

FollowMe Q-Server

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FollowMe Q-Server

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Part

1 Welcome to the FollowMe Q-Server

Navigation

Navigating the main sections of the FollowMe Q-Server Administration tool is via the drop menu at the top. Subsections can then be navigated using a tree to the left hand side.

FollowMe Q-Server Service Control

To the right of the top drop menu the FollowMe Q-Server Status is always displayed. There are Refresh, Start and Stop buttons to the right of the status text to manage the FollowMe Q-Server service.

System Performance & Resources

Here system information is displayed to give a quick overview of the system health, real time processor information, processor history and present disk utilisation, as well as the amount of disk space taken up by the print jobs in the FollowMe data directory click.

Warnings & Events

Any Error and Warning events are displayed here, these are used to troubleshoot any issues that may occur.

Print Activity Today

This section shows the throughput on the server in terms of printed pages over the current day.

Live Print Activity (Last 2 Minutes)

This section provides a snapshot of the last 2 minutes live printing activity.

Part

2 Introduction

FollowMe is a roaming, secure printing and an accounting solution offering many benefits to large or small companies needing to be able to roam and ensure security in printing as well as accounting for all printer and copier usage on a per user, cost centre and printer basis. Secure printing has been a requirement in many companies for a number of years.

FollowMe has been developed as a solution, which is easy to install, manage and upgrade. FollowMe also offers an advanced accounting system. This advanced accounting is able to extract print job information directly from the print job as soon as it has been received from the client workstation. This information is then stored so that it can later be used to generate extensive reports on printer usage, cost centre usage and many more. FollowMe hardware supports over 99% of printers in the world that have a parallel or network port. FollowMe devices are also available for many printers that have internal interface slots such as Hewlett-Packard (HP), Kyocera and Mutoh.

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Part

3 Pre-Requisites

3.1 FollowMe Q-Server

Operating System*/**/***

- Windows 2000
- Windows XP (Administration only)
- Windows 2003
- Windows Vista (Administration only)
- Windows 2008
- Windows 7 (Administration only)
- * Includes support for x64 bit architectures.
- ** Includes support for R2 variants.
- *** Includes support for Windows cluster technologies to allow for a active/active or active/passive configuration.

Microsoft .NET Framework

- Microsoft .NET Framework Version 2 (only required for the FollowMe Q-Server Web Administration)
- Microsoft .NET Framework Version 3.5 (required for the FollowMe Web Client and Embedded Hybrid)

Web Server (only required for Web Administration)

Internet Information Services (Recommended)

Database Components

• Microsoft Data Access Components (MDAC) v2.8 or above

Database Types*

- Microsoft SQL Server 7.0
- Microsoft SQL Server 2000 (including Microsoft SQL Desktop Engine)
- Microsoft SQL Server 2005 (including Microsoft SQL Server 2005 Express Edition)

- Microsoft SQL Server 2008 (including Microsoft SQL Server 2008 Express Edition)
- * Includes support for R2 variants.

3.2 FollowMe Client

Operating System*/**

- Windows 95
- Windows 98
- Windows ME
- Windows NT 4.0
- Windows 2000
- Windows XP
- Windows 2003
- Windows Vista
- Windows 2008
- Windows 7
- * Includes support for x64 bit architectures.
- ** Includes support for R2 variants.

Other Supported Operating Environments

 Windows 2000, 2003 and 2008 Terminal Services (including Citrix and most other thin client environments)

Applications

Internet Explorer 6.0 and above

NOTE: If you are printing directly via LPR or Windows Shared Printers then refer to their respective sections for pre-requisites as the above may not apply.

3.3 FollowMe Shared Printer Port

Operating System*/**

- Windows 2000
- Windows XP
- Windows 2003
- Windows Vista
- Windows 2008
- Windows 7
- * Includes support for x64 bit architectures.
- ** Includes support for R2 variants.

3.4 Line Printer Daemon (LPD)

The FollowMe Q-Server boasts its own built in Line Printer Daemon (LPD) listener allowing it to accept print jobs directly from most operating systems in existence today, including Apple Macintosh, IBM AS/400, LINUX/UNIX and Microsoft Windows as well as ERP type systems such as SAP or Peoplesoft which can also output print data over the Line Printer Remote (LPR) protocol.

3.5 Internet Printing Protocol (IPP)

The FollowMe Q-Server incorporates its own built in Internet Printing Protocol (IPP) listener allowing it to accept print jobs directly from IPP enabled clients, as well as advertising print queues directly from the FollowMe Q-Server bypassing the Windows Print Spooler on the server.

3.6 File Transfer Protocol (FTP)

Within the FollowMe Q-Server a built in File Transfer Protocol (FTP) listener is available allowing the FollowMe Q-Server to accept print jobs from legacy mainframe type systems which cannot print in another way as well as newer solutions where printing via FTP is simply a more convenient solution.

3.7 Windows Shared Printers

Within the FollowMe Q-Server system one of the implementations that is used for inbound print jobs to the FollowMe Q-Server is the use of Windows Shared Printers.

When using Windows Shared Printers to print to the FollowMe Q-Server one can use either the FollowMe Shared Printer port or a LPR port. When using an LPR port then the Windows Standard TCP/IP Port should be used.

NOTE: For configuration instructions refer to the *LPR* or *FollowMe Shared Printer port* sections.

Part

4 Management

4.1 Users

The *Users* section displays users in LDAP structured format, an example of formatting is as follows:

- - Administration
 - ☑ Jane.Doe (Jane, Doe)

Import Users from CSV

Import Users from Server

Import Users from CSV

This CSV import option offers the ability for you to manually import a user list from a CSV. Normally the CSV import is used when not importing from an Active Directory or LDAP compatible user database, or when importing users and ID cards directly from a 3rd party access control database.

Import Users from Server

The import from Server option provides you the ability to manually import users directly from an Active Directory or LDAP compatible user database. This option also supports importing from legacy Windows NT Primary Domain Controllers (PDCs).

4.1.1 Add/Edit

4.1.1.1 Details

Required Fields

There are two fields required for a user in the FollowMe Q-Server which are the following:

Field	Description
Username	The Username field can be populated as either only the Username or a Domain\Username combination
Cost Centre	The Cost Centre field is also at times

	referenced as the Department field, it is required even if the solution is not being used for cost allocation
--	---

Custom Fields

A facility for custom fields is also available where standard user fields are not enough, the available custom fields are the following:

Field	Description
Custom 1	The first custom fields
Custom 2	The second custom field

LDAP

The users tree structure can be defined to look the same as the native user database that they are imported/synchronised from such as Microsoft Active Directory or LDAP compliant user database.

It is important that the LDAP syntax is formatted correctly, an example of a populated LDAP field is below:

• LDAP - o=ringdale.com,ou=Administration



Administration

Language

Each user can have their locale set at time of import and when adding/editing a user manually.

4.1.1.2 Usage Summary

The usage summary report provides a statistical analysis for copied and printed output, including weekly, monthly and 6 monthly trend breakdowns.

4.1.1.3 Environmental Impact

Paper Resources

The paper resources section provides a breakdown of paper, trees, water, energy and CO2

resources which have been consumed as well as saved either through automated purging of print jobs after a pre-defined period of time, the automated conversion of print jobs to b/w based on policies or even the enforcement of duplex in the environment.

Field	Description
Paper (sheets)	The number of paper sheets printed, either in simplex or duplex
Paper (kg/lb)	The physical weight of paper sheets in kilograms (kg) or pounds (lb)
Trees	The number of trees based on the paper sheets
Water (I/gal)	The amount of water consumed by the trees in liters (I) or US gallons (gal)
Energy (KWh)	The amount of energy used during the production of paper in kilowatt hours (KWh)
CO2 (kg/lb)	The amount of CO2 created during the production of paper in kilograms (kg) or pounds (lb)

Toner Resources

The toner resources section provides a breakdown of toner cartridges, land fill and energy resources which have been consumed and as well as saved.

Field	Description
Cartridges	The number of toner cartridges used based on an average number of pages which each cartridge can print
Land Fill (kg/lb)	The land fill weight is based on the number of cartridges used and their dead weight when disposed. It is estimated that around one point three kilograms (three pounds) of waste is generated for each toner cartridge which is disposed.
	Also it is estimated that between two point two and four kilograms (five and nine pounds) of virgin materials are conserved by remanufacturing toner cartridges
Energy (KWh)	The amount of energy is calculated from all

parts of the manufacturing process, including the amount of oil used to produce each toner cartridge. The actual amount of oil burned to produce one toner cartridge is estimated at three point four liters (three quarts) which on average equates to one zero point zero one three six megawatt hours of energy
intee six megawatt hours of energy

Printer Resources

The printer resources section provides a breakdown of the time and energy resources used while a printer is active, on standby as well as the savings when the device is switched off.

Field	Description
Time (Hours)	The total hours that the device has been in a specific state
Energy (KWh)	The total amount of energy is calculated from the devices print speed, active and standby power consumption

4.1.1.4 Credits

There are two credit models available within the FollowMe Q-Server, these are credits also known as quotas which allow for credits to be assigned to the various device functions that FollowMe solution accounts for.

Standard Credits

The standard credits provide a global credit facility for deduction of credits from functions, deduction of credits will only occur if values have been set with the associated *Cost Models* for the specific function being accounted.

Extended Credits

The extended credits provide a per function, paper size, simplex/duplex and even colour/black and white granularity. The extended credit offer a facility for you to only deducted credits based on a specific paper size, if it was simplex/duplex or even for the specific number of colour/black and white pages being printed.

Supported Functions

The following functions can allow credits to be deducted:

- Copy
- E-Mail
- Fax
- Print
- Scan (e.g. scan-to-folder and scan-to-workflow functions)

4.1.1.5 Accounts/Verification

Account Settings

One can set when a user account expires as well as setting a users account to a disabled status.

Verification Options

For each user various verification options can be set, these are used to enforce access policies. For each of the various verification options one can set these options for the following authentication types:

- Card
- PIN
- Fingerprint
- No. of Required Options Allows you to specify the number of authentication types that are to be matched before a user is granted access.

For each of the verification options one can set the following options:

- Allowed This means this authentication type is always available to the user.
- Required This means this authentication is always required.
- Optional This allows you to specify which of the authentication types can be used in conjunction with the No. of Required Options.
- Not Allowed This option allows the authentication type to be made unavailable to the user.

4.1.1.6 Devices

Each user in the FollowMe Q-Server can be assigned devices that they have rights to, one can enable all devices by checking the *Enable All* check box or select the individual devices a

user has access to.

Users assigned devices can be seen in the *Assigned* list box, and unassigned devices can be found in the *Unassigned* list box.

4.1.1.7 Cards/PINs

Within the FollowMe Q-Server one can assign multiple ID cards and PIN numbers to each user, these cards can be added and deleted at any time during the running of the solution.

Assigned Cards/PINs

The assigned ID cards and PIN numbers for the selected user are listed in this list box.

Add New Card/PIN

One can add new ID cards and PIN numbers to a user by either manually entering or automatically listening for the ID card or PIN number. To *Listen* for a ID card one must first select an assignment device that should be used for card enrolment.

Assign Enrolment Device

To select an assignment device one simply should select the device from the drop down list and click the *Assign* button, once assigned one should refer back to the *Add New Card/PIN* section to *Listen* for a ID card from an enrolment device.

Once the enrolment device has been assigned the *Selected Enrolment Device* should update.

Note: The selected Enrollment Device will timeout automatically after 10 minutes of no use and return to normal operation.

HEX, DEC and ASCII

When adding card numbers to a user there are data entry types that are provided these are hexadecimal (HEX), decimal (DEC) and ASCII. The difference between each is how the entered data is formatted, for example when using decimal you will only be able to enter numbers. By default data should be entered as ASCII other than if the card number has been enrolled from an enrolment device and then in this instance you should use the default type which will change once the card number has been received.

4.1.1.8 Restrictions

Each user can have various different restrictions applied for their

This section provides the ability to restrict specific functions including printing options and

also device specific embedded functions. Users can be restricted by start and finish times is desired.

Print Restrictions

Restriction	Description
Disable Colour	Disables colour printing for the selected user
Disable A3 (or 11x17)	Disables A3 or 11x17 printing for the selected user
Disable Duplex	Disables duplex printing for the selected user
Do not limit disk usage	Gives the user an unlimited disk quota when it comes to print jobs
Limit disk usage to	Limits the disk quota for a users print jobs defined in Megabytes (MB)

Embedded Options

Restriction	Description
B&W Copy	Enables or disables the use of black and white copying on an Embedded device
Colour Copy	Enables or disables the use of colour copying on an Embedded device
E-Mail	Enables or disables the use of the e-mail function on an Embedded device
Fax	Enables or disables the use of the fax function on an Embedded device
Print	Enables or disables the use of the print function on an Embedded device
Scan	Enables or disables the use of the scan function on an Embedded device

Access Times

Please refer to the Access Times section.

4.1.1.8.1 Access Times

For each user one can set access time restrictions to permit the user access to a device only during a certain set of hours during a 7 day week.

Times

Column	Description
Enable	Allows you to enable/disable is a access time restriction applies on that particular day or not
Start Time	Allows a start time to be defined for when access is to be granted from
End Time	Allows a end time to be defined for when access is to be denied from

4.1.1.9 Client Features

Roaming

When using peered FollowMe Q-Server's the *Roaming* option allows you to enable users the rights to roam between peered servers/sites.

Other Client Restrictions

When using the FollowMe Client software the other client options apply, allowing you to disable the various tab pages from the client management interface.

Feature	Description
Enable Roaming	This option enables roaming for the user, the roaming option is required when FollowMe Q-Server peering is enabled and you wish for that user to be able to roam between those peered servers
Enable Local Printing	When used in conjunction with the FollowMe Client software and the FollowMe Local Printer Port you can enable and disable if a user has rights to print locally on their workstation via LPT1 or USB connected printer

Enable Cost Codes	When cost codes are enabled and when the FollowMe Client software is being used and/ or FollowMe Embedded one can enable is the user is provided a cost code pop-up on their workstation or on an Embedded front panel
Disable User Settings	When using the FollowMe Client software one can disable is a user has rights to edit and view the user settings tab page
Disable Printer Settings	When using the FollowMe Client software one can disable is a user has rights to edit and view the printer settings tab page
Disable Print Now	When using the FollowMe Client software one can disable is a user has rights to use the print now option
Disable Print Job Information	When using the FollowMe Client software one can disable is a user has rights to edit and view the print job information tab page
Disable Credit Information	When using the FollowMe Client software one can disable is a user has rights to edit and view the credit information tab page

4.1.1.10 Fingerprints

The FollowMe Q-Server system supports the use of fingerprinting for user identification at a device for print or any other device function.

Finger Selection

For each user a selection of 10 fingerprints can be enrolled, for each enrolled fingerprint you can *View* the enrolled images of the fingerprints as well as *Verify* the enrolled fingerprint to the next read print to ensure the enrolment has registered correctly.

Enrolment

Fingerprints can be enrolled using either:

- 1. A locally attached USB fingerprint readers connected to the workstation accessing the FollowMe Q-Server web based administration tool.
- 2. Or using a FollowMe E-Line hardware controller attached to the network (such as one attached to a printer or MFP).

Enrolling a Finger

To enrol a fingerprint the following enrolment process should be followed:

- 1. Ensure you have selected the correct listen *Port* number, by default the port number should be port 9100.
- 2. Click the *Listen* button and the *Start Enrolment* button should now become available.
- 3. Click the Start Enrolment button to start enrolment.
 - 3.1. You will now be prompted to present your first of four fingerprints for the enrolment process
 - 3.1.1.At this point place your fingerprint onto the fingerprint reader, for placement and application of your finger please reference to the *Fingerprint Enrolment Procedure* in the reference section.
 - 3.2.Following the instructions on screen and as per 3.1 above for the next three fingerprints until you have successfully enrolled four images of a single fingerprint for the selected finger.
 - 3.3.Once complete you should see a green tick appear next to the fingerprint you have selected and have enrolled your fingerprint against.
- 4. Once complete click the Stop button.

NOTE: That it maybe required that you perform a stop/start of the FollowMe Q-Server service if you wish the changes to take effect immediately otherwise new fingerprint additional will normally apply with a few minutes depending on the size of the fingerprint database.

Re-Enrolment of Fingerprints

If Ringdale release new fingerprinting algorithms, which is generally quite rare you are given the ability to re-enrol all fingerprints against those new matching algorithms. To do so simply click the Re-Enrol Fingerprints button.

NOTE: That clicking this will cause the system to now re-enrol all fingerprints and the process may take some time to complete.

4.1.1.11 Print Jobs

While print jobs are queued in the system one can view the users personal queued print jobs, one can also when viewing these edit those queued jobs, change their status as well as delete them from the system.

4.1.1.12 Shared User Associations

The shared users that the user is associated to are listed in the right hand "Assigned" list.

4.1.1.13 Web Access Settings

The FollowMe Web Client can be configured to have different rights on a per user level, the different rights are listed here as well as their setting can be changed. By default the "Application Default" will be selected which inherits its settings from the defaults set here in the Web Administration tool.

4.1.1.14 Manager To

If the user is associated as an manager to another user the associations will be listed here.

4.1.1.15 Assistant To

If the user is associated as an assistant to another user the associations will be listed here.

4.1.2 Import

Users can be imported to the system manually in this section, to launch the import wizard simply press on the button on screen.

4.1.2.1 Users From CSV

This CSV import option offers the ability for you to manually import a user list from a CSV. Normally the CSV import is used when not importing from an Active Directory or LDAP compatible user database, or when importing users and ID cards directly from a 3rd party access control database.

The following are the available fields and options that can be populated to define your desired import:

Field	Description
Import File	The path and file name of the desired import file should be specified here
CSV Delimiter	The CSV file delimiter should be specified here, normally a CSV file's delimiter consists of a comma (",") although other characters can also be used
Field 110	The fields from 1 to 10 allow you to specify the import file format, as well as allowing you to skip a field if required
Printers	One can either select <i>Enable All</i> or select which printers should be assigned to the users that are about to be imported
Printing Restrictions	One can select the various printing restrictions that should be applied to the imported users

Credits	One can enable the credits feature by simply checking the <i>Enable</i> check box and entering a credit value in the text box
Client Features	One can select various client features that should be applied to the imported users
Embedded Options	One can select the various Embedded options that should be applied to the imported users

NOTE: When manually importing this option requires that the workstation that you are connecting from has rights to the database.

4.1.2.2 Users From Server

The import from Server option provides you the ability to manually import users directly from an Active Directory or LDAP compatible user database. This option also supports importing from legacy Windows NT Primary Domain Controllers (PDCs).

