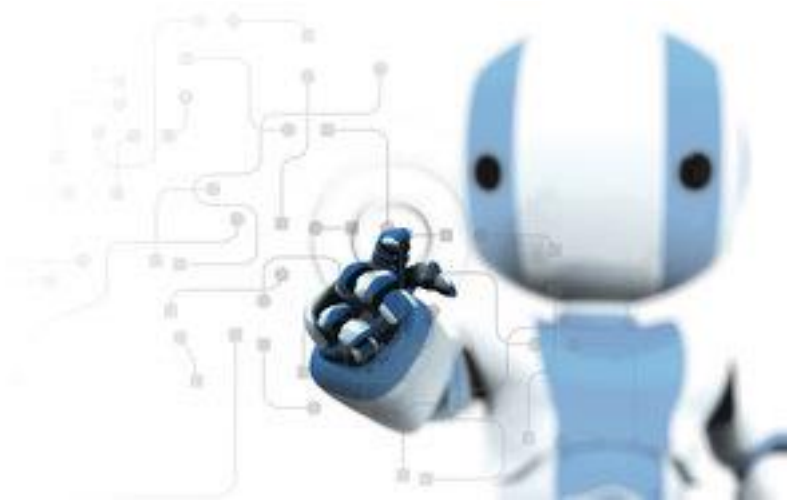
VERSION 1

JANUARY 1, 2014



IX SERVER MANUAL

PRESENTED BY: ALEX DUMMETT

JAMLOGIX LTD

32 CHATTERTON ROAD • LONDON • N4 2DZ

IX SERVER MANUAL

BACKGROUND

This manual has been created to represent the requirement under section 4.1.2 of the "**APPLICATION SOFTWARE SUPPORT AGREEMENT (SAMPLE)**".

It is organic in its nature and JamLogIX reserves the right to change it from time to time in accordance with section 4.1.2 of the Application Support Agreement (Sample).

WHAT IS THE "IX SERVER MANUAL"

The IX Server Manual forms a Start-Up guide and documents the procedures and tasks for setting up an IX server from the initial out-of-the-box deployment to a customer or service.

PROJECT COMMUNICATION TABLE

Document	Recipients	Responsibilities	Update frequency
IX Server Manual	Client	Alexander Dummett <alex.dummett@jamlogic.com>	Monthly
Application Support Agreement (Sample)	Client	Mike Franklin	As Required

CHANGE MANAGEMENT PROCESS

Please record changes to this document

CHANGE CONTROL BOARD (CCB)

Date recorded	Responsibility	Probability	Impact	Mitigation plan
Initial Draft 1	Alex Dummett	None	Start Up	Not required

GENERAL INFORMATION

1.1 SYSTEM OVERVIEW

1.1.1 MAJOR FUNCTIONS PERFORMED BY THE SYSTEM

The system is referred to as an “IX Server”. This is the brand name of the system.

The major functions are as follows.

COLLECT DATA

The IX serve can collect data from a number of sources including FTP, SMTP (Email), SQL Databases and other form of data distribution.

PROCESS DATA

The IX Server then processes the collected data. Example are: manipulating data fields, processing images, filtering emails.

DISTRIBUTE DATA

The IX Server then distributes the data. Examples are send the data to FTP servers, sending data to Web Servers, emailing the data to users, importing data to a database.

1.1.2 ARCHITECTURE OF THE SYSTEM

The architecture of the system is a bespoke operating system we called the “IX Shell”, which runs on Windows Embedded Technology. It is accompanied by an application called the “Data Foundry™” where all the collecting, processing and distribution takes place. This creates the data processing framework we call FoundryBox™. There are no other services or applications involved in the IX Server System.

The system is capable of running on the following platforms:

- Dedicated Intel and SuperMicro hardware.
- Microsoft HyperV
- VMWare
- Microsoft Azure

OPERATING SYSTEM

The IX Shell is a bespoke interface that runs on top of Microsoft Windows Embedded as the kernel with a foot print of 1.2GB. It contains *only* the necessary functions to manage the IX Server operations and provides unique visual performance monitoring.

DATAFOUNDRY™

The core data processing engine is called The DataFoundy™. This is where all the data processing chains are built. This is referred to as the data processing framework core.

