

## How to Set Up File Server Proxy for Forward and Reverse Proxy

## Abstract

Informatica File Server Proxy allows trading partners a secure communication to your organization without keeping any sensitive information in the demilitarized zone (DMZ) or opening incoming ports into your private network. This article provides detailed information about how to set up Informatica File Server Proxy for forward and reverse proxy.

## Supported Versions

- B2B Data Exchange 10.4.0

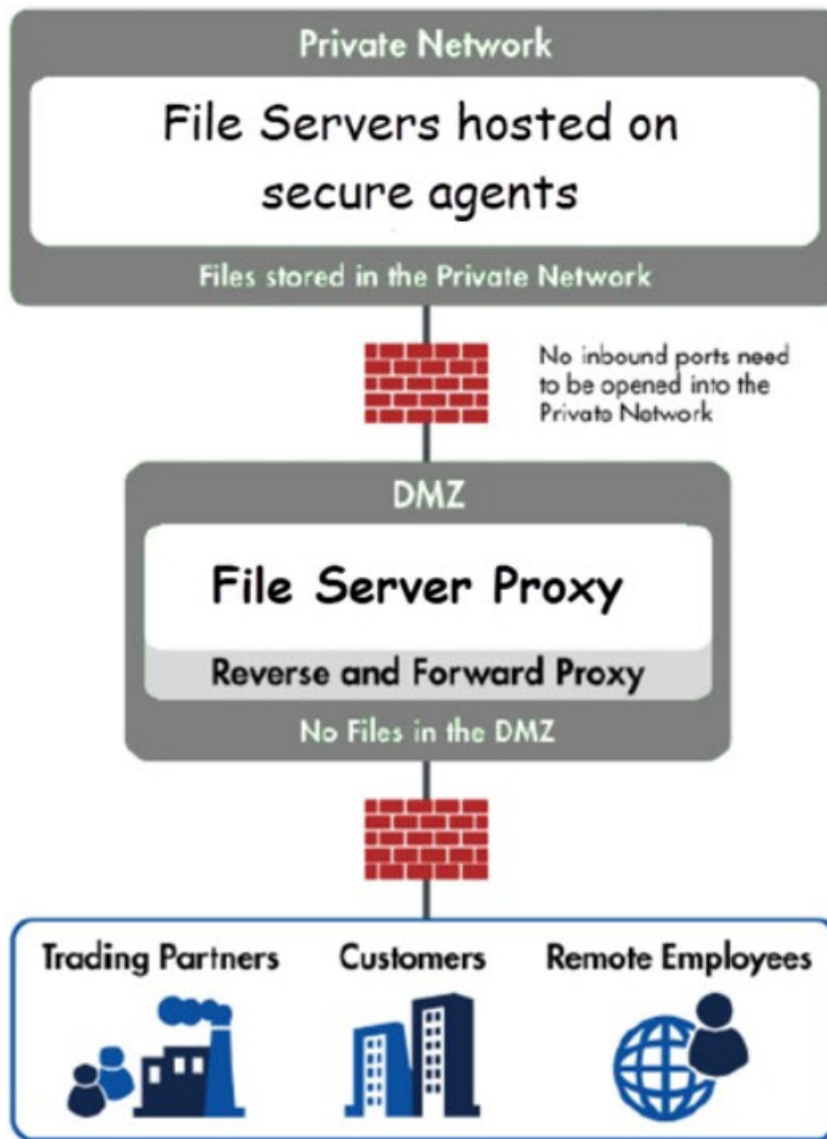
## Table of Contents

Overview. . . . .	2
Introduction. . . . .	3
Setting Up File Server Proxy for Reverse Proxy. . . . .	4
File Servers. . . . .	4
Proxy Configuration. . . . .	4
Proxy Server Actions. . . . .	7
Setting Up File Server Proxy for Forward Proxy. . . . .	7
AS2 Connector. . . . .	8
Configure the Proxy Tab for FTP and FTPS Connector. . . . .	9
Configuring the Proxy Tab for SFTP Connector. . . . .	10

## Overview

Informatica File Server proxy allows your organization to securely communicate and exchange files with remote partners without storing any sensitive information in the DMZ or opening incoming ports into your private network.