Active Directory/LDAP

When using this import option one can specify the following variables to connect to either an Active Directory or LDAP user database:

Field	Description
Server	The server name of the Active Directory or LDAP compatible server should be specified here
Username	The username of the user which has rights to access the user directory. An example of username formatting is below:
	Administrator
	 cn=Administrator, ou=users, dc=ringdale, dc=com
Password	The password of the connecting user should be entered here
Port	The port number of the Active Directory or LDAP server should be specified here, the default port number is 389 (if blank port 389 will be used)

SSL	If your Active Directory or LDAP server requires a secure connection then SSL option should be selected, if selected normally port 636 is also required as this is the LDAP secure port
Root DN	The users tree structure can be defined to look the same as the native user database that they are imported/synchronised from such as Microsoft Active Directory or LDAP compliant user database.
	It is important that the LDAP syntax is formatted correctly, an example of a populated LDAP field is below:
	• LDAP - o=ringdale.com,ou=Administration
	Administration
Filter	As standard the filter that is defined assumes a Windows Active Directory user directory, and the filter used in this instance would be:
	(&(objectClass=user) (objectCategory=person))
	For non-Windows LDAP user directories the filter should either be left blank or a value such as the following should be used:
	• (objectClass=*)
	The filter field can be scaled to a more granular search format.
Scope	There are various scope's that can be used, and they are defined below:
	Base - will only search on the base level
	One Level - will search on its base level and one sub-level
	Sub tree - will search through all levels that are available

NOTE: Once all the server information has been specified you will be required to collapse and expand the tree view for these settings to take effect.

Standard Windows Users

When using this import option one can from the tree view above browse the network for Windows Primary Domain Controllers (PDCs) as well as manually specifying a PDC server name in the *Specify Server* text box. If specifying a server one should be aware the tree needs to be collapsed and expanded for that server to be browsed for.

Settings

With both Active Directory/LDAP and Standard Windows User imports one can specify which fields from those user databases that certain fields in the FollowMe Q-Server should be populated from. A list of available fields and their descriptions is below:

Field	Description
Username	One can import the username from various Active Directory or LDAP schema fields, as well as the formatting of this field can be defined.
	An example of fields is below:
	Active Directory
	• LDAP
	One can also import the username with a domain prefix, when using the <i>Domain\Username</i> prefix then the domain will be imported, however this may not be desired and a specified domain maybe more applicable then one should simply select the <i>Specified</i> -> option and in the Options value and enter a value such as the following for Active Directory:
	DOMAIN\sAMAccountName
	When importing from a non-Active Directory user directory the username is normally set to the following value:
	• uid
	NOTE: This field is case sensitive
Fullname	One can import the users full name from various different fields.
	NOTE: This field is case sensitive

Initials	Users
	NOTE: This field is case sensitive
Identification (Card)	
	NOTE: This field is case sensitive
Identification (Pin)	
	NOTE: This field is case sensitive
Identification (Other)	
	NOTE: This field is case sensitive
Cost Centre	The users cost centre can be import directly from the user database or a default can be specified
	NOTE: This field is case sensitive
Email	The e-mail field can be imported
	NOTE: This field is case sensitive
LDAP	The user database tree format can be imported here, the options work in the same principle as the native LDAP user database where O=Organisation and OU=Organisational Unit
Country Code	The user specific country code can also be imported and one can select this here
Printers	One can either select <i>Enable All</i> or select which printers should be assigned to the users that are about to be imported
Printing Restrictions	One can select the various printing restrictions that should be applied to the imported users
Credits	One can enable the credits feature by simply checking the <i>Enable</i> check box and entering a credit value in the text box
Client Features	One can select various client features that should be applied to the imported users
Embedded Options	One can select the various Embedded options that should be applied to the imported users

NOTE: If a setting is changed in the settings please note you will be required to collapse and expand the tree view for these settings to take effect.

4.2 Shared Users

The Shared Users section displays users in a per server format, an example of formatting is as follows:

- Root
- Peered Server 1 (if applicable)
- Peered Server 2 (if applicable)

Upon selecting the *Root* or a *Peered Server* the right hand list box will populate with the applicable users for that selected node.

Root

The root holds *Shared Users* that are assigned to all servers, however a shared user can be assigned to only one *Peered Server* also, refer to *Peered Server* below.

Peered Server

A Peered Server allows you to to group your Shared Users more effectively allowing some users to be listed in the Root and some specifically only by Peered Server.

Use Cases

- 1. Administrator account can be released by multiple system administrators when logged onto a server and printing under a universal account
- 2. SAP Printing generally when printing from SAP the SAP username will be different to that of the imported Windows Active Directory or LDAP compliant user import therefore *Shared Users* are used to provide a user alias mapping the listed *User* to the SAP username alias
- Analogue Fax Re-Direction the Analogue Fax Re-Direction feature also utilises a Shared Users to provide a User pool, allowing assigned Users to release received faxes when required

4.2.1 Add/Edit

FollowMe Q-Server

In the case of a multiple server environment, the FollowMe Q-Server can be specified so that a single database can be used to manage multiple servers. By default shared users that are added with a FollowMe Q-Server of All (and an IP Address of 0.0.0.0, which cannot be

changed).

Details

The Shared Users username and password (optional) should be specified in this section.

Client Features

When using the FollowMe Client software the other client options apply, allowing you to disable the various tab pages from the client management interface.

Feature	Description
Enable Roaming	This option enables roaming for the user, the roaming option is required when FollowMe Q-Server peering is enabled and you wish for that user to be able to roam between those peered servers
Enable Local Printing	When used in conjunction with the FollowMe Client software and the FollowMe Local Printer Port you can enable and disable if a user has rights to print locally on their workstation via LPT1 or USB connected printer
Enable Cost Codes	When cost codes are enabled and when the FollowMe Client software is being used and/ or FollowMe Embedded one can enable is the user is provided a cost code pop-up on their workstation or on an Embedded front panel
Disable User Settings	When using the FollowMe Client software one can disable is a user has rights to edit and view the user settings tab page
Disable Print Job Information	When using the FollowMe Client software one can disable is a user has rights to edit and view the print job information tab page

Assigned Users

The unassigned and assigned *Users* are listed within these list boxes, one can select multiple *Users* to each *Shared User*.

4.2.2 Import

Shared users can be imported to the system manually in this section, to launch the import wizard simply press on the button on screen.

4.3 Printers

The *Printers* section displays *Printers* in a per server format, an example of formatting is as follows:

- Root
 - Printer 1
 - Printer 2
- Peered Server 1 (if applicable)
 - Printer 10
- Peered Server 2 (if applicable)
 - Printer 20

Upon selecting the *Root* or a *Peered Server* the right hand list box will populate with the applicable *Printers* for that selected node. One can also click on the *Printer* from the left hand node to bring up that printers properties page.

Import Printers

When initially setting up the FollowMe Q-Server one is presented with an option to *Import Printers* from the local print server, or remote print server. The *Import Printers* provides a simple way to configure multiple devices dynamically from their currently configured state in their native print environment.

Embedded

When utilising FollowMe Embedded capable devices and the FollowMe Embedded software needs to be loaded into those devices or device settings need to be changed, then this option should be used.

4.3.1 Add/Edit

FollowMe Q-Server

In the case of a multiple server environment, the *FollowMe Q-Server* can be specified so that a single database can be used to manage multiple servers. By default printers that are added with a *FollowMe Q-Server* of *All* (and an IP Address of 0.0.0.0, which cannot be changed).

Windows Print Spooler

The Windows Print Spooler allows you to select and specify outbound print queues from the FollowMe Q-Server, generally the Windows Print Spooler is only used for supporting outbound print streams to non-RAW/LPR compliant devices such as DEC-LAT.

Field	Description
Printer Name	The printer name is important for you to be able to reference back to the configured device. Normally the printer is that of the physical printer or the most useful name for you to easily identify the output device
Location	The location is used for identifying the location of the printer, the location also has a secondary purpose when creating a new <i>Printer</i> and the <i>Add New Cluster Printer</i> has been selected as when this has been selected the <i>Location</i> field expects a Windows Shared Printer name using the UNC syntax such as \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

FollowMe Print Spooler

The FollowMe Print Spooler is the built in output spooler of the FollowMe Q-Server, it itself works much like the Windows Print Spooler for outbound printing however certainly has more control over the print and the recovery process (when required).

Field	Description
IP or FQDN	The IP Address or Fully Qualified Domain Name (FQDN) allow you to specify the output device that the FollowMe Q-Server should be releasing print jobs to. The IP Address is normally used however in environments where output devices have their IP Addresses assigned via DHCP and have a roaming IP Address the FQDN can be used (normally the FQDN is formatted as device. domain.com)
Printer Name	The printer name is important for you to be able to reference back to the configured device. Normally the printer is that of the physical printer or the most useful name for

	you to easily identify the output device
Timeout & Never Timeout	The timeout option provides the ability to set a timeout period for when a printer sits in an idle state while it is rastering print data or inactivity when say the printer has run out of paper. The timeout itself when triggered by default will re-queue the print job for the user unless otherwise specified within the policies. By default the FollowMe Q-Server will have the timeout set to Never Timeout which unless their is a network socket error never timeout waiting for say paper to be loaded if the device was out of paper at time of printing
RAW	The RAW protocol is selected by default and the Port 9100 is generally used in most instances.
Enable Encryption	The enable encryption (when using a FollowMe E-Line controller) allows you to specify if that particular output device will have print jobs sent to it in encrypted format or not. There are various encryption algorithms that can be utilised and those can be selected from the drop down list when enabled.
LPR	The Line Print Remote (LPR) protocol is similar in function to RAW however is required for print print output devices which do not properly support the RAW protocol for printing. The LPR protocol also offers the printing username to be inserting into the LPR datastream for the print device to know that that user released the print job

FollowMe Device

Field	Description
IP or FQDN	The IP Address or Fully Qualified Domain Name (FQDN) allow you to specify the FollowMe Device (generally the same as the output device) that the FollowMe Q-Server should allowing authentication from for the print queue it is assigned to. The IP Address

	is normally used however in environments where output devices have their IP Addresses assigned via DHCP and have a roaming IP Address the FQDN can be used (normally the FQDN is formatted as device. domain.com)
Device Configuration	For each FollowMe Device that is configuration one needs to assign this via the IP or FQDN value however also each device requires details such as the FollowMe Q-Server address configured. By selecting the Device Configuration one can view all FollowMe Devices on the LAN/WAN

Costs / Info

Field	Description
Cost Model	The FollowMe Q-Server allows for a Cost Model to be assigned to each print queue for accounting purposes. The Cost Model holds cost for copy, e-mail, fax, print and scan functions that occur on that output device
Cost Code	The Cost Code allows for a project/billing code to be assigned to a print output device without requiring client software to be installed on a users workstation. Generally this option is only used in environments where a small number of cost codes is to be used or a print device is specific to a project/billing code or purpose
Additional Info	This field simply allows any additional information such as device serial number or asset tag to be specified

SNMP

The Simple Network Management Protocol (SNMP) option allows you to specific if the print output device should also check SNMP status before and during printing. The option exposes vendor specific SNMP options which can later be exposed in the *Policies*.

Field	Description

SNMP	The SNMP option allows the selection of the specific vendor so that the correct SNMP MIB is interpreted
Community Name	The SNMP community name can also be specified as some devices are configured on a different community name for security reasons

Embedded Settings

Field	Description
Embedded	This option allows you to enable or disable this output device as being a FollowMe Embedded capable device
Print GUI Setting	Here one can configure this output device as having the print job Graphical User Interface (GUI) displayed on the MFP front panel requiring a <i>User</i> once authenticated to select which print jobs they wish to release
Enroll GUI	Here one can configure this output device as having the enrollment Graphical User Interface (GUI) enabled allowing the <i>User</i> to authenticate and then assign an ID card for example to themselves without any administrative overhead
Cost Code GUI	Here one can configure this output device as having the <i>Cost Code</i> Graphical User Interface (GUI) enabled allowing the <i>User</i> to authenticate and then select a cost code from the MFP front panel to assign this to their session at the output device (for copy, email, fax and scan functions)

Copier

If a non-Embedded device is being used such as an analogue or digital copier and the FollowMe Device including a CopyPatrol cable for that output device one can enable that that device is a Copier from this section.

Field	Description

Enable	This enables the Copier based features
Timeout	A front panel timeout can be set, this timeout is the timeout period between the output devices copy counter being clicked. For example if the device is being used to do scan-to-email functions then the timeout should be set higher. Note: The value is recorded in seconds.
Always enable when printing	This option when selected allows the copier to be enabled even though a user also has print jobs that have been released

Printer Messages

The FollowMe Q-Server allows for print messages to be sent to devices that support the @PJL READY message. For devices that support this feature one can set various messages to be displayed under different circumstances on the output devices front panel.

Field	Description
Credits	Before the <i>Users</i> print jobs are released a credits message can be displayed on the first ID being presented at the output device. Once a second ID has been presented then the users print jobs will be released
No Print Jobs	When enabled and the <i>User</i> present their ID they would either receive any pending print jobs although is none are available the <i>No Print Jobs</i> message can appear on the output devices front panel
No Access	When enabled and a <i>User</i> presents their ID at a output device they do not have access to the <i>No Access</i> message can appear on the output devices front panel

Non-Interactive Printing

In some cases output devices controlled by FollowMe Q-Server may not require any form of interaction to release print jobs (e.g. no ID reader), however accounting, polices, control and security are still important. In these instances an output device can be set into *Non-Interactive* mode, meaning a complete audit is still generated of all printing however a user is not required to identify themselves at the output device.

The *Non-Interactive Printing* feature provides you the ability to also enforce print polices such as colour restrictions as well as routing functions to force a users print job over 1000 pages to be re-directed to a more efficient output device.

What makes the *Non-Interactive* Printing feature more unique is that it can be used in conjunction with a FollowMe Printing interactive device requiring an ID reader to release print jobs and via polices you can define which print jobs should be released *Non-Interactively* or not.

Field	Description
Enable	This enables the <i>Non-Interactive</i> based features
Text Entry Field	The note Specify remote printer name if different to local printer name indicates that if the output device has a different name to the incoming print queue or LPR queue name then one can specify this within this text entry field when using Non-Interactive Printing

4.3.1.1 Usage Summary

The usage summary report provides a statistical analysis for copied and printed output, including weekly, monthly and 6 monthly trend breakdowns.

4.3.1.2 Environmental Impact

Paper Resources

The paper resources section provides a breakdown of paper, trees, water, energy and CO2 resources which have been consumed as well as saved either through automated purging of print jobs after a pre-defined period of time, the automated conversion of print jobs to b/w based on policies or even the enforcement of duplex in the environment.

Field	Description
Paper (sheets)	The number of paper sheets printed, either in simplex or duplex
Paper (kg/lb)	The physical weight of paper sheets in kilograms (kg) or pounds (lb)
Trees	The number of trees based on the paper sheets

Water (I/gal)	The amount of water consumed by the trees in liters (I) or US gallons (gal)
Energy (KWh)	The amount of energy used during the production of paper in kilowatt hours (KWh)
CO2 (kg/lb)	The amount of CO2 created during the production of paper in kilograms (kg) or pounds (lb)

Toner Resources

The toner resources section provides a breakdown of toner cartridges, land fill and energy resources which have been consumed and as well as saved.

Field	Description
Cartridges	The number of toner cartridges used based on an average number of pages which each cartridge can print
Land Fill (kg/lb)	The land fill weight is based on the number of cartridges used and their dead weight when disposed. It is estimated that around one point three kilograms (three pounds) of waste is generated for each toner cartridge which is disposed.
	Also it is estimated that between two point two and four kilograms (five and nine pounds) of virgin materials are conserved by remanufacturing toner cartridges
Energy (KWh)	The amount of energy is calculated from all parts of the manufacturing process, including the amount of oil used to produce each toner cartridge. The actual amount of oil burned to produce one toner cartridge is estimated at three point four liters (three quarts) which on average equates to one zero point zero one three six megawatt hours of energy

Printer Resources

The printer resources section provides a breakdown of the time and energy resources used while a printer is active, on standby as well as the savings when the device is switched off.

Field	Description
Time (Hours)	The total hours that the device has been in a specific state
Energy (KWh)	The total amount of energy is calculated from the devices print speed, active and standby power consumption

4.3.1.3 Processing Jobs

Here one can see all the current processing print jobs for the selected printer.

4.3.1.4 Printer Policies

Existing Printer Policies

One can manage policies on a per output device basis, one can assign existing policies and add new polices as required.

Field	Description
List of existing polices containing the condition: 'Printer XXX'	List of all applicable polices specific to this output device
List of existing policies with conditions for other printers	List of all polices that are not assigned to this output device

4.3.2 Import Printers

When initially setting up the FollowMe Q-Server one is presented with an option to *Import Printers* from the local print server, or remote print server. The *Import Printers* provides a simple way to configure multiple devices dynamically from their currently configured state in their native print environment.

4.3.3 Auto Create Printers

The system allows printers to be automatically created upon the device first making a communication attempt with the FollowMe Q-Server.

4.3.4 Embedded

When utilising FollowMe Embedded capable devices and the FollowMe Embedded software needs to be loaded into those devices or device settings need to be changed, then this option should be used.

4.3.5 Advanced

For feature is for use with Hewlett Packard (HP) output devices only.

Foreign Interface Harness (FIH)

Enables or disables HPs Foreign Interface Harness (FIH) settings.

Field	Description
Status	Sets the Enabled/Disabled state which should be set
Password	An optional password that is used when changing the state (is off by default)

Store to Hard Disk

Enables or disables the Multifunction Printers (MFPs) "Store to disk" setting.

Field	Description
Status	Sets the Enabled/Disabled state which should be set

4.4 Kiosks

FollowMe Q-Server

In the case of a multiple server environment, the *FollowMe Q-Server* can be specified so that a single database can be used to manage multiple servers. By default kiosks that are added with a *FollowMe Q-Server* of *All* (and an IP Address of 0.0.0.0, which cannot be changed).

Device Details

Field	Description
Kiosk Name	The kiosk name is important for you to be able to reference back to the configured device
Kiosk IP	The kiosk IP Address should be entered here

Time Servers

Field	Description
Time Server 1/2/3	A NTP enabled time server should be set here, if more than one time server is available then time servers 2 and 3 should also be set
Zone Offset	The timezone offset should be entered here
Zone Plus/Minus	This value indicates if the field offset is positive or negative

Time Out

Field	Description
Time(s)	The users session timeout should be entered here, this will define how long the kiosk will wait between actions
Time Out Action	If a timeout occurs one can set the action that is performed

Notes Credits Amount

This is the amount of credit that is applied based on the tendering of any one specific note. Kiosks can handle 3 note types and the value they represent within the FollowMe environment is specified here.

4.4.1 Display Settings

Fonts

Field	Description
Standard Font	Allows selection of a different font for display at the panel
Size	Allows the font size to be changed at the front panel

Kiosk Display Text

Field	Description
Username	The Username string value on the front panel can be localised by changing this value
Credits	The Credits string value on the front panel can be localised by changing this value
Insert Note	The Insert Note string value on the front panel can be localised by changing this value
Unknown User	The Unknown User string value on the front panel can be localised by changing this value

Week Setup

The days of week can be specified here, we recommend a 3 letter day of week.

Month Setup

The month names can be specified here, we recommend a 3 letter month name.