1.1.3 USER ACCESS MODE, (E.G., GRAPHICAL USER INTERFACE)

The IX Server is accessed using remote control software. This needs to be installed on the client that wishes to connect to the server. The client software is available for download using the following URL:

- PC: ***http://yourserver.domain/support/setup.exe***
- Mac: ***http://yourserver.domain/support/NetSupportManager.dmg***

The DataFoundy™ has a web interface if required. This is switched on by default and may be accessed using the following URL: ***http://yourserver.domain:5401***If you wish to change the configuration of the web interface, this can be done in the servers application settings.

These are the only two user access modes available.

1.1.4 SYSTEM NAME OR TITLE

The System name is “IX Server”.

1.1.5 SYSTEM CODE

There are no APIs available for the server.

1.1.6 OPERATIONAL STATUS

OPERATIONAL

The current operational release at this time is Version AR.01

UNDER DEVELOPMENT

Version AR.02 is currently underdevelopment

UNDERGOING A MAJOR MODIFICATION

No major modifications are reported at this time.

1.1.7 SYSTEM ENVIRONMENT OR SPECIAL CONDITIONS

The IX Server is a network device for processing data. It must have a minimum of a single network connection to operate.

If you are using the hardware version, you must make sure that a suitable data card has been provided to store all for reference data and settings on.

If you are using a virtual environment, please refer to your support engineer for any special conditions.

1.2 AUTHORIZED USER PERMISSION

MODULES

JamLogIX prohibits the use of all Third Party modules that might or have been developed outside the DataFoundy™ Framework and that do not have permission from JamLogIX for server deployment.

JamLogIX are the only authorized developer of modules.

SERVER CORE

At No point and for No reason may the core operating system and all associated software's be reversed engineered, tampered with, changed or copied.

The Server Core cannot be supported by the customer or client and maintains the property of JamLogIX at all times. If any defect if discovered it must be reported to JamLogIX to rectify.

DATA PROCESSING

At no point is the server to be setup with or aligned to, in order to create data cleansing or data modification services that do not directly interface with or connect to the customers own data systems.

1.3 POINTS OF CONTACT

1.3.1 INFORMATION

Please visit our website for further information **http://www.jamlogix.com**

For documentation please visit **http://www.jamlogic.com/wiki**. Here you will find more documentation and help files than this manual is able to provide.

1.3.2 HELP DESK

All support questions should be directed through our help desk at **https://jamlogixltd.zendesk.com/**

1.4 ACRONYMS AND ABBREVIATIONS

FOUNDRYBOX™

The Brand name for the Service

DATAFOUNDRY™

The Data Processing Core

IX SERVER

Our JamLogIX reference to your Cloud Server

DATA CHAIN

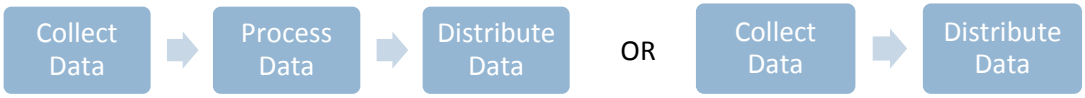
Reference given to how the modules are linked together.

SYSTEM SUMMARY

This section provides a general overview of the system written in non-technical terminology. The summary outlines the uses of the system in supporting the activities of the user and staff.

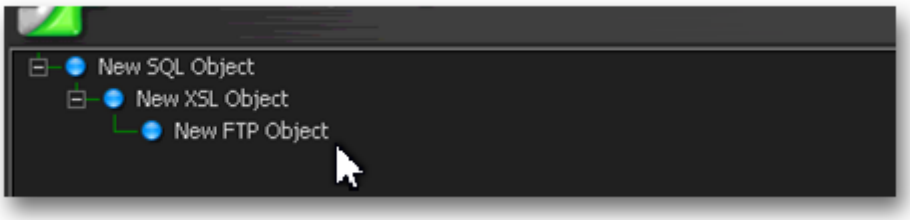
2.1 DATA FLOWS

Data processing all happens in the following order.



It's important to understand that all data modules (as above) need to be linked to each other to create some form of work flow. To do this FoundryBox and the IX Servers use a taxonomy based process flow where the modules are "Chained" together to create a "Data Chain" as in the example below.

It's a bit like walking down steps, and each step you have to stop and perform a task.



