

FreeFlow®  
Output Manager  
Version 9.0.10.0  
702P01831  
August 2013



# FreeFlow® Output Manager

## Install and Configuration Guide



Prepared by:

Xerox Corporation  
Content Development and Language Services - North America  
800 Phillips Road  
Building 0218-01A  
Webster, New York 14580-9791  
USA

Copyright © 1996-2013 Xerox Corporation. All rights reserved. Xerox® and the sphere of connectivity design, FreeFlow®, FreeFlow Makeready®, FreeFlow Output Manager®, and FreeFlow Process Manager® are trademarks of Xerox Corporation in the US and/or other countries.

While every care has been taken in the preparation of this material, no liability will be accepted by Xerox Corporation arising out of any inaccuracies or omissions.

Printed in the United States of America.

Other company trademarks are acknowledged as follows:

Adaptec®, the Adaptec logo, SCSISelect®, and EZ-SCSI® are trademarks of Adaptec, Inc.

Adobe PDFL - Adobe PDF Library Copyright © 1987-2009 Adobe Systems Incorporated.

Adobe®, the Adobe logo, Acrobat®, the Acrobat logo, Acrobat Reader®, Distiller®, Adobe PDF JobReady™, and PostScript®, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries. All instances of the name PostScript in the text are references to the PostScript language as defined by Adobe Systems Incorporated unless otherwise stated. The name PostScript also is used as a product trademark for Adobe Systems' implementation of the PostScript language interpreter, and other Adobe products.

Copyright 1987 - 2009 Adobe Systems Incorporated and its licensors. All rights reserved.

Autologic® is a registered trademark of Autologic Information International, Inc.

Compaq® and QVision® are registered trademarks of Novell, Inc. in the United States and other countries.

DEC, DEC RAID, and Redundant Array of Independent Disks are registered trademarks of Digital Equipment Corporation.

Dundas - This software contains material that is (c) 1997-2000 DUNDAS SOFTWARE LTD., all rights reserved.

Imaging Technology provided under license by Accusoft Corporation.

ImageGear © 1996-2005 by AccuSoft Corporation. All Rights Reserved.

Intel® and Pentium® are registered trademarks of Intel Corporation.

Novell® and NetWare® are registered trademarks of Novell, Inc. in the United States and other countries.

Oracle® is a registered trademark of Oracle Corporation Redwood City, California

ScanFix® Image Optimizer and ImagXpress are either registered marks or trademarks of Pegasus Imaging Corp. Copyright © 1997-2008 Pegasus Imaging Corp. All rights reserved.

Sony™ and Storage by Sony™ are trademarks of Sony.

PANTONE™ and other Pantone, Inc. trademarks are the property of Pantone Inc.

Preps™ is a registered trademark of Creo Inc. All rights reserved.

Quark® and QuarkXpress® are registered trademarks of Quark, Inc.

StorageView™ is a trademark of CMD Technology, Inc.

TIFF® is a registered trademark of Aldus Corporation.

Windows®, Windows XP®, Windows Server® 2003, Windows Server® 2008, and Internet Explorer are trademarks of Microsoft Corporation; Microsoft® and MS-DOS® are registered trademarks of Microsoft Corporation.

Portions Copyright © 2001 artofcode LLC.

This software is based in part on the work of the Independent JPEG Group.

Portions Copyright © 2001 URW++. All Rights Reserved.

This product includes software developed by the Apache Software Foundation.

Copyright © 1999-2003 The Apache Software Foundation. All rights reserved.

This software is based in part on the work of Graeme W. Gill.

© Press-sense Ltd. 2002-2007. All rights reserved.

Includes Adobe® PDF Libraries and Adobe Normalizer technology

The Graphics Interchange Format © is the Copyright property of CompuServe Incorporated. GIFSM is a Service Mark property of CompuServe Incorporated.

Portions contain an implementation of the LZW algorithm licensed under U.S. Patent 4,558,302.

Parts of this software Copyright © 2004-2006 Enterprise Distributed Technologies Ltd. All Rights Reserved.

Parts of this software Copyright © 1995-2003, The Cryptix Foundation Limited. All Rights Reserved.

Parts of this software are a SSLv3/TLS implementation written by Eric Rescorla and licensed by Claymore Systems, Inc. All Rights Reserved.

Parts of this software Copyright © 2002, Lee David Painter and Contributors. Contributions made by Brett Smith, Richard Pernavas, Erwin Bolwidt.

Parts of this software Copyright © 1995-2005, Jean-loup Gailly and Mark Adler.

All other product names and services mentioned in this publication are trademarks of their respective companies. They are used throughout this publication for the benefit of those companies, and are not intended to convey endorsement or other affiliation with the publication. Companies, names, and data used in examples herein are fictitious unless otherwise noted. Changes are periodically made to this document. Changes, technical inaccuracies, and typographical errors will be corrected in subsequent editions

# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1-1</b>
	Before you use this guide .....	1-1
	About this guide .....	1-1
	Conventions .....	1-1
	Related documentation .....	1-2
	Customer Support .....	1-2
<b>2</b>	<b>Installation and configuration for Windows.....</b>	<b>2-1</b>
	Workstation requirements.....	2-1
	Minimum Hardware requirements .....	2-1
	Minimum Software requirements .....	2-1
	Installing FreeFlow Output Manager and FreeFlow Accounting Module .....	2-2
	Installation Prerequisites .....	2-2
	Installing the software .....	2-2
	Licensing FreeFlow Output Manager .....	2-4
	Determining your system's MAC address.....	2-4
	Installing the license file .....	2-4
	Configuring Users and Group Authorizations.....	2-5
	Setting up FreeFlow Output Manager Users .....	2-5
	Setting up FreeFlow Output Manager Authorization Groups .....	2-6
	Setting up FreeFlow Common Printer Administrator Group .....	2-6
	Setting up FreeFlow Accounting Module Authorization Group .....	2-7
	Setting up Custom View Groups .....	2-8
	Important considerations .....	2-8
	Creating Custom View Groups.....	2-8
	Setting up an initial printer and queue.....	2-10
	Performance Settings and Job Ordering .....	2-10
	Configuring Hot Folder .....	2-11
	Creating a printer .....	2-11
	Creating a queue .....	2-13
	Configuring access to a document repository .....	2-13
	Backing up and Restoring FreeFlow Output Manager.....	2-14
	Backup or Restore using the Windows application .....	2-14
	Backup or Restore using the command line .....	2-15
	Uninstalling FreeFlow Output Manager.....	2-16
	Upgrading the FreeFlow Output Manager 8.0 software to version 9.0.....	2-17
	Migrating FreeFlow Output Manager 9.0 to a different system.....	2-18
	Migrating FreeFlow Output Manager 9.0 on the same system after installing a newer Operating System.....	2-19
<b>2</b>	<b>FreeFlow Output Manager web interface software .....</b>	<b>2-1</b>
	Internet Explorer 10 .....	2-1
	Configuring Internet Explorer 10 .....	2-1
	Firefox browsers .....	2-2
	Configuring the Firefox browser .....	2-2
	Accessing the FreeFlow Output Manager and Accounting Module web interface	

	software .....	2-2
	Accessing the Port Controller and Hot Folders.....	2-3
<b>3</b>	<b>Configuring clients for job submission .....</b>	<b>3-1</b>
	FreeFlow applications.....	3-1
	Configuring FreeFlow Web Services to submit jobs to Output Manager ..	3-1
	Windows.....	3-3
	Acrobat 9 and X .....	3-4
<b>4</b>	<b>Configuring Multifunction Device clients .....</b>	<b>4-1</b>
	Introduction.....	4-1
	Configuring FreeFlow Output Manager.....	4-1
	Configuring the Output Manager System Configuration to enable Multifunction Devices .....	4-2
	Setting Up an Output Manager queue to accept jobs from Multifunction Devices .....	4-3
	Multifunction Device configuration.....	4-5
<b>5</b>	<b>Troubleshooting .....</b>	<b>5-1</b>
	Permission problems.....	5-1
	Log In as System Administrator .....	5-1
	Users and groups .....	5-1
	Batch files for Hot Folders and other scripting tasks .....	5-1
	Firewall problems.....	5-2
	Changing port assignments .....	5-3
	Changing the Output Manager port assignments .....	5-3
	Changing the Accounting Module port assignment .....	5-3
	Changing the Send-to-Production port assignment.....	5-4
	Changing the FreeFlow HotFolder Service port assignment .....	5-4
	LPR and IPP input problems .....	5-5
	Command Line LPR test.....	5-5
	LPR does not work remotely, but server can LPR itself.....	5-5
	LPR does not work from any machine, including the server itself .....	5-6
	LPR input to the server works, but no jobs appear on the FreeFlow Output Manager queues .....	5-6
	No Internet Explorer log in for any remote users .....	5-7
	“?????” or “---” displayed as the Send-to-Production icon for a Multifunction device .....	5-7
	HotFolder Service and Client/Administration GUI .....	5-8
<b>6</b>	<b>Configuring Options for JMF Service Communication.....</b>	<b>6-1</b>
	Proxy Server settings.....	6-1
	SendStatus signal retry/delay settings.....	6-2
<b>A</b>	<b>Patch Installation.....</b>	<b>A-1</b>
	Installing a patch to FreeFlow Output Manager on Windows .....	A-1
	Installing the FreeFlow Output Manager software patch .....	A-1

# Introduction

This document will guide you through the installation and configuration process for the FreeFlow Output Manager and FreeFlow Accounting Module.