4.4.1.1 Default Screen

The default screen can be configured here, please specify the fully qualified path on the file system (e.g. C:\Program Files\Ringdale\FM Q-Server\image.bmp").

4.4.1.2 Processing Screen

The processing screen can be configured here, please specify the fully qualified path on the file system (e.g. C:\Program Files\Ringdale\FM Q-Server\image.bmp").

4.4.1.3 Text Screen

The text screen can be configured here, please specify the fully qualified path on the file system (e.g. C:\Program Files\Ringdale\FM Q-Server\image.bmp").

4.4.1.4 Error Screen

The error screen can be configured here, please specify the fully qualified path on the file system (e.g. C:\Program Files\Ringdale\FM Q-Server\image.bmp").

4.4.1.5 Screen 5

A reserved screen can be configured here (unused at present), please specify the fully qualified path on the file system (e.g. C:\Program Files\Ringdale\FM Q-Server\image.bmp").

4.5 Policies

Policies are conditional rules that can be added to any print flow. This will give the administrator the ability to ensure certain rules are undertaken when a print job meets the setup of a policy.

It is possible to have multiple policies and multiple actions for that policy.

4.5.1 Add/Edit

Policy Name

A descriptive policy name should be defined here.

Policy Priority

When running multiple policies that may require an inline execution then the *Policy Priority* setting should be used.

Event Types

The FollowMe Q-Server Policy engine supports various different *Event Types* at which a policy should be executed, here you can define at which *Event Types* this particular policy should be executed.

4.5.1.1 Conditions

Add/Edit Condition

Field	Description
Condition Object	Conditions can apply to any one of the existing FollowMe objects, namely; Audit, Connection, Fax, Job, Printer and User
Object Property	For each condition various properties exist, one should select the property required for the condition from the list provided
Operator	One can define the <i>Operator</i> such as <i>Equals</i> and <i>Not Equal To</i>
Value	The value that the condition is looking for should be specified here

Condition List

The configured conditions are listed here.

Condition Logic

Once your conditions are set and listed, they can be used in *Condition Logic* using the *Insert into Logic* button.

Within the logic you can use standard operators such as AND, OR and () to build your logic to your desired result.

4.5.1.2 Actions

Standard

The *Standard* action covers some of the more basic routing functions that the FollowMe Q-Server offers, some of these include re-queuing, re-directing, forwarding and/or deleting the print job.

ELP

The Enhanced Laser Printing (ELP) action, exposes more advanced functionality for PCL5 based print jobs. Some of these include dynamically enforcing Duplex and Colour settings, as

well being able to re-map paper trays depending on which output device print jobs are being printed on.

PJL

The *Print Job Definition Language (PJL)* action is defined for output devices that support the setting of PJL flags to change the output itself, for example enforcing Economode and conversion to Black and White from Colour.

Custom Rule

As with most environments the standard product functionality there is always a requirement for it to do more, and within the FollowMe Q-Server there is a section called Custom Rules whereby the more environment specific functionality can be exposed.

Email

The *Email* action provides the ability to send a pre-defined recipient, the current printing user a notification of a Policy being executed and/or enforced.

Create PIN

The *Create PIN* action provides the ability to generate a users PIN number dynamically, which could then be used to send an e-mail within the same policy.

4.5.1.2.1 Standard

Action Properties

Field	Description
Action Type	A desired <i>Action Type</i> can be selected here to perform the given task
To User	When Forward Job is selected in the Action Type then one can specify the user the print jobs should be forwarded to
To Printer	When Forward Job is selected in the Action Type then one can specify the printer the print jobs should be forwarded to

Action Priority

When running multiple actions that may require an inline execution then the *Action Priority* setting should be used.

4.5.1.2.2 ELP

Within the ELP engine one can expose many more advanced print job modifications, which are all based on the PCL5 standard. For each ELP action one needs to define the following details:

Field	Description
ELP Name	A reference name should be defined here to identify the ELP action
Number of Copies	One can define the number of copies the ELP engine should make of the current printing print job. For example one can specify 2 copies whereby the first is printed without modification although the second is then printed from a different tray and in black and white
Collate	If you have selected more than one copy, specifies if you want the copies collated
Printer Model	One can define the output device printer model that will then affect the available <i>Staple</i> options settings
Staple	Here one can define if the staple option is to be enforced or not

Action Priority

When running multiple actions that may require an inline execution then the *Action Priority* setting should be used.

ELP Command Strings

Field	Description
Generated ELP Command	The configuration of a defined ELP command

	set is displayed here
Override Generated Command (Advanced)	The ELP engine offers the ability to expose hidden commands which the editor does not provide the ability to configure. Therefore to override the standard functionality the Override Generated Command (Advanced) can be used and the custom ELP command string can be entered

4.5.1.2.2.1 Copy X

For each ELP action one can define the number of Copies, if more than one then this sections settings will be duplicated for each copy defined. Within this section one has all the defined pages and one can add, edit and delete them as required.

For each Copy one can define on a page level which additional print job parameters should be modified, as well as simply selecting an All (remaining) pages option.

For each Page of a Copy that one can defines, there are various per page options that can be selected.

Affected Page(s)

Field	Description
Affected Page(s)	One can select the page(s) that will be affected by the other options selected, for example one can select a single page (from 1 to 19) as well as all pages via the <i>All</i> (remaining) Pages selection

Paper Options

Field	Description
Size	The paper <i>Size</i> option allows one to select the physical paper size that should be printed on
Source	The paper Source option allows one to select

the physical paper tray that the paper should be printed from
The paper <i>Type</i> option allows one to define the physical paper <i>Type</i> that should be used to be printed on

Output Options

Field	Description
Output Bin	The Output Bin option allows one to define the physical Output Bin that the selected page(s) will be printed to

Finishing

Field	Description
Duplex	The <i>Duplex</i> option allows one to enforce Duplex printing on the current page(s) being printed
Orientation	The <i>Orientation</i> option allows the print jobs <i>Orientation</i> to be changed for the current page(s) being printed

Colour Options

Field	Description
Print in Grayscale	The <i>Print in Grayscale</i> allows the enforcement of Black and White or Colour printing, for the current page(s) being printed

4.5.1.2.3 PJL

PJL Settings

Field	Description

Economode	For some drivers one can specify if Economode is enabled or disabled
Force Black and White	One can selected if the print job is forced to black and white on the fly

Action Priority

When running multiple actions that may require an inline execution then the *Action Priority* setting should be used.

4.5.1.2.4 Custom Rule

Rule Name

A descriptive rule name should be defined here.

Script Editor

The *Scripts Editor* allows for VB Script based scripts to be written providing a programmable interface for non-standard actions that are more specific to organisations business needs.

Note: It is possible to have encrypted scripts, and the script listed in the script editor will not be editable once saved.

Action Priority

When running multiple actions that may require an inline execution then the *Action Priority* setting should be used.

4.5.1.2.5 Email

Email Settings

Field	Description
Recipient	The desired <i>Recipient</i> of the e-mail message is defined here
Subject	The Email Subject is defined here

Body	The Email <i>Body</i> is defined here

Action Priority

When running multiple actions that may require an inline execution then the *Action Priority* setting should be used.

4.5.1.2.6 Create PIN

This actions allows a PIN number to be generated for the user dynamically when set. It should be used with conditions to check is a PIN number exists as well as its design does assume that the user is informed via another action or alternative method after a PIN is generated.

4.5.1.3 Active Times

Times

For each policy one can set access time restrictions to permit the policy to be executed only during a certain set of hours during a 7 day week.

4.6 Directory Monitoring

The *Directory Monitoring* section displays users in a per server format, an example of formatting is as follows:



Monitor 1

Monitor 2

Peered Server 1 (if applicable)

Monitor 10

Peered Server 2 (if applicable)

Monitor 20

Upon selecting the *Root* or a *Peered Server* the right hand list box will populate with the applicable users for that selected node.

Root

The root holds *Directory Monitoring* tasks that are assigned to all servers, however a shared user can be assigned to only one *Peered Server* also, refer to *Peered Server* below.

Peered Server

A *Peered Server* allows you to group your *Directory Monitoring* tasks more effectively allowing some users to be listed in the *Root* and some specifically only by *Peered Server*.

4.6.1 Add/Edit

FollowMe Q-Server

In the case of a multiple server environment, the FollowMe Q-Server can be specified so that a single database can be used to manage multiple servers. By default directory monitors that are added with a FollowMe Q-Server of All (and an IP Address of 0.0.0.0, which cannot be changed).

Settings Name

The *Directory Monitoring* task name should be specified in this section.

Monitored Directories

The *Monitored Directories* are specified here, these directories are those which will be monitored for the file name *Filter* that has been defined.

Action

Once a file has been received it would generally be assigned to either a Shared User or User.

Feature	Description
Assign to Shared User	The Shared <i>User</i> which the print job should be assigned to is defined here
Assign to User	The <i>User</i> which the print job should be assigned to is defined here

Note: Once a file has been found a *Received Print Job* policy is executed allowing for custom routing to be defined.

File Name Filter

The file name filter should be specified in the *Filter* text box.

4.7 Print Jobs

The FollowMe Q-Server allows *Print Jobs* to be managed and the tree structure below shows that structure:



When running in a multiple FollowMe Q-Server environment one can view, select and manage *Print Jobs* by server.

All Processing Jobs

Here one can see all the current processing print jobs (the print jobs that are listed are for all servers or the selected server).

All Queued Print Jobs

While print jobs are queued in the system one can view all the users queued print jobs, one can also when edit those queued jobs, to change their status and even delete them from the system.

4.7.1 Processing Print Jobs

Here one can see all the current processing print jobs (the print jobs that are listed are for all servers or the selected server).

4.7.2 Queued Print Jobs

While print jobs are queued in the system one can view all the users queued print jobs, one can also when edit those queued jobs, to change their status and even delete them from the system.

Part

5 Reports

Cost Report

Provides a report with data tailored for cost reporting.

Usage Report

Provides a report with data tailored for usage reporting.

Payment Report

Provides a report with data tailored for payment reporting.

Digital Send (Email/Fax/Scan) Report

Provides a report with fields tailored for digital send reporting.

Deleted Jobs Report

Provides a report with fields tailored for deleted print job reporting.

5.1 Statistics

Totals and Averages

An snapshot of system throughput is provided, where data such as total print jobs, total pages can be viewed for lifetime total, lifetime average and today's counts.

Print Settings

A break down of print specific attributes such as black and white or colour is provided.

Application Break Down

An application break down of print and copy activity for the last 3 months is provided.

5.2 Environmental Impact

Paper Resources

The paper resources section provides a breakdown of paper, trees, water, energy and CO2 resources which have been consumed as well as saved either through automated purging of print jobs after a pre-defined period of time, the automated conversion of print jobs to b/w based on policies or even the enforcement of duplex in the environment.

Field	Description
Paper (sheets)	The number of paper sheets printed, either in simplex or duplex
Paper (kg/lb)	The physical weight of paper sheets in kilograms (kg) or pounds (lb)
Trees	The number of trees based on the paper sheets
Water (I/gal)	The amount of water consumed by the trees in liters (I) or US gallons (gal)
Energy (KWh)	The amount of energy used during the production of paper in kilowatt hours (KWh)
CO2 (kg/lb)	The amount of CO2 created during the production of paper in kilograms (kg) or pounds (lb)

Toner Resources

The toner resources section provides a breakdown of toner cartridges, land fill and energy resources which have been consumed and as well as saved.

Field	Description
Cartridges	The number of toner cartridges used based on an average number of pages which each cartridge can print
Land Fill (kg/lb)	The land fill weight is based on the number of cartridges used and their dead weight when disposed. It is estimated that around one point three kilograms (three pounds) of waste is generated for each toner cartridge which is disposed.

	Also it is estimated that between two point two and four kilograms (five and nine pounds) of virgin materials are conserved by remanufacturing toner cartridges
Energy (KWh)	The amount of energy is calculated from all parts of the manufacturing process, including the amount of oil used to produce each toner cartridge. The actual amount of oil burned to produce one toner cartridge is estimated at three point four liters (three quarts) which on average equates to one zero point zero one three six megawatt hours of energy

Printer Resources

The printer resources section provides a breakdown of the time and energy resources used while a printer is active, on standby as well as the savings when the device is switched off.

Field	Description
Time (Hours)	The total hours that the device has been in a specific state
Energy (KWh)	The total amount of energy is calculated from the devices print speed, active and standby power consumption

5.3 Cost Report

Report Title

This is the title that is displayed in the rendered report and can be customised to be more specific to the entered filter options.

Filter Options

Field	Description
User	A specific use can be be entered or if one toggles the [Show as Droplist]/[Show as Auto Complete Text box] one can select from the down down list (default is All)

Cost Code	A specific Cost Code can be selected (default is All)
Cost Centre	A specific Cost Centre can be selected (default is All)
Printer	A specific <i>Printer</i> can be selected (default is <i>All</i>)
Colour	One can select if the filter should apply a Colour specific filter for example match all print jobs that are detected as Black and White or Colour (default is All)
Job Type	One can select if the filter should apply a <i>Job Type</i> condition
Paper Size	One can select if the filter should apply a Paper Size condition
Duplex	One can select if the filter should apply a Duplex condition
Page Count	One can also filter for print jobs that have page counts <i>From</i> X value <i>To</i> Y value

Date/Time

Field	Description
Date Range	A Date Range that the report should be generated against should be specified here
From/To	If the <i>Specify</i> option is selected from the <i>Date Range</i> then the <i>From</i> and <i>To</i> fields need to be populated
Time Range	If you wish you can also apply a more granular filter for <i>Time Range</i> by checking this option and entering the desired <i>Time Range</i>

Options

Field	Description

Group By	A <i>Group By</i> option allows you to group the report results differently depending on your desired output
Order By	One can optionally also add a <i>Order By</i> ordering
Do Subtotals	When enabled this options also calculates subtotals for each grouping and not simply a global total
Report Type	The reports themselves allow for various formatting options:
	Detailed (default) - Will display all the data returned from the database (determined by the Filter and type of report).
	Summary - This shows aggregate totals for the relevant (numeric) selected fields.
	Totals - Totals for the relevant (numeric) selected fields.
Orientation	Changes the page orientation

Report Columns

The report columns are only applicable when a *Report Type* of *Detailed* is selected. When Detailed is selected one can select which columns are output in the generated report from the available options in this section.

Note: By default when one views this report these columns will be set to their preset selections based on the report.

Email Settings (if applicable)

Field	Description
Email To	One should enter the To email address where the report should be sent to
Report Format	One can select if the report is embedded in the email as HTML or if the report is attached as a CSV file

CSV

If one wishes to view the report as a CSV instead of a HTML one should click the CSV button to generate the report using the CSV standard (Comma Separated Values). This then give one the flexibility to use your report data in other applications, such as Excel, Sage etc.

Schedule

If one wishes to utilise the pre-configured settings to generate this report against a schedule one can simply click the *Schedule* button.

5.4 Usage Report

Report Title

This is the title that is displayed in the rendered report and can be customised to be more specific to the entered filter options.

Filter Options

Field	Description
User	A specific use can be be entered or if one toggles the [Show as Droplist]/[Show as Auto Complete Text box] one can select from the down down list (default is All)
Cost Code	A specific Cost Code can be selected (default is All)
Cost Centre	A specific Cost Centre can be selected (default is All)
Printer	A specific <i>Printer</i> can be selected (default is <i>All</i>)
Colour	One can select if the filter should apply a Colour specific filter for example match all print jobs that are detected as Black and White or Colour (default is All)
Page Count	One can also filter for print jobs that have page counts <i>From</i> X value <i>To</i> Y value

Date/Time

Field	Description
Date Range	A Date Range that the report should be generated against should be specified here
From/To	If the <i>Specify</i> option is selected from the <i>Date Range</i> then the <i>From</i> and <i>To</i> fields need to be populated
Time Range	If you wish you can also apply a more granular filter for <i>Time Range</i> by checking this option and entering the desired <i>Time Range</i>

Options

Field	Description
Group By	A <i>Group By</i> option allows you to group the report results differently depending on your desired output
Order By	One can optionally also add a <i>Order By</i> ordering
Do Subtotals	When enabled this options also calculates subtotals for each grouping and not simply a global total
Report Type	The reports themselves allow for various formatting options:
	Detailed (default) - Will display all the data returned from the database (determined by the Filter and type of report).
	Summary - This shows aggregate totals for the relevant (numeric) selected fields.
	Totals - Totals for the relevant (numeric) selected fields.

Report Columns

The report columns are only applicable when a Report Type of Detailed is selected. When

Detailed is selected one can select which columns are output in the generated report from the available options in this section.

Note: By default when one views this report these columns will be set to their preset selections based on the report.

Email Settings (if applicable)

Field	Description
Email To	One should enter the To email address where the report should be sent to
Report Format	One can select if the report is embedded in the email as HTML or if the report is attached as a CSV file

CSV

If one wishes to view the report as a CSV instead of a HTML one should click the CSV button to generate the report using the CSV standard (Comma Separated Values). This then give one the flexibility to use your report data in other applications, such as Excel, Sage etc.

Schedule

If one wishes to utilise the pre-configured settings to generate this report against a schedule one can simply click the *Schedule* button.

5.5 Payment Report

Report Title

This is the title that is displayed in the rendered report and can be customised to be more specific to the entered filter options.

Filter Options

Field	Description
User	A specific use can be be entered or if one toggles the [Show as Droplist]/[Show as Auto Complete Text box] one can select from the

down down list (default is All)

Date/Time

Field	Description
Date Range	A <i>Date Range</i> that the report should be generated against should be specified here
From/To	If the Specify option is selected from the Date Range then the From and To fields need to be populated
Time Range	If you wish you can also apply a more granular filter for <i>Time Range</i> by checking this option and entering the desired <i>Time Range</i>

Options

Field	Description
Group By	A <i>Group By</i> option allows you to group the report results differently depending on your desired output
Order By	One can optionally also add a <i>Order By</i> ordering
Do Subtotals	When enabled this options also calculates subtotals for each grouping and not simply a global total
Report Type	The reports themselves allow for various formatting options:
	Detailed (default) - Will display all the data returned from the database (determined by the Filter and type of report).
	Summary - This shows aggregate totals for the relevant (numeric) selected fields.
	Totals - Totals for the relevant (numeric) selected fields.

Report Columns

The report columns are only applicable when a *Report Type* of *Detailed* is selected. When Detailed is selected one can select which columns are output in the generated report from the available options in this section.

Note: By default when one views this report these columns will be set to their preset selections based on the report.

Email Settings (if applicable)

Field	Description
Email To	One should enter the To email address where the report should be sent to
Report Format	One can select if the report is embedded in the email as HTML or if the report is attached as a CSV file

CSV

If one wishes to view the report as a CSV instead of a HTML one should click the CSV button to generate the report using the CSV standard (Comma Separated Values). This then give one the flexibility to use your report data in other applications, such as Excel, Sage etc.

