Using FoxPro to Send or Retrieve data, using WebConnect WWHTTP library (any HTTP client library will work - such as curl)

Freshbooks API documentation

<u>Freshbooks</u> provides simple and inexpensive on-line timekeeping, billing, and support for the small and one-person consultant. Payments can be received online through Paypal, Google and major gateways, and invoices can be sent via email or snail-mail. Automated and recurring invoicing is supported.

Retrieving your Client List:

```
SET PROCEDURE TO classes\wwHTTP ADDITIVE
* The following is pulled almost verbatem from the API docs page
* EXCEPT <per page> - which defaults to 25! Unless you have fewer than 25 items to be
returned.
* increase this or call recursively for additional pages! Max items per page = 100
TEXT TO strReq NOSHOW PRETEXT 15
  <?xml version="1.0" encoding="utf-8"?>
   <request method="client.list">
   <!-- The page number to show (Optional) -->
   <page>1</page>
   <!-- Number of results per page, default 25 (Optional) -->
   <per page>100</per page>
   <!-- One of 'active', 'archived', 'deleted' -->
   <folder>active</folder>
   </request>
ENDTEXT
oHTTP = CREATEOBJECT("wwHttp")
oHTTP.cUserAgent = [CondoConduit Invoicing]
oHTTP.nHTTPPostMode = 4   && Ideal for posting XML
oHTTP.AddPostKey(strReq) && This is where we add the request above to post to
FreshBooks
Authentication Token - it changes when you change your FB password
can be anything
   * Freshbooks API has a single entry point for all requests -
https://yourcompanyid.freshbooks.com/api/2.1/xml-in
lcResult = oHTTP.HTTPGet("https://ideatellc.freshbooks.com/api/2.1/xml-
in",lcFBUserName,lcFBPassword)
IF [status="fail"] $ lcResult && Check for Error Condition in returned XML
  * Bad result
  STRTOFILE(strReq, "FBRequest.xml", 0)
  STRTOFILE (lcResult, "FBResult.xml", 0)
  lcReturnValue = [Error: ] + STREXTRACT(lcResult,[<error>],[</error>])
ELSE
  * CAUTION HERE: FoxPro's XMLtoCURSOR does not like the <response></response> Node,
so strip it out of the response
  lcResult = STRTRAN(lcResult,[<response xmlns="http://www.freshbooks.com/api/"</pre>
status="ok">],[])
  lcResult = STRTRAN(lcResult,[</response>],[])
 XMLTOCURSOR(lcResult, 'Clients')
  * You now have the results in a cursor - do what you will from this point forward.
  * I'm creating a JSON response that can be called using AJAX from a web page
  loSerializer = CREATEOBJECT("wwJsonSerializer")
```

```
lcReturnValue = loSerializer.Serialize("cursor:TQuery")
loSerializer.Destroy()
ENDIF
oHTTP.Destroy()
```

Retrieving Invoices:

Each Client is assigned an integer ID, which must be used when performing client specific actions. For example to grab all invoices for a single Client, use the following (documented here):

```
<?xml version="1.0" encoding="utf-8"?>
<reguest method="invoice.list">
 <!-- Filter by client (Optional) -->
 <client id>3</client id>
 <!-- Filter by recurring id (Optional) -->
 <recurring id>10</recurring id>
 <!-- Filter by status (Optional) -->
 <status>draft</status>
 <!-- Return invoices dated after this arg (Optional) -->
 <date from>2007-01-01</date from>
 <!-- Return invoices dated before this arg (Optional) -->
 <date to>2007-04-01</date to>
 <!-- Return invoices modified after this arg (Optional) -->
 <updated from>2007-01-01 00:00:00</updated from>
 <!-- Return invoices modified before this arg (Optional) -->
 <updated to>2007-01-02 00:00:00</updated to>
 <!-- Page number to return, default is 1 (Optional) -->
 <page>1</page>
 <!-- Number of results per page, default is 25 (Optional) -->
 <per page>10</per page>
 <!-- One of 'active', 'archived', 'deleted' (Optional)-->
  <folder>active</folder>
</request>
```

