



FMI Application Details

PREPARED BY FIRST DIGITAL

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INTRODUCTION

This document describes all the components and their functions of the various systems deployed at FMI along with both non-technical explanations and technical specifications and details. This ensures that there is clear understanding of what a system does, what is used for and the technical details around build and deployment.

EXECUTIVE SUMMARY

With a view for disaster recover, it's been deemed necessary to ensure that FMI has a legacy software disaster recovery system process for fixing, building and deploying these applications. The following plan was drafted with all stakeholders.

LIST APPLICATIONS OF CONCERN

Status: Complete.

The purpose of this task is to run through all the applications of concern and note main details about each application. This was completed on the 13/03/2019 by Suman Ganesh (FirstTech), Luis Bester (FMI) and Andre Riekert (FMI). The result of this was used in part, as a basis for the first draft of this document.

APPLICATION DEPLOYMENT DETAILS

Status: Complete.

This task is required to ensure that all the specific technical deployment details for each piece of software is documented. This was completed on 01/04/2019 by Andre Riekert (FMI). The result of this was used in part, as a basis for the first draft of this document.

APPLICATION DETAILS DOCUMENT

Status: In Progress.

This task is creating this document and will be ongoing until all other tasks are complete. This document will describe all the components, requirements, processes and knowledge required to conduct disaster recovery for any application that is listed in this document.

APPLICATION BUILDS FROM SOURCE

Status: Complete.

This task involves running through each piece of software and attempting building from source. The key infrastructure tasks to enable this is the following:

- Send an image of the "FMIAUTORUN3" Virtual Machine (VM) in order to attempt builds of VB6 software projects. (Status: Complete)
- Create a Windows VM where all the builds for the .Net based software projects can be done. (Status: Complete)

Below is a list of all the software projects that need to be built on the "VB6" VM:

Application	Status
Maveric	Complete
Maveric Lite	Complete
Maveric Claims	Complete
AutoJob (a part of Maveric)	Complete
FMI Quote	Complete

Below is a list of all the software that needs to build on the ".Net" VM:

Application	Status
Broker Distribution (BD) module	Complete
FMI Internal sales sync	Complete
Email Monitor	Complete
Web quote and Web service	Complete
Astute API's	Complete
FMI WF importer	Complete
Claims Tool	Complete
Workflow (Individual)	Complete
Workflow (Group)	Complete
Cyber Query	Complete
Shared Folder	Complete

APPLICATION TESTING

Status: Complete.

This is where running through the applications on site in a live environment is planned to give the developers at FirstTech a broad knowledge of what that application looks like running and working.

VB6 applications:

Application	Status
Maveric	Complete
Maveric Lite	Complete
Maveric Claims	Complete
AutoJob (a part of Maveric)	Complete
FMI Quote	Complete

.Net applications:

Application	Status
Broker Distribution (BD) module	Complete
FMI Internal sales sync	Complete
Email Monitor	Complete
Web quote and Web service	Complete
Astute API's	Complete
FMI WF importer	Complete
Claims Tool	Complete
Workflow (Individual)	Complete
Workflow (Group)	Complete
Cyber Query	Complete
Shared Folder	Complete

DEPLOYMENT TESTING

Status: Complete.

This step is where running through test deployments of the applications on site is required.

VB6 applications:

Application	Status
Maveric	Complete
Maveric Lite	Complete
Maveric Claims	Complete
AutoJob (a part of Maveric)	Complete
FMI Quote	Complete

.Net applications:

Application	Status
Broker Distribution (BD) module	Complete
FMI Internal sales sync	Complete
Email Monitor	Complete
Web quote and Web service	Complete
Astute API's	Complete
FMI WF importer	Complete
Claims Tool	Complete
Workflow (Individual)	Complete
Workflow (Group)	Complete
Cyber Query	N/A
Shared Folder	N/A

SYSTEM DATABASE OVERVIEW

This process will go through where all the Databases are and what backup procedures are in place.

GENERAL OVERVIEW

The main piece of software that FMI use is called *Maveric*. This is a Desktop Application that runs on a user's local machine and connects to a database on a centralised server. There are multiple variations of the *Maveric* software running across FMI's systems that each accomplishes a different task. *Maveric* is also key in the running of several other business critical software solutions that will be detailed later. Below is some key technical information to keep in mind:

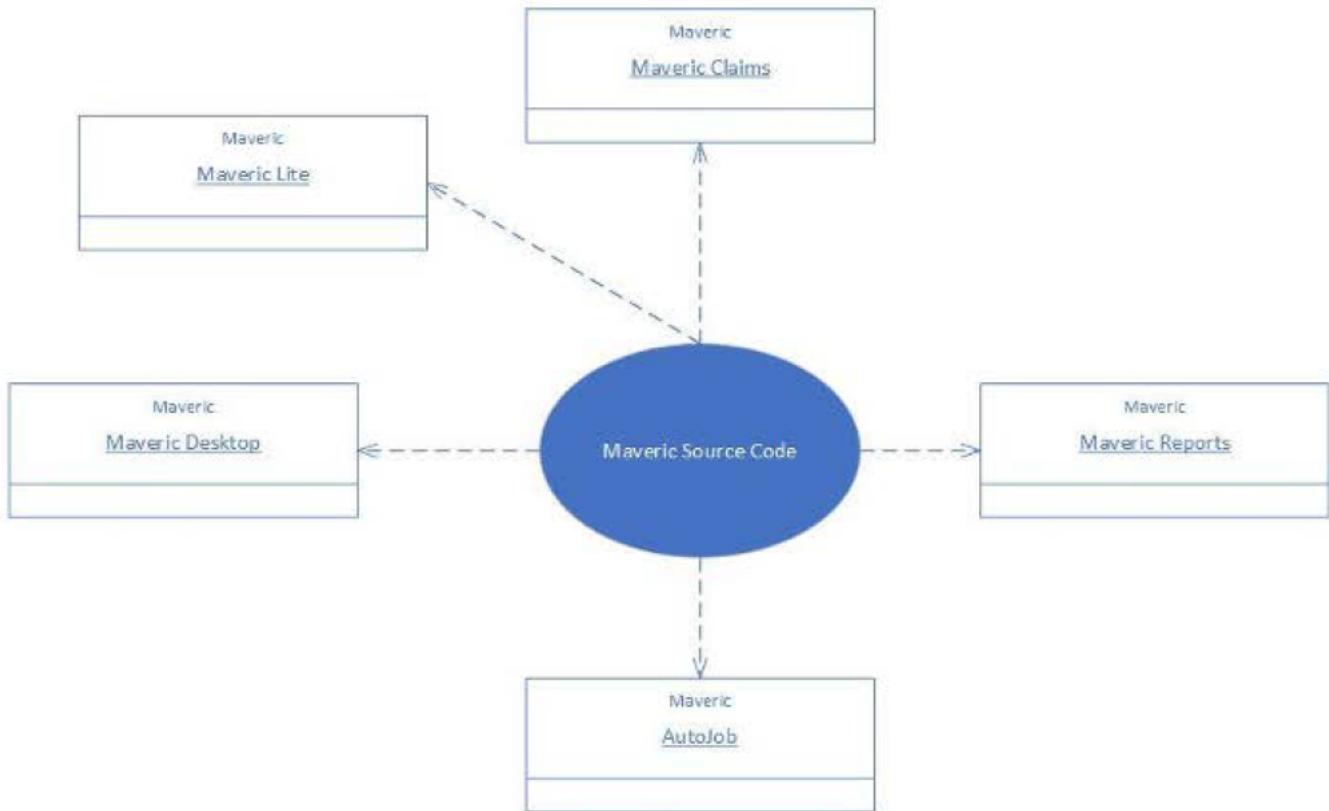
- All PCs that run any of the software detailed in this document need to be set up with the following digit grouping separator, list separator and decimal symbol. Digit grouping is a space ' ', and the decimal separator is a full stop '.', finally, the list separator must be a comma ','.
- Most users machines run Windows 8 with a smaller number running Windows 10. Some users that have computers that are unable to run Maveric and BD module, use the software through a RDP session.