Schedule

If one wishes to utilise the pre-configured settings to generate this report against a schedule one can simply click the *Schedule* button.

5.6 Custom Report

Report Title

This is the title that is displayed in the rendered report and can be customised to be more specific to the entered filter options.

Filter Options

Field	Description

User	A specific use can be be entered or if one toggles the [Show as Droplist]/[Show as Auto Complete Text box] one can select from the down down list (default is All)
Cost Code	A specific Cost Code can be selected (default is All)
Cost Centre	A specific Cost Centre can be selected (default is All)
Printer	A specific <i>Printer</i> can be selected (default is <i>All</i>)
Colour	One can select if the filter should apply a Colour specific filter for example match all print jobs that are detected as Black and White or Colour (default is All)
Page Count	One can also filter for print jobs that have page counts <i>From</i> X value <i>To</i> Y value

Date/Time

Field	Description
Date Range	A <i>Date Range</i> that the report should be generated against should be specified here
From/To	If the Specify option is selected from the Date Range then the From and To fields need to be populated
Time Range	If you wish you can also apply a more granular filter for <i>Time Range</i> by checking this option and entering the desired <i>Time Range</i>

Options

Field	Description
Group By	A <i>Group By</i> option allows you to group the report results differently depending on your desired output

Order By	One can optionally also add a Order By ordering
Do Subtotals	When enabled this options also calculates subtotals for each grouping and not simply a global total
Report Type	The reports themselves allow for various formatting options:
	Detailed (default) - Will display all the data returned from the database (determined by the Filter and type of report).
	Summary - This shows aggregate totals for the relevant (numeric) selected fields.
	Totals - Totals for the relevant (numeric) selected fields.

Report Columns

The report columns are only applicable when a *Report Type* of *Detailed* is selected. When Detailed is selected one can select which columns are output in the generated report from the available options in this section.

Note: By default when one views this report these columns will be set to their preset selections based on the report.

Email Settings (if applicable)

Field	Description
Email To	One should enter the To email address where the report should be sent to
Report Format	One can select if the report is embedded in the email as HTML or if the report is attached as a CSV file

CSV

If one wishes to view the report as a CSV instead of a HTML one should click the CSV button to generate the report using the CSV standard (Comma Separated Values). This then give one the flexibility to use your report data in other applications, such as Excel, Sage etc.

Schedule

If one wishes to utilise the pre-configured settings to generate this report against a schedule one can simply click the *Schedule* button.

5.7 Digital Send (Email/Fax/Scan) Report

Report Title

This is the title that is displayed in the rendered report and can be customised to be more specific to the entered filter options.

Filter Options

Field	Description
User	A specific use can be be entered or if one toggles the [Show as Droplist]/[Show as Auto Complete Text box] one can select from the down down list (default is All)
Cost Code	A specific Cost Code can be selected (default is All)
Cost Centre	A specific Cost Centre can be selected (default is All)
Printer	A specific <i>Printer</i> can be selected (default is <i>All</i>)
Colour	One can select if the filter should apply a <i>Colour</i> specific filter for example match all print jobs that are detected as <i>Black and White</i> or <i>Colour</i> (default is <i>All</i>)
Page Count	One can also filter for print jobs that have page counts <i>From</i> X value <i>To</i> Y value

Date/Time

Field	Description
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Date Range	A Date Range that the report should be generated against should be specified here
From/To	If the Specify option is selected from the Date Range then the From and To fields need to be populated
Time Range	If you wish you can also apply a more granular filter for <i>Time Range</i> by checking this option and entering the desired <i>Time Range</i>

Options

Field	Description
Group By	A <i>Group By</i> option allows you to group the report results differently depending on your desired output
Order By	One can optionally also add a <i>Order By</i> ordering
Do Subtotals	When enabled this options also calculates subtotals for each grouping and not simply a global total
Report Type	The reports themselves allow for various formatting options:
	Detailed (default) - Will display all the data returned from the database (determined by the Filter and type of report).
	Summary - This shows aggregate totals for the relevant (numeric) selected fields.
	Totals - Totals for the relevant (numeric) selected fields.

Report Columns

The report columns are only applicable when a *Report Type* of *Detailed* is selected. When Detailed is selected one can select which columns are output in the generated report from the available options in this section.

Note: By default when one views this report these columns will be set to their preset selections based on the report.

Email Settings (if applicable)

Field	Description
Email To	One should enter the To email address where the report should be sent to
Report Format	One can select if the report is embedded in the email as HTML or if the report is attached as a CSV file

CSV

If one wishes to view the report as a CSV instead of a HTML one should click the CSV button to generate the report using the CSV standard (Comma Separated Values). This then give one the flexibility to use your report data in other applications, such as Excel, Sage etc.

Schedule

If one wishes to utilise the pre-configured settings to generate this report against a schedule one can simply click the *Schedule* button.

5.8 Deleted Jobs Report

Report Title

This is the title that is displayed in the rendered report and can be customised to be more specific to the entered filter options.

Filter Options

Field	Description
User	A specific use can be be entered or if one toggles the [Show as Droplist]/[Show as Auto Complete Text box] one can select from the down down list (default is All)
Cost Code	A specific Cost Code can be selected (default is All)
Cost Centre	A specific Cost Centre can be selected

	(default is All)
Printer	A specific <i>Printer</i> can be selected (default is <i>All</i>)
Colour	One can select if the filter should apply a Colour specific filter for example match all print jobs that are detected as Black and White or Colour (default is All)
Page Count	One can also filter for print jobs that have page counts <i>From</i> X value <i>To</i> Y value

Date/Time

Field	Description
Date Range	A <i>Date Range</i> that the report should be generated against should be specified here
From/To	If the Specify option is selected from the Date Range then the From and To fields need to be populated
Time Range	If you wish you can also apply a more granular filter for <i>Time Range</i> by checking this option and entering the desired <i>Time Range</i>

Options

Field	Description
Group By	A <i>Group By</i> option allows you to group the report results differently depending on your desired output
Order By	One can optionally also add a <i>Order By</i> ordering
Do Subtotals	When enabled this options also calculates subtotals for each grouping and not simply a global total
Report Type	The reports themselves allow for various formatting options, for example here you can

	choose from Summary (being the default), Detailed and Total
--	---

Report Columns

The report columns are only applicable when a *Report Type* of *Detailed* is selected. When Detailed is selected one can select which columns are output in the generated report from the available options in this section.

Note: By default when one views this report these columns will be set to their preset selections based on the report.

Email Settings (if applicable)

Field	Description
Email To	One should enter the To email address where the report should be sent to
Report Format	One can select if the report is embedded in the email as HTML or if the report is attached as a CSV file

CSV

If one wishes to view the report as a CSV instead of a HTML one should click the CSV button to generate the report using the CSV standard (Comma Separated Values). This then give one the flexibility to use your report data in other applications, such as Excel, Sage etc.

Schedule

If one wishes to utilise the pre-configured settings to generate this report against a schedule one can simply click the *Schedule* button.

5.9 Graphs & Charts

Where a graphical representation of FollowMe data is preferred this can be achieved in the form of Pie Charts and Graphs. As with the reports Graphs & Chards can be scheduled to be delivered by email.

Top Ten

Displays *Top Ten* data for various fields from the FollowMe audit data tables.

Usage

Displays general FollowMe usage data over time.

Comparison

Allows you to graphically compare two FollowMe audited objects over time.

5.9.1 Top X

Graph Title

This is the title that is displayed in the rendered graph and can be customised to be more specific to the entered graph settings.

Graph Settings

Field	Description
X Axis	One should select <i>X Axi</i> s data range that the graph should be rendered against
Date Range	A Date Range that the graph should be generated against should be specified here
From/To	If the Specify option is selected from the Date Range then the From and To fields need to be populated
Graph Type	Various graph types are supported, and the required type should be selected

Email Settings (if applicable)

Field	Description
	One should enter the To email address where the report should be sent to

Schedule

If one wishes to utilise the pre-configured settings to generate this graph against a schedule one can simply click the *Schedule* button.

5.9.2 Usage

Graph Title

This is the title that is displayed in the rendered graph and can be customised to be more specific to the entered graph settings.

Graph Settings

Field	Description
X Axis	One should select <i>X Axi</i> s data range that the graph should be rendered against
Date Range	A Date Range that the graph should be generated against should be specified here
From/To	If the Specify option is selected from the Date Range then the From and To fields need to be populated
Y Axis	One should select the Y Axis data range that the graph should be rendered against
Graph Type	Various graph types are supported, and the required type should be selected

Filter Options

Field	Description
User	A specific use can be be entered or if one toggles the [Show as Droplist]/[Show as Auto Complete Text box] one can select from the down down list (default is All)

Cost Code	A specific Cost Code can be selected (default is All)
Cost Centre	A specific Cost Centre can be selected (default is All)
Printer	A specific <i>Printer</i> can be selected (default is <i>All</i>)
Colour	One can select if the filter should apply a <i>Colour</i> specific filter for example match all print jobs that are detected as <i>Black and White</i> or <i>Colour</i> (default is <i>All</i>)
Page Count	One can also filter for print jobs that have page counts <i>From</i> X value <i>To</i> Y value

Email Settings (if applicable)

Field	Description
	One should enter the To email address where the report should be sent to

Schedule

If one wishes to utilise the pre-configured settings to generate this graph against a schedule one can simply click the *Schedule* button.

5.9.3 Comparison

Graph Title

This is the title that is displayed in the rendered graph and can be customised to be more specific to the entered graph settings.

Graph Settings

Field	Description
X Axis	One should select X Axis data range that the

	graph should be rendered against
Date Range	A Date Range that the graph should be generated against should be specified here
From/To	If the Specify option is selected from the Date Range then the From and To fields need to be populated
Y Axis	One should select the <i>Y Axis</i> data range that the graph should be rendered against
Graph Type	Various graph types are supported, and the required type should be selected

Filter Options

Field	Description
User	A specific use can be be entered or if one toggles the [Show as Droplist]/[Show as Auto Complete Text box] one can select from the down down list (default is All)
Cost Code	A specific Cost Code can be selected (default is All)
Cost Centre	A specific Cost Centre can be selected (default is All)
Printer	A specific <i>Printer</i> can be selected (default is <i>All</i>)
Colour	One can select if the filter should apply a Colour specific filter for example match all print jobs that are detected as Black and White or Colour (default is All)
Page Count	One can also filter for print jobs that have page counts <i>From</i> X value <i>To</i> Y value

Email Settings (if applicable)

Field	Description
Email To	One should enter the To email address

where the report should be sent to	

Schedule

If one wishes to utilise the pre-configured settings to generate this graph against a schedule one can simply click the *Schedule* button.

5.10 Saved Reports

This section will display any scheduled reports. It is not possible to add a report from this section it must be selected at the point when the report is designed.

Scheduling a Report or Graph/Chart

To schedule a report or graph/chart you will find a *Schedule* button at the bottom of each of the report or graph/chart pages. One can also use scheduling of reports to save report settings for future use.

5.10.1 Availability & Scheduling

Direct Access To This Report

One can allow for a report to viewed from a web based URL rather or in conjunction with it being e-mailed, simply use the link provided here. The "Allow anonymous access to this report if accessed via this link" enables this report to be viewed without authentication.

Scheduled Reports

One can the report format (PDF or HTML) as well as define if the report should be saved to disk or e-mailed.

When saving to disk one can specify the filename format and directory.

When e-mailing the report one can enter an e-mail address where report should be e-mailed to, or specify a group of users (by cost centre, or all users) and have the report sent to those users without having to setup a schedule for each user individually.

Part

6 Costs

6.1 Cost Models

A cost model can be created to set up the cost options for each printer type. Once set up, a cost model can be applied to as many printers as required (for example, if an office has three of the same type of printer, the costs per page for each printer will be identical, therefore only one cost model would need to be created which could then be applied to all three printers. If the office has two printers, one colour and one black and white, the costs per page for each printer would be different; therefore the printers would require different cost models).

A cost model could be set up to run in conjunction with a cost centre. An example of this would be to have a cost centre for each department within a company so that the printing costs of each department could be monitored (Sales, Marketing etc.). For each department a cost model could also be established, with the costing for colour, black and white and duplex printing. The cost model could then be directly associated with the cost centre.

Copy

As well as being able to create a *Cost Model*, one can also *Copy* a existing cost model to create a new *Cost Model*, this is simply done by clicking the *Copy* button.

6.1.1 Add/Edit

Name

The cost model name is specified here.

Print Cost Settings

For Print specific costs, one defines the costs in this section.

Field	Description
Paper Size	The paper size that this cost is associated against should be selected
Colour	One can flag if this cost is associated to colour or not
Duplex	One can flag if this cost is associated to duplex or not
Credit Cost	The credit cost for this cost setting can be specified here
Money Cost	The monetary cost for the this cost setting

	can be specified here	1
- 1		- 1

NOTE: The "*Default Cost*" is used in the event no cost is defined for a specific function, paper type or associated option.

Copy Cost Settings

For Copy specific costs, one defines the costs in this section.

Field	Description
Paper Size	The paper size that this cost is associated against should be selected
Colour	One can flag if this cost is associated to colour or not
Duplex	One can flag if this cost is associated to duplex or not
Credit Cost	The credit cost for this cost setting can be specified here
Money Cost	The monetary cost for the this cost setting can be specified here

Fax Cost Settings

For Fax specific costs, one defines the costs in this section.

Field	Description
Paper Size	The paper size that this cost is associated against should be selected
Colour	One can flag if this cost is associated to colour or not
Duplex	One can flag if this cost is associated to duplex or not
Credit Cost	The credit cost for this cost setting can be specified here
Money Cost	The monetary cost for the this cost setting can be specified here

Scan Cost Settings

For Scan specific costs, one defines the costs in this section.

Field	Description
Paper Size	The paper size that this cost is associated against should be selected
Colour	One can flag if this cost is associated to colour or not
Duplex	One can flag if this cost is associated to duplex or not
Credit Cost	The credit cost for this cost setting can be specified here
Money Cost	The monetary cost for the this cost setting can be specified here

Email Cost Settings

For *Email* specific costs, one defines the costs in this section.

Field	Description
Paper Size	The paper size that this cost is associated against should be selected
Colour	One can flag if this cost is associated to colour or not
Duplex	One can flag if this cost is associated to duplex or not
Credit Cost	The credit cost for this cost setting can be specified here
Money Cost	The monetary cost for the this cost setting can be specified here

IMPORTANT

It is important to remember that "credits" will only be deducted based on the printers cost model, therefore is a cost model is configured and associated to a cost centre (and therefore user) only the money costs will be used from this cost model as the credit cost is again derived from the printers cost model at time of printing.

6.2 Cost Centres

The *Cost Centre* provides a method of organizing users into easily managed groups or departments (at least one cost centre must be created).

Note: This procedure needs to be completed before adding users and after creating a cost model. All users that are created need to be assigned to a *Cost Centre* or department.

6.2.1 Add/Edit

Cost Centre Name

The cost centre name should be specified here.

Cost Model

A cost model must be selected for each cost centre, the cost model will be used to assign costs to the users which are assigned to this configured cost centre.

Cost Centre Credit Pools

Credit Pools also known as quota pools are created via the *Costs > Credit Templates* and allow multiple of credits pools to a cost centre providing departmental credits as well as a granular costing scheme to provide credit assignment for only colour for example or colour and a particular paper size.

Edit properties of Users that belong to this Cost Centre

For all configured cost centres one can edit all user properties of this cost centre, one can do this by click on the *Edit properties of Users that belong to this Cost Centre* link.

6.2.2 Usage Summary

The usage summary report provides a statistical analysis for copied and printed output, including weekly, monthly and 6 monthly trend breakdowns.

6.2.3 Environmental Impact

Paper Resources

The paper resources section provides a breakdown of paper, trees, water, energy and CO2 resources which have been consumed as well as saved either through automated purging of print jobs after a pre-defined period of time, the automated conversion of print jobs to b/w based on policies or even the enforcement of duplex in the environment.

Field	Description
Paper (sheets)	The number of paper sheets printed, either in simplex or duplex
Paper (kg/lb)	The physical weight of paper sheets in kilograms (kg) or pounds (lb)
Trees	The number of trees based on the paper sheets
Water (I/gal)	The amount of water consumed by the trees in liters (I) or US gallons (gal)
Energy (KWh)	The amount of energy used during the production of paper in kilowatt hours (KWh)
CO2 (kg/lb)	The amount of CO2 created during the production of paper in kilograms (kg) or pounds (lb)

Toner Resources

The toner resources section provides a breakdown of toner cartridges, land fill and energy resources which have been consumed and as well as saved.

Field	Description
Cartridges	The number of toner cartridges used based on an average number of pages which each cartridge can print
Land Fill (kg/lb)	The land fill weight is based on the number of cartridges used and their dead weight when disposed. It is estimated that around one point three kilograms (three pounds) of waste is generated for each toner cartridge which is disposed.

	Also it is estimated that between two point two and four kilograms (five and nine pounds) of virgin materials are conserved by remanufacturing toner cartridges
Energy (KWh)	The amount of energy is calculated from all parts of the manufacturing process, including the amount of oil used to produce each toner cartridge. The actual amount of oil burned to produce one toner cartridge is estimated at three point four liters (three quarts) which on average equates to one zero point zero one three six megawatt hours of energy

Printer Resources

The printer resources section provides a breakdown of the time and energy resources used while a printer is active, on standby as well as the savings when the device is switched off.

Field	Description
Time (Hours)	The total hours that the device has been in a specific state
Energy (KWh)	The total amount of energy is calculated from the devices print speed, active and standby power consumption

6.3 Cost Codes

Also known as billing/client/matter/customer codes and provide a method of organising and billing individual copies, print jobs or other device functionality (such as FAX, E-Mail) to a client or a project as well as accounting separate values in the system when assigned.

6.3.1 Add/Edit

FollowMe Q-Server

In the case of a multiple server environment, the *FollowMe Q-Server* can be specified so that a single database can be used to manage multiple servers. By default Cost Codes that are added with a *FollowMe Q-Server* of *All* (and an IP Address of 0.0.0.0, which cannot be changed).

Cost Reference

The Cost Reference can be used for lookup purposes during the cost allocation process.

Cost Name

The Cost Name can be used for lookup purposes during the cost allocation process.

Cost Model

A cost model must be selected for each *Cost Code*, the cost model will be used to assign costs for the assigned activity.

Cost Description

An description for the *Cost Code* normally used for administrative purposes as users will not see this value.

6.4 Extended Credits

6.4.1 User Extended Credits

Name

The credit template name should be specified here.

Default Credits

A default number of credits that will be applied for users that have the *User Extended Credits* assigned to them.

Print Job Settings For This Template

Assigned cost settings are listed here.

Add New Template Cost Settings

Field	Description
Function	The function that the cost is associated against should be selected

Paper Size	The paper size that this cost is associated against should be selected
Duplex	One can flag is this cost is associated to duplex or not
Colour	One can flag is this cost is associated to colour or not

Associations

One can select which users are assigned to the User Extended Credits.

