



FoxInCloud

A-Z tutorial, Session 3

Requires FAA & FAS V2.0+

Session 3

Publishing your application on localhost

To better follow this session, we recommend you download and install both FoxInCloud Adaptation Assistant (FAA) and FoxInCloud Application Server (FAS) version 2.0+ from <http://foxincloud.com/download.php>

Both licensed and trial versions of FoxInCloud Application Server install the application presented in this Session in this location:
<path to VFP9>\Tools\AB\AW\Samples\Tastrade\

To reproduce the steps presented in this session, please follow session 2 beforehand.

You may also read adapted source code from ...\Tastrade\Adapted\

Publishing your application on localhost, Agenda



| Episode | Subject | Slides |
|---------|-------------------------------------|--------|
| 1 | Automated publication (FAA step 3) | 16 |
| 2 | Manual adaptations after FAA step 3 | 17 |
| 3 | Getting prepared for production | 8 |
| | | 41 |

Session 3, episode 1

Automated publication (FAA step 3)





Click FAA's Publish button

Clicking the publish button starts the automated installation of your web application in <http://localhost/> using IIS

The screenshot shows the FoxInCloud Adaptation Assistant version 2.00 beta3 interface. At the top, there are three buttons: '1-Analyze', '2-Adapt', and '3-Publish'. The '3-Publish' button is circled in red. Below the buttons is a table with columns: File, Object/Class, Base Class, Module, Type, and Adaptation. The table contains several rows of adaptation data. Below the table are buttons for 'Review...', 'Ignore...', and 'Not ignored (7)'. At the bottom, there is a summary of statistics and a 'Quit' button.

| File | Object/Class | Base Class | Module | Type | Adaptation |
|-----------------|--------------|------------|-------------|--|----------------------------------|
| tastradefic.prg | | | tastradefic | Manual adaptation after step 3-Publish | Full Path |
| tastradefic.prg | | | tastradefic | Manual adaptation after step 3-Publish | SET to execute at application st |
| tastradefic.prg | | | tastradefic | Manual adaptation after step 3-Publish | SET to execute at application st |
| tastradefic.prg | | | tastradefic | Manual adaptation after step 3-Publish | SET to execute at application st |
| tastradefic.prg | | | tastradefic | Manual adaptation after step 3-Publish | SET to execute at application st |
| tastradefic.prg | | | tastradefic | Manual adaptation after step 3-Publish | DO FORM <app main form > |
| tastradefic.prg | | | tastradefic | Manual adaptation after step 3-Publish | SET to execute at application st |

Estimated adaptation time: 0 minutes

| | | | |
|-------------|----------------------|---------------------------|----------|
| 6 Files | 188 Modules | Manual adaptations (%) | 0.00 % |
| 162 Classes | 215 Instructions | Estimated time (man.days) | 0.0 days |
| 4 Forms | 0 Manual adaptations | | |



1/ Checking your IIS installation

FAA makes sure your dev. machine has a proper version of IIS installed.

FoxInCloud Adaptation Assistant version 2.00 beta3 (source mode) - Support 11/12/13

Project: \Tools\AB\AW\Samples\Tastrade\Sandbox\tastradefic.pjx Mode: Source

1-Analyze 2-Adapt 3-Publish

Filter adaptations grid ... (viewing 0 on 26)

1 - Install Internet Information Services (IIS) on this computer

Congratulations, your computer runs IIS version 7.5!

In case you have a default IIS installation, you need to check it as some features necessary to FoxInCloud may be missing.

Please perform this verification by clicking the image to the right; this will open the suitable page on the West-Wind Technologies web site for you to check your IIS installation.

After this check, you can continue to the next step ...

Windows Features

Turn Windows features on or off

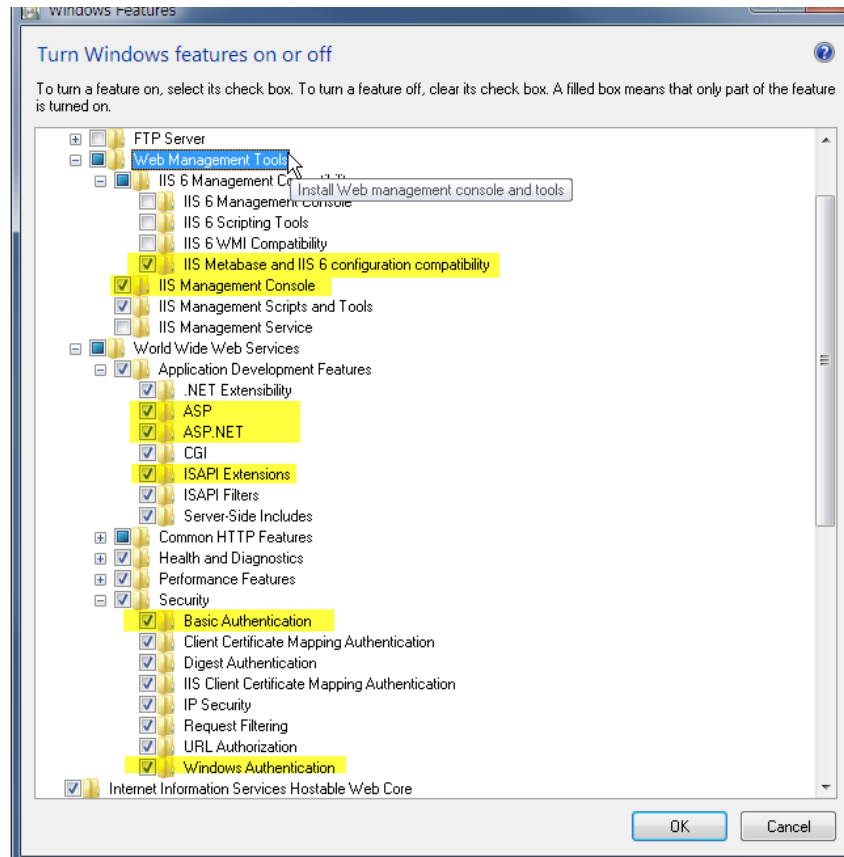
To turn a feature on, select its check box. To turn a feature off, clear its check box. A filled icon is turned on.

- FTP Server
- Web Management Tools
 - Install Web management console and tools
- IIS 6 Management Console
 - IIS 6 Management Console
 - IIS 6 Scripting Tools
 - IIS 6 WMI Compatibility
 - IIS Metabase and IIS 6 configuration compatibility
 - IIS Management Console
 - IIS Management Scripts and Tools
 - IIS Management Service
- World Wide Web Services
 - Application Development Features
 - .NET Extensibility
 - ASP
 - ASP.NET
 - CGI
 - ISAPI Extensions
 - ISAPI Filters
 - Server-Side Includes



1/ Checking your IIS installation...

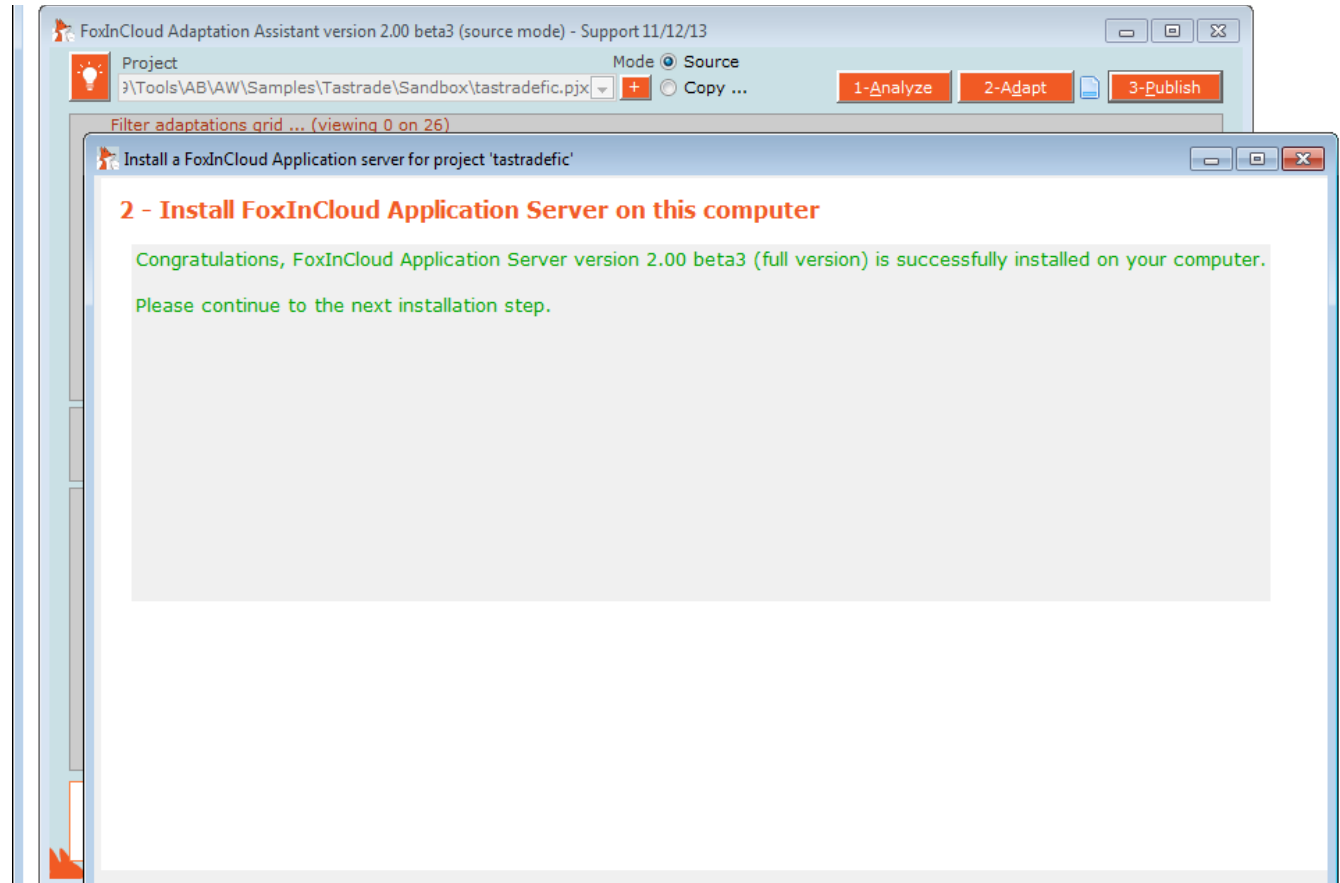
If your machine runs IIS >= 7, you're invited to manually check that all the necessary IIS options are installed.