This set of steps or rather chain, shows how each stage of the process from collection to distribution is related to each other. So in plain terms it is as follows.

The "New SQL Object" collects the data and passes it to its child, the "New XSL Object" for processing, then when the processing is complete, the data is passed to the next child "New FTP Object" for distribution. And so on... and so on...

Each module takes an input, The Data, and passes the output, more Data, to the next module in the chain

Simples!

GETTING STARTED

This section provides a general walkthrough of the system from initiation through exit. The logical arrangement of the information shall enable the functional personnel to understand the sequence and flow of the system. Use screen prints to depict examples of text under each heading.

3.1 LOGGING ON

3.11 USER ID AND LOG ON

Your logon access Usernames and Passwords will be provided by Support. If you have not received these yet, please contact support.

You will need the following set of credentials from your support team.

- Remote Control login details
- Web Interface login details
- “yourserver.domain”. This is the URL or IP address to access your server.

Access to your server is done using two methods. 1) Remote Control Software, 2) Web Site Access

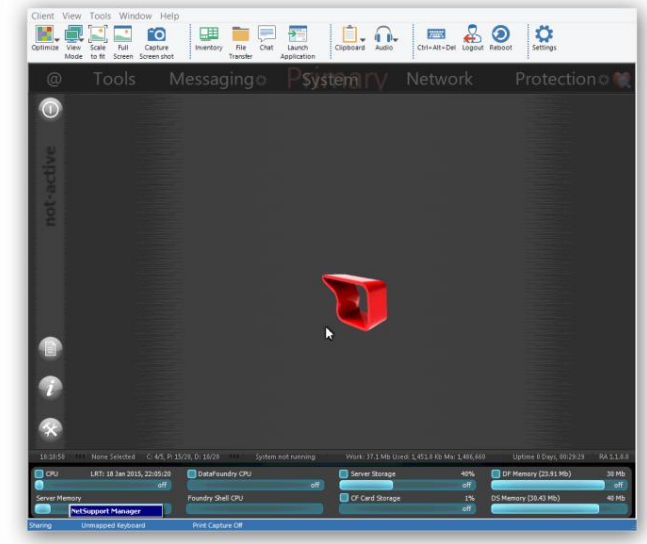
3.1.2 SOFTWARE

To remotely control your server you will need to download and install the appropriate client software. You will need your “Web Interface login details” to be able to download the supporting routines, so please have them to hand. Without them you will not be able to access your server.

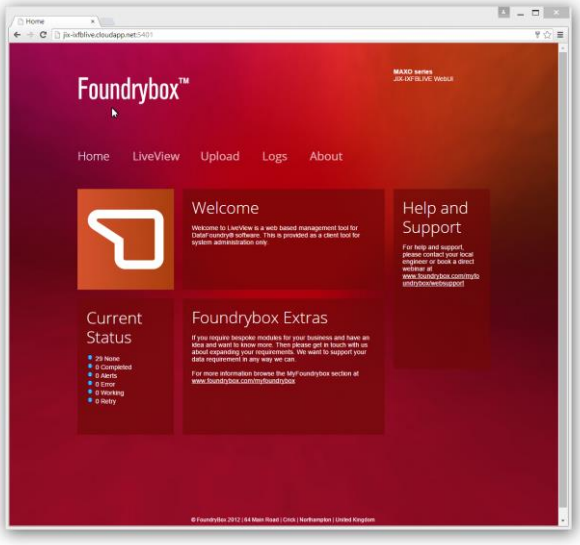
For PC go to: **http://yourserver.domain:5401/support/setup.exe**

For Apple Mac, go to: **http://yourserver.domain:5401/support/NetSupportManager.dmg**

The IX Server also provides you with a web interface for monitoring and file transfers.



Remote Control

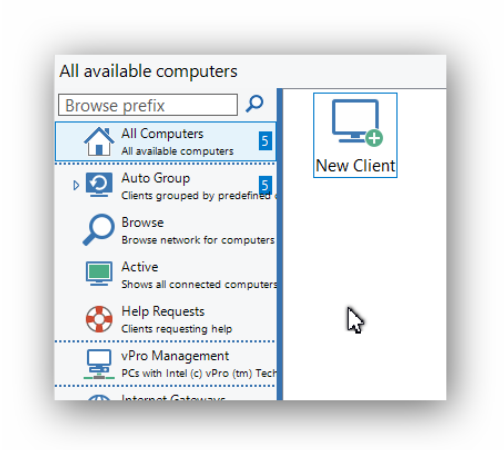


Web Access

3.1.3 REMOTE CONTROL

Once you have downloaded and installed the NetSupport Manager client. You will need to configure it to connect to your server.First create a new client. This will be your server. If you have more than one IX Server you can create multiple clients.