6.4.2 Cost Centre Extended Credits

Name

The credit template name should be specified here.

Default Credits

A default number of credits that will be applied for users that have the *Cost Centre Extended Credits* assigned to them.

Print Job Settings For This Template

Assigned cost settings are listed here.

Add New Template Cost Settings

Field	Description
Function	The function that the cost is associated against should be selected
Paper Size	The paper size that this cost is associated against should be selected
Duplex	One can flag is this cost is associated to duplex or not
Colour	One can flag is this cost is associated to colour or not

Associations

One can select which users are assigned to the Cost Centre Extended Credits.

Part Will

7 Tools

The tools section holds settings that are generally one off settings and not day to day functions.

7.1 Options

7.1.1 General

Print Job Data Directory

This is the physical path on the disk that will hold the folder structure and that holds the spooled print jobs for use prior to their release to the output devices.

Options

These options include support for legacy devices and software along with LPR setup options.

The FollowMe server can be configured to accept incoming print jobs over LPR. This makes FollowMe incredibly versatile when converging with non Windows systems. The industry standard LPR commands can be accepted and processed by FollowMe.

In this section we can choose which LPR Command to take user data from and then choose to override any existing user data fro that specific job.

Field	Description
Enable old non-secure clients (prev 3.04.000)	When enabled the FollowMe Q-Server will accept pre-version 3.04.000 uploads where the authentication process was not encrypted
Accept RAW (9100) Print Jobs directly from clients	The FollowMe Q-Server natively support RAW 9100 printing, to enable this feature simply check this option
Accept LPR Print Jobs directly from clients	The FollowMe Q-Server natively support LPR printing, to enable this feature simply check this option
LPR Command to get Username from	When LPR is enabled the LPR datastream contains the <i>Username</i> by default in the <i>P</i> parameter however it maybe required to obtain this from another and therefore this option can be selected here
Print Job Username Override (LPR)	When LPR is enabled one can also parse the print job datastream for @PJL USER or @PJL USERNAME variables to extract the

	username from
Print Job Username Override (SPP)	When SPP is used one can also parse the print job datastream for @PJL USER or @PJL USERNAME variables to extract the username from
Enable Advanced Postscript Processing	The FollowMe Q-Server engine contains an advanced <i>PostScript Processing</i> engine within it (by default this option is enabled). If for any reason it is required for this to be disabled simply uncheck this option
Enable Advanced PCL Processing	The FollowMe Q-Server engine contains an advanced <i>PCL Processing</i> engine within it, the <i>PCL Processing</i> is more than <i>PCL Processing</i> as this engine also holds all other print language processing other than <i>PostScript Processing</i> (by default this option is enabled). If for any reason it is required for this to be disabled simply uncheck this option
FTP Job Receive	For legacy print systems or specialist systems that are only able to print via FTP then simply enable this option (Note: this option uses port 21, therefore if a FTP server already exists or if this port is in-use then either this option or the offending application needs to be disabled)
Enable Incoming Fax to Shared User	When the FollowMe Embedded for HP is used in conjunction with its Inbound Analogue Fax Re-direction feature the <i>Enable Incoming Fax to Shred User</i> option needs to be enabled
Shared User	When the Enable Incoming Fax to Shred User is enabled a Shared User must be selected. If a custom rule is used to re-direct print jobs it is still required that a Shared User is selected even if that Shared User will not have a Fax stored against it
Deduct from Credit Pools before user's default credits (rather than both simultaneously)	This option allows extended credits to be deducted before users standard credits

Encryption

A key part of FollowMe is security. The level of security can be chosen here from a drop down of 5 options, these apply to the transmission of data to and from the FollowMe server.

For tighter security we can also choose to store print jobs as encrypted files.

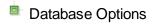
We can also disable old (low security) uploads, this may be necessary in an upgrade environment for software from pre-2004).

LDAP Import Settings

Field	Description
Bind Timeout (secs)	Binding is the step where the LDAP server authenticates the client and, if the client is successfully authenticated, allows the client access to the LDAP server based on that client's privileges. The timeout for the Bind is configured here.
Query Timeout (secs)	The maximum time in seconds that a LDAP server will spend on a single search. When this limit is reached, the LDAP server will return a timeout error. The timeout for the Query is configured here.
Page Count	This Page Count controls the maximum number of LDAP objects that are returned in a single search result, independent of how large each returned object is. To perform a search where the result might exceed this number of objects.
	The Page Count is configured here.

7.1.2 Database Options

The available *Database Connections* that have been configured can also be managed via the tree structure:



Database Connection 1

Database Connection 2

Selected Database

The Selected Database is where one specifies the currently active database that is to be used for the web administration tool and FollowMe Q-Server service to connect against.

If at ant point one uses the web administration tool connects to a database that does not have the latest database schema, one maybe required to use the *Update DB* button to allow the web administration tool to update the schema.

Database Connections

The available database connections are listed in this section, if no connection is available one would simply create one by clicking the *Add* button.

7.1.2.1 Add/Edit

Connection Settings

For each connection the following details are required:

Field	Description
Setting Name	This is a descriptive name used to describe the connection
SQL Server	The SQL Server name or IP Address is specified here, if the name then this should either be the NETBIOS name or DNS name. An instance may also be required required, if so then the name should be formatted as sever name\instance name although
Database	The database name used for the FollowMe Q-Server service
Username	The username associated with the database specified. This user should have rights to connect to the database, normally <i>db_owner</i> is recommended
Password	The password associated to the username should be specified here
Network	For connections to a SQL Server one can also connect with various different network libraries, for example the default connection

	is TCP/IP however in some instances Named Pipes is used, however most other network libraries are only used under special installations of SQL Server
Timeout	The database timeout for a query to executed (default timeout is 30 seconds), value is entered in seconds
NT Authentication	Optionally one can connect to the database using NTLM authentication, not requiring specific SQL based username/password details above these will be greyed out when using NT Authentication
Create Database	The create database option

7.1.3 Registration

One can view the currently installed license keys details:

Field	Description
Version	Indicates the edition that the installed license key supports
Max Users	Indicates the maximum number of users that the installed license key supports
Web Printing	This indicates if the Web Printing feature is enabled or disabled
Non-Interactive Printing	This indicates if the Non-Interactive Printing feature is enabled or disabled
License Type	Either Local (a locally installed license key specific to the local server) or Global (a globally installed license key not specific to this server) that has been installed

7.1.3.1 Update Registration

Two different licensing schemes are available, one a *Local* (a locally installed license key specific to the local server) or *Global* (a globally installed license key not specific to this

server).

Local License Key

Field	Description
Registration Key	The Registration Key is generated from various hardware components of the server that the FollowMe Q-Server is installed on. The Registration Key is used to generate a License Key via the Ringdale web site
License Key	The <i>License Key</i> is generated by the Ringdale web site against your purchased product and the entered registration key which is obtained from the <i>Registration Key</i> field above
Features Key	Once a license key has been entered a Features Key can also be entered this allows additional features to be enabled that are not enabled by default from the License Key
Feature List	The installed features enabled by the license and features keys entered are listed here

Global License Key

Field	Description
Registration Key	The Registration Key is generated from various hardware components of the server that the FollowMe Q-Server is installed on. The Registration Key is used to generate a License Key via the Ringdale web site
License Key	The <i>License Key</i> is generated by the Ringdale web site against your purchased product and the entered registration key which is obtained from the <i>Registration Key</i> field above
Features Key	Once a license key has been entered a Features Key can also be entered this allows additional features to be enabled that are not enabled by default from the License Key

Feature List	The installed features enabled by the license and features keys entered are listed here
	,

7.1.4 Service Control

This section allows us to control the FollowMe Q-Server's Windows System Service.

Start Parameters

In the unlikely event of an system issue, a verbose logging feature is available, which when selected here will populate the event log with detailed information of the issue.

This is called *Debug output enable* and is selected from the *Start Parameters* drop down menu (by default *None* is selected).

Local System account Vs. This account

As you can within the Windows Services Control manager one can also modify which use the FollowMe Q-Server service runs under, the choice is either the *Local System account* (e. g SYSTEM) or *This account* (e.g. a specified user which has been granted service user rights and has rights to the database and folders where print data is to be stored).

7.1.5 Messages

This section enables the modification of two types of messages.

Client Feedback Messages

If using the *FollowMe Client* software, the messages that are fed back to a users workstation can be customised for different events. These events are selected in the *Alert Type* drop down and the message is populated in the text field below.

Printer Messages

When using compatible devices (e.g. a copier supporting @PJL READY messages, or an MFP device supporting the FollowMe Embedded software) one can customise the messages that are displayed at the devices screen. These events are selected in the *Alert Type* drop down and the message is populated in the text field below

7.1.6 Service Created Users

Service Created User Settings

The *Create a new user if a job is received from an unknown user* option enabled the automatic user creation if a user is *unknown* (this is disabled by default), the list box below shows all the configured create user profiles if multiple servers are used.

To launch the import wizard simply press on the button on screen.

7.1.6.1 Add/Edit

Server Settings

Field	Description
Enable Server Lookup	If it is required that when a user is created that the settings are
Type	Defines if the auto create user option performs the user lookup using a Active Directory or LDAP compatible user database as well as Windows NT Primary Domain Controller (PDC).
	The Allow Disabled Users option overrides the disabled user flag found in the user database
Server	The server name of the Active Directory or LDAP compatible server should be specified here
Username	The username of the user which has rights to access the user directory. An example of username formatting is below:
	Administrator
	cn=Administrator, ou=users, dc=ringdale, dc=com
Password	The password of the connecting user should be entered here
Port	The port number of the Active Directory or LDAP server should be specified here, the default port number is 389 (if blank port 389 will be used)

SSL	If your Active Directory or LDAP server requires a secure connection then SSL option should be selected, if selected normally port 636 is also required as this is the LDAP secure port
Root DN	The users tree structure can be defined to look the same as the native user database that they are imported/synchronised from such as Microsoft Active Directory or LDAP compliant user database.
	It is important that the LDAP syntax is formatted correctly, an example of a populated LDAP field is below:
	LDAP - o=ringdale.com,ou=Administration
	Administration
Filter	As standard the filter that is defined assumes a Windows Active Directory user directory, and the filter used in this instance would be:
	(&(objectClass=user) (objectCategory=person))
	For non-Windows LDAP user directories the filter should either be left blank or a value such as the following should be used:
	• (objectClass=*)
	The filter field can be scaled to a more granular search format.
Scope	There are various scope's that can be used, and they are defined below:
	Base - will only search on the base level
	One Level - will search on its base level and one sub-level
	Sub tree - will search through all levels that are available

User Settings

Description
One can import the username from various Active Directory or LDAP schema fields, as well as the formatting of this field can be defined.
An example of fields is below:
Active Directory
• LDAP
One can also import the username with a domain prefix, when using the <i>Domain\Username</i> prefix then the domain will be imported, however this may not be desired and a specified domain maybe more applicable then one should simply select the <i>Specified</i> -> option and in the Options value and enter a value such as the following for Active Directory:
DOMAIN\sAMAccountName
When importing from a non-Active Directory user directory the username is normally set to the following value:
• uid
NOTE: This field is case sensitive
One can import the users full name from various different fields.
NOTE: This field is case sensitive
Users
NOTE: This field is case sensitive
NOTE: This field is case sensitive
NOTE: This field is case sensitive

	NOTE: This field is case sensitive
Cost Centre	The users cost centre can be import directly from the user database or a default can be specified
	NOTE: This field is case sensitive
Email	The e-mail field can be imported
	NOTE: This field is case sensitive
LDAP	The user database tree format can be imported here, the options work in the same principle as the native LDAP user database where O=Organisation and OU=Organisational Unit
Country Code	The user specific country code can also be imported and one can select this here

7.1.6.1.1 Devices

Each user in the FollowMe Q-Server can be assigned devices that they have rights to, one can enable all devices by checking the *Enable All* check box or select the individual devices a user has access to.

Users assigned devices can be seen in the *Assigned* list box, and unassigned devices can be found in the *Unassigned* list box.

7.1.6.1.2 Restrictions

Print Restrictions

Restriction	Description
Disable Colour	Disables colour printing for the selected user
Disable A3 (or 11x17)	Disables A3 or 11x17 printing for the selected user
Disable Duplex	Disables duplex printing for the selected user
Do not limit disk usage	Gives the user an unlimited disk quota when it comes to print jobs

Limit disk usage to	Limits the disk quota for a users print jobs defined in Megabytes (MB)
	0 , , ,

Embedded Options

Restriction	Description
B&W Copy	Enables or disables the use of black and white copying on an Embedded device
Colour Copy	Enables or disables the use of colour copying on an Embedded device
E-Mail	Enables or disables the use of the e-mail function on an Embedded device
Fax	Enables or disables the use of the fax function on an Embedded device
Print	Enables or disables the use of the print function on an Embedded device
Scan	Enables or disables the use of the scan function on an Embedded device

Access Times

Please refer to the Access Times section.

7.1.6.1.2.1 Access Times

Times

Column	Description
Enable	Allows you to enable/disable is a access time restriction applies on that particular day or not
Start Time	Allows a start time to be defined for when access is to be granted from
End Time	Allows a end time to be defined for when access is to be denied from

7.1.6.1.3 Client Features/Credits

Client Features

When using the FollowMe Client software the other client options apply, allowing you to disable the various tab pages from the client management interface.

Feature	Description
Enable Roaming	This option enables roaming for the user, the roaming option is required when FollowMe Q-Server peering is enabled and you wish for that user to be able to roam between those peered servers
Enable Local Printing	When used in conjunction with the FollowMe Client software and the FollowMe Local Printer Port you can enable and disable if a user has rights to print locally on their workstation via LPT1 or USB connected printer
Enable Cost Codes	When cost codes are enabled and when the FollowMe Client software is being used and/ or FollowMe Embedded one can enable is the user is provided a cost code pop-up on their workstation or on an Embedded front panel
Disable User Settings	When using the FollowMe Client software one can disable is a user has rights to edit and view the user settings tab page
Disable Printer Settings	When using the FollowMe Client software one can disable is a user has rights to edit and view the printer settings tab page
Disable Print Now	When using the FollowMe Client software one can disable is a user has rights to use the print now option
Disable Print Job Information	When using the FollowMe Client software one can disable is a user has rights to edit and view the print job information tab page
Disable Credit Information	When using the FollowMe Client software one can disable is a user has rights to edit and view the credit information tab page

Credits

The standard credits provide a global credit facility for deduction of credits from functions, deduction of credits will only occur if values have been set with the associated *Cost Models* for the specific function being accounted.

7.1.7 Auto Create Printers

The system allows printers to be automatically created upon the device first making a communication attempt with the FollowMe Q-Server.

7.1.8 Windows Passwords

Windows Password Settings

Field	Description
Authenticate Windows Passwords	This option is used to enable and disable if the <i>Windows Passwords</i> feature
Override with FM Password if set	This option is used when a user within the FollowMe Q-Server database has a password set against them, if this password is set and this option is enabled then the FollowMe Q-Server will not validate this users password against a password server and only use the locally entered password

The list box below shows the configured Windows Password servers.

7.1.8.1 Add/Edit

Windows Passwords

Field	Description
Туре	Defines if a password validation is performed against a Active Directory, Windows NT Primary Domain Controller (PDC) or LDAP Server
Server	The server name of the Active Directory,

	Standard Windows server, or LDAP server should be specified here
Domain	If a domain is being used for, for example users in the user list are listed as domain\username then this domain should be specified here, however if no domain is present for the listed users then no domain should be specified here making this server setting global
Username	The username of the user which has rights to access the Windows Password server
Password	The password of the connecting user should be entered here

Test Authentication Settings

One can test the detailed entered by entering a test user account in this section and pressing on the *Authenticate* button.

7.1.9 **Email**

In FollowMe e-mails can be inbound or outbound, the settings for each are configured here.

7.1.9.1 Outbound Email

Settings

Field	Description
Mail Server	The mail server name or FQDN should be specified here
From	The e-mail <i>From</i> address should be specified here, this is the address used on all correspondence that the FollowMe Q-Server generates

Test Email Server Settings

To test that the correct *Mail Server* and *From* address have been specified the *Test Email Server Settings* option can be used.

Field	Description
То	The <i>To</i> address should be specified here, this will be the test e-mail address that you wish the test e-mail to be sent to
Subject	The test Subject should be specified here
Body	The test <i>Body</i> should be specified here

7.1.9.1.1 Email Alert Messages

7.1.9.1.1.1 High File Usage Warning

Email Message

The High File Usage Warning allows an email to be sent to the user which has exceeded their file usage threshold. Simply check Enable and enter the number of MB before the High File Usage Warning email should be sent, also enter the Subject and the email body in the text box below to enable the email High File Usage Warning.

7.1.9.1.1.2 Low Credit Usage Warning

Email Message

The Low Credit Warning allows an email to be sent to the user which has credits that drop below the Low Credit Warning threshold. Simply check Enable and enter the number of Credits threshold before the Low Credit Warning email should be sent, also enter the Subject and the email body in the text box below to enable the email Low Credit Warning.

7.1.9.1.1.3 Pending Print Job Removal Warning

Email Message

The Pending Print Job Removal Warning allows an email to be sent to the user which has pending print jobs that have exceeds the Pending Print Job Removal threshold. Simply check Enable and enter the number of Day(s) before the Pending Print Job Removal email should be sent, also enter the Subject and the email body in the text box below to enable the email Pending Print Job Removal Warning.

7.1.9.1.1.4 Client Feedback Messages

Email Message

The *Client Feedback Messages* that you have setup previously for use with the *FollowMe Client* software can also be sent to the user (if they have a valid email address configured in their user profile). Simply check *Enable* and enter the *Subject* and the email body in the text box below to enable the email *Client Feedback Messages*.

7.1.9.1.1.5 Administrative Alerts

Email Message

The FollowMe Q-Server can send *Administrative Alerts* to designated e-mail address, the messages that are sent are a duplicate of those stored in the Windows application event log. Simply check *Enable* and enter the *To* address to enable the *Administrative Alerts*.

7.1.9.2 Inbound Email

POP3 Server Settings

Field	Description
Mail Server	The mail server name or FQDN should be specified here
Account Name	The account e-mail address should be specified here, this is the address used to authenticate against the e-mail server
Password	The accounts password is specified here
Port	The POP3 port number is specified here

FM Q-Server Email Service

The *Email Service* is controlled in this section, where one can start and stop the service as well as change the frequency it checks for new emails

Attachment Type Filters

Field	Description

Filter	In the filter one can specify the allowed extension
Web Printing	By selecting this option the Web Printing module will be invoked for this file format, one can choose that some formats such as RAW print job files can be passed through without the Web Printing module being invoked

7.1.10 Internet Printing Protocol (IPP)

Options

One can specify the ports in which the FollowMe IPP service listens for IPP requests, there is both a secure and non-secure port which can be defined.

FM Q-Server IPP Service

The service is controlled in this section, where one can start and stop the service.

IPP Device List

The configured IPP device list is shown here, both the device name, URI and other attributes are shown.