## Before you use this guide

This guide is intended for users of workstations using one of the following web browsers:

- Internet Explorer 8.x or 10.x
- Firefox 3.0, 3.5., 3.6.

### Note

FreeFlow Output Manager requires Internet Explorer 8.x and 10.x to be set to run in Compatibility Mode for the application to function properly.

You should be familiar with using a web browser.

## About this guide

Before you perform any procedures in this guide, become familiar with its contents and conventions.

## Conventions

This guide includes the following conventions:

- Angle brackets: Variable information that is displayed on your window or that can be entered as part of a command line is enclosed within angle brackets. Examples include “Unable to copy <filename>;” “set -p <printer>.”
- Square brackets: Square brackets are used for the following:
  - Names of menu options that you select; for example, **Printer Default**
  - Names of buttons that you select; for example, **OK** and **Cancel**
  - Names of text boxes, list boxes, and fields; for example, “the **From** text box,” the **Directories** list box,” “The **Color Source** field”
- Bold: Boldface type is used for the following:
  - Directory paths; for example, “Browse to the **Win\_nt40/Xeroxdrv** directory.”
  - Text that you enter; for example, “Enter **purple** or **XDS**.”

- Calling attention to text that is particularly important; for example, “Select [Stop] on the user interface window. **Do not press the red stop button on the controller.**”
- Introductory words or phrases that begin items in a list; for example, **[Hold job]**: The document is held at the printer... or **[Cancel job]**: The document is not printed...
- Notes: Notes are hints that help you perform a task or understand the text. Notes are presented in separate paragraphs. Example:

**Note**

You cannot submit a job unless the printer is connected to your workstation.

## Related documentation

For further information about your specific Xerox printer and print service or controller, refer to the documentation that was delivered with your system.

## Customer Support

For customers in the United States:

- To place a customer service call, dial 1-800-821-2797 for assistance.

For customers in Canada:

- To place a customer service call, dial 1-800-939-3769 for assistance.

For other locations, call your local customer support center for assistance.

# Installation and configuration for Windows

This chapter contains the information that you need to install the FreeFlow Output Manager and FreeFlow Accounting Module applications.

## Workstation requirements

Your workstation must meet the following hardware and software requirements to run the software:

### Minimum Hardware requirements

- Processor: Dual Processor Intel® Xeon 2.8 GHz equivalent or better
- RAM: 4.0 GB
- Hard Disk Space: 250 GB plus any additional expected spool space

#### Note

Additional spool space may be required depending upon the type and size of jobs submitted to the platform.

- Ethernet Capability: 10/100/1000 Mb/sec

### Minimum Software requirements

To use the software, your PC workstation must be running one of the following operating systems:

- Windows Server 2003 with SP2 or Windows Server 2003 R2 with SP2
- Windows Server 2008 with SP2
- Windows Server 2008 R2 (run under 32 bit compatibility)
- Windows Server 2012 Standard

One of the following Internet browsers is also required:

- Internet Explorer 8.x or 10.x
- Mozilla Firefox 3.0, 3.5, or 3.6

#### Note

FreeFlow Output Manager requires Internet Explorer 8.x and 10.x to be set to run in Compatibility Mode for the application to function properly.

## Installing FreeFlow Output Manager and FreeFlow Accounting Module

This section details the installation instructions for the FreeFlow Output Manager and FreeFlow Accounting Module software.

### Installation Prerequisites

The following services must be disabled before you install the software:

- TCP/IP Print Server -- known as Print Services for UNIX
- Internet Information Services

Disable the Indexing Service: following service under **Control Panel > Administrative Tools > Services**

- Server 2003: Open the **Control Panel**. Select, **Administrative Tools > Services**. Disable the **Indexing Service**
- Server 2008: Open the **Control Panel**. Select, **Administrative Tools > Services**. Disable the **Windows Search** service.
- Server 2012: Open the Start Menu. Type **Server Manager**, and press Enter. Select **[Tools, Computer Managent]** Select **[Services and Applications, Services]** Disable the **Windows Search** service, if listed.

Disable Hyper-threading in the PC BIOS (if option exists)

The following must be installed **before** you install the software:

- Microsoft .NET Framework 3.5 Service Pack 1

### Installing the software

In order to install the software, you must be logged in as a user with Windows Administrator rights.

#### Note

FreeFlow Output Manager provides an embedded JMF Service. Do not install the standalone FreeFlow JMF Service.

#### Note

The full installer includes SP 10. It is not necessary to install the SP 10 patch after installing the full version.



To install the software:

1. Insert the FreeFlow Output Manager CD into the PC. The disk will autorun.

**Note**

If the installation does not start automatically, navigate to the CD/DVD drive, and double click on the installation program.

2. At the splash screen, select the appropriate language from the pull-down menu and click **OK**.
3. At the Xerox FreeFlow Output Manager Introduction screen, click **Next**.
4. At the Software License Agreement screen, select the **I accept...** option to accept the End User License Agreement terms. Click **Next**.
5. At the Choose Install Set screen select the installation type, then select **Install**. Options include:
  - Typical: installs the full set of applications including Output Manager, Accounting Module and the Printer Registration application.
  - Minimal: installs only the Output Manager and Printer Registration applications.
  - Custom: allows you to select the applications to be installed. Enable the check mark next to the applications that you want to install.
6. At the Choose Install Folder screen, accept the default installation folder or select another installation location. Click [Next] to proceed with the installation or [Cancel] to abort the installation.

**Note**

It is possible that for a reinstall or upgrade this screen may not appear.

**Note**

If your PC has multiple partitions, install FreeFlow Output Manager in the partition that has the most available free disk space.

7. At the Choose Shortcut Folder screen, make a selection for where you want to create the product icons. Click **Next**.

**Note**

If you want to create the product icons on all desktops, mark the checkbox for **Create Icons for All Users**.

8. Enter the serial number that is provided with the CD.

**Note**

It is possible that for a reinstall or upgrade this screen may not appear.

9. At the pre-installation summary screen, click **Install**. The installation of FreeFlow Output Manager begins.
10. At the Install Software License screen, the license name and directory location is noted. For information on installing the license file see [Licensing FreeFlow Output Manager](#) on page 4. Click **Next**.

**Note**

It is possible that for a reinstall or upgrade this screen may not appear.

11. After the installation is complete, ensure that the **Yes, restart my system** radio button is selected.
12. Click **Done**. The system reboots.

## Licensing FreeFlow Output Manager

The software is protected through the use of a license manager. A permanent license must be acquired at the time of installation. All systems running the software require a valid license file for operation.

For customers in the United States, Canada, and Europe, the license file is acquired via the Xerox Software Activation Portal. Using the supplied activation key, go to the following website to obtain the license file: <https://www.xeroxlicensing.xerox.com/activation>.

For other countries, please contact your local support representative for assistance in obtaining a license file.

You need to be prepared to provide your FreeFlow Output Manager serial number and MAC address when acquiring the license. A license file will be issued that will enable the FreeFlow Output Manager applications. A backup copy of this license file should be stored to an achievable location (backup disk, DVD/CD-ROM, USB storage device, etc.).

### Determining your system's MAC address

To determine your system's MAC address:

1. Open the Command Prompt:
  - a. For Windows Server 2003 or 2008: From the Start Menu, select **Start: Programs: Accessories: Command Prompt**.
  - b. For Windows Server 2012: Open the Start Menu, type **Command Prompt**, and press **Enter**.
2. At the command prompt, enter **ipconfig /all**.
3. The MAC Address is known as the Physical Address value, and will be displayed on screen in the format xx-xx-xx-xx-xx-xx. Write this information down and have it ready when you access the Xerox Software Activation Portal web site.

### Installing the license file

To install the license file:

1. Locate the license file you obtained from Xerox.
2. Copy the file to a location on the PC.
3. Rename the file to **xrx\_ffom.lic**.
4. Select the file and select **Edit:Copy**.
5. Browse to the following location: *<directory where the software was installed>\license*, and paste the file in that folder.
6. If asked whether you want to overwrite the existing file, select **Yes**.
7. Reboot the system.

# Configuring Users and Group Authorizations

The installer will create the user groups necessary to use the system. The system administrator must add users to those groups to enable user and administrator access to the software; the groups allow access to all or a limited set of administration commands.

## Note

If you wish to create new users to administer the software, follow the steps described in “Setting Up FreeFlow Output Manager Users” and then proceed to “Setting Up FreeFlow Output Manager Authorization Groups.”

The groups are named:

- Xerox FreeFlow Output Manager Administrators
- Xerox FreeFlow Output Manager Operator1s
- Xerox FreeFlow Output Manager Operator2s
- Xerox FreeFlow Output Manager Operator3s
- Xerox FreeFlow Common Printer Administrators

The FreeFlow Accounting Module group is named:

- Xerox FreeFlow Accounting Module Administrators

If the system will be setup to enable custom views using the Custom View Groups, you will need to create those groups and add users to them. see the section [Setting up Custom View Groups](#) on page 8.

## Setting up FreeFlow Output Manager Users

To set up users to perform administrative tasks on FreeFlow Output Manager, perform the following steps:

## Note

You can use the existing Windows administrator account on the system, or create an administrator account specifically for Output Manager.