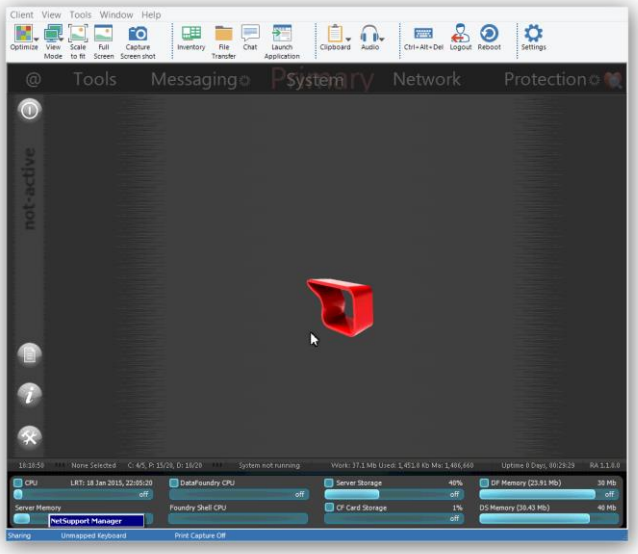
1) Double click on the “New Client” image.



2) Enter the “Name” and the “Address” of your server. The address will either be a domain name (yourserver.domain) or an IP address. If you do not have these please contact technical support for your connection details.

You can type anything in the “Name” field, because when you connect for the first time, it will be changed to the name of your server.

3) Next, double click on the newly created client and enter the “Remote Control Login Details”. If you don’t have these please contact Technical Support.
4) Once connected you will see a screen like this. Congratulations, you are now in control of your first IX Server.



3.2 SYSTEM MENU

Let's now see an example of how an initial setup looks like. Although the described steps serve as examples, they have been already put in to practice and operate well for a company.

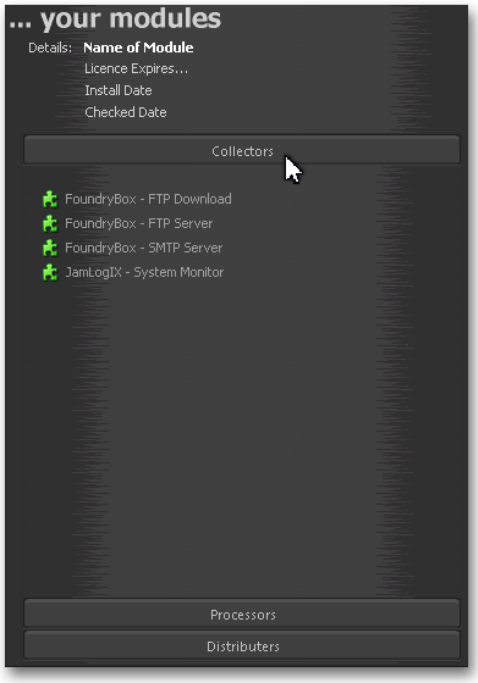
First of all you need to build chains. These are called "Data Chains". They link the collectors, Processors and Distributers together to form a simple workflow.

3.3 CREATING A COLLECTOR

To start this click on the **"Chain Builder" icon: This is at thetop, a round blue button with a document symbol on it.**

Click on the half-white half green puzzle icon at the top of the window "*Show available plugins*". This move displays "Collectors", "Processors" and "Distributors" on the right side of the screen.

On the right had side of the window you will now see a list of modules.