The following image shows a model of secure communications using the File Server proxy:



## Introduction

Informatica File Server proxy includes the following features:

- Load balancing when multiple File Server systems are running in a clustered configuration.
- Incoming ports are not opened into the private network.
- Files are not stored in the DMZ.
- User credentials and permissions are maintained and stored on the private network.
- Service configurations are maintained and stored on the private network .
- Supports AS2, SFTP, FTP, and FTPs file transfer protocols.
- Available as a software-only solution.
- Installs on Windows and Linux operating systems.

## Setting Up File Server Proxy for Reverse Proxy

You can configure Informatica File Server Proxy as a reverse proxy. When you use Informatica File Server Proxy as a reverse proxy, the Informatica File Server Proxy does not open the inbound ports into the internal network and does not store sensitive data in the DMZ.

Perform the following steps to set up Informatica File Server Proxy as a reverse proxy:

1. Add a new Proxy configuration.
2. Configure the Proxy Server parameters.

You can also perform a Proxy Server action to edit, start, or delete a proxy configuration.

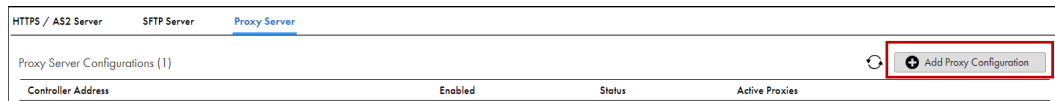
### File Servers

Use the File Servers to control the Informatica File Server Proxy connection and view the current status of the File Server Proxy servers. When File Server is running in a cluster configuration, the service mappings for each system in the cluster are displayed in the File Servers.

Perform the following steps to add a new Proxy configuration:

1. To manage the file server, log in as an Administrator User with the **Product Administrator** role.
2. From the main menu bar, select **File Servers** and then click the **Proxy Server** tab.

The following image shows the **Proxy Server** page:



3. Click **Add Proxy Configuration** to add a new proxy.

### Proxy Configuration

The Proxy Server Configuration page contains the operating parameters and service mappings for File Server Proxy.

Configure the proxy parameters and service mappings for File Server.

The following table describes the Proxy Server Configuration parameters:

Gateway Configuration parameter	Description
Enabled	Indicates whether Informatica File Server Proxy is enabled. By default, Informatica File Server Proxy is enabled.
Controller Address	The IP address of the server running the Informatica File Server Proxy server component. The IP address must match the controller address defined in the <code>proxy.xml</code> file on the Informatica File Server Proxy server.
Controller Port	The port on which Informatica File Server Proxy listens for incoming control connections. The default port is 9100 and must match the port defined in the <code>proxy.xml</code> file on the Informatica File Server Proxy server.
Minimum Number of Threads	The minimum number of threads reserved for connections to Informatica File Server Proxy. Default is 10.

Gateway Configuration parameter	Description
Maximum Number of Threads	<p>The maximum number of threads that can be used for connections to Informatica File Server Proxy. This determines the maximum number of simultaneous requests that can be handled. Default is 2000.</p> <p><b>Note:</b> Changing the thread values can alter the performance. Modify the thread values to obtain the optimal performance for your configuration requirements.</p>
Thread Keep Alive Time	<p>The amount of time that an idle thread waits before it is released. Default is 60 seconds.</p> <p><b>Note:</b> Increasing the value might cause a higher CPU and memory usage on the server. However, the connections start faster because they do not need to create new threads frequently.</p>