2/ Checking your FAS installation

FAA checks FoxInCloud Application Server is installed on your machine; if not, get a free download using the form displayed .





3/ Installing FoxInCloud's *.js and *.css

FAA
creates the
awScripts
/ virtual
directory in
localhost
where all
your Web
apps can
access
FoxInCloud
standard
*.js and
*.css





3/ Installing FoxInCloud's *.js and *.css ...

When this step is completed successfully, clicking the image in FAA opens the same image in your default Web browser

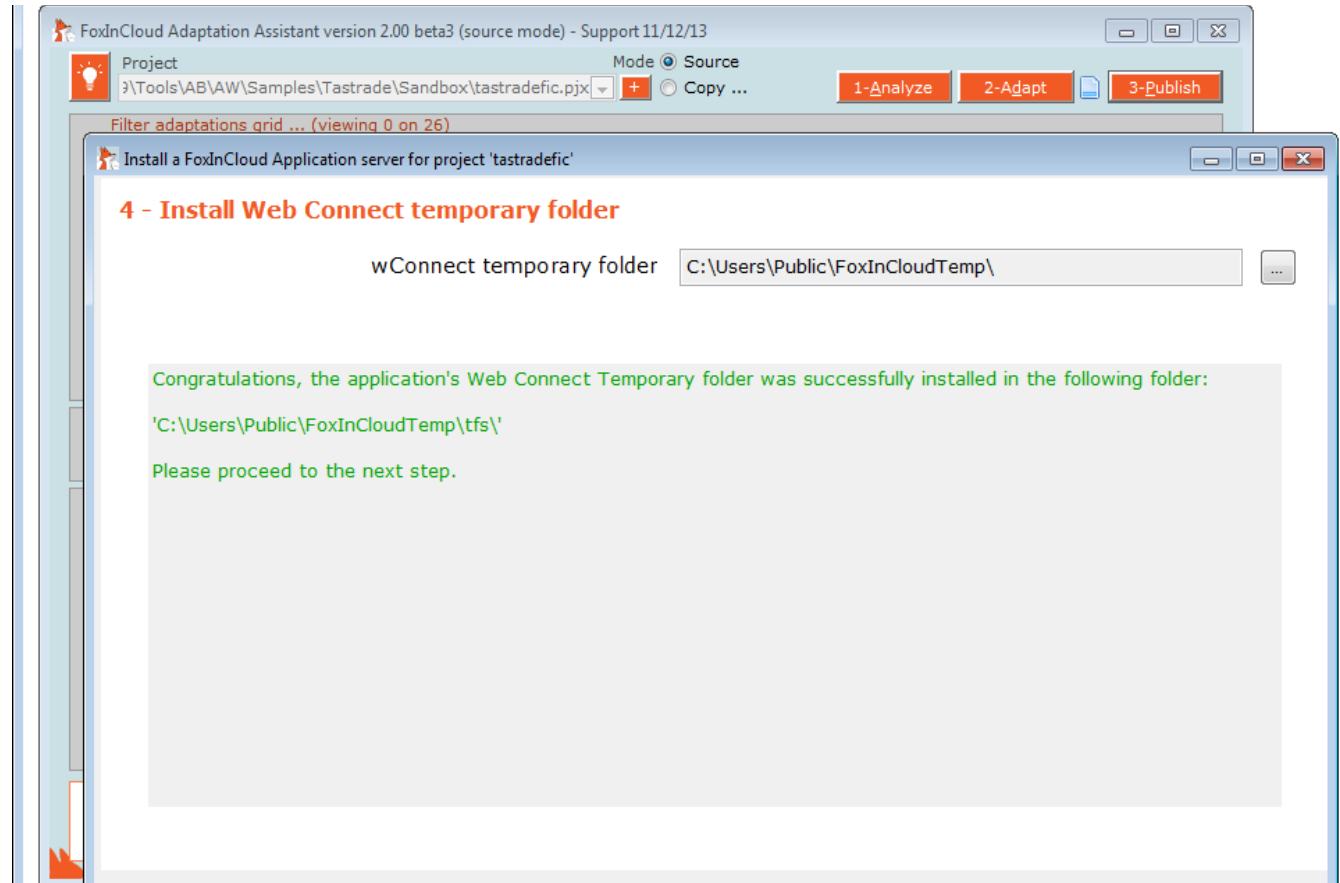




4/ Installing Web Connect Temp folder

wConnect stores requests, responses and text logs into a Temp folder.

By default, FAA installs this folder in a public area where IIS anonymous user has full rights.

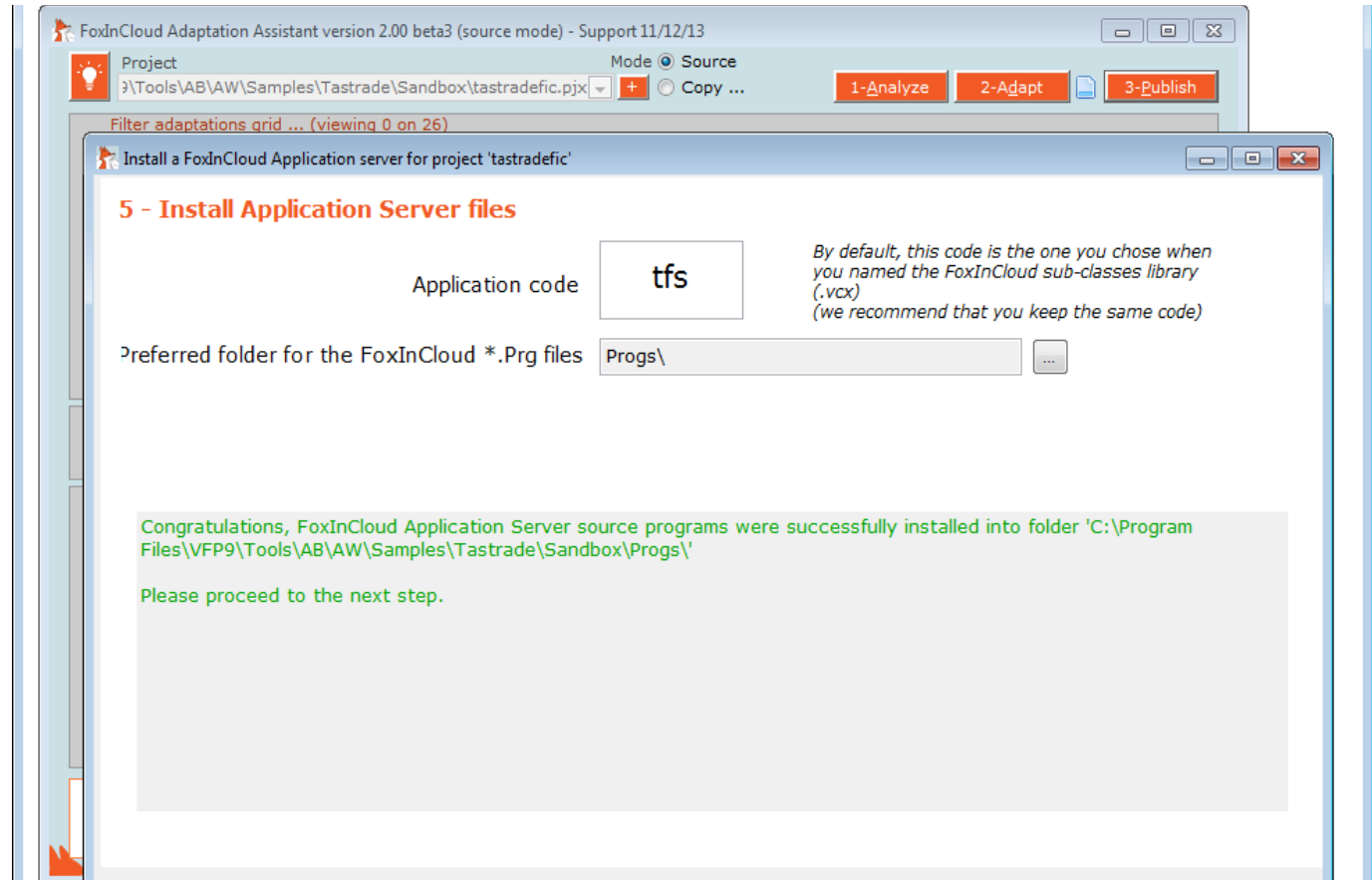




5/ Installing your FoxInCloud Application Server files

Application code prefixes your FAS sub-class names, and serve as default URL extension;

