001 is for a Member called "Guest Member");
5. Select Doc Type (Invoice or Credit Note);
6. Enter your Invoice Number / Credit Note Number in the BSDocNum field;
7. Enter the amount of the Invoice/Credit Note in the AuthAmt field;
8. Press the "Create Request" button. You should get the following response in the request window.

The screenshot shows the 'Caplink DLL Test Application' window. The 'Auths' tab is selected. The 'Request Details' section contains the following fields:

RefID	MyRefID	MemberID	999002	BSDocNum	MyInvoice01
SupplierID	999002	Doc Type	Invoice	AuthAmt	100

The 'Request' window contains a 'Create Request' button and the following XML request:

```
<AuthReq RefID="MyRefID"><SupplierID>999002</SupplierID>  
<MemberID>999002</MemberID><BSDocNum Type="17">  
MyInvoice01</BSDocNum><AuthAmt>100</AuthAmt></AuthReq>
```

The 'Response' window contains 'Pre-Auth' and 'Auth' buttons.

9. The test application has created our Authorisation Request XML from the information we have entered above. To submit our Authorisation Request to the CAPLINK web services/DLL, press the “Auth” button.
10. A message saying ‘please wait...’ will briefly appear;
11. Wait a few seconds and response will be returned. If Authorisation is successful the response message will be as follows;

The screenshot shows the 'Caplink DLL Test Application' window. It has a navigation bar with 'Auths', 'Docs', 'Process Req', and 'Settings' tabs. Below this is a 'Request Details' section with input fields for RefID (MyRefID), MemberID (999001), BSDocNum (MyInvoice03), SupplierID (999002), Doc Type (Invoice), and AuthAmt (100). There are 'Request' and 'Response' panels. The 'Request' panel has a 'Create Request' button and contains the following XML:

```
<AuthReq RefID="MyRefID"><SupplierID>999002</SupplierID>
<MemberID>999001</MemberID><BSDocNum Type="17">
MyInvoice03</BSDocNum><AuthAmt>100</AuthAmt></AuthReq>
```

The 'Response' panel has 'Pre-Auth' and 'Auth' buttons. The 'Auth' button is active, and it contains the following XML:

```
<AuthRes RefID="MyRefID" xmlns=""><SupplierID>999002
</SupplierID><MemberID>999001</MemberID><BSDocNum
Type="17">MyInvoice03</BSDocNum><AuthAmt>100</AuthAmt>
<AuthCode
Global="96E10B1220E2BB236945F0BCBC454312BDF026D3">
68C5A170B90C437A5C735CEF7305238A2100A309</AuthCode>
<AuthTime Ticks="632391284405260534">20/Dec/2004 04:34:00
PM</AuthTime></AuthRes>
```

- i. If a small message box will appears with an integer value the request failed. Click OK to view the error message. Fix the problem with the Authorisation request, RECREATE your Authorisation XML and re-submit by following steps 3 to 8 above.