MAVERIC

INTRODUCTION

Maveric is used to maintain client and policy information for FMI. It is used by most staff at FMI. It is used to attain client, claim, coverage and financial information of a client. It is also used to collect and process various data about the client and policy.

There are several deployments of the *Maveric* software across FMI's system architecture besides the version that runs on the user's local desktop. The versions of each are described below:



MAVERIC TECHNICAL SPECIFICATIONS

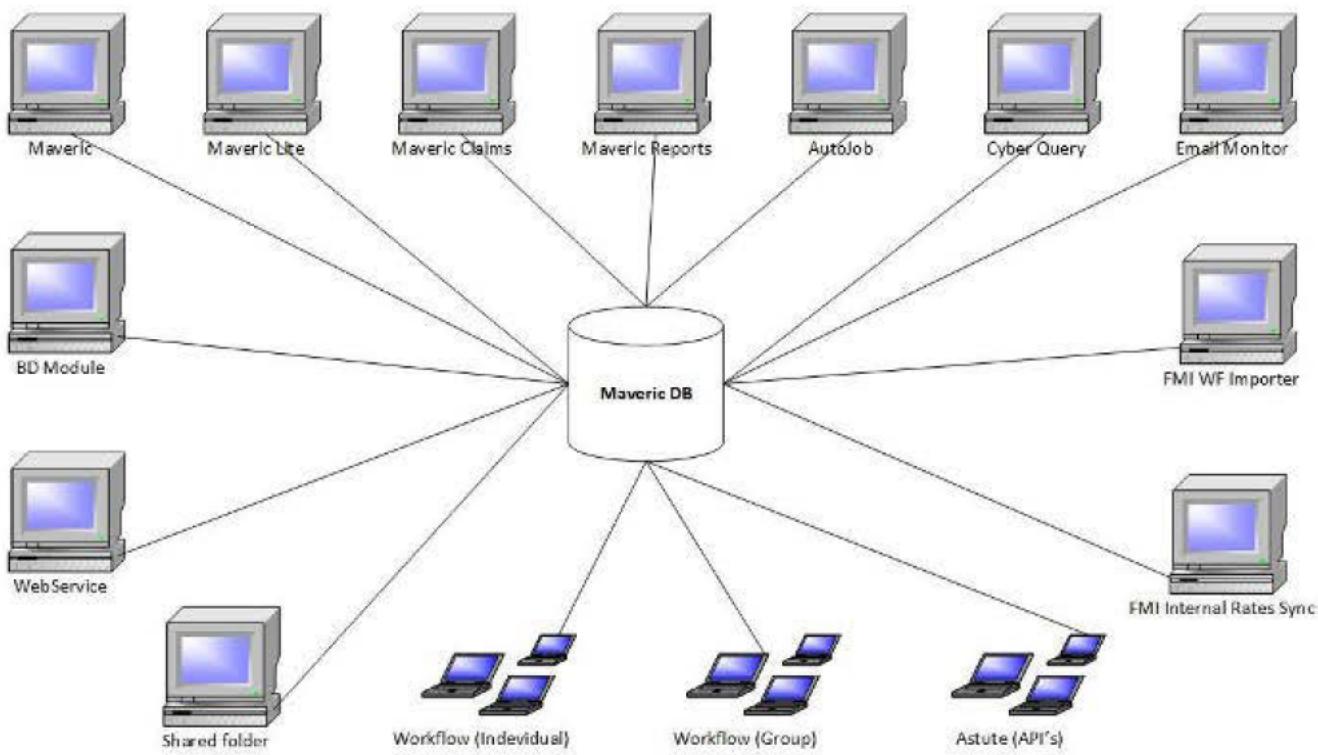
Below are the technical specifications for each of the *Maverick's* versions and their deployments.

VERSIONS

Application	Source Code	Language	Deployment	Server
Maveric Desktop	Gitlab	VB6	Desktop App	FMISQL03
Maveric Lite	Gitlab	VB6	Desktop App	FMISQL03
Maveric Claims	Gitlab	VB6	Desktop App	FMISQL03
Maveric Reports	Gitlab	VB6	Desktop App	FMISQL03
AutoJob	Gitlab	VB6	FMIAUTORUN, FMIAUTORUN2/3/4	FMIAUTORUN, FMIAUTORUN2/3/4

MAVERIC DATABASE

There are several applications that depend and reply on the Maveric Database to function. If this DB goes down, then these apps will also not function. Note for the WebQuotes system. The instance of WebQuotes that is hosted at FMI links to the Maveric DB. The instance that is hosted on a Hetzner server has its own Db, FMIRates, that is a subset of the Maveric db. The data is synced between DB's using a linked server using stored procs on the Mavericks DB that pools the data between the 2 systems. The following graph displays the apps that rely on this database.



MAVERIC DB BACKUPS

Every evening at 8pm, a SQL Server Agent Job called ‘__HH Backup 2018 full’ runs that does a backup of the Maveric DB and stores it in ‘\\FMIDBN-NAS-03\\nas03_25TB\\SQL\\SQL03’ on fmisql03 (172.16.93.129).

Every morning at 3am, a SQL SERVER Agent job runs on fmisql08 (172.16.93.83) called ‘restore MODO’ that takes the Maveric backup from the previous night and restores it to the MODO db.

Note: All the SQL Server Agent Jobs are backed up in the First Digital Azure DevOps Repo’s, ‘FMI-FMISQL03-SQLAgentJobs’ and ‘FMI-FMISQL08-SQLAgentJobs’.