1. Perform one of the following:
  - **For Windows Server 2003:** Right-click **My Computer** and select **Manage**. In the left pane of the Computer Management window, expand the display to reveal **System Tools: Local Users and Groups: Users**.
  - **For Windows Server 2008:** Right-click **My Computer** and select **Manage**. In the left pane of the Server Manager window, expand the display to reveal **Configuration: Local Users and Groups: Users**.
  - **For Windows Server 2012:** Open the Start Menu. Type **Server Manager** and press **Enter**. Select **[Tools, Computer Management]**. In the left pane of the Computer

Management window, expand the display to reveal **System Tools: Local Users and Groups: Users**.

2. Right-click **Users** and select **New User**.
3. In the supplied text field, enter a user name.
4. In the supplied text field, enter the full user name.
5. If desired, enter a description of the user.
6. Type a password, then retype it.
7. Select the desired password options by clearing or marking the supplied check boxes.
8. Select **Create**. The user will appear in the right pane of the Computer Management window.
9. Repeat steps 4-9 to create additional users.
10. Select **Close** when you are finished adding users.

## Setting up FreeFlow Output Manager Authorization Groups

1. Perform one of the following:
  - **For Windows Server 2003:** Right-click **My Computer** and select **Manage**. In the left pane of the Computer Management window, expand the display to reveal **System Tools: Local Users and Groups: Groups**.
  - **For Windows Server 2008:** Right-click **My Computer** and select **Manage**. In the left pane of the Server Manager window, expand the display to reveal **Configuration: Local Users and Groups: Groups**.
  - **For Windows Server 2012:** Open the Start Menu. Type **Server Manager** and press **Enter**. Select **[Tools, Computer Management]**. In the left pane of the Computer Management window, expand the display to reveal **System Tools: Local Users and Groups: Groups**.
2. Select the **Xerox FreeFlow Output Manager Administrators**.
3. Select **Add** to add members to the group.
4. In the supplied text field, enter the user name you wish to add to the group.
5. Select **OK**. The user or users will be added to the group.
6. Repeat steps 3-5 to add any additional users to the group.
7. Repeat steps 3-6 to add users to the following group names:
  - Xerox FreeFlow Output Manager Operator1s
  - Xerox FreeFlow Output Manager Operator2s
  - Xerox FreeFlow Output Manager Operator3s
8. Select **[Close]** when you are finished adding users.

## Setting up FreeFlow Common Printer Administrator Group

Users added to the Common Printer Administrator are allowed to use the Printer Administration application to add printers to the system.

1. Perform one of the following:
  - **For Windows Server 2003:** Right-click **My Computer** and select **Manage**. In the left pane of the Computer Management window, expand the display to reveal **System Tools: Local Users and Groups: Groups**.

- **For Windows Server 2008:** Right-click **My Computer** and select **Manage**. In the left pane of the Server Manager window, expand the display to reveal **Configuration: Local Users and Groups: Groups**.
  - **For Windows Server 2012:** Open the Start Menu. Type **Server Manager** and press **Enter**. Select **[Tools, Computer Management]**. In the left pane of the Computer Management window, expand the display to reveal **System Tools: Local Users and Groups: Groups**.
2. Select the **Xerox FreeFlow Common Printer Administrators**.
  3. Select **Add** to add members to the group.
  4. In the supplied text field, enter the user name you wish to add to the group.
  5. Select **OK**. The user or users will be added to the group.
  6. Repeat steps 3-5 to add additional users.
  7. Select **Close** when you are finished adding users.

## Setting up FreeFlow Accounting Module Authorization Group

1. Perform one of the following:
  - **For Windows Server 2003:** Right-click **My Computer** and select **Manage**. In the left pane of the Computer Management window, expand the display to reveal **System Tools: Local Users and Groups: Groups**.
  - **For Windows Server 2008:** Right-click **My Computer** and select **Manage**. In the left pane of the Server Manager window, expand the display to reveal **Configuration: Local Users and Groups: Groups**.
  - **For Windows Server 2012:** Open the Start Menu. Type **Server Manager** and press **Enter**. Select **[Tools, Computer Management]**. In the left pane of the Computer Management window, expand the display to reveal **System Tools: Local Users and Groups: Groups**.
2. Select the **Xerox FreeFlow Accounting Module Administrators**.
3. Select **Add** to add members to the group.
4. In the supplied text field, enter the user name you wish to add to the group.
5. Select **OK**. The user or users will be added to the group.
6. Repeat steps 3-5 to add additional users.
7. Select **Close** when you are finished adding users.

## Setting up Custom View Groups

The Custom View Groups are used to create custom views of Output Manager. When configured using the FreeFlow Output Manager System Configuration screen, users will only be able to view the queues, printers, and jobs that the Custom View Groups they are assigned to are permitted to view.

### Important considerations



#### WARNING

When configuring Output Manager, the Output Manager administrator should determine whether to enable or disable this feature. Only a single mode is supported. Switching between the modes will compromise the integrity of the system.

Setting up a custom view group is a 2-step process:

- Custom View Groups must be created by IT Administrator.
  - The groups must be created using a “Xerox FFOM <customer designation>” syntax. For example, a valid group could be named “Xerox FFOM Westwing Printshop.”

#### Note

FreeFlow Output Manager cannot recognize Custom View Groups without the “Xerox FFOM...” prefix.

#### Note

If the system administrator changes the Custom View Groups group name for whatever reason, it will not be reflected in Output Manager. The application will treat the altered group name as a new group. The application cannot track group name changes and then update the queue or printer assignments.

- Printer and Queue assignment must be performed by FreeFlow Output Manager Administrators.
  - Printers and queues can only be assigned to one group at a time. Once a printer or queue is assigned, it becomes unavailable for new assignment.

When Custom View Groups is enabled, unauthorized guest login is not supported. Guest users must have valid logins and must be added to the appropriate groups.

### Creating Custom View Groups

1. Perform one of the following:
  - **For Windows Server 2003:** Right-click **My Computer** and select **Manage**. In the left pane of the Computer Management window, expand the display to reveal **System Tools: Local Users and Groups: Groups**.
  - **For Windows Server 2008:** Right-click **My Computer** and select **Manage**. In the left pane of the Server Manager window, expand the display to reveal **Configuration: Local Users and Groups: Groups**.
  - **For Windows Server 2012:** Open the Start Menu. Type **Server Manager** and press **Enter**. Select **[Tools, Computer Management]**. In the left pane of the Computer

Management window, expand the display to reveal **System Tools: Local Users and Groups: Groups**.

2. Right-click **Groups** and select **New Group**.
3. In the supplied text field, type the name using the proper Custom View Groups syntax: **"Xerox FFOM <customer designation>."**
4. If desired, enter a description of the new group.
5. Select **Add** to add members to the group.
6. In the supplied text field, enter the user name you wish to add to the group.
7. Select **OK**. The user or users will be added to the group.
8. Select **Create**. The group will be created.
9. Repeat steps 2-8 to create additional Custom View Groups.
10. Select **Close**. The necessary groups have been created and the appropriate users have been added to them.

Proceed to the following sections, [Performance Settings and Job Ordering](#) on page 10 and [Creating a queue](#) on page 13.

Once the necessary printer and queues have been created, use the FreeFlow Output Manager System Configuration screen to enable the Custom View Groups feature and assign queues and printers to the various groups. See the *FreeFlow Output Manager online help* for more information on configuring this feature.

# Setting up an initial printer and queue

Before you can use FreeFlow Output Manager, you must set up printers and queues. This section of the Installation and Configuration Guide will help you to create a simple queue and printer.

## Note

It is not within the scope of this Guide to provide detailed instructions for these activities; rather, this Guide provides simple, general instructions. Detailed instructions for creating specialized queues and specific printers are provided in the Online Help.

## Performance Settings and Job Ordering

In order to increase job throughput, multiple submission threads can be used to send jobs to the printers simultaneously. This setting is controlled by the MAX\_THREADS property. To change this setting:

1. Open the file OBS.properties in <OM installation directory>\config directory (by default, C:\Program Files\Xerox\FreeFlow Output Manager\config, or for Server 2012, C:\Program Files (x86)\Xerox\FreeFlow Output Manager\config)
2. Locate the string MAX\_THREADS and replace the value on the right. By default, it is set to 5  
Example: MAX\_THREADS=10 (to set value to 10)

When multiple thread feature (MAX\_THREAD > 1) is enabled, jobs are submitted to the printers in the order determined by the OM queue policy but they may arrive at the printer out of order. While this is acceptable to some customers, it is a problem for customers who require jobs to be in order. This is especially a problem for the iGen4 220 Perfecting Press for which FFOM is the front end controller. The iGen4 220s expect jobs to be sent to both DFE1 and DFE2 in order.