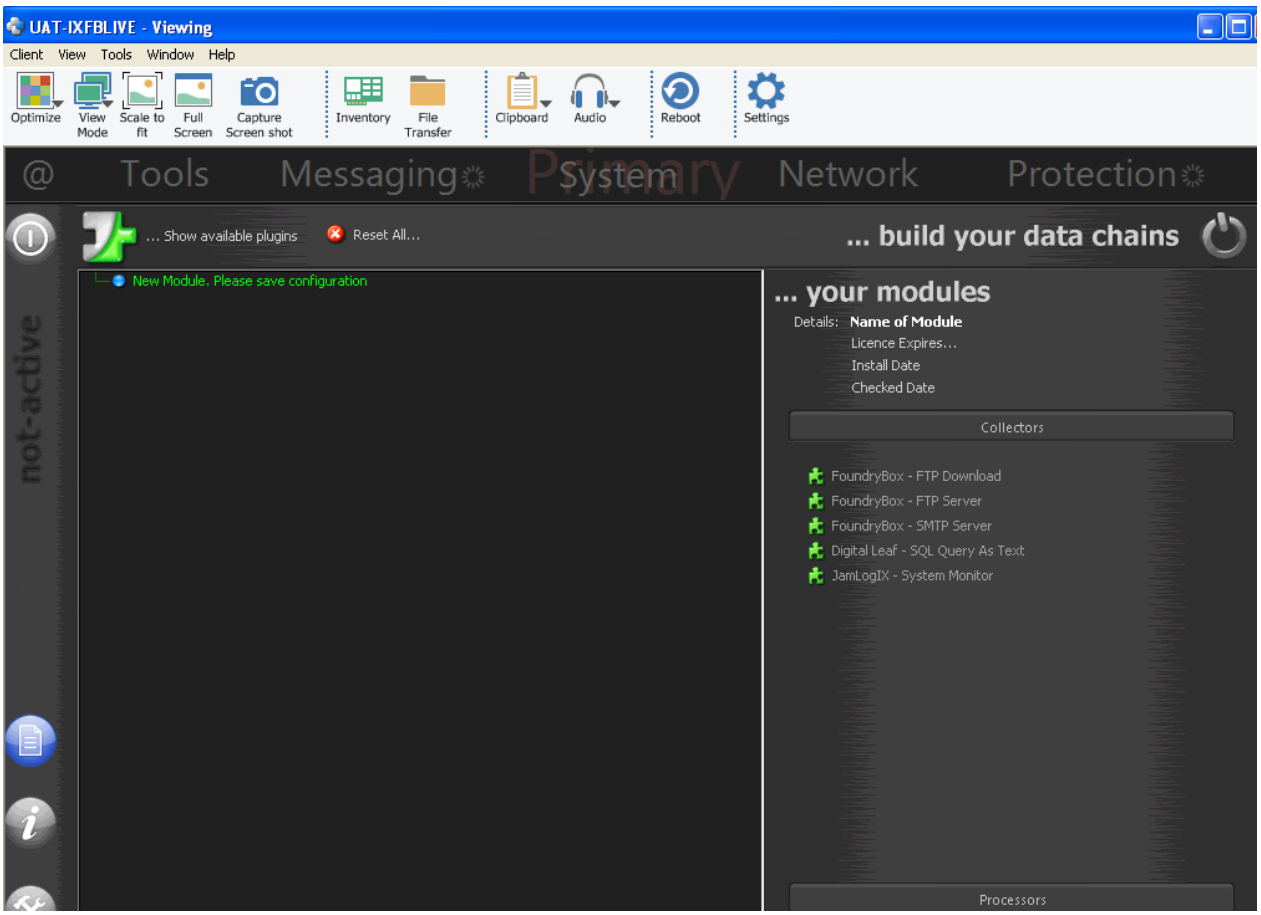


Click on "Collectors".

From “Collectors” drag “Digital Leaf - SQL Query As Text” on to the blank space to the left. We call this the Canvas. For this you need to place your mouse over the green puzzle piece just before the text “Digital Leaf - SQL Query As Text”.

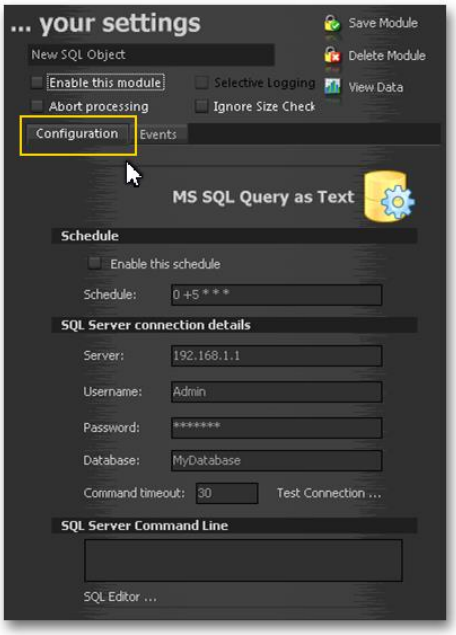
Clicking on the text itself will not move the item,you need to click on the puzzle.