VB6 VIRTUAL MACHINE

This is a Hyper-V virtual machine that is used to build Maveric and all other VB6 solutions:

- Machine name: FMIAUTORUN3
- OS: Windows 7
- Visual Studio 2013
- MS Visual Basic 6
- Windows User: FMIDOMAIN\autorun
- Windows Password: [REDACTED]

Maveric needs to be built in the ‘C:/Code/fmi-dev/...’ path on the VM. To build a project, find the .vbp project file, open it on MS Visual Basic and then press ‘Ctrl +f5’ or select ‘Start with full compile’ from the ‘Run’ menu tab.

Noteworthy files:

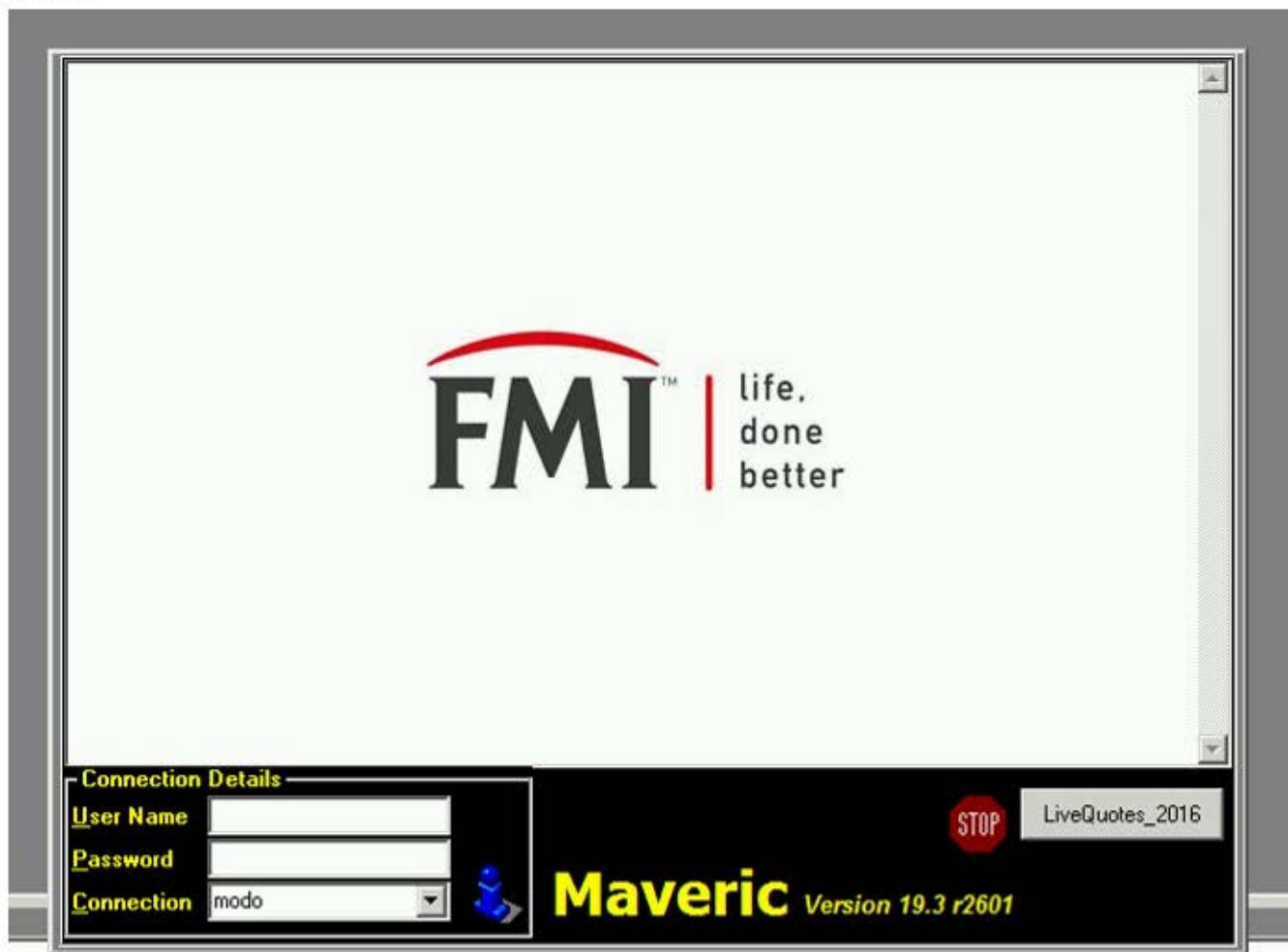
- Maveric GIT FETCH.bat, file gets the latest code from gitlab and then copies it to ‘C:/code/fmi-dev/master/maverick-vb6/’ for master, develop and testing. It also runs a bat file to get external dependency dll’s and registers them. Path to the external dll’s is

'//fmishare/download/maveric/dll_2011', this is run whenever maveric.exe is run or when 'Maveric GIT FETCH.bat' is run. This file can be run whenever Maveric needs to be deployed.

BUILDING

To build, test and deploy Maveric, the following process needs to be followed:

1. On the host machine, connect to FMI's network via VPN.
2. Start the VB6 Virtual machine and login.
3. Run the bat file 'Maveric GIT FETCH.bat', that will fetch the latest Maveric source files from Gitlab and copy the required dlls from the '//fmishare/download/maveric/dll_2011' folder onto the VM.
4. Navigate to 'C/code/fmi-dev/master/maverick-vb6/Maveric' and open the 'Maveric.vbp' file.
5. Once the Maveric project opens, you will get a dialog box saying, 'Object reference not set to a instance of a object.', ignore this message and continue.
6. To test that Maveric Builds correctly, press Ctrl+F5 to run the solution. If the build succeeds, you will see the Maveric login screen and be able to login with the Testing details described in the Deployment Details.



7. Once you have confirmation that Maveric builds and runs successfully, stop the project and navigate to File => Make Maveric.exe which will bring up a dialog box detailing where to save the exe. Before you save the exe, click Options and update the version number as follows:

- a. Major is Year.Ex 19 for 2019
 - b. Minor is Month. Ex 3 for March
 - c. Revision is day and deployment number for that day. Ex 2601 for the 26th of March, first deployment.
8. Once the version number has been updated, click OK and navigate to 'Desktop\FMI Code\Maveric Deployments' and save the file as 'Maveric2.exe' and click OK. This will create a 'Maveric2.exe' in that folder.
9. After the exe is made, copy the 'Maveric2.exe' file, navigate to '\\fmishare\download\Maveric', rename the existing 'Maveric2.exe' file to 'Maveric2_TODAYSDATE[DDmmyyyy].exe' then paste the 'Maveric2.exe' that was just created into this path.
10. The last step to deploying Maveric is to update the Maveric build number in the Maveric DB which will cause the latest version to be deployed to the users machine.