The setting that controls this behavior is JOB\_ORDER which indicates whether job order is required. By default, it is set to ORDER. While this guarantees that jobs will arrive at the printer in the right order, it limits the number of submission threads to each DFE queue to 1. If job order is not important, it is advisable to set this value to UNORDER. To change this setting:

1. Open the file OBS.properties in <OM installation directory>\config\ directory (by default, C:\Program Files\Xerox\FreeFlow Output Manager\config, or for Windows Server 2012, C:\Program Files (x86)\Xerox\FreeFlow Output Manager\config)
2. Locate the string JOB\_ORDER and replace the value on the right. There are two options:
  - UNORDER: Use maximum number of threads to submit jobs. Jobs are submitted in the order determined by the OM queue policy but due to the job size and network factors, jobs may arrive at the printers out of order. Currently ORDER is the default job ordering policy.
  - ORDER: Ensure that jobs arrive at the DFE queue in the order determined by the OM queue policy. If this policy is used, a single thread will be used for each DFE queue. The maximum number of threads used is determined by the number of active DFE queues (the target DFE queues where jobs are being printed) up to MAX\_THREADS.

Important: If you change either or both options (MAX\_THREADS and JOB\_ORDER) above, you must restart FFOM for the settings to take effect.



## Configuring Hot Folder

If a hot folder is mapped to a remote share and the connection to the remote share is lost, the Hot Folder Service will attempt to re-establish connection at a set interval. To change this value:

1. Open the file HotfolderService.properties in <OM installation directory>\config\ directory (by default, C:\Program Files\Xerox\FreeFlow Output Manager\config\, or for Windows Server 2012, C:\Program Files (x86)\Xerox\FreeFlow Output Manager\config)
2. Locate the string connectionRetryFrequency and replace the value on the right. By default, it is set to 60 seconds. Example: connectionRetryFrequency=90 (to set to 90 seconds)
3. Restart FFOM\_HotFolderService from Windows Services

## Creating a printer

The production printers that are used by FreeFlow Output Manager are made available through the Printer Registration application. Printer Registration maintains a list of production printers and their configured settings. The printer list can reside on the same computer as the Output Manager application or the list can reside on a remote computer. When adding production printers, use the following guidelines:

### Note

For detailed information on how to use the Registered Printer List Locator or the Printer Registration application, see the online help for those applications.

### Note

When adding a printer using the Printer Registration application, the name of the Output Manager printer cannot contain the following characters <space>, |, ., \*, <, >, /, \, ", ?.

### Note

It is best practice to keep the custom name for the printer as short as possible so as to keep the name from wrapping in the Output Manager interface.

- Access the Registered Printer List Locator and select the [Local] or [Remote] option depending on whether you will create the printer list locally or on a remote PC.

### Note

If you select the Remote option and then attempt to access the Printer Registration application on the local PC, you will receive an error message.

- Access the Printer Registration application by performing one of the following:
  - For **Windows Server 2003 or 2008**: select [Start : Xerox FreeFlow Applications: Printer Administration: Registered Printer List Locator].
  - For **Windows Server 2012**: Open the Start Menu, type **Registered Printer List Locator** and press **Enter**.

If you selected the [Local] option, use the application on the same PC as Output Manager. If you selected the [Remote] option, access the application on the PC that will be used to maintain the printer list. To access the Printer Registration application:

1. Perform one of the following steps:
  - For **Windows Server 2003 or 2008**: Select [**Start, Programs, Xerox FreeFlow Software, Printer Administration, Printer Registration**].
  - For **Windows Server 2012**: Open the Start Menu, type **Printer Registration** and press **Enter**.
2. On the Installed Products dialog, ensure that the **Output Manager** check box is selected and click **OK**.
3. Click the **Add...** button to add a printer. Follow the steps in the Add Printer Wizard to add the printer and its corresponding queues.

#### Note

If you are using the FreeFlow Accounting Module, you will need to enter the location of the accounting log created on the FreeFlow Printer Server. For instructions on how to configure the FreeFlow Printer Server, see the online help for the Accounting Module after the installation is completed. Once the print server has been configured, re-enter the Printer Registration application and edit the printer settings to enter the necessary server information.

4. Continue to add printers if necessary. Once you have finished, close the Printer Registration application.

Once you have added the necessary production printers using the Printer Registration application, you can then add the registered printers to FreeFlow Output Manager.

#### Note

For detailed information on how to change the printer list in Output Manager, see the FreeFlow Output Manager online help.

1. Double-click the FreeFlow Output Manager shortcut icon on the desktop to open the application.
2. Logon as a user who is a member of the **Xerox FreeFlow Output Manager System Administrators** group.
3. Click **Printer Manager**.
4. Select the **Change Printer List ...** button. The **Add/Remove Printer list** window opens. The printers that are available for Output Manager have check boxes to the left of the printer name or IP address.
5. Ensure that the check box to the left of the printer name or IP Address for those printers you want to add is selected. Deselect the check box for any printer you do not want to add at this time.
6. Select the **Next** button to move through the various screens. When you reach the final screen in the process, click **Done** to add the printers and return to the Printer Status screen.

## Creating a queue

FreeFlow Output Manager uses a New Queue Wizard to ask a series of questions when creating a queue. Before you create a queue, you will need to know the following:

- What production printer or printers do you want to assign to the queue?
- Will the queue utilize job splitting? If so, what type of job splitting method will be utilized?

Once you have determined the type of queue and the production printers you want to assign to it, you can create the queue.

### Note

For detailed information on how to create a queue in Output Manager, see the FreeFlow Output Manager online help.

1. Double-click the FreeFlow Output Manager shortcut icon on the desktop to open the application.
2. Logon as a user who is a member of the **Xerox FreeFlow Output Manager System Administrators** group.
3. Click **Queue Manager**.
4. Click the **New Queue...** button.
5. Follow the steps in the Create Queue Wizard screen to create the new queue and assign it the necessary production printers.
6. Click **Next**.
7. Select **Done**. The queue will be displayed in the Queue List.

## Configuring access to a document repository

Before FreeFlow Output Manager can access a document repository (for example, Documentum, DocuShare or SharePoint), it is necessary to edit the Output Manager System Configuration.

Perform the following:

1. Double-click the FreeFlow Output Manager shortcut icon on the desktop to open the application.
2. Logon as a user who is a member of the **Xerox FreeFlow Output Manager System Administrators** group.
3. Click the **System Configuration** link at the top of the right of the page.
4. Click the Repository Location heading to jump to that section.
5. Enter the Server Name or IP address of the server hosting the document repository. You can also enter the port number for the repository server.
6. The port number should match the port for the Repository Service, **not** the port for Sharepoint, Documentum, or DocuShare web service.
7. Click **Apply** to save the settings.

## DocuShare Support

If Output Manager is being used with DocuShare, the default .NET Framework version needs to be set to 2.0.

1. Open the Start Menu. Type **Internet Information Services (IIS) Manager** and press **Enter**.
2. If necessary, select the local host in the left pane.
3. In the right pane, select **[View Application Pools]**.
4. Right-click on **[DefaultAppPool]** and select **[Set Application Pool Defaults...]**.
5. Under **(General)**, select the **.NET Framework Version** drop-down, and select **[v2.0]**.
6. Select **[OK]**.

## Backing up and Restoring FreeFlow Output Manager

After configuring printers and queues, it is a good idea to periodically backup the configuration information in the unlikely event of a catastrophic failure of your system.

The FreeFlow Output Manager configuration settings and data that is backed up and restored are the following:

- Output Manager application configuration settings.
- Jobs, Queues, and Printers.
- Hot Folders and Port Controller configuration settings
- Accounting Module configuration settings, reports, database, and exported data.
- If the Printer Registration and/or Standalone Repository Management System are present on the machine, the configuration settings for those applications are backed up and restored.

There are two means of invoking the backup and restore application:

- Using the Backup/Restore Utility Windows application.
- Using a command line to activate the backup or restore processes.

### Note

The backup and restore operations will automatically shutdown and restart the Output Manager and Accounting Module services.

## Backup or Restore using the Windows application

### Note

You must be logged in as the Windows Administrator to perform the backup or restore operations.

If you are using the Windows Server 2008 application, right-click on the Start menu GUI command and select **Run as Administrator** to run the program as an Administrator.

Perform the following to backup the Output Manager system

1. Perform one of the following steps:
  - For **Windows Server 2003 or 2008**, Select **Start: Programs: Xerox FreeFlow: Output Manager: Backup**.
  - For **Windows Server 2012**, Open the Start Menu, type **Backup**, select the **[Backup]** application.
2. In the browse dialog, select a folder location to save the backup information.
3. Enter a file name in the text box or accept the default file name.

#### Note

If you specify a file name that is a duplicate of a previous backup, a dialog will display. Select **Yes** to overwrite the previous backup, or **No** to specify an alternate filename.

4. Select **Save**. A progress bar dialog will display the status of the backup.
5. Select **OK** when the operation is complete.

Perform the following to restore the Output Manager system:

1. Perform one of the following steps:
  - For **Windows Server 2003 or 2008**, Select **Start: Programs: Xerox FreeFlow: Output Manager: Restore**.
  - For **Windows Server 2012**, Open the Start Menu, type **Restore**, select the **[Restore]** application.
2. In the browse dialog, select a folder location of the backup information.
3. Select the ZIP file containing the backup information you want to restore.
4. Select **Open**. A progress bar dialog will display the status of the restore operation.
5. Select **OK** when the operation is complete.

## Backup or Restore using the command line

#### Note

You must be logged in as the Windows Administrator to perform the backup or restore operations.

If you are using the Windows Server 2008 or 2012, right-click on the Command Prompt icon and select **Run as Administrator** to run the program as an Administrator.