On the left it will be displayed as a “*New Module. Please save configuration*”. Note that this does not save the module, just places it for the settings to be applied.



3.3.1 SETTING THE COLLECTORS PROPERTIES

Click on the line “*New Module. Please save configuration*”. This brings up the option “Configuration” on the right. Now you will configure it.



1) Check “Enable this module”.

2) Fill in all the fields as per the picture.

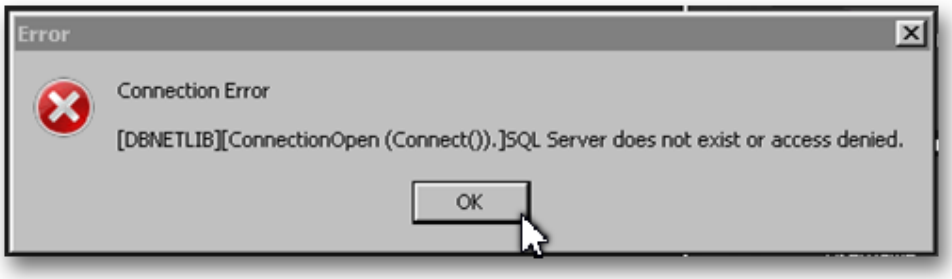
3) Click “Save Module”.

At this time you will get a warning box. This is because you have not completed the settings.

4) Enter “Get_My_Data”, in the SQL Server Command Line.

If you click “Save”, you will see at the top on the left (in the Canvas) that the Module has now received a name. This means that it has been saved. Now you can “Test Connection” and make sure that the module is able to communicate with the database.

Possible errors 2: In case it cannot connect to server, you will this message:



Please check your database connection settings.

As this is an example, it is unlikely to work unless you actually do have a database with all the same settings listed above. If you do. Email us ☺

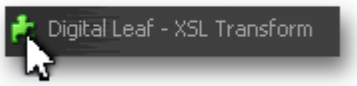
3.3 CREATING A PROCESSOR

Now we need to process the collected data. You don't have to, because we could just distribute it again, but for this example we want to show you how to change the data to something useful.

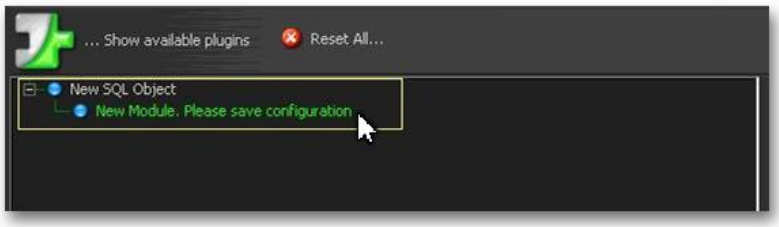
To go back to main menu, you hit the puzzle sign: "Show available plugins" and get to the main page. Now we are going to add a "Processor" to process the data that was collected in the previous section.

Now click on "Processors" to change the list to the available processors you have installed on your IX server.

Drag XSL Transform to the left.

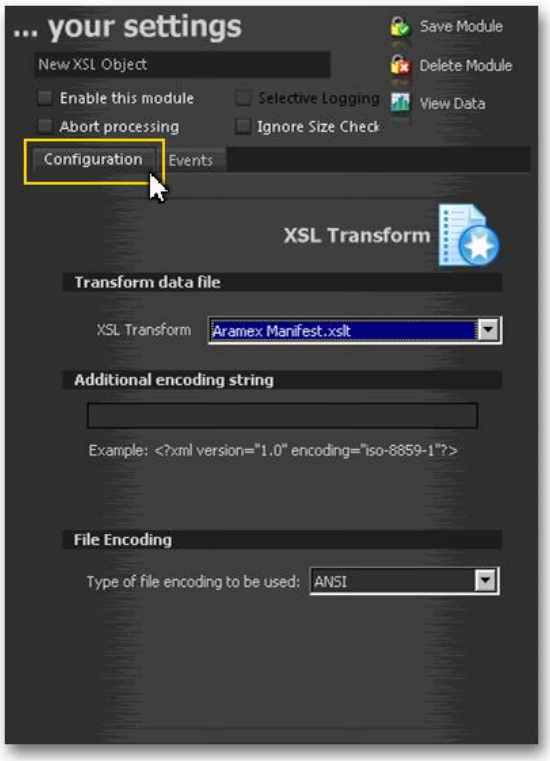


Now it is on the left. It should be under the main chain, as it is sub-function of the collector.