7.1.10.1 Add/Edit

Configure IPP Device

Under the device one can configure the IPP print queues details.

Field	Description
Identifier	The devices Unique Resource Identifier (URI) is specified here
Name	The devices reference name in FollowMe is specified here
Make and Model	The devices make and model is entered here
Printer Additional Information	Additional information can be specified

Location	The devices location can be specified
Black and White / Colour	Select if the device should be marked as a black and white or colour device

Authentication

One can specify a authentication scheme to be associated to the device.

Field	Description
Windows Integrated Authentication	When this option is selected the users Windows credentials will be validated via standard Windows security mechanisms (Kerberos, NTLM, etc) to ensure the user is correctly validated
Basic Authentication	When this options is selected the users credentials are validated over HTTP based Basic Authentication
Anonymous	When this option is selected no authentication is required

7.1.11 Render Queues

The render queues enable the Web Printing mobile to pre-render print jobs ready for printing, eliminating the need for a user to wait at an output device for the print job to be spooled.

7.1.11.1 Add/Edit

FollowMe Q-Server

In the case of a multiple server environment, the *FollowMe Q-Server* can be specified so that a single database can be used to manage multiple servers. By default printers that are added with a *FollowMe Q-Server* of *All* (and an IP Address of 0.0.0.0, which cannot be changed).

Render Queue Details

Field	Description
Name	The internal name for the render queue
Driver Name	The Print Driver associated with this render

queue (list contains drivers stored on the server running the web administration tool)

FollowMe Printers Associated with this Render Queue

Render queues can be assigned to multiple printers, and to assign one simply selects the devices from the *Not Associated* list box and moves them to the *Associated* list box.

Assigned devices can be seen in the *Associated* list box, and unassociated devices can be found in the *Not Associated* list box.

7.1.12 Embedded

For some embedded devices global settings can be defined.

7.1.13 FollowMe API Access

The FollowMe Q-Server holds an internal administration API which by allows it to communicate internally as well as 3rd party applications can integrate with it.

7.1.13.1 Add/Edit

API Access Settings

Field	Description
IP	The IP address of the accessing API compliant client is defined here
Name	The Name of the API setting is defined here
Use Encryption	In environments where encryption is required set this option to Yes, however it should be observed that enabling this option will increase the CPU overhead required to manage the solution

7.1.14 FollowMe LDAP Server

The FollowMe LDAP Server is for sure with specific printer vendors devices to provide an authentication mechanism and address book service.

Field	Description
Enable LDAP Service	This options enables the LDAP service within FollowMe
Port	The LDAP server port can be specified here (default: 389)
Admin Bind User	The administrative bind username is specified here
Password	The administrative bind users password is specified here
Code Page	For some device the code page needs to be changed to support non-ANSI characters, to do this simply select or specify the code page

NOTE: It does not support all printer vendors LDAP interfaces.

7.2 User Interface

3rd Party Libraries

In FollowMe 3rd party libraries are not used, however there are some specific features which have been added which allow for a 3rd party library to be enabled whereby FollowMe can leverage some of its functionality.

PIN Settings

Field	Description
Generated PIN length	Specify the PIN number length when the auto generated PIN option is used
PIN Format	The PIN Format can be changed to be Numeric or Alphanumeric, including the ability to allow or disallow specific characters

7.2.1 Administratiion Tool

All user interface's administration tool settings are contained in this section.

7.2.1.1 Rights Management

Rights Management

Users and Groups can be managed to provide user rights on a per user interface area and user basis. The *Rights Management* interface allows granularity so that one can assign specific rights to each area for read/write access.

7.2.1.1.1 Groups

One can setup groups rights to simply the management of the users and their applicable rights.

Group Details

Field	Description
Group Name	A descriptive name for your group
Group Description	A description for your group

Note: The Administrators group cannot be changed and this has Full Control for all functions.

Group Roles

Each role that can be assigned to a group can be seen here, various rights for each role can be defined and the each group can have selective options of these selected depending on the security policy you wish to implement.

7.2.1.1.2 Users

User Details

Field	Description
Username	The <i>Username</i> of the administrative user can be entered here

Password	The Password of the administrative user can be entered here
Email	The <i>Email</i> address of the administrative user can be entered here
Last Login	The Last Login time of the selected user is displayed here

User Options

Field	Description
Show Help By Default	This option shows the Help menu pane on the right hand side of the screen by default
Use Browser Language Preference	When the user logs into the administration tool, the connecting web browser language preference is checked and if present used. At times this may cause unexpected behaviour, therefore if you do not wish for the web browser language to be used then this option should be disabled and the specified <i>Default Language</i> should be used
Default Language	The Default Language is selected here, however if the Use Browser Language Preference is enabled then this option becomes overridden

Group Membership

Here one can select which groups a user has rights to.

7.2.1.2 Tool Defaults

The web administration tool defaults are configured in this section.

Field	Description
Default Language	Specify which browser language should be used when a user visits the <i>Web Administration Tool</i>
Default Locale	The locale for which dates, times and

	number are formatted can be selected here
Default Skin	The user interface skin can be selected here
Show Company Logo	When a logo has been uploaded this option can be selected so the logo is displayed in the user interface
Show Server Name	The servers FQDN can be displayed when this option is selected
Upload your logo	To upload select a file which matches the size guidelines and upload it
Show Custom Link	One can specify a custom link to be displayed in the web administration tool

Administration Tool Logging

Field	Description
Enable Auditing	When enabled the web administration tool will log the specified actions providing an audit trail which can later be reviewed
Audit History	This specifies the amount of time to keep administration tool audit data
Events to Log	One can specify which events should be audited

Reports

Field	Description
Maximum rows in Detailed Report	The maximum number of records a report can contain is specified here
First Day of Working Week	The first day of a working week is specified here
Last Day of Working Week	The last day of a working week is specified here
CSV Delimiter	The CSV file delimiter can be specified here

7.2.1.2.1 Home Page Settings

Additional Process Performance Counters to Display

Field	Description
Display Name	The display name given to the process being monitored
Process Name	The actual executable process name

7.2.1.3 Administration Tool Audit Logging

In this section one can view audited administration tool events, for deleted or updated actions.

7.2.2 Web Client Administration Defaults

The FollowMe Web Client Administration interface allows various options to be enabled which change how the visual elements of the interface are displayed.

Field	Description
Show Credits	Enables the Credits display feature when a user has credits enabled
Language Settings	Specify which browser language should be used when a user visits the Web Client Administration Tool
Show Company Logo	When a logo has been uploaded this option can be selected so the logo is displayed in the user interface
Upload your logo	To upload select a file which matches the size guidelines and upload it

One can also change the interface features making them more selectable:

Field	Description
Allow jobs to be uploaded	Enables the uploading of print jobs
Allow editing of uploaded jobs	Enables the editing of uploading print job properties
Allow editing of other jobs	Enables the editing of non-uploaded print job

	properties
Allow PIN change	Enables the option for a user to change their PIN number
Allow change password	Enables the option for a user to change their password
Allow user details edit	Enables the option for a user to change their user details
Allow reports	Enables the viewing of reports
Allow payment reports	Enables the viewing of payment reports
Allow cost codes	Enables the setting of cost codes when editing a print job
Show Information page	Enables the viewing of the information page
Allow Print Now feature	Enables the direct print feature

External Menu Links

One can specify custom links to be displayed in the client administration tool.

7.2.3 Web Embedded Hybrid Settings

The FollowMe Web Embedded Hybrid allows various options to be enabled which change how the interface behaves.

Field	Description
Show Company Logo	When a logo has been uploaded this option can be selected so the logo is displayed in the user interface
Upload your logo	To upload select a file which matches the size guidelines and upload it

Toshiba Settings

There are some specific settings for vendors, in this instance Toshiba.

Field	Description
Printer must send userlogon in browser useragent for Integrated Authentication	This setting defines if the device will be sending the username in the browser useragent always or not
Document Source	The default Document Source is defined here
Save Format	The default Save Format is defined here
Scan Resolution	The default Scan Resolution is defined here
Colour Setting	The default Colour Setting is defined here
Content	The default Content is defined here

7.3 Device Configuration

This section lists all the FollowMe external and internal devices on the network. If the FollowMe device has just been installed it will display the factory default IP address of '11.22.33.44' (or if an E-Line controller it may also display as the output devices IP Address that it is connected to) and will have a Printer Name NP_XXXXXX.

Note: If installing more than one FollowMe Printing device it is advised that each is configured immediately after installation before the next device is installed onto the network. There will be difficulties in identifying which device is which if more than one non-configured device is on the network sharing the same factory default IP address.

Locating Devices on Different Networks/Subnets

If the FollowMe device is on a different network/subnet to the server after the device has been configured then it will not be instantly identified by the application.

- 1. Click on the Network Restrictions button.
- Click on the Add button and use the TCP/IP subnet address or the IP Address of the device (xxx.xxx.xxx.255 will find all devices on the network without having to enter a specific IP address) and click OK. The address will appear on the list in the Network Restrictions dialog box.
- 3. Ensure that the address is selected (highlighted) before clicking OK.
- 4. Click the Requery Network button to list the device in the Devices window.

To Configure A Device

- 1. Highlight the device and click the 'Edit' button.
- 2. Select a name for the device that will make it easily identifiable.

FollowMe Specific Settings

Field	Description
FollowMe Q-Server	One is required to enter at least one FollowMe Q-Server IP Address, if in a multiple server environment then the entry of more than one FollowMe Q-Server IP Address maybe desirable
Reader Type	The FollowMe E-Line controllers and later revisions allow for a reader type to be specified when using a universal all in one firmware. If this option is available one should choose the correct reader type for the application
Combi Reader Type	When using a FollowMe Combination Reader one can specify the additional <i>Combi Reader Type</i> that is attached to the reader
CopyPatrol Type	When using a FollowMe CopyPatrol capable controller and CopyPatrol cable one can select the CopyPatrol cable type being used
USB	Some FollowMe controllers have USB support on-board, one can enable and disable the USB ports via this option
Offset/Length	This only applies to devices that require configured offsets and lengths (e.g. Magnetic Swipe Card and Barcode readers)
Fingerprint Humidity	For older capacitive fingerprint readers a humidity setting is available
CopyPatrol Signal	Note: This option should only be used with pre-universal firmware. For example if the CopyPatrol Type is greyed out above. Invert - If you are using a copier which specifically requires the copier to be inverted.

Please contact Ringdale Technical Support to confirm which copiers require this option

Note: The CopyPatrol *Invert* option is only to be changed if specifically instructed. If used improperly this option can cause the FollowMe hardware device to become inoperable.

7.4 Remote Administration

This section allows the installation of the following components:

- FollowMe Printing Client Software
- FollowMe Client Ports
- Windows Printer Drivers
- Windows Printers

The above components can be installed to the following operating systems:

- Windows NT 4.0
- Windows 2000
- Windows XP
- Windows 2003
- Windows Vista

Adding Additional Servers that are not listed in Microsoft Windows Network Query

- 1. Click the Add IP Addresses Computer Name button.
- 2. Type the remote machine name or IP Address (Note: Use CTRL+RETURN for new line).
- 3. Repeat for as many remote machines as required. You can also paste machine names or IP Addresses into the text box from a text/notepad file.

Configuration Options

To configure a computer select the computer from the list and right click on it, from the option list select *Properties*.

Properties

FollowMe Tab

- Install/Upgrade or Remove FollowMe Printing Client software.
- View installed component versions.

Printers Tab

- Add and remove printers.
- Configure Windows printers, editing default settings, ports and drivers.

Server Properties

- Manage forms.
- Add, edit and remove ports.
- Add and remove drivers.
- Change advanced settings (e.g. spool folder directory, enable and disable events).

Configuring Multiple Computers

- Select the multiple servers you wish to configure by using the standard windows Shift+Click or CTRL+Click commands.
- 2. Right click and then select the Configure Multiple button.
- Input the relevant user detail with rights to administer the machine in your Windows network.
- 4. Choose either Skip or Prompt. If you choose Skip then you will need to specify at least one Username and Password to authenticate against the remote machines. If the connection fails the system will continue with the next remote machine.
- 5. If you choose Prompt the system will prompt you when it is installing the select items on each remote machine.
- 6. Choose whether to:
 - Install/upgrade FollowMe Printing Client
 - Remove FollowMe Printing Client
 - Skip this step if the client is already installed

You can also run a script on the remote machine by selecting the file to be run and the time it should execute.

- 7. Choose whether to:
 - Add a FollowMe Printing Client port

- Remove all FollowMe Printing Client ports
- Skip this step if a client port is already installed
- 8. Choose whether to:
 - Install a printer driver (selected from the list)
 - Remove a printer driver (selected from the list if it exists on the client machine)
 - Skip this step if no printer driver is required
- 9. Choose whether to:
 - Install a printer (Specifying the printer name or selecting a local server printer name from the list)
 - Remove a printer (Specifying the printer name or selecting a local server printer name from the list)
 - Skip this step if no printer is required

Note: A printer can only be added if a driver is being added as well. For single printer installation please refer to the single workstation remote administration. Repeat these steps for as many installations as required.

7.5 Event Logs

In order to maintain a healthy system this page gives you the option to read the Windows Event Logs. These are displayed within the FollowMe Administration tool interface. There a 4 simple steps to retrieve your required event log information:

- 1. Choose how many logs per page you wish to view on screen.
- 2. Select which event types you want displayed: Information, Warning, Error.
- 3. Select a Filter (if required) to narrow your expected result.
- Click the Read Event Log button.

Download Event Logs

In the event of requiring external support for your system you may asked to download the event log data for troubleshooting and debugging.

This section enables the download of your event logs in 2 ways:

- 1. You can choose to download the whole event log.
- 2. You can choose to download only the FollowMe specific event log entries.

When complete this data is held in a proprietary format for use by Ringdale technical support.

Note: Depending on the amount of data in the event log downloading this may take some time, please be patient.

7.6 Tasks

Configuring the Windows Task

To enable the task click the *Enable* option. When enabled you can select a schedule from the drop down if the message *Task Not Scheduled* is displayed then one should click the *New* button to create a new task schedule.

Pending Print Job Removal

This provides the ability to automatically delete jobs from the FollowMe Q-Server that have been waiting to be printed for a specified period of time. For example, if someone sends a print job but does not go to the printer to print it out the FollowMe Q-Server can be set to delete the print job after one day, two days or whatever length of time that is required.

Audit Job Removal

The FollowMe Q-Server keeps an extensive record of each job that is processed. Over time this can create a large amount of data, much of which will not be needed again once reports have been generated and accounted for. Using this option, the audit data can be set to be cleared on a regular basis. For example, the FollowMe Q-Server can be set up to delete all print job details more than a month old and could be set to do it once a week.

Credit Addition

This provides a system wide credit addition service. On a scheduled basis a specified number of credits is added to your users accounts. This is especially useful in a pay for print environment.

Transaction Log Truncation (SQL Database Only)

The transaction log is a feature unique to SQL Server where a log is created for each operation that the database makes. As with the Audit Job Removal above, use this option to remove old data that is no longer required.

Dynamic User Import/Shared User Import

Use this option to schedule FollowMe Q-Server to check either the Microsoft Windows Domain Controller, Active Directory or LDAP at regular intervals and automatically add, update or delete any new users that have been created. This can be used in conjunction with the Import List feature.

Note: As with the Import Users from CSV and Import Users from Server feature, full configuration details for each user will still need to be set up. See Dynamic User Import for further configuration details.

7.6.1 Dynamic User Import

Users can be imported to the system dynamically in this section, to launch the import wizard simply press on the button on screen.

7.6.2 Dynamic Shared User Import

Shared Users can be imported to the system dynamically in this section, to launch the import wizard simply press on the button on screen.

7.6.3 Other Tasks

The system has also some housekeeping tasks which can be used, these are found under this section.

7.6.3.1 Clean Up Tool

Due to the nature of diverse implementations at times it may be required that the clean up tool is used to remove any orphaned files from the file system, this section allows for this to occur.

7.7 Peered Servers

FollowMe allows servers to be peered to enable the system to be as robust and scalable as possible.

Note: FollowMe Q-Server Peering and Windows Clustering can be used in conjunction.

Domains

Domains are used within the Peering setup to denote a group of peered servers.

Field	Description
Domain Name	This is a descriptive name for you to define the domain the servers will be assigned to
Туре	Local - Your organisation has more than three servers in your London office therefore you would have a local domain with all the servers associated to it.
	Master - Your organisation has multiple servers in one location although also have servers in another location which is to act as

a backup or control server.
Remote - You have other organisations and you are the head office, you would make the remote sites remote domains and then they would use your local domain as a master domain.

Note: This works on a hierarchical level and can be expanded to any amount of servers on any amount of levels.

Servers in Selected Domain

Select the domains which this remote domain has rights to. This allows the remote domain to use this domain as a relay to the master domains.

Server Settings

In the Server Settings one can specify the servers Sending IP address, which is especially useful when working in a Windows Cluster server environment where the Sending IP should be that of the cluster node rather than the local node which the FollowMe service is residing on.

FollowMe Service Status

When *Peered Servers* have been configured this section enables remote viewing of the *FollowMe Q-Server service Status* (e.g. Started/Stopped) and changing the status remotely.

7.7.1 FollowMe Service Status

When more than one FollowMe Q-Server exists and it has been Peered, the Service Status becomes available and provides the ability to see the service status as well as stop/start the service remotely on the Peered servers.

7.8 Cashier

The Cashier feature creates a virtual cashier interface to allow user credits to be added/subtracted as well as management of a users card/PIN numbers.

7.8.1 User Search

The *User Search* gives a quick search facility allowing administrators to find users in the system easily. Enter your search criteria in the text box provided, choose which objects you wish to search from the drop down list.

7.8.1.1 Details/Credit Management

Personal Details

The users personal details are displayed here.

Credits

The users credits are displayed, as well as credits can be added and subtracted here.

7.8.1.2 Cards/PINs

Within the FollowMe Q-Server one can assign multiple ID cards and PIN numbers to each user, these cards can be added and deleted at any time during the running of the solution.

Assigned Cards/PINs

The assigned ID cards and PIN numbers for the selected user are listed in this list box.

Add New Card/PIN

One can add new ID cards and PIN numbers to a user by either manually entering or automatically listening for the ID card or PIN number. To *Listen* for a ID card one must first select an assignment device that should be used for card enrolment.

Assign Enrolment Device

To select an assignment device one simply should select the device from the drop down list and click the *Assign* button, once assigned one should refer back to the *Add New Card/PIN* section to *Listen* for a ID card from an enrolment device.

Once the enrolment device has been assigned the *Selected Enrolment Device* should update.

Note: The selected Enrollment Device will timeout automatically after 10 minutes of no use and return to normal operation.

HEX, DEC and ASCII

When adding card numbers to a user there are data entry types that are provided these are hexadecimal (HEX), decimal (DEC) and ASCII. The difference between each is how the entered data is formatted, for example when using decimal you will only be able to enter numbers. By default data should be entered as ASCII other than if the card number has been enrolled from an enrolment device and then in this instance you should use the default type which will change once the card number has been received.