Gateway Configuration parameter	Description
Service Mappings	<p>Each service such as FTP, FTPS, AS2, and SFTP is mapped from Informatica File Server Proxy to the corresponding service in Informatica File Server. When a control connection is established, the mappings are sent to the Informatica File Server proxy server.</p> <p>Informatica File Server Proxy listens for incoming connections on the <b>From Address</b> and <b>From Port</b> for each service mapping.</p> <p>When a connection occurs, Informatica File Server Proxy forwards the traffic to File Server based on the <b>To Address</b> and <b>To Port</b> service mappings.</p> <p>If more service mappings are needed, for example, more than one listener for a particular service, click <b>Add</b> to add a new service mapping entry row. If a service mapping is no longer needed, click the icon to delete the corresponding service mapping.</p>
Add service mapping	<p>The Add service mapping contains the following parameters:</p> <p><b>Label</b></p> <p>An identifier for the service mapping.</p> <p><b>From Address</b></p> <p>The IP address that Informatica File Server Proxy uses to listen on for incoming traffic. Optionally leave the From Address field blank to use the Controller Address as the bind address for client connections on that particular mapping.</p> <p><b>From Port</b></p> <p>The port that Informatica File Server Proxy uses to listen on for incoming connections. The standard ports are 21 for FTP, 990 for FTPS, 22 for SFTP, and 443 for AS2.</p> <p><b>To Address</b></p> <p>The IP address of the local File Server system.</p> <p><b>To Port</b></p> <p>The port that the service listener uses for a specific service on the File Server system.</p> <p><b>Load Balancer Rule</b></p> <p>The Informatica File Server Proxy uses the Load Balancer Rule to configure the load balancing for each service mapping. This rule is defined in Informatica File Server proxy and should be round-robin for FTP, FTPS, and SFTP protocols. For AS2, the Load Balancer Rule should be IP-based round-robin that routes traffic from specific IP addresses for a period of time to a single system.</p> <p>By default, use the <code>default</code> rule for FTP, FTPS and SFTP.</p> <p>Use the <code>https</code> rule for AS2.</p> <p>Changes made to the Service Mappings take effect the next time the connection to the File Integration Service Proxy is reset.</p> <p>To reset the connection, click <b>Cancel</b> and then the <b>Save</b> button on the <b>Proxy Server Configuration</b> page.</p>

The following image shows the **Proxy Server Configuration** page:

**Proxy Server Configuration**

Enabled:  Yes  No

Controller Address: \*

Controller Port: \* 9100

Minimum Number of Threads: \* 10

Maximum Number of Threads: \* 2000


Thread Keep Alive Time: \* 60

Service Mappings (0) + Add

Label	From Address	From Port	To Address	To Port	Load Balancer Rule

Save Cancel

## Proxy Server Actions

You can perform the following actions by selecting the  Actions icon:

- Click **Edit** to edit a Proxy Configuration.
- Click **Delete** to delete a Proxy Configuration.
- Click **Start** to start a Proxy Configuration.

The following image shows the Proxy Server actions:

HTTPS / AS2 Server   SFTP Server   Proxy Server

Proxy Server Configurations (1) + Add Proxy Configuration

Controller Address	Enabled	Status	Active Proxies
10.80.27.202:9100	No	DISCONNECTED	

Edit  
Delete  
Start

## Setting Up File Server Proxy for Forward Proxy

You can configure Informatica File Server Proxy as a forward proxy in the **Administrator > Connections** page. When you use Informatica File Server Proxy as a forward proxy for outbound connections, the Informatica File Server Proxy hides the identities and locations of the internal systems.

Perform the following actions to set up Informatica File Server Proxy as a forward proxy:

- Configure the proxy tab for AS2 connector.
- Configure the proxy tab for FTP/FTPS connector.
- Configure the proxy tab for SFTP connector.

## AS2 Connector

The AS2 connector is used to specify the settings to use when messages are sent using the AS2 1.2 specification. AS2 is a standard originally created to securely transfer EDI documents, but it can also be used to transmit virtually any file type. The messages are structured using the standard S/MIME format and are sent over HTTP(S) connections.