Perform the following to backup the Output Manager system

1. From the /bin folder located in the Output Manager installation directory, enter the **ffom\_backup** command followed by a fully qualified path to the backup file to be created.
  - For example: **ffom\_backup c:\Backup\<today's\_date>**

#### Note

If you do not specify a backup path, the ffom\_backup will create a backup file in a default location. The default location will be in the <installation directory>\backup.

Perform the following to restore the Output Manager system:

1. From the /bin folder located in the Output Manager installation directory, enter the **ffom\_restore** command followed by a fully qualified path to the backup file to be restored.
  - For example: **ffom\_restore c:\Backup\<today's\_date.zip>**

# Uninstalling FreeFlow Output Manager

If you wish to uninstall the software, perform the following steps:

1. Perform one of the following steps:
  - **For Windows 2003:** Select [Start: Settings: Control Panel]. Select [**Add or Remove Programs**].
  - **For Windows 2008:** Select [Start: Settings: Control Panel]. Select [**Programs and Features**].
  - **For Windows 2012:** Open the Start Menu, type **Control Panel**, and press **Enter**. Select [**Programs, Programs and Features**].
2. From the list, select **Xerox FreeFlow Authorization Service**.
3. Select **Change/Remove**.
4. From the list, select **FreeFlow Output Manager <version number>**.
5. Select **Change/Remove**.
6. At the Uninstall FreeFlow Output Manager window, select **Uninstall**. The process will run.

## Note

If you also want to remove the Printer Registration utility, select **FreeFlow Printer Registration <version number>**. At the Uninstall FreeFlow Printer Registration window select **Uninstall**. The process will run.

7. Make note of the items that could not be removed. You may wish to remove them manually.
8. Select **Done**.
9. Close the **Add/Remove Programs** window.
10. If desired, manually remove the files that were not automatically removed by the uninstaller.
11. Restart your PC to complete the uninstall.

# Upgrading the FreeFlow Output Manager 8.0 software to version 9.0

This procedure is used to upgrade FreeFlow Output Manager version 8.0 software to version 9.0. The procedure requires that the system configuration be saved, the version of Output Manager be uninstalled, and the latest version of Output Manager be installed and configured.

## Note

Uninstalling the software will not delete FreeFlow Output Manager setup items, such as created queues, printers, jobs, scripts, users and groups, nor configuration and licensing information. To completely remove these items, delete the directory where the software was installed. Example: C:\Program Files\Xerox\FreeFlow Output Manager.

If you have a version of Output Manager earlier than version 8, upgrade using the “Upgrading FreeFlow Output Manager” procedure found in the **8.0 version** of your *FreeFlow Output Manager Install and Configuration Guide* (p/n 701P49182). Once you have confirmed that you have a working version 8 of Output Manager, follow this procedure to upgrade to version 9.

A new license file will be required to run the software after the upgrade.

1. Stop all queues from accepting any more jobs. Stop all Hot Folders and Port Controller sources.
2. Output all jobs to the appropriate printers.
3. Delete or purge all non-required jobs.
4. Hold all remaining jobs.
5. Backup the necessary folders using the procedure “Backing Up and Restoring FreeFlow Output Manager” of the **8.0 version** of your *FreeFlow Output Manager Install and Configuration Guide* (p/n 701P49182).
6. Uninstall FreeFlow Output Manager per the procedure [Uninstalling FreeFlow Output Manager](#) on page 16.
7. Install FreeFlow Output Manager per the procedure [Installing FreeFlow Output Manager and FreeFlow Accounting Module](#) on page 2. Perform all sub-procedures.

## Note

Ensure that you preform all install prerequisites before you install the new version of Output manager. In particular, ensure that Microsoft .NET Framework 3.5 SP1 is installed.

8. Install a new license file. See [Licensing FreeFlow Output Manager](#) on page 4 for more information.
9. Start the FreeFlow Output Manager application and verify all user and printer settings are present.
10. Installations that use the Accounting Module must be restored from backup after upgrading to Output Manager 9.0.

# Migrating FreeFlow Output Manager 9.0 to a different system.

This procedure describes how to migrate FreeFlow Output Manager version 9.0 to a different system. The system you are migrating to could have the same operating system version or another supported version.

1. Stop all queues from accepting any more jobs. Stop all Hot Folders and Port Controller sources.
2. Output all jobs to the appropriate printers.
3. Delete or purge all non-required jobs.
4. Hold all remaining jobs.
5. Backup the necessary folders using either the FreeFlow Output Manager backup utility or the Command Line executable. See [Backing up and Restoring FreeFlow Output Manager](#) on page 14 for more information.
6. Uninstall FreeFlow Output Manager from the old system per the procedure [Uninstalling FreeFlow Output Manager](#) on page 16.
7. Install FreeFlow Output Manager on the new system per the procedure [Installing FreeFlow Output Manager and FreeFlow Accounting Module](#) on page 2. Ensure that the install directory is the **same** as the install directory using on the older system.

## Note

Ensure that you preform all install prerequisites before you install the new version of Output manager. In particular, ensure that Microsoft .NET Framework 3.5 SP1 is installed.

8. Perform all sub-procedures.
9. Acquire and install a new license file on the new system. Please contact your local support representative for assistance in obtaining this license file. See [Licensing FreeFlow Output Manager](#) on page 4 for more information on providing your FreeFlow Output Manager serial number and MAC address. The local support representative is the one that will request this new license file as you "move" the FreeFlow Output Manager from your previously licensed system to the new system.
10. Restore the information backed up in step 5 using the Windows application or Command Line executable. See [Backing up and Restoring FreeFlow Output Manager](#) on page 14 for more information.
11. Start the FreeFlow Output Manager application and verify all user and printer settings are present.



# Migrating FreeFlow Output Manager 9.0 on the same system after installing a newer Operating System

This procedure describes how to migrate FreeFlow Output Manager version 9.0 on the same system after the operating system version has been changed.

1. Stop all queues from accepting any more jobs. Stop all Hot Folders and Port Controller sources.
2. Output all jobs to the appropriate printers.
3. Delete or purge all non-required jobs.
4. Hold all remaining jobs.
5. Backup the necessary folders using either the Windows Backup application or the Command Line executable. See [Backing up and Restoring FreeFlow Output Manager](#) on page 14 for more information.
6. Store the backup data and a copy of your license file in a safe location. This is especially necessary if the hard disk for the system will be reformatted.
7. Uninstall FreeFlow Output Manager per the procedure [Uninstalling FreeFlow Output Manager](#) on page 16.

## Note

If you will reformatting the hard drive before the installation of Windows Server 2008, you can skip step 7.

8. Install the new version of Windows Server operating system.
9. Install FreeFlow Output Manager per the procedure [Installing FreeFlow Output Manager and FreeFlow Accounting Module](#) on page 2. Ensure that the install directory is the **same** as the install directory using on the older operating system.

## Note

Ensure that you perform all install prerequisites before you install the new version of Output manager. In particular, ensure that Microsoft .NET Framework 3.5 SP1 is installed.

10. Perform all sub-procedures.
11. Restore the information backed up in step 5 using the Windows application or Command Line executable. See [Backing up and Restoring FreeFlow Output Manager](#) on page 14 for more information.
12. Start the FreeFlow Output Manager application and verify all user and printer settings are present.



# FreeFlow Output Manager web interface software

This chapter contains procedures for administering FreeFlow Output Manager using the FreeFlow Output Manager web interface.

Although FreeFlow Output Manager applications are installed on a single host, the primary Graphical User Interface (GUI) is accessed through a web browser, and can therefore be run on any connected host.

With FreeFlow Output Manager you use a browser to access menus and tabs that enable you to select a document file, set up a job ticket, and submit your print job to the printer.

## Internet Explorer 10

Internet Explorer 10 must be set to run in Compatibility Mode in order for Output Manager to function properly when using that browser version.

### Configuring Internet Explorer 10

1. Open the Internet Explorer application.
2. If necessary, navigate to the Output Manager login page.
3. Press **Alt**, and select [**Tools, Compatibility View Settings**].
4. The Output Manager web site address should be highlighted in the **Add this website** text box. Select **Add**.
5. Select **Close**.
6. Perform steps 1-5 again, but for step two navigate to the Accounting Module login page.

## Firefox browsers

Before the Firefox browsers can be used, the security settings must be configured to connect to FreeFlow Output Manager.

### Configuring the Firefox browser

The SSL settings for the Firefox browser require only SSL3 to be enabled. SSL2 is to be disabled. Perform the following to configure these settings:

1. Open the Firefox browser application.
2. In the navigation bar type about:config
3. In the filter text box type 128
4. In the results below locate the string:
  - security.ssl3.dhe\_rsa\_aes\_128\_sha
5. Double-click on that link (this will turn the value to false)

You can now log in to the FreeFlow Output Manager server using this browser.

## Accessing the FreeFlow Output Manager and Accounting Module web interface software

To log into the application and to ensure system security, Administrators and Operators must have a registered user account with an assigned user name and password.

#### Note

Use the Windows operating system to create and manage user accounts.

To access the FreeFlow Output Manager or the FreeFlow Accounting Module:

1. If there is an icon on your desktop, double-click the icon. If not, select [Start: Program Files: Xerox FreeFlow Output Manager: <application name>]. The login page displays.

#### Note

You can access FreeFlow Output Manager from within the browser by entering the URI: **http://localhost:8080/WebClient/Controller** or **http://<IP address of the FreeFlow Output Manager server>:8080/WebClient/Controller**.