using the suggested app code is recommended

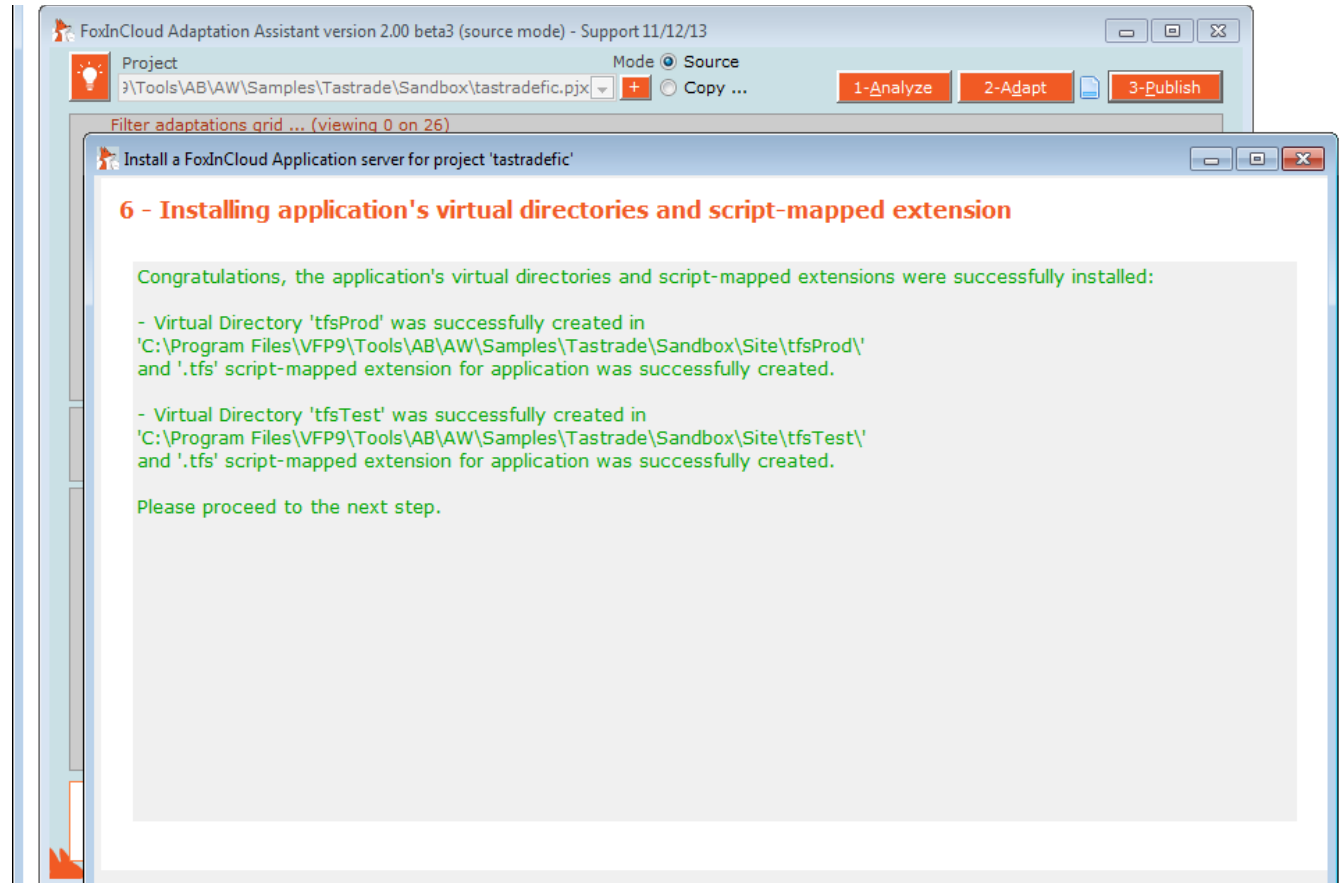




6/ Installing app virtual directories

FAA installs 2 virtual dirs., one for test and one for production.

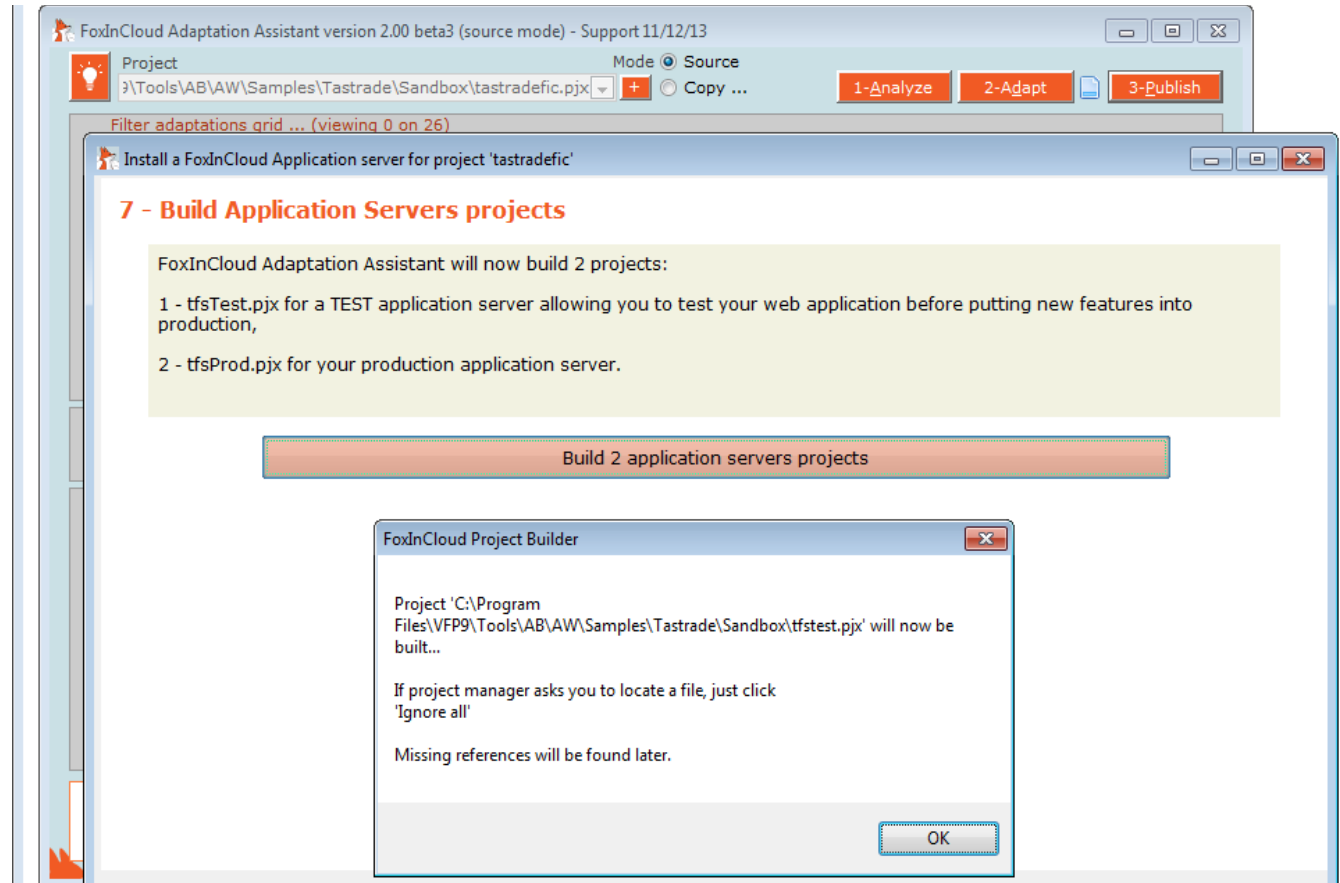
Both your site and projects are split into test and prod.





7/ Building application server projects

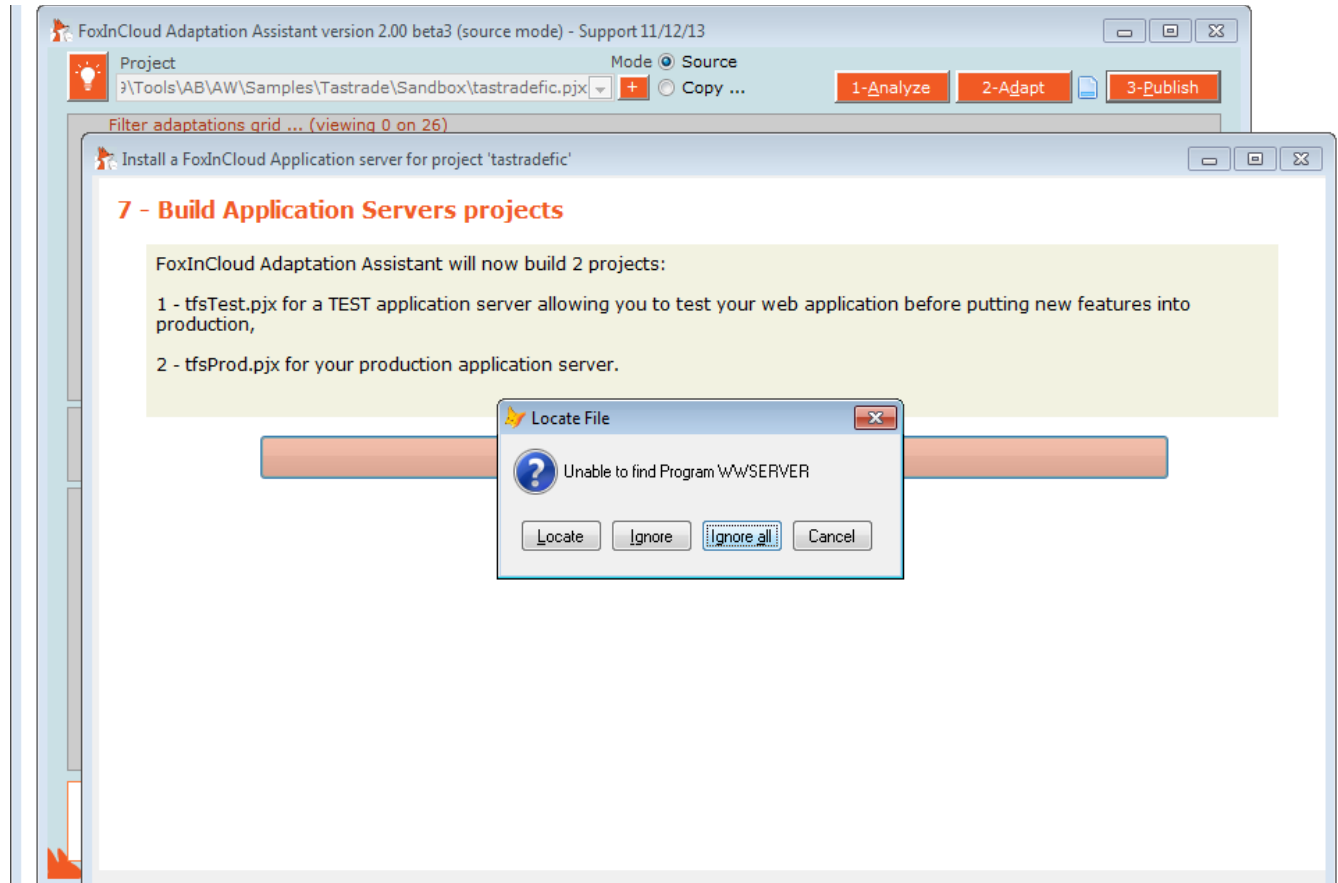
FAA builds 2 projects so that you can later install 2 distinct apps and COM objects on your production server.