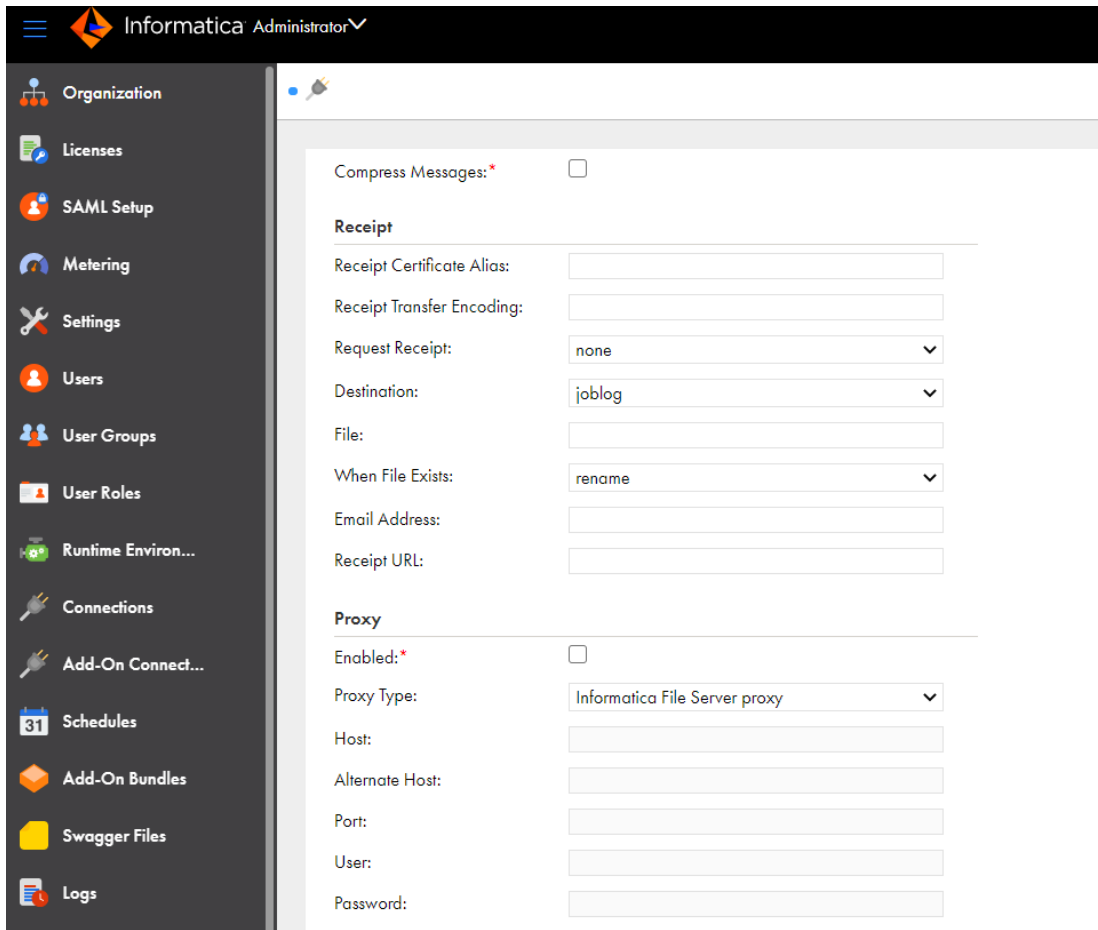
Configure the following fields in the **Proxy** section to set up Informatica File Server proxy for forward proxy:

Proxy field	Description
Enabled	Indicates whether Informatica File Server proxy is enabled.
Proxy Type	File Server supports SOCKS (version 4 and 5), HTTP tunneling through an HTTP proxy, and Informatica File Server proxy. Check with the network administrator for the correct proxy type.
Host	The host name or IP address of the proxy server on your network.
Alternate Host	The host name or IP address of an alternate proxy server. The alternate proxy server is used when the primary proxy server is unavailable.
Port	The port number to use for connecting to the proxy server. The default port for an HTTP connection is 80 and SOCKS is 1080.
User	The user name to use to connect to the proxy server.
Password	The password to use to connect to the proxy server. Required if your network uses a proxy server to make HTTP(S) connections. After entering the password, you can optionally click the <b>Encrypt</b> button which will encrypt the password when it is stored in the File Server database.