TESTING NOTES:

To test Maveric, from the Home screen, perform the following tests:

- Test 1:
 - Run Maveric by double clicking the Maveric2.exe
 - Login using the Maveric Login details described below.
 - Go to Search => Find Someone => Policy Info => MavScan (Icon on the bottom right corner, 4th from the right) => open a doc.
 - If the document opens successfully, then the file share is working correctly. If an error appears, then Maveric cannot find the path to the File Share where all the documents are stored.
- Test 2:
 - Print => Policy Schedule => Print => a 'Exporting records' dialog should appear, if this happens then Crystal reports are working correctly.

To test AutoJob:

- Run and Login to Maveric => IT => Autorun

Note: When testing Maveric on the VB6 VM, do not worry about how the icons look on the top menu from the Home screen, these display correctly after Maveric is deployed.

DEPLOYMENT DETAILS

Maveric:

- Application Type - Desktop
- Authentication - SQL
- DB Server – FMISQL03
- DB Server IP – 172.16.93.129
- DB Name – Maveric
- Username/Passwords:
 - autorun--rdp-[REDACTED]
 - autorun--rdp-[REDACTED]

- maveric--sqlconnection--[REDACTED]
 - maveric--sqlconnection--p [REDACTED]
 - maveric login username: Firsttech@fmi.co.za
 - maveric login password: [REDACTED]
 - maveric test db connection: modo
- Deployment Path – \\fmishare\download\Maveric
- Publish Method – File System
- Publish Notes – RDP into fmiautorun3. Get latest code and build. Copy to deploy folder.
- Version Update File Location – \\fmishare\download\Maveric
- Other Notes - Update version number and date in tblVersionControl table on Maveric database on live server.

Maveric Lite, Maveric Claims, Maveric Reports and AutoJob:

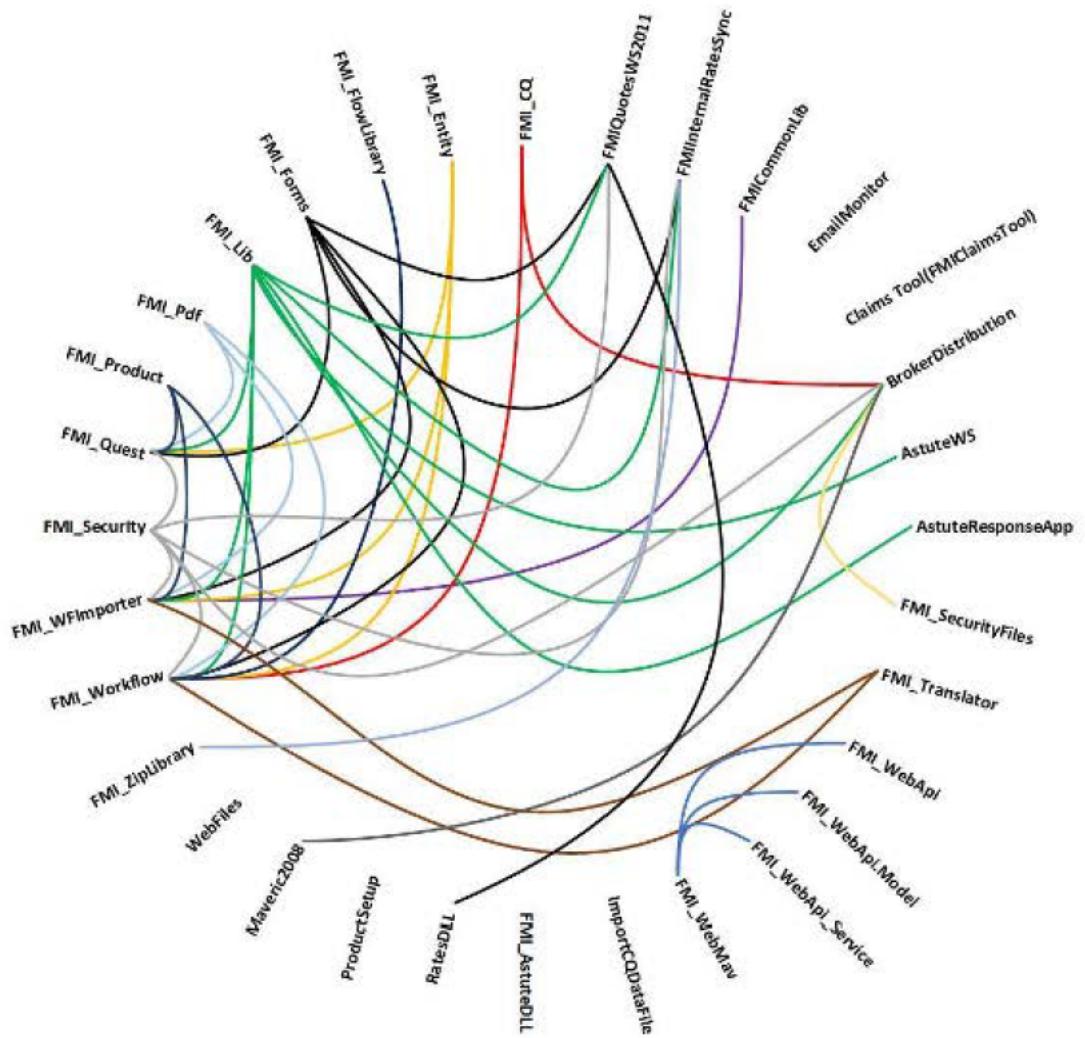
- Application Type - Desktop
- Authentication - SQL
- DB Server – FMISQL03
- DB Server IP – 172.16.93.129
- DB Name – Maveric
- Deployment Path – \\fmishare\download\Maveric
- Publish Method – File System
- Publish Notes – RDP into fmiautorun3. Get latest code and build. Copy to deploy folder.
- Version Update File Location – \\fmishare\download\Maveric
- Other Notes - Update version number and date in tblVersionControl table on Maveric database on live server

OTHER CORE SOFTWARE

Apart from Maveric, FMI also uses multiple other software solutions and tools to accomplish several tasks. The following sections will detail what each piece of software/tool does and the technical specifications of each.

KEY .NET SOLUTIONS IN GITLAB

The following graph and accompanying table display the relationships between the projects/solutions in the FMI Gitlab that are noteworthy.