7.8.2 Recent Transactions

Credit Transaction Search

The users transaction history can be searched and displayed here.

Part Williams

8 Search

The *Search* gives a quick search facility allowing administrators to find objects in the system easily. Enter your search criteria in the text box provided, choose which objects you wish to search from the drop down list.

Part

9 Help

9.1 Online Support

The online support option presents a direct link to the Ringdale support web site. The support section on the Ringdale web site provides valuable resources such as an in-depth knowledge base, frequently asked questions as well as white papers and other useful support guides.

9.2 About

Versions

The currently installed product versions are listed here. If your server has internet access the column titled *Latest* will inform you if a newer version of a installed product is available.

Technical Support

Listed here is useful technical support contact information for your reseller or Ringdale technical support direct if a reseller is not present.

Part

10 How To's

10.1 Integration Guides

10.1.1 Client Software

Concept

Overview

FollowMe client software can be added to user workstations where required to achieve specific customer requirements, detailed in the Key Features and Usage section below. It consists of a specific software install that can be carried out either locally or remotely, and the configuration of a FollowMe client port to enable the FollowMe client to communicate with the FollowMe Q-Server.

Key Features and Usage

The FollowMe client software can be used in situations where the customer has any of the following requirements:

- Local Printers They have locally attached printers (one or more) and wish to account for print job information being sent to these printers.
- Direct Release They wish to be able to release print jobs directly from the user's workstation without using authentication at the print device.
- Encryption They need to encrypt documents from the user's workstation up to the FollowMe Q-Server.
- Cost Codes Cost codes need to be implemented, allowing a cost code selection box to appear on the user's screen when they send a print job.

If the customer does not require any of the functions listed above, there is no need to install the FollowMe client software, as it is an optional component of the FollowMe solution and not a required one.

How the FollowMe client software interacts with FollowMe Q-Server

The interaction of the FollowMe Client software with FollowMe Q-Server is the same whether you are using a locally attached device or just utilising the other features on their own. At the time a print job is created by the user, the print job information is sent to the Q-Server. The Q-Server then checks to see what options the user has, for instance cost codes, and sends

the relevant information back to the user. If a locally attached printer is installed, the print job is sent to the printer for printing, and again the print job information is sent back to the Q-Server for processing. This can be illustrated in the diagram below:

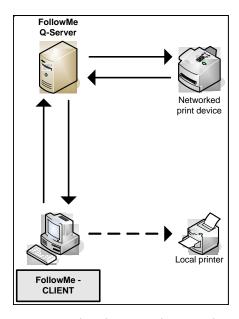


Figure 1: This diagram shows a theoretical setup, where a user has a locally attached printer as well as requiring access to the networked print devices. Information is sent to the Q-Server for any print jobs created, and in return the Q-Server sends back any information for cost codes. In the case of sending print jobs to the locally attached printer, the job is sent as usual to the printer, but the job information also travels to the FollowMe Q-Server.

Installation and Configuration

The FollowMe client software needs to be installed on each user's workstation. This can either be done at the local workstation itself or remotely from the FollowMe Q-Server admin software. Both methods are shown below, and both presume that the appropriate client software has been downloaded from the Ringdale website. If this is not the case, it should be downloaded at this time. To perform the download, go to www.ringdale.com/myaccount (you will need to register if you have not already done so). Click on Downloads and Registrations, then select the appropriate download as instructed.

Manual Installation on a Workstation

Locate the icon for the client software that has been downloaded and double click on it. It will extract some files and a welcome screen will appear. Click on Next to continue:





You will now be asked to agree to the license agreement. Click on Yes to do so. Next you will be asked to select the install location. Click on Next when you are happy with the install path:



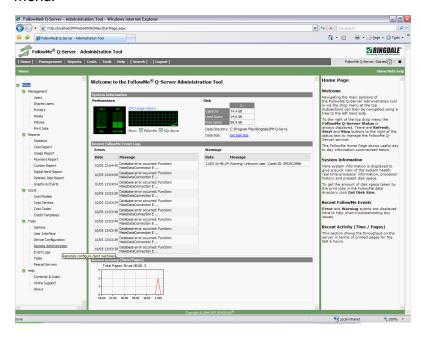
You will now be asked what program group you would like to install to. When you are happy with your selection, click on Next. The install wizard will copy the files to your computer. Once complete you will be informed that the installation has finished. Click on Finish to exit the install wizard:



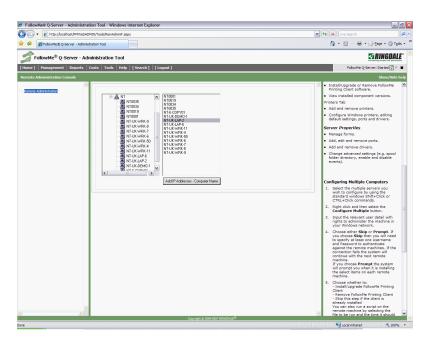
Remote install on client workstation/s

It is possible to distribute the FollowMe client software to one or more workstations on the network via the FollowMe Administration interface. Before this is possible however, the FollowMe client software must be installed on the server where the FollowMe Q-Server software is installed, using the manual method detailed above.

When ready to distribute the FollowMe client software to your user workstations, start the Web Administrator and from the main screen select Remote Administration under the Tools menu:



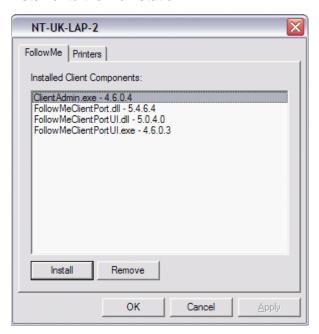
Expand the network tree so that you can identify which computers you wish to choose for install. At this point you can choose either a single workstation by clicking once on its name to highlight it, or choose multiple workstations by holding down the Ctrl key whilst highlighting them. You may also add workstations that are not in the list by using the Add IP Addresses – Computer Name button:



Right click on the workstation/s name and a menu will appear. The menu choices and subsequent steps will vary depending on if you selected one or more workstations.

Single workstation

Selecting Properties from the menu will allow you to select which items you would like to install onto the workstation:

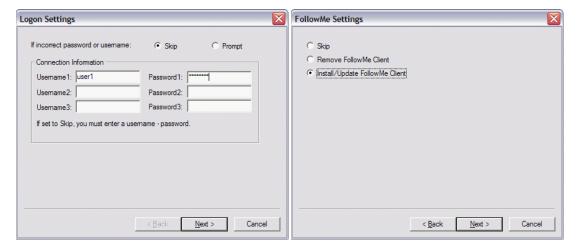


Highlight your choice and click the Install button. You will now be taken through some further

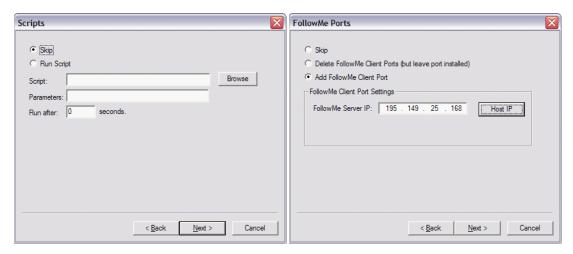
steps to install the software, including prompting you for a user name and password to install software to the client workstation.

Multiple workstations

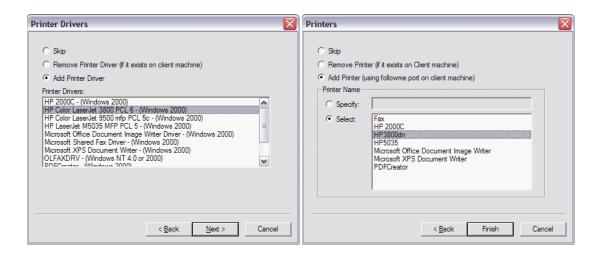
If installing to multiple workstations, the only menu option available will be Configure Multiple. A new screen will appear asking for further choices. Selecting Skip will cause the installer to try to connect to each selected workstation, but should the connection fail it will move on to the next. If Prompt is chosen it will prompt you when installing on each workstation. Normally Skip should be used with a single user name and password entry. You can then select what action you would like to perform on each workstation:



Next you will be asked if you wish to run a script on the workstations. After this screen select if you would like to add a FollowMe client port to the workstation, and specify the IP address to use:



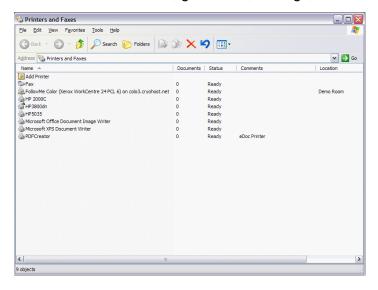
You can now choose which Printer Driver you would like to install, and then if you wish to add a printer to the workstation using the FollowMe client port:



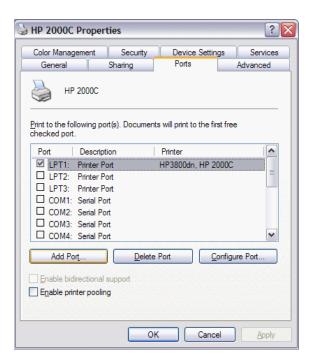
Clicking Finish will then start the install, and you will be prompted as per your options above, and also when the install is complete.

After installing the client on the relevant workstation/s, you may need to configure a client port for the print device, depending on if this was chosen as part of the previous install steps or not.

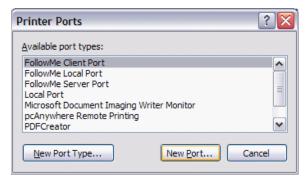
On the client workstation, go to Start, Settings, Printers and Faxes:



Right click the printer where you need to change the port type and select Properties. From the new screen, click on the Ports tab:



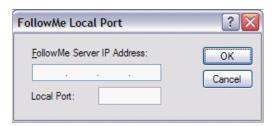
Click on Add Port and you will be presented with a list of ports to choose from. At this point you will either add a FollowMe Local Port, if you are installing the client for a workstation with a locally attached printer, or a FollowMe Client Port if you are installing the client for all other functions. Highlight the relevant port and click New Port...:



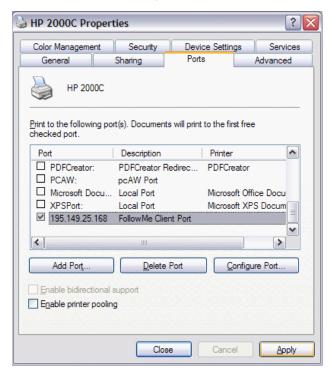
You will now be asked to enter the IP address of the FollowMe Q-Server:



If you have chosen to install the FollowMe Local Port you will also be prompted for the local port that the print device is attached to:



Once you have entered the settings, click on OK and then click on Close. You new port should be in the list of ports, and should be selected with a tick in the port box:



Click on Apply and then click Close. Your new port is now setup, ready to use the features in the FollowMe client.

Locally Attached Printers

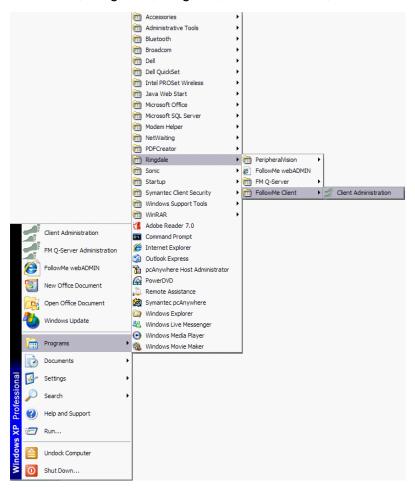
If you are using a locally attached printer you will have set the port to be the FollowMe Local Port type. By doing this, FollowMe Q-Server will receive the print job information at the same time that the print job is sent to the locally attached device. This allows for accounting of the print jobs. The FollowMe Local Port also allows any of the other functions to be implemented in conjunction with monitoring locally attached printers.

Direct Print Job Release

The FollowMe client software can be used to release jobs direct to the print device that the job was sent to. This can either be configured as an automatic option, or one that the user controls.

Automatic release of print jobs

Go to Start, Programs, Ringdale, FollowMe Client, Client Administration:



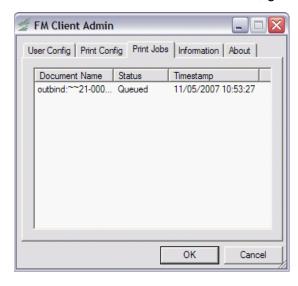
Click on the Print Config tab, and select the option to Print jobs direct to selected printer:



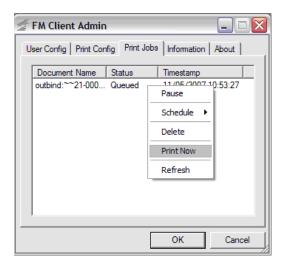
Select the print device that you wish to automatically release jobs to. When printing from the workstation, each job will now print at the selected printer without user intervention.

Manual release of print jobs

Alternatively we can queue the jobs as usual, but the user can release them directly through the Print Jobs tab. In the Client Admin, go to the Print Jobs tab:



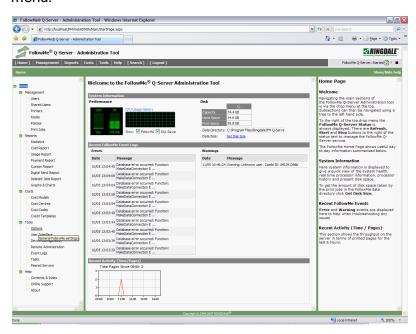
For each queued job, it is possible to right click the job name and a menu will be shown. From this menu the user can choose the Print Now option and the print job will be printed to the print device:



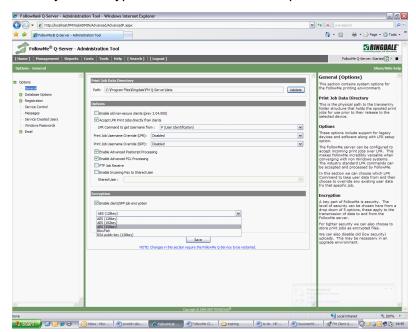
The user also has other options available from this menu, though some options may only appear on certain editions, e.g. Professional, Enterprise etc. The screen shot shown is from the Enterprise edition.

Encryption

The FollowMe client software allows encryption to be present from the user workstation to the FollowMe Q-Server. From the main Web Administrator page, go to Options under the Tools menu:



From the Options main screen, enable the option titled Enable client/SPP job encryption, and

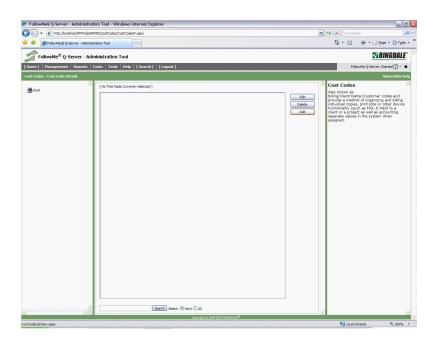


select your encryption method from the drop down menu:

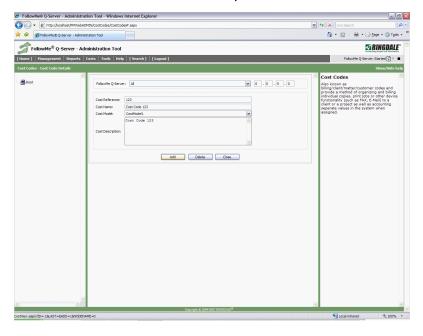
It is recommended that AES 256bit is used as the encryption type. Additionally, you may wish to set encryption in the printer device setup screens. This will allow encryption from the server to the print device.

Cost Codes

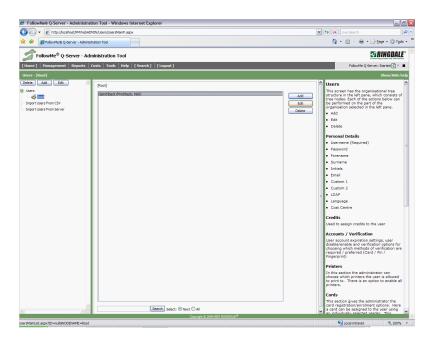
Cost codes can be configured to appear on the user's screen each time they print, making the user select a code that the print job will be logged against. Cost codes need to be set up in the Web Administrator screens. From the main web administrator screen, select Cost Codes from the Costs menu. On the Cost Codes screen, select Add:



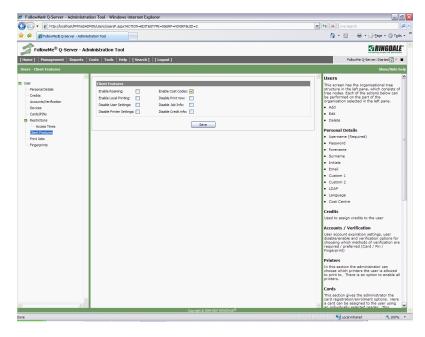
Enter the Cost Code details as required and click on Add when done:



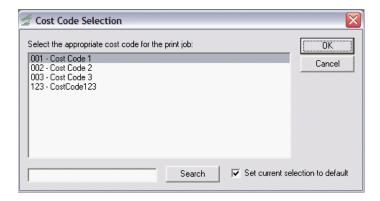
Repeat this process to add all of the required cost codes. Once you are happy with the cost codes you have added, the relevant users must be set up to use cost codes. From the main screen, select Users from the Management menu. Highlight the required user and select Edit:



Select Client Features from the menu on the left. In this new screen, select Enable Cost Codes:



Click on Save. The user should now get a pop up Cost Codes screen each time they print, enabling them to assign a cost code to the print job:



10.1.2 Line Printer Remote (LPR)

Concept

Overview

FollowMe can utilise the Line Printer Remote (LPR) protocol to allow clients to meet their particular requirements. These requirements are listed in the Key Features and Usage section below. It is installed with the FollowMe Q-Server software by default but does need configuration.

Key Features and Use Cases

LPR can be used when the customer has any of the following requirements:

- When it is a basic install with few outside factors, such as special requirements.
- When they want FollowMe to run with a Windows clustered print spooler resource.
- When the customer has non-Windows operating systems, such as Apple Mac, Linux or Novell.

LPR is simple to install, configure and use, making it the ideal choice for customers who just require standard FollowMe functionality.