**Note:** The options are only needed if your system uses a proxy server to make HTTP(S) connections.

The following image shows the fields that you need to configure in the **Proxy** section:





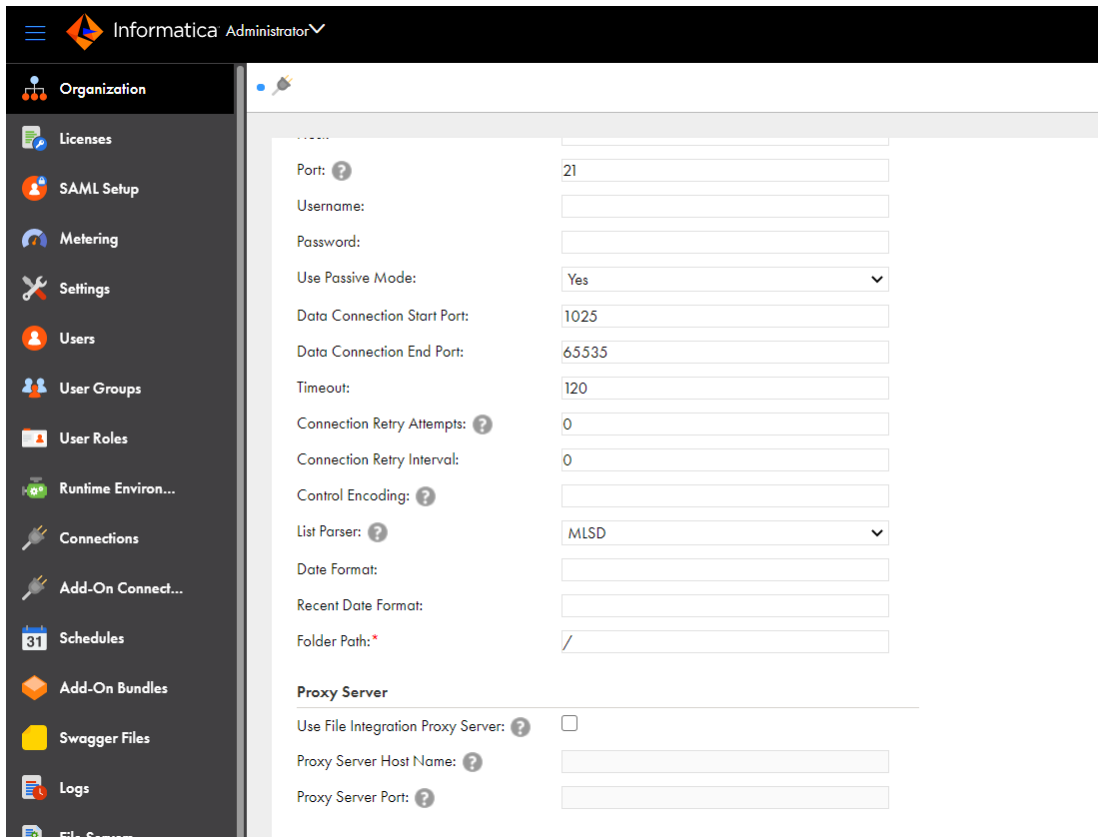
## Configure the Proxy Tab for FTP and FTPS Connector

The File Transfer Protocol (FTP) and File Transfer Protocol Secure (FTPS) protocols are used to transfer files between clients and servers over the Internet.

Configure the following fields in the **Proxy** section to set up Informatica File Server proxy for forward proxy:

Proxy Tab field	Description
Use File Integration Proxy Server	The connector connects to the FTP or FTPS server through the file integration proxy server. Check with the network administrator for the correct proxy type.
Proxy Server Host Name	The host name or IP address of the outgoing File Server proxy server.
Proxy Server Port	The port number of the outgoing File Server proxy server .