Project/Solution	Used In/ Notes
AstuteResponseApp	AstuteResponseApp
AstuteWS	AstuteWS
BrokerDistribution	BrokerDistribution
FMIClaimsTool	FMIClaimsTool
DetectDotNet	DetectDotNet
EmailMonitor	EmailMonitor
FMICommonLib	FMI_WFImporter
FMIInternalRatesSync	FMIInternalRatesSync
FMIQuotesWS2011	FMIQuotesWS2011
FMI_CQ	BrokerDistribution, FMI_Workflow
FMI_Entity	FMI_Workflow, FMI_WFImporter, FMIQuest
FMI_FlowLibrary	FMI_Workflow
FMI_Forms	FMIInternalRatesSync, FMI_Workflow, FMI_WFImporter, FMIQuotesWS2011, FMIQuest
FMI_Lib	BrokerDistribution, FMIInternalRatesSync, FMI_Workflow, FMI_WFImporter, AstuteWS, AstuteResponseApp, FMIQuotesWS2011, FMIQuest
FMI_Pdf	FMI_Workflow, FMI_WFImporter, FMIQuest
FMI_Product	FMI_Workflow, FMI_WFImporter, FMIQuest
FMI_Quest	FMIQuest

FMI_Security	BrokerDistribution, FMIInternalRatesSync, FMI_Workflow, FMI_WFImporter, FMIQuotesWS2011, FMIQuest
FMI_SecurityFiles	BrokerDistribution
FMI_Translator	FMI_Workflow, FMI_WFImporter
FMI_WebApi	WebMav
FMI_WebApi.Model	WebMav
FMI_WebApi_Service	WebMav
FMI_WebMav	WebMav
FMI_WFImporter	FMI_WFImporter
FMI_Workflow	FMI_Workflow
FMI_ZipLibrary	FMIInternalRatesSync
WebFiles	WebFiles
Maveric2008	BrokerDistribution
ProductSetup	ProductSetup
ImportCQDataFile	ImportCQDataFile (Being sunset)
ImportMixpanel	ImportMixpanel (Being sunset)
FMI_AstuteDLL	Not sure, Dev(FMI) to confirm if this is used anywhere
RatesDLL	FMIQuotesWS2011 (This is a legacy proj that is not being maintained but is still used in FMIQuotesWS2011)
FMI.snk	Might be used when BD module is published.

.NET VIRTUAL MACHINE

This is a Hyper-V virtual machine that is used to build Maveric and all other VB6 solutions:

- Machine name: FMIBUILD
- OS: Windows 10
- Visual Studio 2017 Community
- MS Visual Basic 6
- Windows User: FMI Builds
- Windows Password: 12345
- SQL Server sa Password: [REDACTED]

CYBER QUERY

INTRODUCTION

This is a Business intelligence and reporting tool and is also used extensively in the Maveric's system to generate letters (Similar to Power BI). This is maintained by Andrew Torry (adt@geller-computer.com), who is based in Canada and only does updates/maintenance when requested.

TECHNICAL SPECIFICATIONS

Below are the technical specifications for Cyber Query and its deployments.

VERSIONS

Application	Source Code	Language	Deployment	Server
Cyber Query	N/A	N/A	FMI CQ Server	FMI CQ Server

DEPLOYMENT DETAILS

Cyber Query:

- Application Type - 3rd Party
- DB Server – FMISQL03
- DB Server IP – 172.16.93.129
- DB Name – Maveric
- Server Name – FMICQV
- Server IP – 172.16.93.241
- Dependencies – Reports Folder, Data Dictionary

WORKFLOW (GROUP)

INTRODUCTION

This system is web based which imports the group business details, controls and directs the application through the system to the point that the business is accepted or declined.

TECHNICAL SPECIFICATIONS

Below are the technical specifications for Workflow and its deployments.

VERSIONS

Application	Source Code	Language	Deployment	Server
Workflow	Gitlab	PHP	FMI Workflow V	FMI Workflow V

BUILD

Built first time.

TESTING NOTES:

Changes are normally done on the live environment directly to the php and html files.

To test this app, go to <http://fmiworkflowv/WF/frmWorkFlow.php> while on the FMI network or connected via vpn and login using the username and password below. If the login is successful, then there is nothing further to test beside the changes that were made.

DEPLOYMENT DETAILS

Workflow (Group):

- Application type - WebApp (PHP)
- DB Server – FMISQL03
- DB Server IP – 172.16.93.129
- DB Name – Maveric
- Deployment Path – 
- Deployment Path – \\fmiworkflowv\www\\$\WF
- Publish Method – File System
- Publish path on VM - C:\Users\FMIBuild\Desktop\FMICodePublish\FMI_Workflow

BROKER DISTRIBUTION (BD) MODULE

INTRODUCTION

Is used by the sales staff and is used to access client, policy and adviser information. (Initially intended to replace Maveric, was not implemented to that stage)

TECHNICAL SPECIFICATIONS

Below are the technical specifications for BD Module and its deployments.

VERSIONS

Application	Source Code	Language	Deployment	Server
BD Module	Gitlab	.NET	Desktop App, FMIWEB03V	FMISQL03

BUILD NOTES

The source code solution for this project contains 14 other projects that are used by BrokerDistrobution. In order to build this solution, Visual Studio needs to be running as Administrator and the 'BrokerDistrobution' project needs to be selected as the start-up project. Microsoft interop packages may need to be installed.

These packages can be downloaded and installed onto the build machine from: <https://www.microsoft.com/en-ie/download/confirmation.aspx?id=3508>. The last item that may hinder the build from succeeding is a error from the 'post build event', throwing a error something like, "*The command "call "C:\Program Files (x86)\Microsoft Visual Studio\2017\Professional\Common7\IDE..\tools\vsvars32.bat" editbin.exe /NXCOMPAT:NO"D:\Work\FMI\Code\BrokerDistribution\BrokerDistribution\Application\BrokerDistribution\bin\x86\Debug\BrokerDistribution.exe"" exited with code 9009*". If this is the case, then the path to "vsvars32.bat" needs to be updated to wherever it is installed on the build machine.

Projects in this solution:

- BrokerDistribution
- FMI_CQ
- FMI_Lib
- FMI_Security
- FMI_SecurityFiles
- Maveric2008

Once the build completes, move onto the test and deployment tasks.

TESTING NOTES

To deploy this app, build it in Visual studio, and publish it to '//fmiweb03v/sites\$/BrokerDistrobution. Once this app is deployed, go to 'http://fmiweb03v:6660' you will be presented with a login screen, after logging in, go to Policies Search => Policy Number => Documents tab => Open a document. If you can open a document then everything is correct.

Note: This app requires Maveric to be installed on the same machine in order to run properly.

DEPLOYMENT DETAILS

BD Module:

- | | |
|----------------------|--|
| • Application Type - | Desktop(.Net) |
| • Live address - | http://172.16.93.231:6660/ (While on the FMI Network) |
| • DB Server – | FMISQL03 |
| • DB Server IP – | 172.16.93.129 |
| • DB Name – | Maveric |
| • Server Name – | FMIWEB03V |
| • Server IP – | 172.16.93.231 |
| • Deployment Path – | \\\fmiweb03v\sites\$\BrokerDistribution |

- Publish Method – Visual Studio Publish
- Version Update File Location – [\\fmiweb03v\sites\\$\BrokerDistribution](\\fmiweb03v\sites$\BrokerDistribution)
- Publish path on VM -- C:\Users\FMIBuild\Desktop\FMICodePublish\BrokerDistrobution

FMI INTERNAL RATES SYNC

INTRODUCTION

This system is used by the I.T staff to transfer benefit rating information and input forms between the test and live servers and between the live server and Web Quotes server.