7/ Building application server projects ...

While attempting to build your projects, if FAA asks for missing references, just **ignore all** references will be found later.





7/ Building application server projects ...

FAA warns you if some reference are still missing due to an incomplete `Set ('PATH')`.

This is a **simple WARNING**, you can carry on.

FoxInCloud Adaptation Assistant version 2.00 beta3 (source mode) - Support 11/12/13

Project: `\\Tools\AB\AW\Samples\Tastrade\Sandbox\tastradefic.pjx` Mode: Source Copy ...

1-Analyze 2-Adapt 3-Publish

Filter adaptations grid ... (viewing 0 on 26)

Install a FoxInCloud Application server for project 'tastradefic'

7 - Build Application Servers projects

FoxInCloud Adaptation Assistant will now build 2 projects:

- 1 - tfsTest.pjx for a TEST application server allowing you to test your web application before putting new features into production,
- 2 - tfsProd.pjx for your production application server.

Build 2 application servers projects

This is a simple warning for your information; you can go ahead installing.

Building your Application Server projects encountered some trouble:
"Filecompile() - File 'tfsTest.pjx.prg' compiled successfully
Project 'C:\Program Files\VFP9\Tools\AB\AW\Samples\Tastrade\Sandbox\tfstest.pjx' could not be (re)built properly
Filecompile() - File 'tfsProd.pjx.prg' compiled successfully
Project 'C:\Program Files\VFP9\Tools\AB\AW\Samples\Tastrade\Sandbox\tfsprod.pjx' could not be (re)built properly"

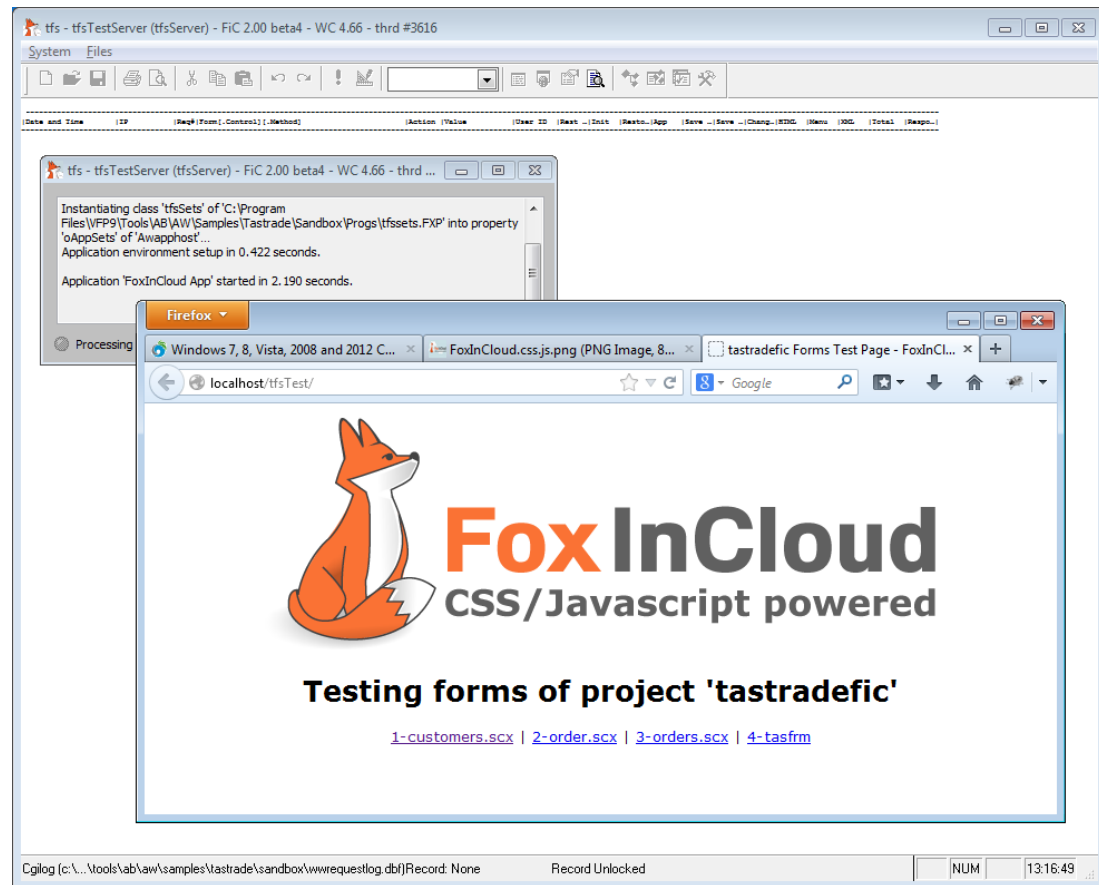
You may (re)build your projects by running the following programs:
C:\Program Files\VFP9\Tools\AB\AW\Samples\Tastrade\Sandbox\tfsTest.pjx.prg
C:\Program Files\VFP9\Tools\AB\AW\Samples\Tastrade\Sandbox\tfsProd.pjx.prg



8/ Testing your Web application in http://localhost/...

Note to trial version users:

Check VFP IDE for any wConnect splash form, click 'continue' if any.





8/ Testing your Web application in `http://localhost/...`

Clicking the `customers.scx` link displays the customers form inside the browser

Note how the menu and form are similar to VFP originals ...

The screenshot shows a Firefox browser window with the following content:

- Browser tabs: Windows 7, 8, Vista, 2008 and 2012 C..., FoxInCloud.css.png (PNG Image, 8..., Tastrade Customers - FoxInCloud App
- Address bar: `localhost/tfsTest/wFormStandardPageTest.tfs?awFrm=customers_scx`
- Page title: FoxInCloud App
- Table: Tastrade Customers - FoxInCloud App

| company | contact | contact title | phone | city | address |
|----------------------|--------------------|------------------|----------------|------------|---------------|
| Alfreds Futterkiste | Maria Anders | Sales Repres... | 030-0074321 | Berlin | Obere Str... |
| Ana Trujillo Empa... | Ana Trujillo | Owner | (5) 555-4729 | México ... | Avda. de la |
| Antonio Moreno T... | Antonio Moreno | Owner | (5) 555-3932 | México ... | Mataderos |
| Around the Horn | Thomas Hardy | Sales Repres... | (71) 555-7788 | London | 120 Hanov |
| Berglunds snabb... | Christina Bergl... | Order Adminis... | 0921-12 34 65 | Luleå | Berguvsväg |
| Blauer See Delik... | Hanna Moos | Sales Repres... | 0621-08460 | Mannheim | Forsterstr. : |
| Blondel père et fils | Frédérique Cite... | Marketing Man... | 88.60.15.31 | Strasbo... | 24, place K |
| Bólido Comidas p... | Martin Sommer | Owner | (91) 555 22 82 | Madrid | C/ Araquil, I |

Customer details form (for Alfreds Futterkiste):

- Company: Alfreds Futterkiste
- Phone: 030-0074321
- Address: Obere Str. 57
- Postal code: 12209
- City: Berlin
- Country: Germany
- Contact name: Maria Anders
- Contact title: Sales Representative
- Discount: 2
- Min. amt: \$ 2,600.00
- Max. amt: \$ 6,300.00

Buttons: Print, Close

Footer: FoxInCloud App, myCompany :: FoxInCloud

Session 3, episode 2

Manual adaptations after step 3





A very last round of adaptations ...

FAA has built `xxxSets.prg`, your app init. class, with whatever code found in your desktop app `main.prg`;

You now need to review this generated code.

Assistant d'Adaptation FoxInCloud version 2.00 beta4 (mode source) - Support 12/11/13

Projet: ?\Tools\AB\AW\Samples\Tastrade\Sandbox\tastradefic.pjx Mode: Source

1-Analyser 2-Adapter 3-Publier

Filtrer la liste des adaptations ... (7 affichées sur 26)

| Objet/Classe | Classe de base | Module | Type | Adaptation |
|-----------------|----------------|-------------|-----------------------------|--|
| | | tastradefic | Adaptation manuelle après é | Chemin absolu |
| | | tastradefic | Adaptation manuelle après é | SET à exécuter au lancement de l'application |
| tastradefic.prg | | tastradefic | Adaptation manuelle après é | SET à exécuter au lancement de l'application |
| tastradefic.prg | | tastradefic | Adaptation manuelle après é | SET à exécuter au lancement de l'application |
| tastradefic.prg | | tastradefic | Adaptation manuelle après é | SET à exécuter au lancement de l'application |
| tastradefic.prg | | tastradefic | Adaptation manuelle après é | DO FORM <formulaire principal> |
| tastradefic.prg | | tastradefic | Adaptation manuelle après é | SET à exécuter au lancement de l'application |

Revoir... Ignorer... Tous (7) Revus (0) Non revus (7) Ignorés (0) Non ignorés (7)

```
c:\program files\vf9\tools\ab\aw\samples\tastrade\sandbox\tastradefic.prg > tastradefic (ligne 22)
do form customers
```

Cette instruction affiche le formulaire d'accueil de votre application. Cette instruction ne doit s'exécuter qu'en mode LAN.

En mode Web, après que vous aurez exécuté l'étape 3 (publication), votre formulaire principal apparaîtra comme la page d'accueil du site en procédant comme suit :

- 1- dans votre serveur Web (IIS en général), redirigez 'index.htm' vers 'votreForm.xxx', où 'xxx' est le code de votre application (choisissez 'redirection permanente'),
- 2- dans vos Sources relatives/Bases, créez cette méthode :

Temps d'adaptation estimé : 10 minutes

| | | | |
|---------------|-------------------------|-----------------------|--------|
| 1 Fichiers | 1 Modules | Adaptations man. (%) | 0,00 % |
| 0 Classes | 18 Instructions | Temps estimé (jour.h) | 0,0 j. |
| 0 Formulaires | 0 Adaptations manuelles | | |

Quit



Reviewing tfsSets.prg code

`tfsSets.Init()`
fires when
application starts,
`tfsSets.destroy()`
fires when it stops.