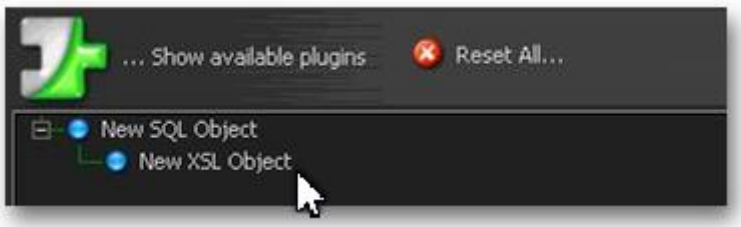
3.3.1 SETTING THE COLLECTORS PROPERTIES

Click on thenew module to bring up the “Configuration” page that appears on the right.



1. From “XSL Transform” drop-down list you choosethe first of any option. In this case “Aramex Manifest”.
2. The “Additional encoding string” is for techies, leave it blank.
3. The “File Encoding” leads you to another drop-down, here choose the first option. In this case “Ansi”.
4. If you choose the second one “UTF8”, note that this is used for additional character sets, such as Hungarian.
5. Having executed all these steps, it will look like the picture on the left.
6. “Enable” it and “Save” it. It will then be saved and the name will change.

After saving the module, it will add it to the canvas, change its name and save it to the server. You should now see the picture below.

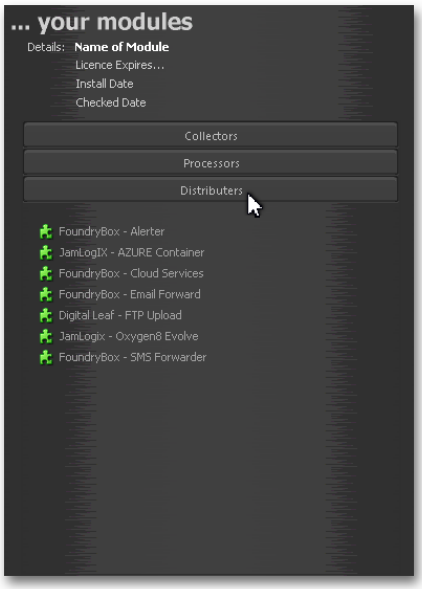


3.4 CREATING A DISTRIBUTOR

By now we will have a data file that would be transformed in to the desired shape for the actual business partner of the customer. The next step is to distribute it, so the best way to send it is via FTP. So we will use an FTP Uploader to perform this task, but there are many more to choose from.

To do this, click on the left top to “Show available plugins”.

Click on the right and choose “Distributers”. If you do not see this option, scroll totally at the bottom on the right side of the page and it should appear. It’s often possible that you have not set the remote control window to the correct size.