TECHNICAL SPECIFICATIONS

Below are the technical specifications for FMI Internal Rates Sync and its deployments.

VERSIONS

Application	Source Code	Language	Deployment	Server
FMI Internal Rates Sync	Gitlab	.NET(Winforms)	FMIWEB03V	Desktop App

BUILD NOTES

Requires the project 'FMI_Product' to be opened and built before the 'FMIInternalRatesSync' project will build. The FMI developers have agreed to include this project into the solution so that this workaround is not required.

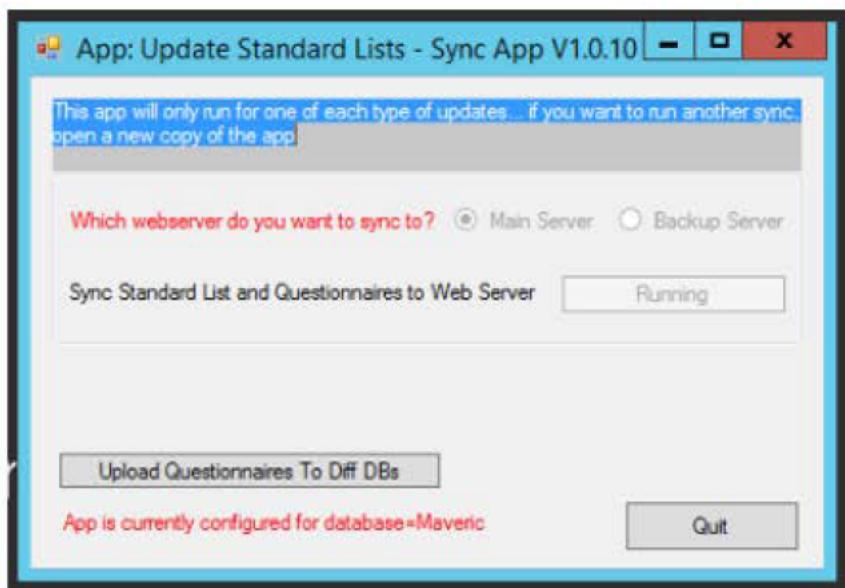
Projects in this solution:

- FMIInternalRatesSync
- FMI_Forms
- FMI_Lib
- FMI_Security
- FMI_ZipLibrary
- FMI_Product (To be added)

TESTING NOTES

This is tested on the Virtual Machine in Visual studio and the files from the build in the bin folder are manually copied across to the live server. Make sure the app can connect to the MODO DB. Once the app is deployed, there is a shortcut to start it on "FMIWEB03V/Desktop/Start These". After the app starts, ensure 'Main Server' is checked and then click the button to the right of 'Sync Standard List and Questionnaires to Web Server' and the text will change to 'Running' as seen below.

Below is what the system looks like running:



DEPLOYMENT DETAILS

FMI Internal Rates Sync:

- Application Type - Desktop Winforms (.Net)
- DB Server – FMISQL03
- DB Server IP – 172.16.93.129
- DB Name – Maveric
- Server Name – FMIWEB03V
- Server IP – 172.16.93.231
- Username/Passwords - fmiweb03v--rdp--userid
- Dependencies – WebQuote & WebServices
- Publish path on VM -- C:\Users\FMIBuild\Desktop\FMICodePublish\FMIIInternalRatesSync

FMI QUOTE

INTRODUCTION

This is used by internal sales staff to generate a quote for group business.

TECHNICAL SPECIFICATIONS

Below are the technical specifications for FMI Quote and its deployments.

VERSIONS

Application	Source Code	Language	Deployment	Server
FMI Quote	Gitlab	VB6	Desktop App	N/A

TESTING NOTES:

This app's source code does not build. It was decided that it is good enough to backup a copy of the existing working deployment and use that to recover if the system goes down. This backup is stored on the VB6 VM under 'C:\Users\autorun\Desktop\FMI Code\FMI Code Backup\FMI Quotes Backup.rar'.

DEPLOYMENT DETAILS

FMI App:

- Application Type - Desktop (VB6)

• Authentication -	No Logins
• DB Server –	Local MS Access DB
• Deployment Path –	
• Publish Method –	File System
• Publish path on VM -	C:\Users\FMI\Build\Desktop\FMICodePublish\FMIQuest

EMAIL MONITOR

INTRODUCTION

Server based desktop app that is used to monitor certain email mailboxes on exchange and import emails into the DB.

TECHNICAL SPECIFICATIONS

Below are the technical specifications for Email Monitor and its deployments.

VERSIONS

Application	Source Code	Language	Deployment	Server
Email Monitor	Gitlab	.Net	FMIWEB03V	Desktop App

BUILD

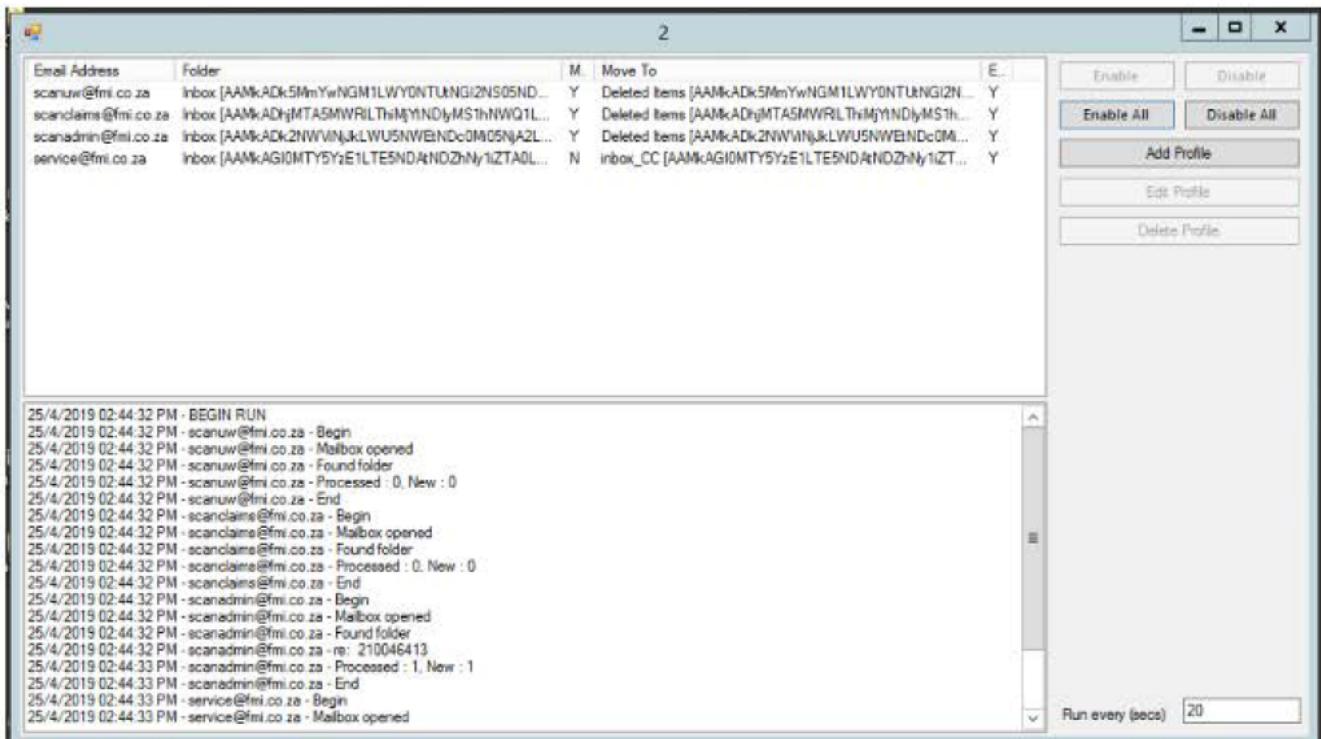
Built first time without issue.