`tfsSets.wlLan` &
`tfsSets.wlWeb`
tell whether app
runs in desktop or
Web mode.

`tfsSets.Set()`
performs SETtings
and restores initial
`Set()` when
application
unloads.

```
ABC tfssets.prg
* -----
* Before this code executes, FoxInCloud Application Server has set CurDir() to
* the application's main folder, where project resides
* (C:\Program Files\VFP9\Tools\AB\AW\Samples\Tastrade\Sandbox\
* All the following paths are relative to this folder ...

SET PATH TO ".\..\_DATA\;..\..\_LIBS\;\CLASS\;\FORM\;.\PROGS\" ADDITIVE

IF NOT InList(_VFP.StartMode, 2, 3, 5) && In COM automation mode, Visual FoxPro implicitly p
    SET PROCEDURE TO tastradefic ADDITIVE
|
  ClassLibAdd("tastradefic.vcx,tfs.vcx") && modify command abDev
  EXTERNAL PROCEDURE ClassLibAdd

ENDIF

this.Set("Status Bar", 'off')

if this.wlLAN
  set systemu save
endif

do foxyPreviewer.app
do tastradeFIC.mpr

return m.success

* -----
PROCEDURE Destroy

= DoDefault()

if this.wlLAN
  set systemu to default
endif

removeProperty(_Screen, 'oFoxyPreviewer')
```



Choose your app home page

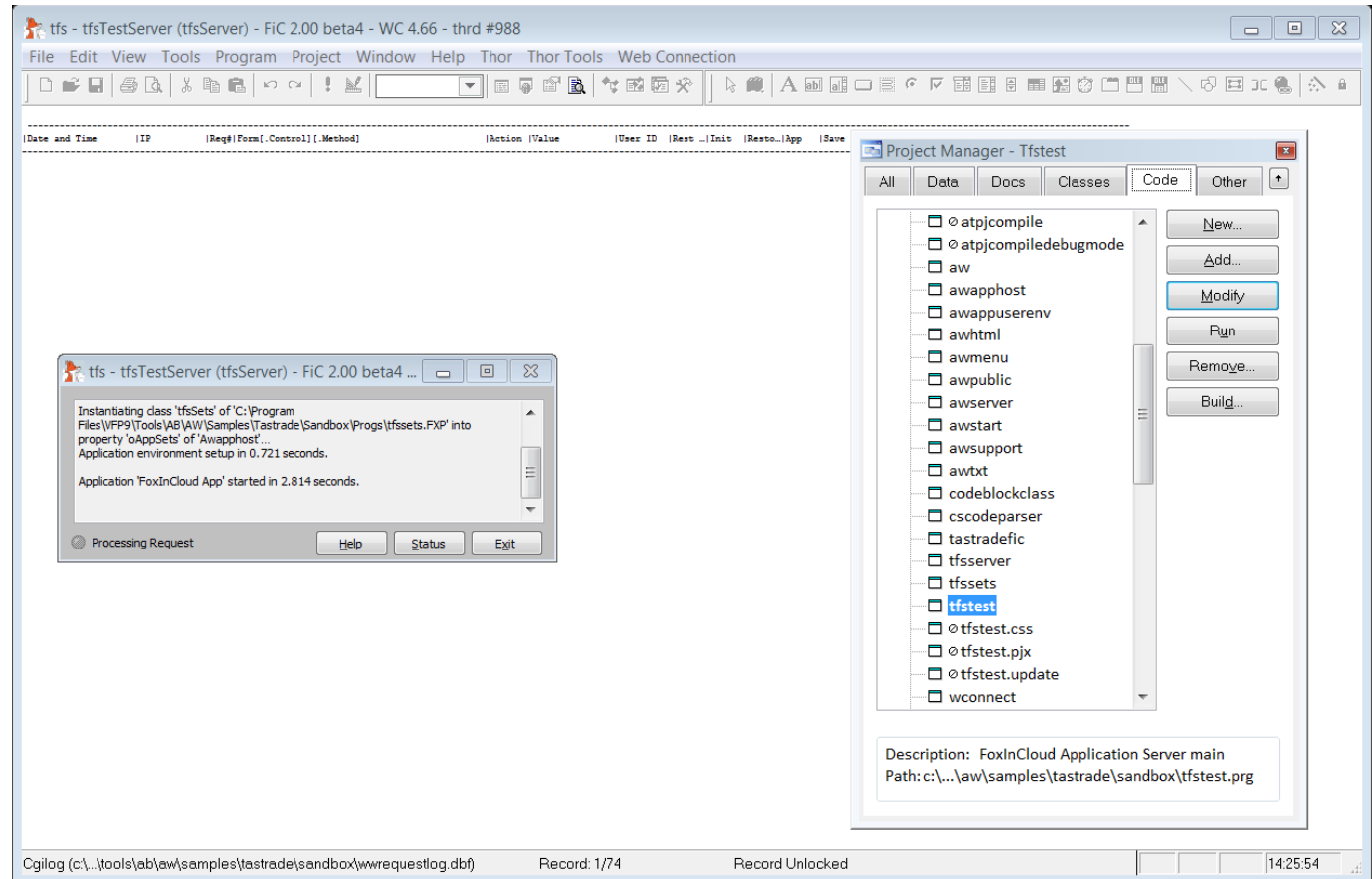
Go to your test app virtual, switch to contents view, select [index.htm](#), switch back to features view, open 'HTTP redirect', click redirect to [index.tfs](#).



Starting your FAS in development mode ...

In your app. folder, open your web project named

`tfsTest.pjx`, and run the eponym `tfsTest.prg`





Displaying standard FoxInCloud home page

Your web app has now built the home page using FAS's standard `awProcess.index()` method.

You can override this code in your subclass `tfsServer.prg !tfsProcess`





Allowing anonymous access to app's forms

As this sample app is public, you need to set `.wlAnonymousAllowed` to `.T.` in your form class.

In a real-life application, only the login form should have this ability.

The screenshot displays two windows from a development tool. The left window, titled 'Properties - tastradefic.vcx (tasfrm)', shows a list of properties for the 'tasfrm' form class. The 'wlAnonymousAllowed' property is highlighted and set to '.T.'. The right window, titled 'Class Designer - tastradefic.vcx (tasfrm)', shows a visual representation of the form, which is a simple yellow rectangle with an 'OK' button at the bottom right.

| Property | Value |
|---------------------------|------------|
| wlmgPath | (None) |
| wlInputBoxClass | awFrmIB |
| wlLocFileClass | awFrmLF |
| wlMessageBoxClass | awFrmMB |
| wlModalChoiceProp | wuValue |
| wlPropSave | wuPK |
| wlPutFileClass | awFrmPF |
| wlUserID | NULL |
| wlWindowTheme | mac_os_x |
| wlAnonymousAllowed | .T. |
| wlContentChanged | .F. |
| wlContentDynamic | .F. |
| wlHTMLgen | .F. |
| wlInitFirst | .T. |
| wlModal | .F. |
| wlPrivate | .F. |
| wlPropsRestore | .F. |
| wlPropsSave | .F. |
| wlSubForm | .F. |
| wlViews3Requery | .F. |
| wlWeb | .F. |
| wnButton | 0 |
| wnDataSessionID | 0 |
| wnReq | -1 |
| wnShift | 0 |
| wnXcoord | 0 |
| wnYcoord | 0 |
| wgAJAX | NULL |
| woForm | NULL |
| woFormDS | NULL |
| woHTMLGen | NULL |
| wuPK | NULL |



Displaying a form from the 'Files' menu

By default, FAA adapts `DO FORM` into `wForm()`; this makes form to display as a child window of current page...

The screenshot shows a Firefox browser window with the URL `localhost/tfsTest/index.tfs`. The main page displays a table of customer data. A modal window titled "Tastrade Customers - FoxInCloud App" is open, showing a table of customer data and a form for editing details.

| company | contact | contact title | phone | city | address |
|----------------------|--------------------|------------------|----------------|------------|---------------|
| Alfreds Futterkiste | Maria Anders | Sales Repres... | 030-0074321 | Berlin | Obere Str... |
| Ana Trujillo Empa... | Ana Trujillo | Owner | (5) 555-4729 | México ... | Avda. de la |
| Antonio Moreno T... | Antonio Moreno | Owner | (5) 555-3932 | México ... | Mataderos |
| Around the Horn | Thomas Hardy | Sales Repres... | (71) 555-7788 | London | 120 Hanov |
| Berglunds snabb... | Christina Bergl... | Order Adminis... | 0921-12 34 65 | Luleå | Berguvsväg |
| Blauer See Delik... | Hanna Moos | Sales Repres... | 0621-08460 | Mannheim | Forsterstr. 5 |
| Blondel père et fils | Frédérique Cite... | Marketing Man... | 88 60 15 31 | Strasbo... | 24, place K |
| Bólido Comidas p... | Martín Sommer | Owner | (91) 555 22 82 | Madrid | C/ Araquil... |

The modal window also contains a form for editing customer details:

Customer details | Customer Orders

Company: Alfreds Futterkiste | Phone: 030-0074321

Address: Obere Str. 57

Postal code: 12209 | City: Berlin | Country: Germany

Contact name: Maria Anders | Min. amt: \$ 2,600.00 | Save

Contact title: Sales Representative | Discount: 2 | Max. amt: \$ 6,300.00 | Cancel

Print | Close



Displaying a form from the 'Files' menu in its own page...

Would you prefer your form to display in its own HTML page, just open your menu snippet and change `wForm()` into `wFormMaster()`, and discard parameter #2 (.F.)