#### Note

You can access FreeFlow Accounting Module from within the browser by entering the URI: **http://<ipaddress or hostname of Accounting Module server>:9090/WebClient/Login.do**.

2. Login to the application:
  - a. In the **User Name** text box, enter your user name.
  - b. In the **Password** text box, enter the password.
  - c. In the **Domain** text box, enter the computer name.
  - d. Select **Log In**.

**Note**

If you are logging in using a Firefox browser, a certificate acceptance screen will appear. Select the [Accept this certificate permanently] to avoid seeing this screen each time you log in.

**Note**

Enable the allow pop-ups option when accessing application remotely using a browser.

## Accessing the Port Controller and Hot Folders

The Port Controller and Hot Folders can be accessed by selecting **Start: Programs: Xerox FreeFlow: Output Manager: Port Controller** or **Start: Programs: Xerox FreeFlow: Output Manager:Hot Folders**, or, if they do not appear, perform the following procedure:

1. Open **My Computer**.
2. Browse to the location in which the software is installed. For most installations, this will be **C:\Program Files\Xerox\FreeFlow Output Manager**.

**Note**

For installations on Windows 2008 R2 or Windows Server 2012, the directory will be **C:\Program Files (x86)\Xerox\FreeFlow Output Manager**.

3. Double-click the **bin** folder. This folder will open.
4. Within the **bin** folder, you may double-click the icons for **HotFolder.exe** or **PortController.exe** to open these applications.

**Note**

You can also create shortcuts on the desktop at this time, if they are not present, using standard Windows methodology.

**Note**

For additional information on the Port Controller and Hot Folders, consult the online help.



# Configuring clients for job submission

This chapter contains information on configuring the various clients to submit jobs to FreeFlow Output Manager.

## FreeFlow applications

To configure FreeFlow applications to access FreeFlow Output Manager, use the Printer Registration application and enter the IP address to the FreeFlow Output server when adding a printer.

### Configuring FreeFlow Web Services to submit jobs to Output Manager

To configure Printer for submitting jobs from FreeFlow Web Services to FreeFlow Output Manager:

1. Log On to Web Services as Print Provider.
2. Go to the **Print Settings** tab, then go to the **Production** tab.
3. Go to **Output Devices** tab.
4. Click on the **Add** button to add a new device.
5. In the **Add Device** dialog box, enter the Device Name.
6. Select **Digital** for the Device Group.
7. Select **Xerox Output Manager** for the Machine Type and click on the **OK** button.
8. From the Output Devices on the left side, select the Device created in Step #7.
9. After selecting the Device, select the **Output Channels** tab on the right side.

#### Note

It is recommended that you select **JMF over HTTP**.

10. Set the Port to 7781.
11. Select one of the two options based on whether the JDF job type is Intent or Process:
  - Select **Intent\_1.2\_General** to produce JDF output for Intent JDF jobs.
  - Select **Proc\_DigitalPrinting\_1.2\_General** to produce JDF output for Process JDF jobs.

**Note**

If **Intent\_1.2\_General** is selected, be aware that unsupported paper sizes (such as Business Cards) are unsupported and will be rejected by the JMF Service. Use **Proc\_DigitalPrinting\_1.2\_General** instead.

12. Set the IP Address to the location of the FreeFlow Output Manager server and click on the **OK** button. A confirmation message pop-up to confirm that the changes have been saved.
13. Click on the **Device supports multi-queue system** link. This shows the list of queues available in Output Manager. Configure to a queue from the list and save the changes.

Jobs can now be submitted to the Device and the Queue configured above.

Job submission from FreeFlow Web Services is done in two steps:

1. Log In as Print Buyer and Order the job to be submitted to the FreeFlow Output Manager.
2. Log In as Print Provider and approve the job to be sent to the FreeFlow Output Manager.

See the FreeFlow Web Services documentation for instructions on how to perform these operations.



# Windows

To configure Windows printer to submit jobs to FreeFlow Output Manager:

1. To start,
  - **Windows Server 2003:** Select **Start: Settings: Printers and Faxes**.
  - **Windows Server 2008 SP2:** Select **Start: Printers**
  - **Windows Server 2008 R2:** Select **Start: Devices And Printers**
  - **Windows Server 2012:** Open the Start Menu. Type **Control Panel** and press **Enter**. Select **[Hardware, Devices and Printers]**.
2. Double-click **Add Printer**.
3. Select **Next**.
4. Select **Local printer attached to this computer** and select **Next**.
5. Select **Create a new port**; in the pull-down menu, select **Standard TCP/IP Port**.
6. Select **Next**.
7. When the Add Standard TCP/IP Printer Port wizard appears, select **Next**.
8. Enter the IP address and name for the port, and select **Next**.
9. Select **Custom** for the Device Type.
10. Select **Settings** and make the following choices:
  - a. Under Protocol, select **LPR**.
  - b. Enter the name of the FreeFlow Output Manager queue in the Queue Name field.
  - c. Mark the check box for **LPR Byte Counting Enabled**.
  - d. When these settings have been made, select **[OK]**. the Settings dialog closes.
11. Select **Next**.
12. Select **Finish**. The Add Standard TCP/IP Printer Port wizard closes.
13. Insert the media that contains your printer driver and select **Have Disk....**
14. Browse to the appropriate location for your driver, select it, and select **OK**.
15. Select your printer from the list and click **Next**.
16. If asked whether to keep an existing driver, which may happen if you are configuring several similar printers, accept the default and select **Next**.
17. Enter a printer name in the text field and select whether you wish to use the printer as default; then select **Next**.
18. In the Printer Share dialog, enable sharing and enter a share name; then select **Next**.
19. If desired, enter the location of the printer and a comment in the supplied fields and select **Next**.
20. If desired, print a test page; select **Next**.
21. Select **Finish**. The printer has been configured.

## Acrobat 9 and X

FreeFlow Output Manager provides support for JMF clients, such as Adobe Acrobat 9 or X to submit jobs containing job ticket instructions using JDF (Job definition Format).

### Note

Acrobat XI does not support JMF submission.

To configure Adobe Acrobat to submit jobs via JMF, perform the following:

1. Perform the following:
  - In Adobe Acrobat 9, select **Advanced: Print Production: JDF Job Definitions**
  - In Acrobat X, [**View, Tools, Print Production, JDF Job Definitions**]
2. Click **Submission Manager...**, the **Add...**
3. At the Submission Settings dialog, enter a name to identify the submission settings.
4. Under the Submission Options area, select **Convert to a MIME package and submit to a JMF device**.
  - In the URL text box, enter **http://<IP address of the Output manager server:7781>/<name of an Output Manager queue>**.

### Note

Acrobat 9 and X do not support JDF file submission with IPv6 addresses.

5. Click **OK** twice, then **Close**.

# Configuring Multifunction Device clients

This chapter contains information on configuring the various Multifunction Device clients that can submit jobs to Output Manager.

## Introduction

To configure a Multifunction Device to access FreeFlow Output Manager, both the multifunction Device (MFD) and Output Manager must be configured.

The following Multifunction Devices are supported:

- WorkCentre 76xx - full panel color
- WorkCentre 2xx/56xx

## Configuring FreeFlow Output Manager

Once Output Manager has been installed, it can be configured to communicate with various Multifunction Devices. The configuration process requires two stages. The first stage involves enabling the feature and adding the specific devices using the System Configuration screen. The second stage involves configuring a queue to accept jobs from the Multifunction devices. There is no setup required on the Multifunction device itself.

## Configuring the Output Manager System Configuration to enable Multifunction Devices

### Note

A Multifunction device can be registered with multiple Output Manager servers. However, each Output Manager server can only register a particular Multifunction device once.

Perform the following to configure Output manager:

1. Double-click the FreeFlow Output Manager shortcut icon on the desktop to open the application.
2. Logon as a user who is a member of the **Xerox FreeFlow Output Manager System Administrators** group.
3. Click the **System Configuration** link at the top of the right of the page.
4. Select the **Multifunction Device Input Client Setup** link heading.
5. Select the **Enable** radio button option to enable the feature at the Output Manager level.
6. Select the **Apply** button to enable the feature
7. In the **Feature Name at Device** text box, enter the name that will be displayed at the service access button at the multifunction device.

### Note

The default feature name is "Send to Production." If you do not enter a custom name for this feature, that is the text that will appear next to the service access button on all the devices that communicate with Output Manager.

8. Select whether to **Enable** or **Disable** the Send Confirmation Page to Device option.
  - If you enable the confirmation page option, enter the information that will appear in the header of the confirmation page in the **Confirmation Information** text box.
9. Select the **Add Device** button.
10. Enter the IP address for the multifunction device in the **IP Address** text box.
11. Enter the **Administrative Name** for the device, and the **Device Password** into the appropriate text boxes.
12. Enter the **Multifunction Device Name** that you want to appear in the Device Name column of the Device list on the Multifunction Device Client Input screen.
13. Enter the **Location** of the device. This information will appear in the Location column of the Device list on the Multifunction Device Client Input screen.
14. Perform one of the following:
  - Select **OK** to add the device and return to the System Configuration screen.
  - Select the arrow button to the left of the **OK and Add Another** heading to add the device and add another device using this screen. Repeat steps 9-14.