How the LPR interacts with FollowMe Q-Server

When setting up a port for the printer to use, we can simply configure the port to use the LPR protocol. The FollowMe Q-Server is then configured to accept jobs that use the LPR protocol. The print job request is then processed in the usual manner. This can be illustrated as follows:

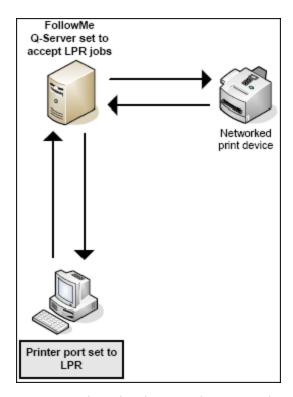
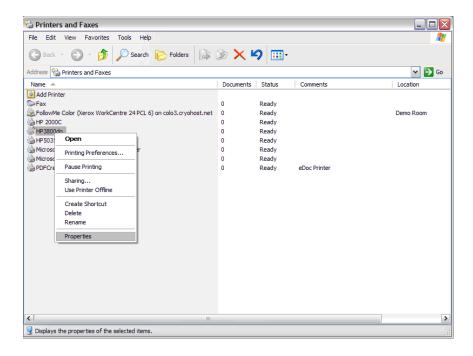


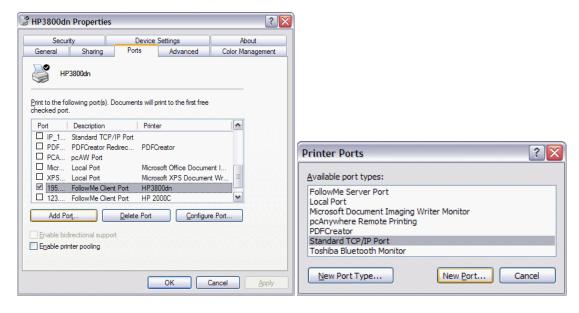
Figure 1: When the client sends a print job it is done so using the LPR protocol. The FollowMe Q-Server looks for the user name in the LPR string, the location of which can be defined in the administrator interface. The job is then processed as a standard print job.

Installation and Configuration

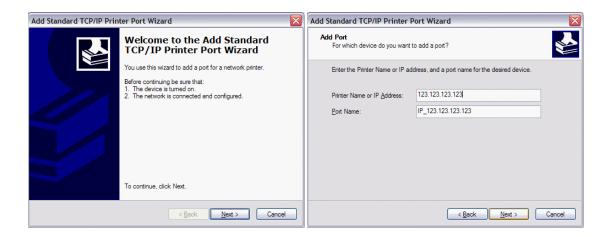
No additional software needs to be installed on the either the FollowMe Q-Server or the client workstation. However, the port that the printer is using must be configured to use the LPR protocol. This guide assumes that you have not already set up a TCP/IP port directed to the FollowMe Q-Server. To configure the port, go to Start, Settings, Printers and Faxes. Right click on the printer you wish to change and select Properties:



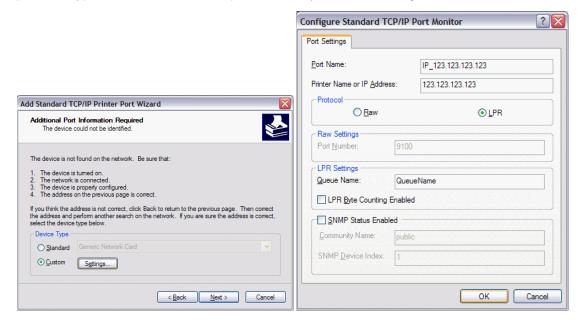
Select the Ports tab and click on the Add Port button. From the new window that appears choose Standard TCP/IP Port, and click on New Port:



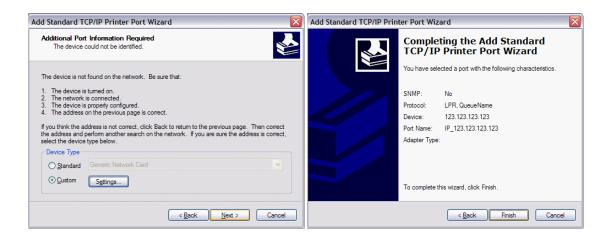
The Add Standard TCP/IP Printer Port Wizard screen will now be displayed. Click on Next, and on the next screen enter the IP address of the FollowMe Q-Server:



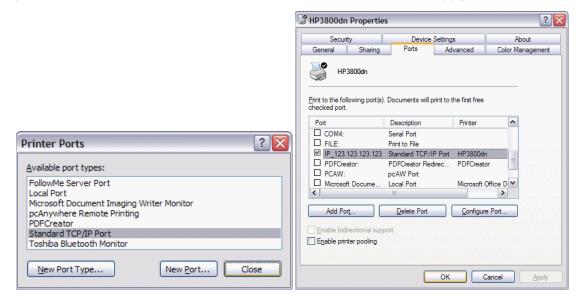
You should now be told that the device has not been found. Select the Custom radio button and click on Settings to manually configure the port. On the next screen, choose LPR as the protocol type and enter the LPR queue name you will be using. Click on OK when done:



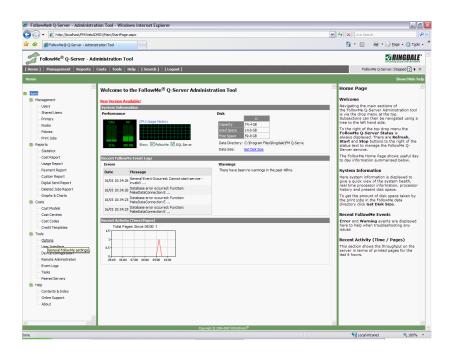
You will be returned to the previous screen. Click Next, then Finish:



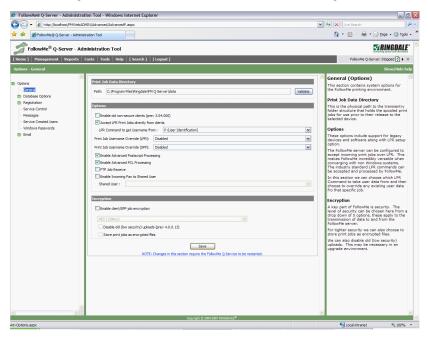
You will be returned to the Printer Ports dialogue box. Click on Close. Your newly created port should now be listed. Ensure that it is selected and click on Apply. Click on OK to finish:



The printer port is now setup to use the LPR protocol. We must now configure the FollowMe Q-Server to accept print jobs that use the LPR protocol. From the main administration screen, select Options from the Tools menu:



Enable the item titled Accept LPR Print Jobs directly from clients. This will enable the drop down box titled LPR Command to get Username from. The setting you use here will depend on how you are sending print jobs via LPR, but in most cases it should be set to P (User Identification). You must also enable two more options, titled Enable Advanced Postscript Processing and Enable Advanced PCL Processing:



Once the options are enabled, click on Save. The last task is to restart the FollowMe service.

This can be done from the service control function located at the top right of the administrator screen.

Your system is now setup to accept LPR print jobs from clients.

Frequently Asked Questions (FAQs)

- Q: Whenever I print a document I receive a windows pop up message saying the document failed to print. What should I check?
- **A:** 1) Check that the Port Properties for the print device are set to use LPR.
- 2) Check that the Port IP address has been set to the FollowMe Q-Server IP address and not the device IP address.
- 3) Ensure that you have selected the correct settings in the Tools, Options administration page.
- 4) Ensure sure that the FollowMe Q-Server service was stopped and restarted after any changes were made in the Tools, Options administration page.
- **Q:** My print jobs are extremely slow. What is the problem?
- **A:** Ensure that you do not have LPR Byte Counting turned on. To check this, go into the properties of the TCP/IP port and make sure LPR Byte Counting is not enabled.
- **Q:** I can see my user's print jobs in the FollowMe Q-Server, but when the users authenticate at the device the job disappears and doesn't print. What should I check?
- A: In the administrator software, make sure that your print spooler settings are correct. They should be set to use the FollowMe print spooler using either Raw or LPR, not Windows Print Spooler. These options are in the print device settings in the administrator software.
- **Q:** I have set up a TCP/IP port for my printer. However, I have more than one printer that requires the port. What should I do?
- **A:** Multiple printers can use the same port. It is also possible (and recommended) that port pooling be used to make use of multiple TCP/IP ports all pointing towards the same FollowMe Q-Server.

10.1.3 Shared Printer Port

Concept

Overview

The FollowMe Shared Printer Port (SPP) can be used where the customer has specific requirements that have to be met, detailed in the Key Features and Usage section below. It consists of a software install on those workstations that require it, and then some configuration depending on the features being used.

Key Features and Usage

The FollowMe SPP can be used in situations where the client has any of the following requirements:

- Encryption is needed from the print server to the FollowMe Q-Server.
- The client has a multiple domain environment.
- The client wishes to force a user to use a specific printer, where no user authentication is available.
- The client wishes to implement load balancing by using FollowMe Q-Server load balancing, i.e. clustering or peering.

If the customer does not require any of the functions listed above, there is no need to install the FollowMe SPP, as it is an optional component of the FollowMe solution and not a required one.

How the FollowMe SPP Interacts with FollowMe Q-Server

The FollowMe SPP sits in between the client workstation and the FollowMe Q-Server. This is similar to the FollowMe client software, however the functions are different. This can be illustrated as follows:

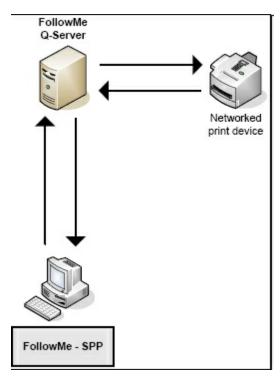


Figure 1: When the client sends a print job to a printer, it actually is directed through the SPP that has been setup to point to the FollowMe Q-Server.

Installation and Configuration

The FollowMe SPP software needs to be installed on each user's workstation. This guide presumes that the appropriate FollowMe SPP software has been downloaded from the Ringdale website. If this is not the case, it should be downloaded at this time. To perform the download, go to www.ringdale.com/myaccount (you will need to register if you have not already done so). Click on Downloads and Registrations, then select the appropriate download as instructed.

Locate the file that you have downloaded and double click on it. You shown the install wizard welcome screen. Click Next to continue:

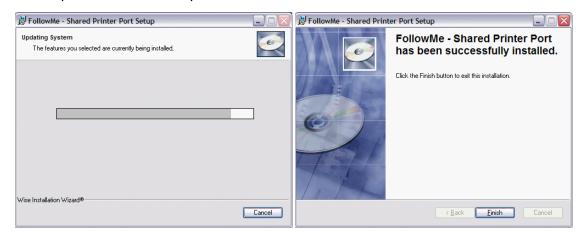




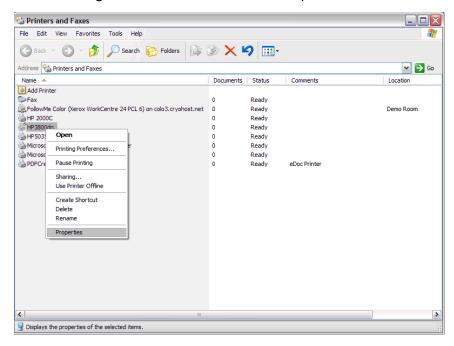
You will be asked to agree to the license agreement. Following this screen you will be asked to confirm the installation path. Choose the appropriate path and then click Next:



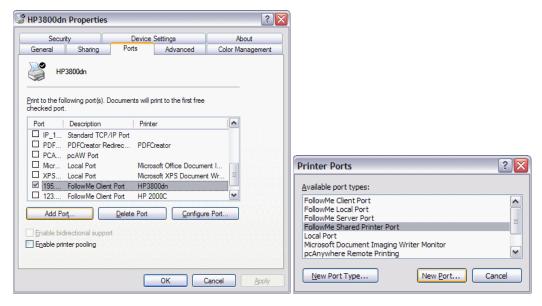
The files will now be copied to the workstation. Once this has been completed you will be able to press Finish to complete the installation:



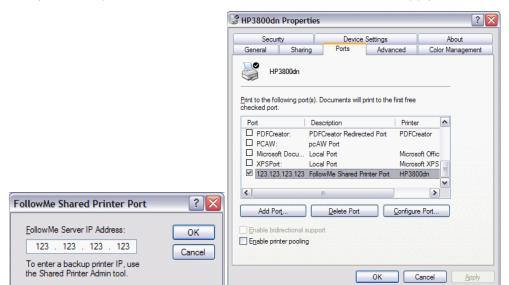
Now that the installation is complete you need to set up the appropriate printer to use the SPP. To do this, click on Start, Settings, Printers and Faxes. Right click on the printer you wish to change to use the SPP and click Properties:



Select the Ports tab and click on the Add Port button. From the new window that appears choose FollowMe Shared Printer Port, and click on New Port:

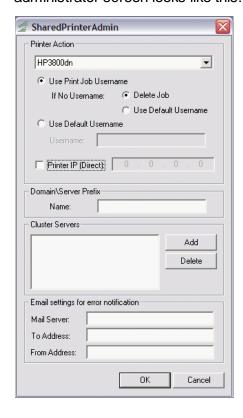


Enter the IP address of the FollowMe Q-Server and click on OK. Click on Close, and the



newly created port should be selected in the list.
Click on Apply and then Close:

The installation and setup is now complete and the FollowMe SPP is ready for use. To administer the settings there is an admin tool provided. This can be accessed from Start, Programs, Ringdale, FollowMe Shared Printer Port, SharedPrinterAdmin.exe. The main administrator screen looks like this:



From this screen there are several options available, including what to do iff no user name is supplied with the print job. Here we can enter a default user name for the print job. This is useful if the client workstation is printing in such a way that the username may not be present with a print job.

Multiple Domain Environments

If the client is in a multiple domain environment, the SPP can be used to prefix the user name that is sent with the print job. By doing so we can ensure that the name is authenticated against the correct domain. Simply populate the Domain\Server Prefix field with the appropriate information.

Fail-Over

The FollowMe SPP has a built in fail-over capability that allows the print job to be re-directed directly to a printer when a network link or the FollowMe Q-Server software is unavailable for any reason. To do this, enable the checkbox titled Printer IP (Direct), and enter the IP address of the print output device. When used in conjunction with the Email settings for error notification one can alert administrators of the print fail-over and reduce downtime of the live print environment.

Load Balancing

FollowMe SPP can be used in a FollowMe Q-Server load balanced environment to provide security against server failures. It is important to note that SPP does not work directly in a Windows Cluster. However, it does work in a FollowMe Q-Server cluster, now known (as of version 5) as Peering. To add additional servers for the FollowMe SPP to communicate in case of problems, simply click the Add button in the Cluster Servers area of the main FollowMe SPP administration page. Multiple servers can be added to provide additional redundancy. Note that this does require clustering/peering to be set up on the relevant FollowMe Q-Servers.

Frequently Asked Questions (FAQs)

- **Q:** I have FollowMe installed in a multiple domain environment, but I may have some user names present on both domains. What can I do to make sure the user name is authenticated correctly?
- **A:** The FollowMe client software can be configured to prefix the username who is sending the print job with the domain name. This can help identify the user in multiple domain environments. This can be done via the Shared Printer Admin program.

- **Q:** I have multiple FollowMe Q-Servers. If one of them fails, how can I direct my clients to the next one?
- **A:** This can be done by adding FollowMe Q-Server IP addresses to the Cluster Servers section in the Shared Printer Admin program.

Part

11 Reference

11.1 Light Weight Directory Protocol (LDAP)

Root DN

The users tree structure can be defined to look the same as the native user database that they are imported/synchronised from such as Microsoft Active Directory or LDAP compliant user database.

It is important that the LDAP syntax is formatted correctly, an example of a populated LDAP field is below:

• LDAP - o=ringdale.com,ou=Administration



Administration

Filter

As standard the filter that is defined assumes a Windows Active Directory user directory, and the filter used in this instance would be:

(&(objectClass=user)(objectCategory=person))

For non-Windows LDAP user directories the filter should either be left blank or a value such as the following should be used:

(objectClass=*)

The filter field can be scaled to a more granular search format.

Scope

There are various scope's that can be used, and they are defined below:

- Base will only search on the base level
- One Level will search on its base level and one sub-level
- Sub tree will search through all levels that are available

Reserved Characters

Character	Description		
	Space or # character at the beginning of a		

	string	
	Space character at the end of a string	
,	Comma	
+	Plus sign	
п	Double quote	
\	Backslash	
<	Left angle bracket	
>	Right angle bracket	
· ·	Semicolon	
LF	Line feed	
CR	Carriage return	
=	Equals sign	

Part

12 Glossary

Active Directory

Microsoft's Active Directory user database.

AD

Microsoft's Active Directory user database.

ASCII

American Standard Code for Information Interchange (ASCII) standard code for representing characters as binary numbers, used on most microcomputers, computer terminals, and printers. In addition to printable characters, the ASCII code includes control characters to indicate carriage return, backspace, and the like.

CSV

The comma-separated values (or CSV; also known as a comma-separated list or Comma-Separated Variable) file format is a file type that stores tabular data. The format dates back to the days of mainframe computing. For this reason, CSV files are common on all computer platforms.

DEC

Decimal.

FollowMe

Ringdale's Secure Output Management Solution, called FollowMe.

FollowMe Printing

The FollowMe Printing concept is where print jobs are printed from a users workstation and then stored on a FollowMe Q-Server until the user present their identification at a print device to release those held print jobs.

FollowMe Print Output Spooler

The output spooler which processes the print jobs and sends them to the printer, either using RAW data mode on port 9100 or LPR data mode on port 515.

FTP

File Transfer Protocol. An Internet protocol that allows a computer to send files to or receive files from another computer. Like many Internet resources, FTP works by means of a client-server architecture; the user runs client software to connect to a server on the Internet. On the FTP server, a program called a daemon allows the user to download and upload files. Before the World Wide Web was introduced, FTP was one of the most popular methods of exchanging information over the Internet and many Web sites still use it to disseminate their larger files.

HEX

Hexadecimal.

Inbound Print Queues

Inbound print queues are the print queues that originate from a client print queue (directly on the workstation, print server or host operating system). Within the FollowMe solution inbound means queues that print to the FollowMe Q-Server software.

LDAP

Light Weight Directory Application Protocol.

LPD

Line Printer Daemon, a name used for the server portion of the LPR communication protocol and is built in the FollowMe Q-Server software.

LPR

Line Printer Remote, the client to server protocol most commonly used to upload print jobs to the FollowMe Q-Server software's LPD Daemon.

MDAC

Microsoft Data Access Components.

NPMP

Network Peripheral Management Protocol.

NTP

Network Time Server

Outbound Print Queues

Outbound print queues are the print queues that are defined in the FollowMe Q-Server. Within the FollowMe solution outbound means queues that print from the FollowMe Q-Server software to the output device (e.g. a Printer/MFP).

Pull Printing

Another name for FollowMe Printing.

Root DN

Root Distinguished Name (also known as Base DN).

SMTP

Simple Mail Transfer Protocol (SMTP) The standard e-mail protocol on the Internet and part of the TCP/IP protocol suite, as defined by IETF RFC 2821. SMTP defines the message format and the message transfer agent (MTA), which stores and forwards the mail. SMTP was originally designed for only plain text (ASCII text), but MIME and other encoding methods enable executable programs and multimedia files to be attached to and transported with the e-mail message.

SNMP

Simple Network Management Protocol.

UNC

Universal Naming Convention (UNC), specifies a common syntax to describe the location of a network resource, such as a shared file, directory, or printer.