No external projects in solution.

TESTING NOTES:

Visual Studio Build as Debug and bin files are copied across manually to FMIWEB03V for deployment. Make sure the app can connect to the MODO DB. Once the app is deployed, there is a shortcut to start it on "FMIWEB03V/Desktop/Start These". Once the app is running, click the 'Enable All' button and you should see emails start being processed.

Below is what the app looks like running:



DEPLOYMENT DETAILS

Email Monitor:

- Application Type - Winforms(.Net)
- DB Server – FMISQL03
- DB Server IP – 172.16.93.129
- DB Name – Maveric
- Username/Passwords - fmiweb03v--rdp--userid
- Deployment Path – \\fmiweb03v\c_\\$\\FMIInternalRatesSync
- Publish Method – File System
- Publish Notes – RDP to fmiweb03v. Stop running version. Copy new build. Start application again.
- Connection Strings – App.Config
- Dependencies – Mailboxes - Scan Admin. Scan Claims, Scan UW -> TBL_EMAILMESSAGES_EWSIMPORTMESSAGES
- Publish path on VM - C:\Users\FMIBuild\Desktop\FMICodePublish\EmailMonitor

WEBQUOTE AND WEBSERVICE

INTRODUCTION

Web based system that is hosted internally and on a Hetsner(VPS) and module enables advisers and internal users to perform quotes for prospective clients in order to attain a illustrative premium. This system can also be used to build input forms called “questionnaires” that are used throughout FMI.

TECHNICAL SPECIFICATIONS

Below are the technical specifications for WEBQUOTE and WEBSERVICE and its deployments.

VERSIONS

Application	Source Code	Language	Deployment	Server
WebQuote and WebService	Gitlab	.Net	FMIWEB03V & Hetzner	FMIWEB03V & Hetzner

BUILD NOTES (Web Service - FMIQuotesWS2011)

Built without issue.

Projects in this solution:

- FMIQuotesWS2011
- FMI_Forms
- FMI_Lib
- FMI_Security
- RatesDLL

BUILD NOTES (Web Quote - FMIQuest)

Built without issue.

Projects in this solution:

- FMI_Quest

- FMI_Entity
- FMI_Forms
- FMI_Lib
- FMI_Pdf
- FMI_Product
- FMI_Security

TESTING NOTES:

To deploy the WebService, Build the solution in Visual Studio as Debug and copy the files in the bin folder to \\FMIWEB01\\Sites\$\\quotes2011ws_dev.

To test the WebService after deployment, go to <http://fmiweb01v:4450/FMIServicesWS2011.asmx> while on the FMI network. If you see the site displayed, then everything is working correctly.

To deploy the WebQuote(Internal), Build the solution in Visual Studio as Debug and copy the files in the bin folder to \\FMIWEB01\\Sites\$\\devquotes.

To test the WebQuote(Internal) after deployment, go to <http://fmiweb03v:4444/QA.aspx?Q=d873b961-508a-4781-a349-d6619d00a852> and login. After you've logged in, load a quote and that confirms that it is working correctly.

To deploy the WebQuote(External), Build the solution in Visual Studio as Debug and copy the files in the bin folder via ftp to the Hetzner server.

To test the WebQuote(Internal) after deployment, go to fmi.co.za => Financial Advisor => Advisor Login => Quotes. If the drop downs populate then it confirms that the site is working.

DEPLOYMENT DETAILS

WebQuote and WebService:

- | | |
|------------------------|--|
| • Application Type - | WebApp and Web API (.Net) |
| • DB Server – | FMISQL03 & Hetzner |
| • DB Server IP – | 172.16.93.129, 129.232.218.42 |
| • DB Name – | Maveric, FMIRates |
| • Username/Passwords: | <ul style="list-style-type: none"> ○ webquote--ftp- ○ webquote--ftp- ○ webquote--rpd- ○ webquote--rdp ○ webquote--rdp  |
| • Deployment Path – | \\fmiweb03v\\sites\$\\quotes & /wwwroot/secure2/quotes |
| • Publish Method – | File System, Ftp |
| • Publish Notes – | Internal: Build and copy to live folder. DO NOT OVERWRITE
Web.Config. |
| • Connection Strings - | Web.Config |
| • Other Notes - | ID Server, (app includes quotes and questionnaire modules), uses a specific sql user to access things. See note under "Maveric Database" for more information around how this DB is populated. |

ASTUTE (API's)

INTRODUCTION

Web API that is used by Astute to access FMI's client information.

TECHNICAL SPECIFICATIONS

Below are the technical specifications for Astute and its deployments.

VERSIONS

Application	Source Code	Language	Deployment	Server
Astute (API's)	Gitlab	.Net	FMIWEB05V	FMIWEB05V

BUILD (AstuteWS)

Built first time.

Projects in solution:

- AstuteWS
- FMI_Lib

BUILD (AstuteResponseApp)

Built first time.

Projects in solution:

- AstuteResponseApp
- FMI_Lib

TESTING NOTES:

To deploy and test AstuteWS, Open the solution in Visual Studio and Build as Debug and copy to FMIWEB05V, C:/inetpub/secure3/astutelivew. Once deployed, Astute will notify FMI if it is not working.

To deploy and test AstuteResponseApp, open the solution in Visual Studio and Build as Debug and copy to FMIWEB03V, C:/AstuteResponseApp.