## Setting Up an Output Manager queue to accept jobs from Multifunction Devices

Once Output Manager has been configured to accept jobs from Multifunction Devices, and those devices have been identified, queues must be designated to receive those jobs. Each queue represents a “Job Template” on the Multifunction Device. Multiple queues can be created and assigned to a single device to give walkup users different submission options. For example, two different queues could be created for a particular Multifunction Device, each with different default queue values. Each Multifunction device that is configured using the System Configuration screen can have multiple queues assigned to it.

If you have not created a specific queue to receive jobs from Multifunction Devices, create that queue now. For more information on printer and queue setup, see [Creating a queue](#) on page 13.

### Note

When naming the new queue, ensure that you assign it a name that will identify it as an Multifunction Device enabled queue. The name you assign does not have to be the name that will appear on the interface of the Multifunction Device.

### Note

If necessary, use the online help for Output Manager to create a queue for this feature.

## Setting Default Values for Queues used by Multifunction Devices

---

The the default values for the following queue attributes should be selected when configuring a queue to accept jobs from a Multifunction Device. Otherwise, the attribute description will appear as “Printer Default” on the Multifunction Device, which is not very useful to the walkup user.

- Color > Print Color As
- Output Format > Sides Imaged
- Paper Stock
- Output Format > Finishing
- Slip Sheets
- Covers

If no queue defaults are selected for the following attributes on the Output Manager Administrator GUI, the first values on the Multifunction Device drop-down widgets will be selected:

- Color > Print Color As
- Output Format > Sides Imaged
- Paper Stock
- Output Format > Finishing

When setting up Paper Stock, defaults should be selected for either the stock name or properties (holes, weight, color, type, etc..), but not both. If both are selected, the job will be faulted at the DFE or the Stock Name overrides the properties (the behavior is controller dependent).

## Configuring the Queue

---

Once a queue has been created, perform the following steps to configure it to receive jobs from Multifunction Devices:

1. Select the check box to the left of the queue that you created for Multifunction Devices.
2. Click the **Edit Queue Properties** button.
3. Select the **Multifunction Device Setup** heading to open that panel.
4. Next to the Accept Jobs from Multifunction Devices heading, select the **Enable** radio button.
5. In the **Queue Name Displayed at Device** text box, enter name that will appear on the Multifunction Device interface. This name will appear in the Job Template list of the Multifunction Device.
6. Verify that the items in the **Queue Values Displayed at Device** list are the items you want displayed at the Multifunction Device.

### Note

Because of the limited amount of space on the Multifunction Device interface, these are the only attributes that the operator may select to be displayed at the Multifunction Device.

### Note

When values are not specified at the Multifunction Device, the job will inherit the default value settings of the queue.

- If there are listed items you want to remove, or missing values, select the **Edit Values** button. To add a value, place a check mark in the box to the left of the value. To remove a value, clear the check mark. Click **OK**.
7. Next to the Provide Output Controls at Device heading, select the **Enable** radio button if you want to enable 2-sided, paper, and output finishing controls at the Multifunction Device.
  8. In the **Present This Queue at** list, select the check boxes to the left of the Multifunction devices that you want to make the queue available. Click the **Apply All Settings and Make Queue Available to Devices** button. The queue will appear in the selected devices' Job Template list.
  9. Click the **OK** button at the top right of the Multifunction Device Setup panel. You will be returned to the Queue Manager screen.

# Multifunction Device configuration

There is no specific configuration steps necessary for the Multifunction device to function.

The following steps cover how to submit a job to the Output Manager server from a Multifunction device, so that a configuration can be tested.

1. Access the Multifunction device using the username and password specified for the device.
2. Select the [Send to Production] icon on the Multifunction device display.
3. On the Send to Production screen, the Send to Production tab, look for the queue name that you specified in the **Queue Name Displayed at Device** text box when you configured the Output Manager queue. See step 5 in [Setting Up an Output Manager queue to accept jobs from Multifunction Devices](#) on page 3.
4. Enter the job settings for the job. For example, set the Quantity setting to **25**.
5. Place a document into the Multifunction device scanner and begin scanning.
6. Verify the job was received by the appropriate queue in the Output Manager Job Manager.





# Troubleshooting

# 5

This chapter contains information on troubleshooting FreeFlow Output Manager installations. The various problems that you may encounter are divided into the following sections:

- Permission problems
- Firewall problems
- LPR and IPP problems
- Remote Internet Explorer log in problems

## Permission problems

The following is a list of problems and solutions dealing with issues surrounding Output Manager permissions.

### **Log In as System Administrator**

When installing the FreeFlow Output Manager and creating the new FreeFlow Output Manager Groups and Users, make sure you are logged in as the PC system administrator.

### **Users and groups**

If the three FreeFlow Output Manager User levels do not work at the lower levels of capability from any source, make sure you have created all the lower level groups, and have typed them correctly.

### **Batch files for Hot Folders and other scripting tasks**

If the batch files used for hot folders, etc and scripting tasks work correctly when testing them, but not when called by FreeFlow Output Manager, the problem is caused by permissions problems because they were created by the PC Administrator, but are being called by Output Manager / Hot Folders (owned by FreeFlow Output Manager Administrator).

You must be PC Administrator to make the following changes:

- The PC Administrator User must be in the FreeFlow Output Manager Administrators Group,  
**and**
- The FreeFlow Output Manager Administrator USER must be in the PC Administrator Group.

## Firewall problems

If any other systems have problems accessing Output Manager using

`http://<ip-address>:8080/WebClient/Controller`

Then the page may be blocked by the firewall settings or the proxy/router settings. For **Windows Server 2003 or 2008**, perform the following to access the Firewall setting dialog:

1. Right-click on the **My Network Places** desktop icon and select **Properties**
2. Right-click on the **Local Area Connection** icon and select **Properties**.
3. Click the **Advanced** tab. Then click the **Settings..** button in the Windows Firewall area.

For **Windows Server 2012**, perform the following steps:

1. Open the Start Menu, type **Control Panel**, and press **Enter**.
2. Select [**System and Security, Windows Firewall, Turn Windows Firewall on or off**]

If the Firewall is set to **Off**:

- Messages can get through but other systems can not see the FreeFlow Output Manager server. Check the external proxy settings to determine if there are any gateways impeding communication.
- If other machines can ping the FreeFlow Output Manager server, check the proxy settings or the basic network structure and configuration.

If the Firewall is set to **On**:

- Check if there are any exceptions. If there are exceptions, check what they are. Without exceptions in the Firewall settings, other systems will not be able to talk to the FreeFlow Output Manager server. This will block any Internet Explorer access and JMF/LPR/IPP of input jobs, maybe Hot Folders shared to other users as well as Port Controller input.
- Ensure that the **Don't allow exceptions** check box is NOT checked.
- Exceptions will be for port numbers and applications such as:
  - Port 515 for LPR
  - Port 631 for IPP
  - Ports 8080, and 8443 for IE/FreeFlow Output Manager access
  - Ports 9090, and 9443 for IE/FreeFlow Accounting Module access
  - Port 7781 for JMF access
  - Port 21 for Send-To-Production/FreeFlow Output Manager access when Send-To-Production feature is enabled
  - Port Controller - Port defined in Port Controller utility
  - Application FreeFlow Output Manager CoreServices, JDF application and JAVA for applications.

## Changing port assignments

If it is necessary due to a conflict, you can assign alternate ports to Output Manager, the Accounting Module, or the Send-to-Production feature.

### Changing the Output Manager port assignments

If the HTTP and HTTPS ports 8080 and 8443 are unavailable, perform the following to reassign them:

1. Open the **Notepad** application.
2. Select **File: Open**.
3. Navigate to the <FreeFlow Output Manager installation directory>\jakarta-tomcat\webapps\WEB-INF directory and select the web.xml file. Select **Open**.
4. Locate the following entry in the file:  

```
<init-param>  
    <param-name>HttpPort</param-name>  
    <param-value>8080</param-value>  
</init-param>
```
5. Change the value between the <param-value> and </param-value> tags to an alternate port assignment for HTTP.
6. Locate the following entry in the file:  

```
<init-param>  
    <param-name>HttpsPort</param-name>  
    <param-value>8443</param-value>  
</init-param>
```
7. Change the value between the <param-value> and </param-value> tags to an alternate port assignment. for HTTPS
8. Save and close the file.

### Changing the Accounting Module port assignment

If the HTTP and HTTPS ports 9090 and 9443 are unavailable, perform the following to reassign them:

1. Open the **Notepad** application.
2. Select **File: Open**.
3. Navigate to the <FreeFlow Accounting Module installation directory>\config directory and select the Tomcat.properties file. Select **Open**.
4. Locate the following entry in the file:  

```
# HTTP PORT FOR THE SERVER TO START ON  
httpport:9090  
httpsport:9443
```
5. Change the values for the httpport and httpsport to the alternate port assignments.
6. Save and close the file.

## Changing the Send-to-Production port assignment

If the ports 21 is unavailable, perform the following to reassign it:

1. Open the **Notepad** application.
2. Select **File: Open**.
3. Navigate to the <FreeFlow Output Manager installation directory>\config directory and select the FtpSpooler.properties file. Select **Open**.
4. Locate the following entry in the file:  
**configurableFTPport=21**
5. Change the value for configurableFTPport to the alternate port assignment.
6. Save and close the file.