Returning all open Invoices, or all Invoices for a single Client:

```
*******************
*** Function: FreshBilling
*** Assume:
*** Created: 01/11/2011
*** Revised:
*** Copyright: (c) 2011, Ideate, LLC
*******************
FUNCTION FreshBilling()
#IF .F.
 LOCAL Request as wwRequest, Response as wwResponse
#ENDIF
lcPropCode = ""
lcPropCode = ALLTRIM(Request.QueryString("PropCode"))
llGetClients = .F.
THIS.TableOpen('Props','CondoUsers')
loUserInfo=THIS.CheckLogin()
IF INDEXSEEK(lcPropCode,.T.,"Props","PropCode") AND Props.FBClientCode > 0
 lcFBClientCode = ALLTRIM(STR(Props.FBClientCode))
```

```
strReq = [ <?xml version="1.0" encoding="utf-8"?>] + CRLF + ;
    [<request method="invoice.list">] + CRLF + ;
    [ < per page > 100 < / per page > ] + CRLF + ;
    [ <client id>] + lcFBClientCode + [</client id>] + CRLF + ;
    [</request>] + CRLF
ELSE
  TEXT TO strReq NOSHOW PRETEXT 15
   <?xml version="1.0" encoding="utf-8"?>
    <request method="invoice.list">
      <!-- Number of results per page, default is 25 (Optional) -->
      <per page>100</per page>
      <!-- Filter by status (Optional) -->
      <status>unpaid</status>
    </request>
  ENDTEXT
ENDIF
*** Connect to the server
oHTTP = CREATEOBJECT("wwHttp")
oHTTP.cUserAgent = [CondoConduit Invoicing]
oHTTP.nHTTPPostMode = 4
oHTTP.AddPostKey(strReq)
lcFBPassword = lcFBUserName
lcResult = oHTTP.HTTPGet("https://ideatellc.freshbooks.com/api/2.1/xml-
in",lcFBUserName,lcFBPassword)
* Cliptext = lcResult
IF [status="fail"] $ lcResult
  * Bad result
  STRTOFILE (strReq, "FBRequest.xml", 0)
  STRTOFILE (lcResult, "FBResult.xml", 0)
  lcReturnValue = [Error: ] + STREXTRACT(lcResult, [<error>], [</error>])
ELSE
  lcResult = STRTRAN(lcResult,[<response xmlns="http://www.freshbooks.com/api/"</pre>
status="ok">],[])
  lcResult = STRTRAN(lcResult,[</response>],[])
  lcResult = STRTRAN(lcResult,[>0<],[>0.00<]) && force decimal values rather than
FALSE
  XMLTOCURSOR (lcResult, 'Invoices')
  SELECT Invoices. Number, Organization, First Name, Last Name, Status, ;
   Amount, Amount Outstanding, DTOC (Invoices.Date) AS InvDate, Props.PropCode,
Invoices.URL as LinkURL;
    FROM Invoices ;
    INNER JOIN Props ON Invoices.Client ID = Props.FBClientCode ;
   ORDER BY InvDate DESC ;
  INTO CURSOR TQuery
  loSerializer = CREATEOBJECT("wwJsonSerializer")
  lcReturnValue = loSerializer.Serialize("cursor:TQuery")
 loSerializer.Destroy()
ENDIF
oHTTP.Destroy()
USE IN SELECT ('TQuery')
USE IN SELECT('Invoices')
Response.Write(lcReturnValue)
ENDFUNC && FreshBilling
```

Other online services used:

<u>Outright</u> for simple accounting, links to Freshbooks AND Bank and Credit Card accounts for easy-as-pie maintenance.

<u>ProvideSupport</u> for economical monitoring of web site activity from any platform (Win, Mac, Linux and Web) - includes proactive chatting

<u>Paessler</u> Server Monitoring - free for up to 100 nodes

<u>Producteev</u> - simple task manager that syncs with Google Tasks (has iPhone client) and the fabulous <u>Astrid</u> task manager for Android

<u>UserVoice</u> - Track and vote on suggestions from your users