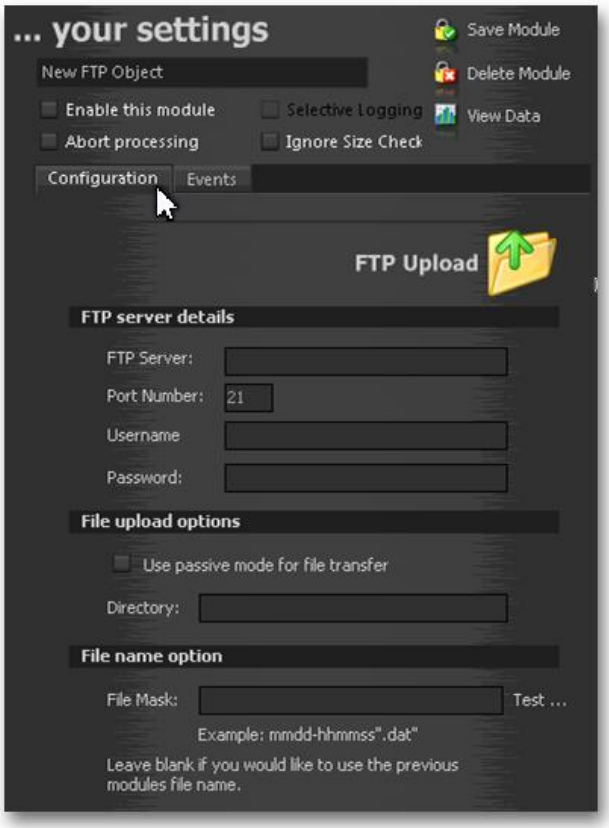


Choose “Digital Leaf - FTP Uploader”.

Drag it to be the sub of the last options on the left.

Click on the module line in the canvas window, this will now show the configuration.

"FTP server details" FTP Server is the server where you upload the file to.This is either an IP address, or a domain name. So in the server configuration you need a destination.



1) FTP Server: 192.168.1.20 or ftp.jamlogix.com

2) "Port Number": it can be 21.

3) "Username": Admin.

4) "Password: your password

5) "File upload options": "Passive mode", is something particular to FTP. Some servers use it, others do not, so it is an option if the end server is compatible. Leave it unchecked.

6) Directory" is the path on the destination server, or rather the folder where you want to save the file.

   Type this: Incoming/

7) "File name option": A "File Mask" allows you to change the file name.

   Insert this: "MyData.csv". You MUST include the quotes.

"Enable" and "Save" it and you will have a view as below.

CONGRATULATIONS!! You have now created your first Data Chain! Give yourself a pat on the back.

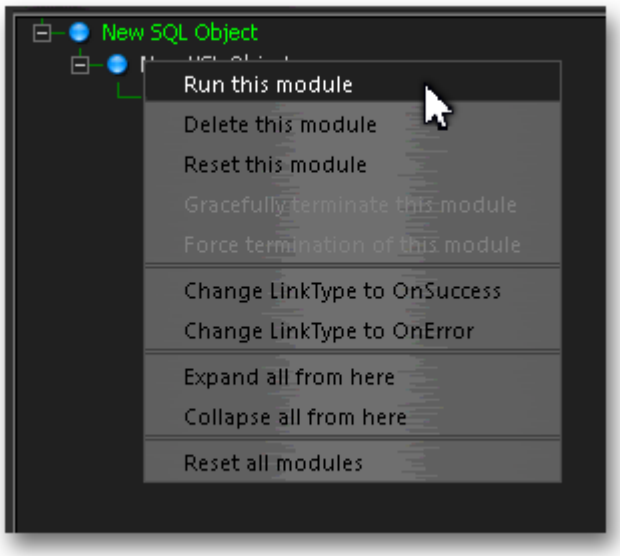
Once the file is uploaded, there is nothing more to set. You have collected data, processed the data and distributed the data.

3.5 TO TEST

"Test…", "Test…", "Test…"

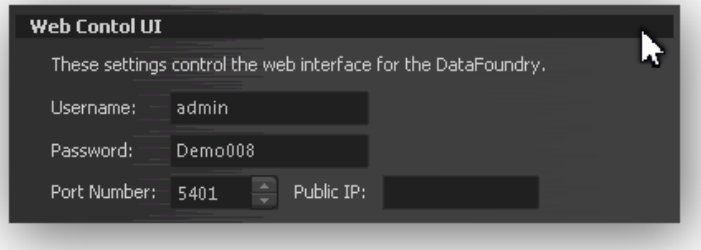
Normally, you can test your settings, but in our case you cannot test it as all the settings we have used in this manual are "dummy".

To test your data chain, right click on the collector and select "Run this module". This will execute your data chain starting at the first point.



3.6 CHANGING USER ID AND PASSWORD

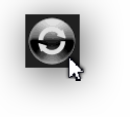
The only username and password you are able to change is that of the Web Access. This can be done from the DataFoundy™ settings page under "Web Control UI"



If you need to change the Username and Password of the Remote Control access, please contact technical support.

3.7 EXIT SYSTEM

In order to *Shut down* or *Restart* the system, you will need to use the IX Shell. Click on the menu item "@" to display its options and select from either of the two icons.



Shutdown

Restart