The screenshot shows two windows from a software development environment. The left window is titled 'Properties - Desktop' and shows the 'Screen' tab. It contains a list of properties for a screen object, including:

| | |
|---------------------------|------------------------|
| ActiveForm | 0 |
| BaseClass | Form |
| Class | Form |
| ClassLibrary | (None) |
| DefOleLCID | 0 |
| Docked | F. - False (Default) |
| Enabled | T. - True (Default) |
| HWnd | 131944 |
| HelpContextID | 0 |
| KeyPreview | F. - False (Default) |
| Name | Screen |
| OleDragMode | 0 - Manual (Default) |
| OleDropEffects | 3 |
| OleDropHasData | -1 |
| OleDropMode | 0 - Disabled (Default) |
| Parent | 0 |
| ParentClass | (None) |
| ReleaseType | 1 |
| ShowInTaskBar | T. - True (Default) |
| TabIndex | 0 |
| TabStop | T. - True (Default) |
| WhatsThisHelp | F. - False (Default) |
| WhatsThisHelpID | -1 |
| WindowType | 0 - Modeless |
| memberdata | <VFPData> <memberdata |
| clanguser | fr |
| foxyviewerorigoutput | C:\PROGRAM FILES\VF |
| foxyviewerorigpreview | C:\PROGRAM FILES\VF |
| foxyviewerorigreportbehav | 90 |

The right window is titled 'Menu Designer - tastradefic - Customers Procedure *' and shows a menu snippet with the following code:

```
*-FIC- Replaced by FoxInCloud Adaptation Assistant versio
*-FIC- do form customers

external form customers
customers = wFormMaster('customers.scx') && second parameter
```




Display the 'order' child form by double clicking an orders grid row

```
gridOrders.d  
blClick()  
calls  
thisForm.w  
Form('orde  
r.scx', ...):  
order form  
displays in  
a child  
window  
within  
current  
page.
```

System > Files >
FoxInCloud App

Tastrate Customers - FoxInCloud App

Order # 214 for customer 'Berglunds snabbköp' - original - FoxInCloud App

Employee: Albert Hellstern 04/14/2009

Ship to

Recipient name: Berglunds snabbköp

Berguvsvägen 9

Luleå S-958 22 Sweden

Discount: 10

Pay Term: 15 days 1 month 2 months

Paid

Notes

| product | unit price | quantity |
|---------------|------------|----------|
| Chocolade | \$8.00 | 30 |
| Côte de Blaye | \$184.40 | 10 |
| Lakkalikööri | \$12.60 | 11 |

Print OK



Setting the 'modal return' property in order form

For the order form callback to work, you need to set `.wcModalChoiceProp` to the name of the property holding the returned value, `'lEdit'` here.

The screenshot displays two windows from a software development environment:

- Properties - order.scx:** A list of properties for the 'frmOrder' object. The property `wcModalChoiceProp` is highlighted, with its value set to `wuPK.lEdit.Caption`.
- Form Designer - order.scx:** Shows the 'Unload' procedure for the 'frmOrder' object. The code is:

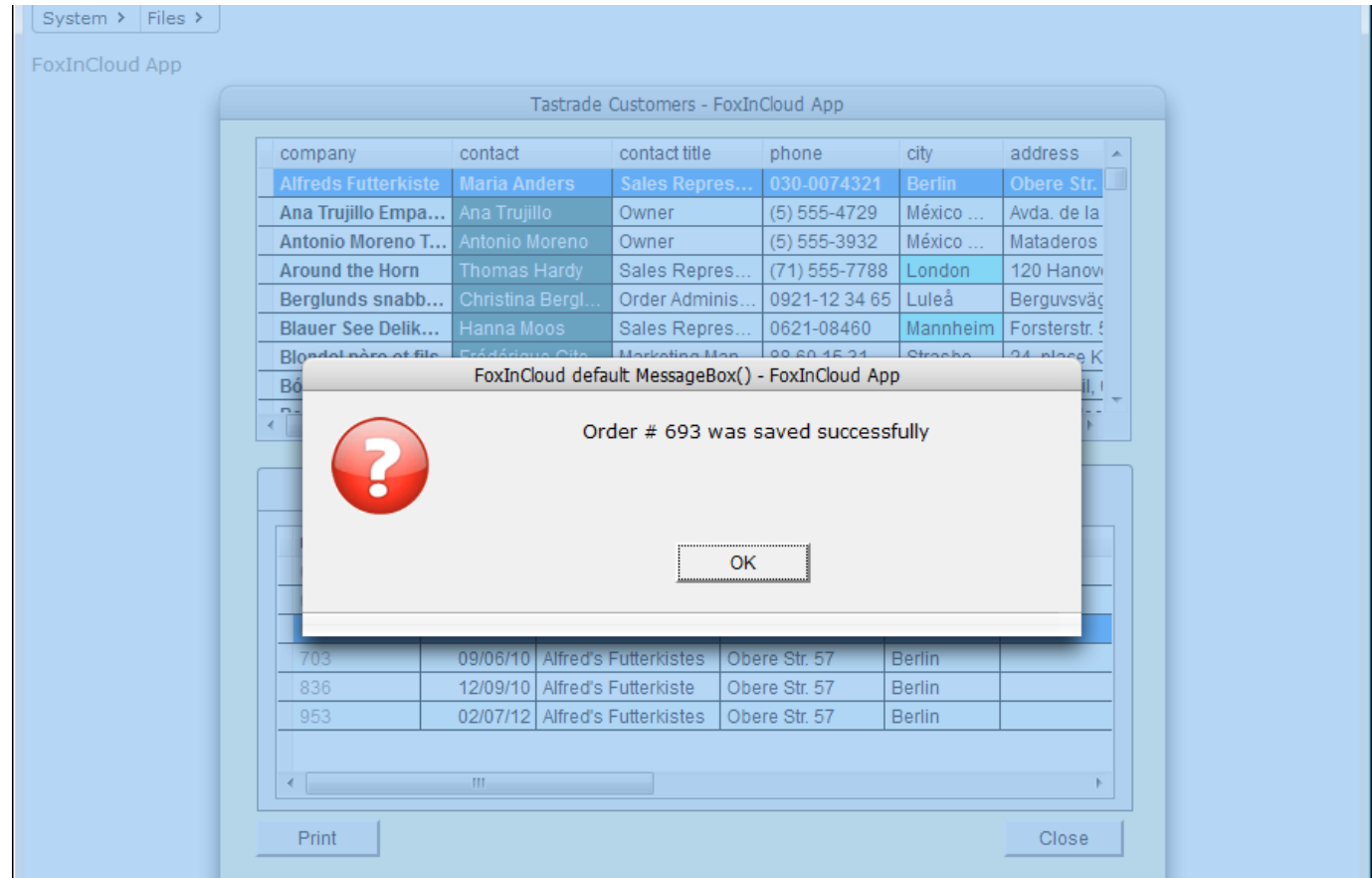
```
RETURN m.this.lEdit

&& manual adaptation, at design time:
&& set this.wcModalChoiceProp = 'lEdit'
```



Modal form call-back in action

Once `.wcmodalChoiceProperty` is set to `'lEdit'`, a message box appears whenever user modifies the order before closing the child form.





Reporting as PDF

Using `.wFileSaveAs()` opens a new tab in the browser, facing the standard popup blocker; this requires user's consent.

The screenshot shows a Firefox browser window with the following details:

- Address bar: `localhost/tfsTest/wFormStandardPage.tfs?awForm=customers.sxc`
- Page title: `Tastrade Customers - FoxInCloud App`
- Table content:

| company | contact | contact title | phone | city | address |
|----------------------|--------------------|------------------|---------------|------------|---------------|
| Alfreds Futterkiste | Maria Anders | Sales Repres... | 030-0074321 | Berlin | Obere Str. |
| Ana Trujillo Empa... | Ana Trujillo | Owner | (5) 555-4729 | México ... | Avda. de la |
| Antonio Moreno T... | Antonio Moreno | Owner | (5) 555-3932 | México ... | Mataderos |
| Around the Horn | Thomas Hardy | Sales Repres... | (71) 555-7788 | London | 120 Hanov |
| Berglunds snabb... | Christina Bergl... | Order Adminis... | 0921-12 34 65 | Luleå | Berguvsvä |
| Blauer See Delik... | Hanna Moos | Sales Repres... | 0621-08460 | Mannheim | Forsterstr. f |
| Blondel père | | | | | 4, place K |
| Bólido Comid | | | | | / Araquil, t |

At the bottom of the browser window, the text `myCompany :: FoxInCloud` is visible.



Reporting as PDF...

Once user allows popups on your web app, the PDF report displays in a new window.

Alternatively, you can display the pdf in a child form using your subclass of `aw.vcx!`
`awolepdf*`

CUSTOMER
11/12/13

Fox InCloud

Customer Id: ALFKI Phone: 030-0074821 Fax: 030-0076546
Company Name: Alfreds Futterkiste
Contact Name: Maria Anders
Contact Title: Sales Representative
Address: Obere Str. 57
City: Berlin Postal Code: 12209 Country: Germany

Max Order Amt: 6,300.00
Min Order Amt: 2,600.00
Discount: 2
Sales Region:

| <u>Order Id</u> | <u>Customer Id</u> | <u>Shipper Id</u> | <u>Order Number</u> | <u>Order Date</u> | <u>Deliver By</u> | <u>Ship To Name</u> | <u>Paid</u> |
|-----------------|--------------------|-------------------|---------------------|-------------------|-------------------|-------------------------------------|-------------|
| 953 | ALFKI | 1 | 953 | 02/07/12 | 03/21/11 | Alfred's Futterkistes | Y |
| 836 | ALFKI | 3 | 836 | 12/09/10 | 01/06/11 | Alfred's Futterkiste | Y |
| 703 | ALFKI | 1 | 703 | 09/06/10 | 10/18/10 | Alfred's Futterkistes | Y |
| 693 | ALFKI | 3 | 693 | 08/27/10 | 09/24/10 | Alfred's Futterkiste test test test | Y |
| 644 | ALFKI | 3 | 644 | 07/19/10 | 08/16/10 | Alfred's Futterkiste | Y |
| 63 | ALFKI | 1 | 63 | 08/21/08 | 09/18/08 | Alfred's Futterkistes | Y |



.MouseEnter() / .MouseLeave() effects using CSS

If you use VFP's
.MouseEnter()
.MouseLeave()
() for visual effects on hovered objects, you can easily achieve the same result using CSS

```
1  /*
2  This your application's style sheet.
3  By default, [see awServer.prg!awProcess::cawCSSinc()], FoxInCloud loads this styleSheet after
4  javascript components' CSS, and default CSS generated from your application's classes
5  and forms: [awDefault.css]
6  You may add any CSS directives to override styles inherited from you VFP application's
7  visual objects.
8  */
9
10 /* this CSS replaces the desktop .MouseEnter() and .MouseLeave() */
11
12 #customers_scx-pgf-pagdetails input:hover, #customers_scx-pgf-pagdetails select:hover {
13     background-color: rgb(190,190,190);
14     border-color: transparent;
15     box-shadow: 2px 2px 2px #535353;|
16 }
17
```





.MouseEnter() / .MouseLeave() effects using CSS...