The following image shows the fields that you need to configure in the Proxy section:



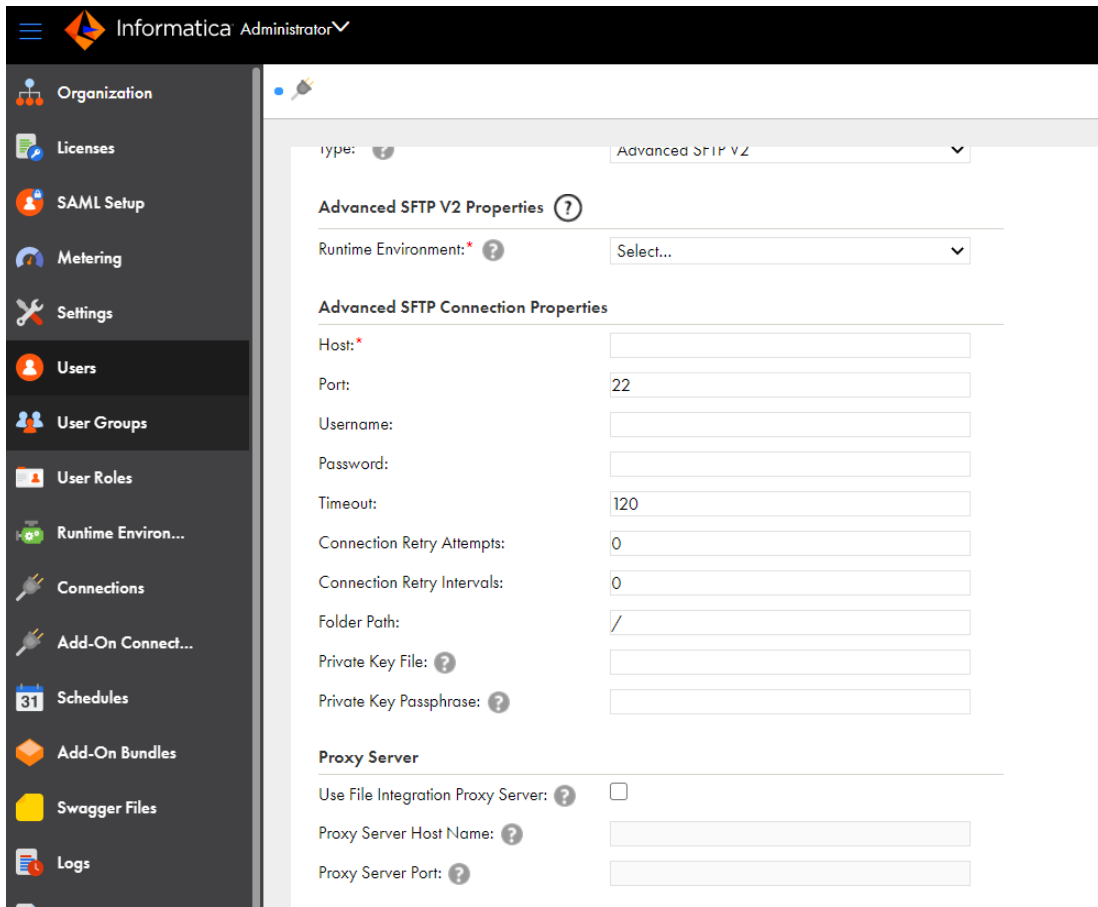
## Configuring the Proxy Tab for SFTP Connector

Informatica File Server proxy can connect to SSH Servers for performing SFTP transfers, SCP (Secure Copy) file transfers, and for running SSH remote commands. When you define an SSH Server resource in File Server proxy, indicate the connection properties such as the host name or IP address, and User ID. You can specify a password, SSH private key, or both for authentication.

Configure the following fields in the **Proxy** section to set up Informatica File Server proxy for forward proxy:

Proxy	Description
Use File Integration Proxy Server	The connector connects to the SFTP server through the file integration proxy server. Check with the network administrator for the correct proxy type.
Proxy Server Host Name	The host name or IP address of the outgoing File Server proxy server. <b>Note:</b> If the Proxy Type or Host fields are blank, there is a direct connection to the target host.
Proxy Server Port	The port number of the outgoing File Server proxy server.

The following image shows the fields that you need to configure in the Proxy section:



## Author

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