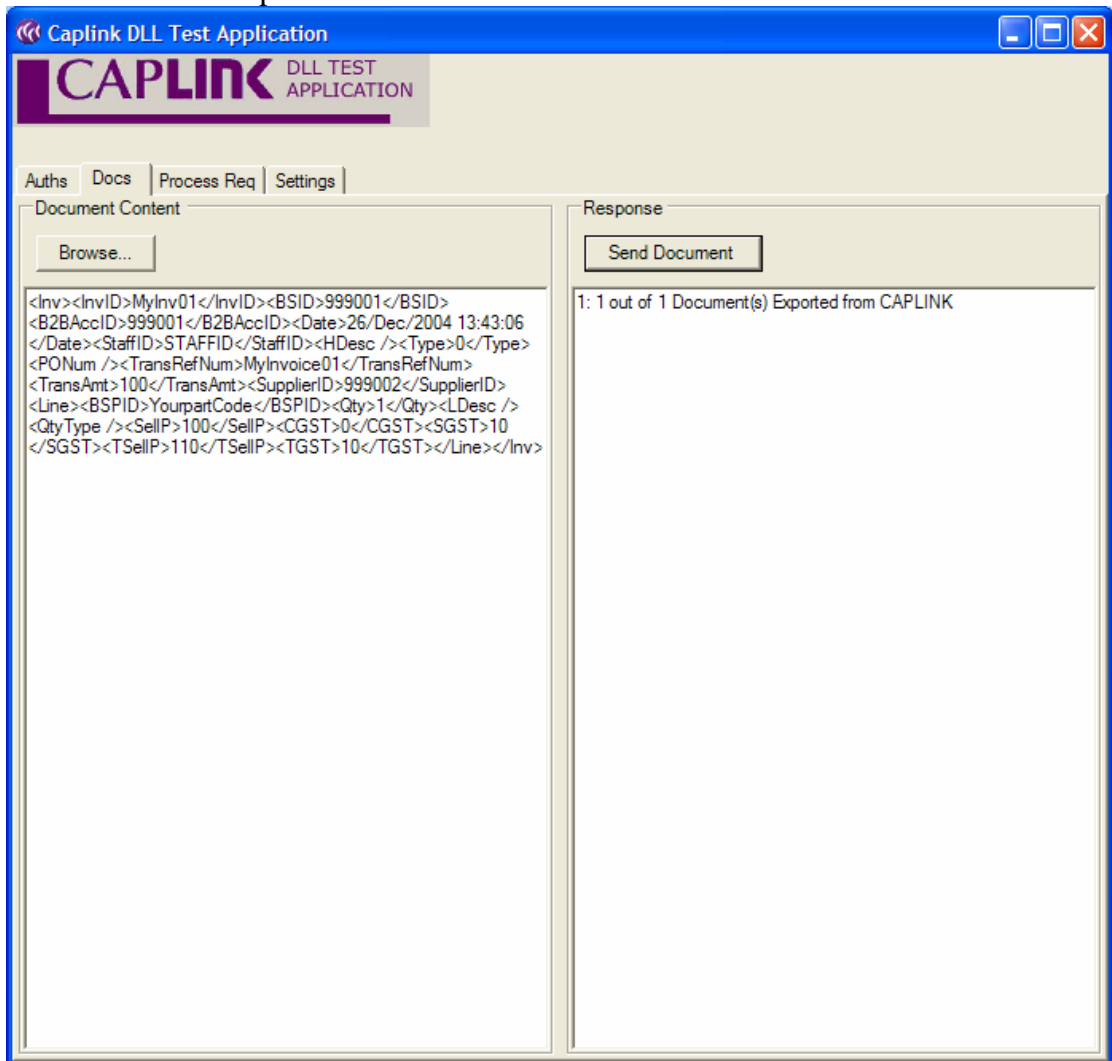
Submitting Invoices and Credit Notes.

When you have successfully created an Authorisation code for a document you need to format the Invoice XML and submit to the web services. Once submitted the transaction is checked against the Authorisation code and sent to Capricorn.

Submitting an Invoice for our sample Authorisation code above is done as follows;

1. Click on the ‘Docs’ tab;

2. Click the browse button on the left side to select your XML or use the sample XML located in the rinstall directory of the test application. E.g. C:\Program Files\Anthem\Test_CapLinkViaCTA\samples\
3. Edit the XML in the request field as follows:
 - a. Change **B2BAccID** value to match the member code you created in the Authorisation Request;
 - b. Enter the **TransRefNum** value to match the DocNum field in your Authorisation Request. This is Invoice / Credit Note number. E.g. "YourInvNum001"
 - c. Change the **TransAmt** value so it within 20% of the AuthAmt (amount \$) that you requested.
4. Press the **Send Document** button to submit your Invoice/Credit Note XML.
5. If successful the response will be as follows:



Additional Notes:

- If you get the following response for your Auth Request, simply increment or change your invoice number. Duplicates are not accepted by Capricorn.
 - <AuthRes
RefID="YourRefID112233"><SupplierID>999002</SupplierID><MemberID>999001</MemberID><BSDocNum

```
Type="17">YourInvNum001</BSDocNum><AuthAmt>100</AuthAmt><ErrRpt>There is already a successful or complete Auth existing for this document number: YourInvNum001</ErrRpt></AuthRes>
```

- The following message indicates that you have not created a successful Authorisation Code for the document you are trying to submit:
0: 0 out of 1 Document(s) Exported from CAPLINK
Errors:
There are no successful Auths in the system for Document 'InvNotAuth001'.
- To fix the above, simply create an Authorisation for your invoice first before submitting the document.

TroubleShooting and Error Messages

- If there is no internet connection or invalid URL, the following message will result:

```
System.Net.WebException: The underlying connection was closed: The remote name could not be resolved.  
at System.Net.HttpWebRequest.CheckFinalStatus()  
at System.Net.HttpWebRequest.EndGetRequestStream(IAsyncResult asyncResult)  
at System.Net.HttpWebRequest.GetRequestStream()  
at System.Web.Services.Protocols.SoapHttpClientProtocol.Invoke(String methodName, Object[] parameters)  
at Test_CapLinkViaWS.CapLinkViaWS.PostDoc(String strNodDoc, Boolean bInStandAloneTesting) at Test_CapLinkViaWS.Form1.cmdDocPush_Click(Object sender, EventArgs e)
```