## Changing the FreeFlow HotFolder Service port assignment

If the ports 1099 is unavailable, perform the following to reassign it:

1. Open the **Notepad** application.
2. Select **File: Open**.
3. Navigate to the <FreeFlow Output Manager installation directory>\config directory and select the HotFolderService.properties file. Select **Open**.
4. Locate the following entry in the file: registryPort=1099
5. Change the value for registryPort to the alternate port assignment.
6. Save and close the file.

## LPR and IPP input problems

The following is a list of problems and solutions dealing with issues surrounding LPR and IPP input problems.

### Command Line LPR test

Perform the following to test the LPR input using the DOS command prompt from any PC:

1. Enter "LPR -S <OM\_ip-address> -P <OM\_Queue> <Job URI or Job Path>".
2. Determine whether any of two typical error messages appears:
  - **Error 1:** "Print server unavailable or specified printer did not exist" appears after the timeout period.
  - **Error 2:** "Print server did not accept request - job aborted" appears immediately.
3. Take steps to correct the error:
4. **For Error 1:** Check that you have the correct IP-address and you can ping the IP-address.
5. **For Error 2:** Check that you have the correct queue name AND check that the queue is enabled for input.

### LPR does not work remotely, but server can LPR itself

An LPR to FreeFlow Output Manager from any network machine fails with the error message "Print server didn't accept request. Job aborted." First check that the queues are enabled to accept jobs.

Try to LPR to FreeFlow Output Manager Queues from the server itself using commands below:

- LPR -S <ipaddress> -P <Queue> <Job>
- LPR -S localhost -P <Queue> <Job>

If both commands work, check the following:

- Check the Firewalls settings for LPR standard port 515 is used.
- Ensure that port 515 is enabled for TCP/IP:
  - a. Go to the **Exceptions** tab of the Windows Firewall dialog.
  - b. Select **port 515**. Click the **Edit...** button.
  - c. Ensure that the **TCP/IP** radio button is selected for the port.

## LPR does not work from any machine, including the server itself

In this case, LPR to FreeFlow Output Manager from any network machine does not work, but also the LPR from the FreeFlow Output Manager server itself does not work. Also, it has been verified that the queues are enabled to accept jobs. Finally, the Command Line LPR tests described above do not work.

Perform the following checks:

- Are there other applications on the server, which should not be present. They may be conflict with the function of FreeFlow Output Manager.
- There may be conflicting Windows Components or Services for Print. Perform the following:
  - a. Select **Start: Settings: Control Panel**, then double-click the **Add or Remove Programs** icon.
  - b. Click the **Add/Remove Windows Components** icon in the left side pane.
  - c. Look for the heading "Other Network File and Print Services". If there is a check mark next to the heading, deselect it. Click the **Next** button to remove the service.
  - d. Reboot the server to apply the changes.

## LPR input to the server works, but no jobs appear on the FreeFlow Output Manager queues

Sometimes even with queues enabled, LPR jobs are accepted to the system, but the jobs are never seen by FreeFlow Output Manager because some third party LPDaemon can accept any work for any queue name on the system but just sends the data to nowhere.

If something else is receiving the LPR requests and not letting FreeFlow Output Manager see the input, check if a Windows printer is shared. Also, check what queue names are being used for this share.

- Determine the following:
- You can only have one (1) LP Daemon running on a system. If you have two, they will create a conflict.
- Ensure you are only running FreeFlow Output Manager on the server and no other FreeFlow or other products which could cause conflicts. Minor and major conflicts between some products and Output Manager have been observed.
- Ensure that no LPR/LPD tools are installed on the same system as FreeFlow Output Manager.

## No Internet Explorer log in for any remote users

The Console on the server using Internet Explorer (IE) works, but no level of IE access is available from any other system. Yet, there are no Firewall or Network blocks to communications. In these cases, other Windows options may be impeding IE requests.

Check that the Internet Information Service (IIS) is inactive in the Windows Components on the server.

## “?????” or “---” displayed as the Send-to-Production icon for a Multifunction device

A multifunction device that has been previously registered on a FreeFlow Output Manager system may display an icon as “?????” or “---”. This can be caused by a multifunction device that has lost its connection to the FreeFlow Output Manager, or it has not been properly deleted from the FreeFlow Output Manager. If the multifunction device is no longer used or needed, an administrator should delete the multifunction device via the FreeFlow Output Manager **System Configuration** page.

1. Open the FreeFlow Output Manager application and log in as a member of the **Xerox FreeFlow Output Manager System Administrators** group.
2. Select the **System Configuration** link at the top of the right of the page.
3. Select the **Multifunction Device Input Client Setup** link heading.
4. Select the check box(s) to the left of the multifunction device(s) you wish to delete.
5. Select the **Delete Device** button.
6. Select **Yes** at the confirmation dialog.

### Note

Before moving or changing the IP address of a FreeFlow Output Manager server, always delete all its associating multifunction devices. In order to remove a multifunction device that is associated to an obsolete FreeFlow Output Manager, a FreeFlow Output Manager command can be used. Please refer to *FreeFlow Output Manager Command Line Users Guide*, the **xomdelreg** command.

## HotFolder Service and Client/ Administration GUI

The following errors may occur with HotFolder Service and Client Administration. Refer to Online Help for more information.

- **Error "Cannot connect to Hot Folder Service."**  
The HotFolder Administration GUI may display a dialog window to indicate there is a communication problem between the HotFolder Service and its administration GUI. Refer to the Online Help topic "Hot Folder tips".
- **Jobs submitted from Hot Folder has "SYSTEM" as Sender.**  
The Hot Folder Service is running as the "SYSTEM" default user ID. To change the default user ID for Hot Folder Service, refer to the Online Help topic "Hot Folder tips".
- **Remote Hot Folder is not recognized or accessible**  
The Hot Folder Administration GUI does not recognize a remote hot folder. Refer to the Online Help topic "Hot Folder tips" to configure a remote hot folder.
- **Hot Folder processing script fails on remote hot folder**  
The processing fails on a remote hot folder which may be caused by not having sufficient access. Choose a different processing program to solve the problem. Refer to the Online Help topic "Configuring the Default Processing Template".



# Configuring Options for JMF Service Communication

This chapter contains information on configuring the Proxy Server settings for remote file reference & various signals.

## Proxy Server settings

If a proxy server is required to retrieve files using http file reference by the Output Manager, the settings to the proxy server must be configured.

1. Access a text editor application on the system (for example, Notepad).
2. Open the "Jdfjmgateway.properties" file in the text editor. The file is located in the C:\Program Files\Xerox\FreeFlow Output Manager\config directory.

### Note

For installations on Windows 2008 R2 or 2012, the directory will be C:\Program Files (x86)\Xerox\FreeFlow Output Manager.

3. Locate the entry "proxyHost=" in the file. Enter the IP Address or server name for the proxy host following the equals sign.
4. Locate the entry "proxyPort=" in the file. Enter the port number for the proxy host following the equals sign.
5. Save and close the file.
6. Right-Click on the **My Computer** icon and select **Manage** to open the Computer Management applet.
7. Expand the Services and Applications heading, then select **Services**.
8. In the list of services, locate the "FFOM\_CoreService" service.
9. Right-click on the service and select **Restart**.
10. Locate the "FFOM\_JMFService" service in the list, right-click and select **Restart**.

## SendStatus signal retry/delay settings

If number of retries of delay between retries for the ReturnQueueEntry signal need to be modified, the following settings are configured.

1. Access a text editor application on the system (for example, Notepad).
2. Open the "Jdfjmfgateway.properties" file in the text editor. The file is located in the C:\Program Files\Xerox\FreeFlow Output Manager\config directory.

### Note

For installations on Windows 2008 R2 or 2012, the directory will be C:\Program Files (x86)\Xerox\FreeFlow Output Manager.

3. Locate the entry "RQERetries=" in the file. Enter a number for the number of retries following the equals sign.
4. Locate the entry "RQERetryDelay=" in the file. Enter a number in seconds for the delay between each retry following the equals sign.
5. Save and close the file.
6. Right-Click on the **My Computer** icon and select **Manage** to open the Computer Management applet.
7. Expand the Services and Applications heading, then select **Services**.
8. In the list of services, locate the "FFOM\_CoreService" service.
9. Right-click on the service and select **Restart**.
10. Locate the "FFOM\_JMFService" service in the list, right-click and select **Restart**.



# Patch Installation

From time to time it may be necessary to install a software patch to the FreeFlow Output Manager software. This chapter describes the procedures for installing a patch to FreeFlow Output Manager.

## Installing a patch to FreeFlow Output Manager on Windows

This section details the software patch installation instructions for the Windows version of the software.

### Installing the FreeFlow Output Manager software patch

In order to install the FreeFlow Output Manager patch, you must be logged in as a user with Windows Administrator rights.

To install the software patch:

1. Start the FreeFlow Output Manager software patch by double-clicking on the **.exe** file.
2. At the splash screen, select the appropriate language from the pull-down menu and click **OK**.
3. At the Xerox FreeFlow Output Manager Introduction screen, click **Next**.
4. At the pre-installation summary screen, click **Install**. The installation of FreeFlow Output Manager patch begins.
5. After the installation is complete, ensure that the **Yes, restart my system** radio button is selected.
6. Click **Done**. The system reboots.