Adding the proper CSS directives to your app's css (tfs.css here) produces a cool bgcolor change when hovering controls.

| company | contact | contact title | phone | city | address |
|----------------------|--------------------|------------------|----------------|------------|---------------|
| Alfreds Futterkiste | Maria Anders | Sales Repres... | 030-0074321 | Berlin | Obere Str. |
| Ana Trujillo Empa... | Ana Trujillo | Owner | (5) 555-4729 | México ... | Avda. de la |
| Antonio Moreno T... | Antonio Moreno | Owner | (5) 555-3932 | México ... | Mataderos |
| Around the Horn | Thomas Hardy | Sales Repres... | (71) 555-7788 | London | 120 Hanov |
| Berglunds snabb... | Christina Bergl... | Order Adminis... | 0921-12 34 65 | Luleå | Berguvsväg |
| Blauer See Delik... | Hanna Moos | Sales Repres... | 0621-08460 | Mannheim | Forsterstr. : |
| Blondel père et fils | Frédérique Cite... | Marketing Man... | 88.60.15.31 | Strasbo... | 24, place K |
| Bólido Comidas p... | Martin Sommer | Owner | (91) 555 22 82 | Madrid | C/ Araquil, : |

Customer details

Company: Alfreds Futterkiste Phone: 030-0074321

Address: Obere Str. 57

Postal code: 12209 City: Berlin Country: Germany

Contact name: Maria Anders Min. amt: \$ 2,600.00 Save

Contact title: Sales Representative Discount: 2 Max. amt: \$ 6,300.00 Cancel

Print Close

myCompany :: FoxInCloud

Session 3, episode 3

Getting prepared for production

Completing this section requires a full [FoxInCloud](#) license.

For more information about this license, please browse <http://foxincloud.com/pricing.php>,
and/or contact sales@foxincloud.com



Compiling your app in production mode

Running
atpjcompileDebugMode.prg
toggles
application
between
dev and
production
modes

The screenshot displays a software development environment with several windows:

- Properties - Desktop**: A window showing the properties of a 'Screen' object. The 'Name' property is set to 'Screen'.
- Command**: A window showing the command prompt with the following text:

```
DO "c:\program files\vfp9\toc  
clear  
DO "c:\program files\vfp9\toc
```
- Project Manager - Tfstest**: A window showing a list of files in a project. The file 'atpjcompiledebugmode' is selected. The 'Run' button is highlighted.
- Compilation Log**: A window showing the output of a compilation process. The text reads:

```
Compilation du projet c:\program files\vfp9\tools\ab\aw\samples\tastrade\sandbox\tfstest.pjx en mode PRODUCTION  
  
Starting C:\Program Files\VFP9\Tools\AB\AT\atpjcompile.FXP at 12/11/13 17:40:52  
1 - C:\...\AB\AW\awserver.PRG OK | 2 - C:\...\WC\classes\wserver.prg OK | 3 - C:\...\c  
lasses\wwProcess.PRG OK | 4 - C:\...\WC\classes\wwmaint.PRG OK | 5 - C:\...\wwscriptmap  
s.PRG OK | 6 - C:\...\AB\AW\awapph  
- C:\...\Tools\AB\AW\awhtml.PRG OK  
.\Tools\AB\AC\acData.PRG OK | 11 -  
lasses\wweval.prg OK  
12 files processed in 00:00:03  
All compiled successfully
```



Running your Application in production mode

In production mode, request log and forms won't appear in screen, and errors are captured by a global handler

The screenshot shows a development environment with two main windows:

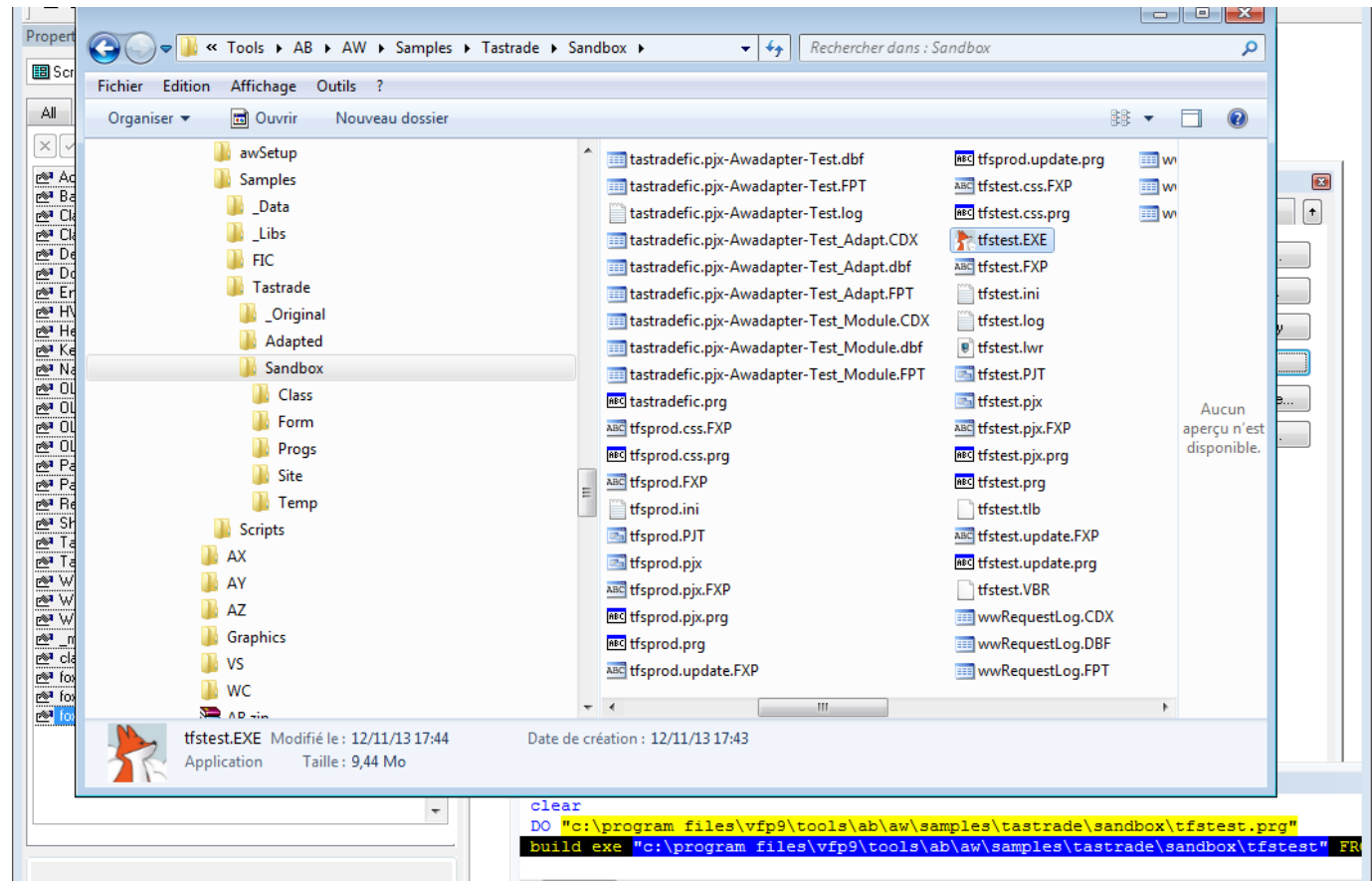
- Properties - Desktop:** A window showing the properties of a 'Screen' object. The 'Name' property is set to 'Screen'. Other properties include 'ActiveForm' (0), 'BaseClass' (Form), 'Class' (Form), 'ClassLibrary' (None), 'DefOleLCID' (0), 'Docked' (F - False (Default)), 'Enabled' (T - True (Default)), 'Hwnd' (131944), 'HelpContextID' (0), 'KeyPreview' (F - False (Default)), 'OLEDragMode' (0 - Manual (Default)), 'OLEDropEffects' (3), 'OLEDropHasData' (-1), 'OLEDropMode' (0 - Disabled (Default)), 'Parent' (0), 'ParentClass' (None), 'ReleaseType' (0), 'ShowInTaskBar' (T - True (Default)), 'TabIndex' (0), 'TabStop' (T - True (Default)), 'WhatsThisHelp' (F - False (Default)), 'WhatsThisHelpID' (-1), 'WindowType' (0 - Modeless), 'memberdata' (<VFPData> <memberdata>), 'clanguser' (fr), 'foxyviewerorigoutput' (C:\PROGRAM FILES\VF\), 'foxyviewerorigpreview' (C:\PROGRAM FILES\VF\), 'foxyviewerorigreportbehav' (90), and 'oFoxyPreviewer' (Object).
- Processing Request:** A dialog box showing a log of requests. The log includes:
 - 17:42:18 index.tfs - 1,032
 - 17:42:25 AJAXmenuSelect.tfs
 - 8id=popup-files-1&PageInit=&UserID=&Value=null&ValueType=object&nReq=1 - 0,832
 - 17:42:26 wFormStandardPage.tfs awForm=customers.scx - 1,152
 - 17:42:27 MethExec.tfs
 - 8MethAddr=InitControlsInet&ObjAddr=customers_scx&PageInit=true&UserID=&nReq=1&awForm=customers.scx - 1,902The dialog has buttons for 'Help', 'Status', and 'Exit'. Below the log, there is a list of files with checkboxes, including 'atpcompiledebugmode' which is checked. Other files include 'acga', 'acoop', 'actxt', 'atpiclean', 'atpicompile', 'aw', 'awapphost', 'awappuserenv', 'awhtml', 'awmenu', 'awpublic', 'awserver', 'awstart', 'awsupport', 'awt', 'codeblockclass', 'cscodeparser', 'lastradic', 'tfsserver', 'tfssets', 'tfstest', 'wconnect', 'wwapi', 'wwasprequest', 'wwasyncwebrequest', and 'wwbanner'. A 'Description' field at the bottom shows the path: 'c:\program files\vp9\tools\ab\at\atpicompiledebugmode.prg'.