DEPLOYMENT DETAILS

Astute (API):

- | | |
|----------------------|-----------------------|
| • Application Type - | WebAPI (.Net) |
| • DB Server – | FMISQL03 |
| • DB Server IP – | 172.16.93.129 |
| • DB Name – | Maveric |
| • Publish Type - | Visual Studio Publish |

WORKFLOW(INDEVIDUAL)

INTRODUCTION

This system is web based which imports the individual business details, controls and directs the application through the system to the point that the business is accepted or declined. This also directs and controls amendments to existing policies.

TECHNICAL SPECIFICATIONS

Below are the technical specifications for Workflow (Individual) and its deployments.

VERSIONS

Application	Source Code	Language	Deployment	Server
Workflow	Gitlab	.Net	FMIWEB04V	FMIWEB04V

BUILD

Built first time. Shares the solution with Workflow(Group).

Projects in solution:

- FMI_Workflow
- FMI_CQ
- FMI_Entity
- FMI_FlowLibrary
- FMI_Forms
- FMI_Lib
- FMI_Pdf
- FMI_Product
- FMI_Translator
- FMI_Security

TESTING NOTES:

Once the app has been deployed, follow the following steps to test:

- While connected to the FMI Network, open your browser and go to fmiweb04v:4445 or 172.16.93.85:4445 and login with the following details:
 - [REDACTED]
 - [REDACTED]
- If the login is successful, then the app is working correctly.

DEPLOYMENT DETAILS

Workflow:

- Application Type - WebApp (.NET)
- DB Server – FMISQL03
- DB Server IP – 172.16.93.129
- DB Name – Maveric
- Server Name - FMIWEB04V
- Server IP - 172.16.93.85
- Deployment Path – \\fmiweb04v\\sites\$\\WorkFlow2017
- Publish Method – File System
- Publish path on VM - C:\\Users\\FMIBuild\\Desktop\\FMICodePublish\\FMI_Workflow
- Publish Notes – Build and copy to live folder. DO NOT OVERWRITE Web.Config
- Connection Strings – Web.Config
- Other Notes - ID Server, (application includes web quotes module), uses a specific sql user to access things, for non-business and amendments

CLAIMS TOOL (3rd party developed)

INTRODUCTION

(May not be running) A web based tool to select various details about a client and provides a list of what they can be covered for.

TECHNICAL SPECIFICATIONS

Below are the technical specifications for Claims Tool and its deployments.

VERSIONS

Application	Source Code	Language	Deployment	Server
Claims Tool	Gitlab	.Net	Hetzner Server	Hetzner Server

BUILD

Built first time.

TESTING NOTES:

DEPLOYMENT DETAILS

Claims Tool:

- Application Type - WebApp (.Net)
- DB Server – Hetzner Server
- DB Server IP – 129.232.218.42
- DB Name – fmiclaimstool
- Username/Passwords:
 - claimsTool_ftp_userid [REDACTED]
 - [REDACTED]
- Deployment Path – /wwwroot/secure2/FMIClaimsTool
- Publish Method – FTP
- Publish path on VM - C:\Users\FMIBuild\Desktop\FMICodePublish\ClaimsTool
- Connection Strings - Web.Config
- Publish Notes – Build and upload to server folder over FTP. DO NOT OVERWRITE Web.config.

FMI WF IMPORTER

INTRODUCTION

Desktop app that runs on a server and monitors the DB for completed questionnaires/forms and then performs a action depending on the form type. Some form types are hard coded and others are setup when the form/questionnaire is created.

TECHNICAL SPECIFICATIONS

Below are the technical specifications for FMI WF Importer and its deployments.

VERSIONS

Application	Source Code	Language	Deployment	Server
FMI WF Importer	Gitlab	.Net	Desktop App	FMIWEB03V

BUILD

Needs to be built as administrator.

Projects in solution:

- FMI_WFImporter
- FMI_Entity
- FMI_Forms
- FMI_Lib
- FMI_Pdf
- FMI_Product
- FMI_Security
- FMI_Translator
- FMICommonLib

TESTING NOTES:

DEPLOYMENT DETAILS

FMI WF Importer:

• Application Type -	Winforms (.Net)
• DB Server –	FMISQL03
• DB Server IP –	172.16.93.129
• DB Name –	Maveric
• Username/Passwords:	[REDACTED]
• Deployment Path –	\\\fmiweb03v\sites\$\WF_Importer2017
• Publish Method –	File System
• Connection Strings -	App.Config
• Publish path on Vm -	C:\Users\FMIBuild\Desktop\FMICodePublish\FMI WF Importer
• Publish Notes –	RDP to fmiweb03v. Stop running version. Copy new build. Start application again.
• Dependencies -	Calls workflow server to create a flow

AMENDMENTS INTERFACE (FMI_WebAPI, FMI_Model, FMI_WebAPI_Service, FMIWeb_Mav(Main Solution))

INTRODUCTION

A small MVC application that uses a API to load and display client, policy and claim summary overview information to FMI staff.

TECHNICAL SPECIFICATIONS

Below are the technical specifications for Amendments Interface and its deployments.

VERSIONS

Application	Source Code	Language	Deployment	Server
Amendments Interface	Gitlab	.Net	Web App	FMIWEB03V

BUILD

Built without issue.

Projects in solution:

- FMI_WebMav
- FMI_WebApi.Model

TESTING NOTES:

DEPLOYMENT DETAILS

FMI WF Importer:

- | | |
|------------------------|--|
| • Application Type - | MVC (.Net) |
| • DB Server – | FMISQL03 |
| • DB Server IP – | 172.16.93.129 |
| • DB Name – | Maveric |
| • Username/Passwords: | fmiweb03v--rdp--userid |
| • Deployment Path – | \\\fmiweb03v\sites\$\WF_Importer2017 |
| • Publish Method – | File System |
| • Connection Strings - | App.Config |
| • Publish path on VM - | C:\Users\FMIBuild\Desktop\FMICodePublish\FMI_WebMav |
| • Publish Notes – | RDP to fmiweb03v. Stop running version. Copy new build. Start application again. |

SHARED FOLDER

INTRODUCTION

A windows file share on a server and stores any documents that relate to any policy, client, advisor and claim. The relationships are stored in the Maveric Db, tbl_mav_scan.

TECHNICAL SPECIFICATIONS

Below are the technical specifications for Shared Folder.

VERSIONS

Application	Deployment
Shared Folder	FMI DBN SRV 01/MAVERIC_DOCS , FMI DBN SRV 03/BULK PRINT EXPORT\$

FOLDER PERMISSIONS

- //FМИDBN-SRV-01/MAVERIC_DOCS (Possibly everyone read only)
- //FМИDBN-SRV-03/BULK_PRINT_EXPORT\$ (Everyone read + write)
- //FМИDBN-SRV-03/BULK_PRINT_EXPORT\$/TEST (Everyone read + write) - This is for testing/dev

If this folder needs to be remapped, paths in Web.config and App.Config for all .Net apps will need to be updated. All VB6 Maveric based apps will need the path to be changed in code and redeployed.