Building your application.exe

Like for your desktop app., you distribute your web app. as an executable

Build a COM server (exe)



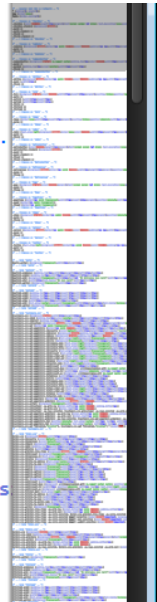


Build your global default CSS (awDefaultAll.css)

Running
`xxxTest.css.prg` builds
your app's
global CSS.

`xxxTest.css.prg` sits in your
project's
home folder,
next to
`xxxTest.*`

```
2 This is the standard style sheet generated as of your VFP application's classes and objects
3 hierarchy.
4 To get the CSS definitions of all class and objects existing in your application, run
5 xxx[Test\Prod].css.prg, or start your FoxInCloud server in file mode with the first parameter set
6 to .T.
7 In this case, the stylesheet generated is named 'awDefaultAll.css', otherwise 'awDefault<Sys(2015)>.
8 css' dynamically refreshed.
9 To make your Web application look and feel different from its VFP 'ancestor', you can simply
10 override any of these CSS definitions in your application's Style Sheet 'xxx.css' (always Loaded
11 Last).
12 -- */
13
14
15 /* -- General (W3C CSS 2.1 default) -- */
16 * {padding:0; margin:0;}
17 img {border:none;}
18 table {border-spacing:0;}
19
20 /* -- Classes as 'Checkbox' -- */
21 .checkbox {color:#000000;height:17px;margin:0;font:normal normal 9pt Arial; text-decoration:none;pos
22 .checkbox.standard {background:#FFFFFF;}
23 .awchk {}
24 .awchk.standard {}
25 .tfschk {}
26 .tfschk.standard {}
27 /* -- / Classes as 'Checkbox' -- */
28
29 /* -- Classes as 'Combobox' -- */
30 .combobox {background:#FFFFFF;border:1px solid #646464;color:#000000;padding:2px 2px;width:94px;heig
31 .awcbo {}
32 .tfsco {}
33 /* -- / Classes as 'Combobox' -- */
34
35 /* -- Classes as 'Commandbutton' -- */
36 .commandbutton {background:#F0F0F0 no-repeat center;padding-top:0px;color:#000000;width:98px;height:
--
```





Running your Web app in COM mode

Open your
wConnect
admin
page,
switch to
COM
mode and
load server.

(browse
[wConnect on
line
documentation](#)
for details)

The screenshot shows a web browser window displaying the 'Web Connection ISAPI Configuration' page. The page title is 'Web Connection ISAPI Configuration'. Below the title, there are several navigation links: 'Back to Admin Page', 'Re-Read Configuration', 'Recover Deadlock', 'Unload Servers', 'Load Servers', and 'Load One Server'. The main content area displays configuration details for the Web Connection 4.67 (32 servers). The configuration includes: DLL Version: Web Connection 4.67 (32 servers); Current INI File: c:\program files\vp9\tools\ab\aw\samples\tastrade\sandbox\site\tfstest\bin\wc.INI; File Template: wc; Script Timeout: 600; Temp File Path: c:\users\public\foxincloudtemp\tfs\; Admin Account: ; Current Login: Système; Messaging Mechanism: COM Mode | [File Mode](#); POST Mechanism: URL Encoded; COM Server Loading: Sequential; Keep Alive: Force Keep Alive; Hold Requests: Servers running [Switch](#); Lock: -1 Recursion: 0 Spin: 0. Below the configuration details, there is a table with the following columns: COM Servers, Hits, Active, Cumulative, Started, PID, and Action. The table contains one row for 'tfsTest.tfsTestServer' with 4 Hits, 0 Active servers, 4 Cumulative seconds, and started at 17:55 on 11/12/2013 with PID 1384. The Action column for this row contains a [Kill](#) link. Below the table, there is a link to [Show this info as XML](#).

| COM Servers | Hits | Active | Cumulative | Started | PID | Action |
|-----------------------|------|--------|------------|--------------------|------|----------------------|
| tfsTest.tfsTestServer | 4 | 0 secs | 4 secs | 17:55 - 11/12/2013 | 1384 | Kill |



Running your Web app in COM mode ...

As server auto-starts In COM mode, and response times are twice faster than in file mode, COM is the recommended mode for production.

| company | contact | contact title | phone | city | address |
|----------------------|--------------------|------------------|----------------|------------|---------------|
| Alfreds Futterkiste | Maria Anders | Sales Repres... | 030-0074321 | Berlin | Obere Str. 2 |
| Ana Trujillo Empa... | Ana Trujillo | Owner | (5) 555-4729 | México ... | Avda. de la |
| Antonio Moreno T... | Antonio Moreno | Owner | (5) 555-3932 | México ... | Mataderos |
| Around the Horn | Thomas Hardy | Sales Repres... | (71) 555-7788 | London | 120 Hanow |
| Berglunds snabb... | Christina Bergl... | Order Adminis... | 0921-12 34 65 | Luleå | Berguvsväg |
| Blauer See Delik... | Hanna Moos | Sales Repres... | 0621-08460 | Mannheim | Forsterstr. 2 |
| Blondel père et fils | Frédérique Cite... | Marketing Man... | 88.60.15.31 | Strasbo... | 24, place K |
| Bólido Comidas p... | Martin Sommer | Owner | (91) 555 22 82 | Madrid | C/ Araquil... |

| Customer details | | Customer Orders | |
|------------------|-------------------------|-----------------|--------------|
| Company | Antonio Moreno Taquería | Phone | (5) 555-3932 |
| Address | Mataderos 2312 | | |
| Postal code | 05023 | City | México D.F. |
| | | Country | Mexico |
| Contact name | Antonio Moreno | Min. amt | \$ 1,700.00 |
| Contact title | Owner | Discount | 6 |
| | | Max. amt | \$ 8,500.00 |

myCompany :: FoxInCloud



Browsing your server log

From your wConnect server admin page, you can browse the requests against your web app.

| Web Connection Log | | | | |
|--|---|-----|----------|---------|
| File: wwRequestLog.DBF Total Log: 110 Today: 110 Displaying last 110 Entries | | | | |
| Time | Script | Ip | Duration | Memory |
| 12/11/2013 18:00:32 | propch.tfs?&Prop=activepage&ObjAddr=customers_scx-pgf&PageInit=&UserID=3X7128VYQ&Value=2&ValueType=number&nReq= | ::1 | 0,78 | 3657664 |
| 12/11/2013 18:00:31 | gridmethod.tfs?&MethAddr=wAfterRowChange&ObjAddr=customers_scx-grdcustomer&PageInit=&UserID=3X7128VYQ&Value=ALFKI&V | ::1 | 0,88 | 3660076 |
| 12/11/2013 18:00:30 | gridmethod.tfs?&MethAddr=wAfterRowChange&ObjAddr=customers_scx-grdcustomer&PageInit=&UserID=3X7128VYQ&Value=ANTON&V | ::1 | 0,98 | 3660284 |
| 12/11/2013 18:00:29 | gridmethod.tfs?&MethAddr=wAfterRowChange&ObjAddr=customers_scx-grdcustomer&PageInit=&UserID=3X7128VYQ&Value=BERGS&V | ::1 | 1,27 | 3660508 |
| 12/11/2013 18:00:27 | gridmethod.tfs?&MethAddr=wAfterRowChange&ObjAddr=customers_scx-grdcustomer&PageInit=&UserID=3X7128VYQ&Value=BOLID&V | ::1 | 0,85 | 3659628 |
| 12/11/2013 18:00:26 | gridmethod.tfs?&MethAddr=wAfterRowChange&ObjAddr=customers_scx-grdcustomer&PageInit=&UserID=3X7128VYQ&Value=BLAUS&V | ::1 | 0,93 | 3659488 |
| 12/11/2013 18:00:25 | gridmethod.tfs?&MethAddr=wAfterRowChange&ObjAddr=customers_scx-grdcustomer&PageInit=&UserID=3X7128VYQ&Value=AROUT&V | ::1 | 1,56 | 3659688 |
| 12/11/2013 18:00:23 | gridmethod.tfs?&MethAddr=wAfterRowChange&ObjAddr=customers_scx-grdcustomer&PageInit=&UserID=3X7128VYQ&Value=BLAUS&V | ::1 | 1,01 | 3659616 |
| 12/11/2013 18:00:22 | gridmethod.tfs?&MethAddr=wAfterRowChange&ObjAddr=customers_scx-grdcustomer&PageInit=&UserID=3X7128VYQ&Value=ALFKI&V | ::1 | 1,22 | 3659756 |
| 12/11/2013 18:00:21 | gridmethod.tfs?&MethAddr=wAfterRowChange&ObjAddr=customers_scx-grdcustomer&PageInit=&UserID=3X7128VYQ&Value=ANATR&V | ::1 | 1,24 | 3659556 |
| 12/11/2013 18:00:19 | gridmethod.tfs?&MethAddr=wAfterRowChange&ObjAddr=customers_scx-grdcustomer&PageInit=&UserID=3X7128VYQ&Value=AROUT&V | ::1 | 1,23 | 3659680 |
| 12/11/2013 18:00:18 | gridmethod.tfs?&MethAddr=wAfterRowChange&ObjAddr=customers_scx-grdcustomer&PageInit=&UserID=3X7128VYQ&Value=BOLID&V | ::1 | 0,71 | 3659456 |
| 12/11/2013 18:00:17 | gridmethod.tfs?&MethAddr=wAfterRowChange&ObjAddr=customers_scx-grdcustomer&PageInit=&UserID=3X7128VYQ&Value=BERGS&V | ::1 | 0,86 | 3659148 |