



# **TIBCO® Managed File Transfer Internet Server**

## **Security Guide**

*Version 8.4.2  
April 2022*



# Contents

---

<b>Contents</b> .....	<b>2</b>
<b>Introduction</b> .....	<b>3</b>
<b>Security Features</b> .....	<b>4</b>
FTP Connections .....	4
Platform Server Security .....	6
OFTP2 Security .....	6
PGP Encryption .....	7
Miscellaneous Security Features .....	8
<b>Security Tasks</b> .....	<b>13</b>
Installation .....	13
Server Configurations .....	24
<b>TIBCO Documentation and Support Services</b> .....	<b>26</b>
<b>Legal and Third-Party Notices</b> .....	<b>28</b>

# Introduction

---

MFT Internet Server is the TIBCO® Managed File Transfer Internet Server product. MFT Internet Server is the file transfer component. MFT Internet Server supports many open protocols, and it also supports the Platform Server protocol. MFT Internet Server has an administrative component that allows you to configure all of the parameters (users, servers, transfers) to allow file transfers to execute. For additional capabilities, you can install MFT Command Center. MFT Internet Server can be installed in the DMZ or in the internal network; when executing in the DMZ, you must disable the administrative capability because it allows you to configure Internet Server transfers.

This document describes guidelines to ensure security within TIBCO Managed File Transfer (MFT) Internet Server. It provides security-related guidance and recommendations for installation, configuration, and execution of file transfers.

# Security Features

---

TIBCO Managed File Transfer Internet Server provides many features that enhance security. Here is a summary of these features. These features are discussed in more detail later in the document.

- [FTP Connections](#)
- [Platform Server Security](#)
- [OFTP2 Security](#)
- [PGP Encryption](#)
- [Miscellaneous Security Features](#)

**i Note:** FTP Connections, Platform Server Security, OFTP2 Security, and PGP Encryption can be configured in Command Center but are typically only used in Internet Server.

## FTP Connections

You can secure FTP connections for incoming and outgoing requests.

### MFT FTP Service

Parameters in the following admin page can help to lock down the FTP protocol for incoming FTP requests:

**Administration > Transfer Servers > FTP Server > Configure FTP Server**

Parameter	Description
PORT/EPRT Allowed in Incoming Request	Defines whether incoming PORT or EPRT connections are allowed. You can disable PORT/EPRT by clicking on

Parameter	Description
	"No".
PORT Checking	Defines whether any checking is performed on the IP Address sent by the client in the PORT request. We suggest setting this parameter to "Subnet" or "IP Address".
PASV Checking	Defines whether any checking is performed on the IP Address of the connection created by the PASV command. We suggest setting this parameter to "Subnet" or "IP Address".

Refer to the MFT Admin help pages for more information on these parameters.

## MFT Server Definitions with Server Type of FTP

Parameters in the **Add/Update Server** page can help to lock down the FTP protocol for outgoing FTP requests.

Parameter	Description
PORT Checking	Defines whether any checking is performed on the IP Address of the connection created by the PORT command. We suggest setting this parameter to "Subnet" or "IP Address".
PASV Checking	Defines whether any checking is performed on the IP Address sent by the client in the PASV request. We suggest setting this parameter to "Subnet" or "IP Address".

Refer to the MFT Admin help pages for more information on these parameters.

# Platform Server Security

MFT supports the following modes of operation for incoming and outgoing Platform Server requests. This is for both file transfer requests and administrative requests such as audit collection, server status and node and profile updates.

1. Clear text mode. The password is encrypted using a proprietary encryption algorithm but the data is not encrypted.
2. AES 256 encryption. The password and data are encrypted using AES256. The asymmetric encryption key is generated through an algorithm on both the client and server.
3. SSL (or TLS) mode. MFT Establishes an SSL connection with the Partner Server. A symmetric AES 256 encryption key is exchanged through the secure TLS connection. MFT uses this AES256 encryption key to encrypt and decrypt all data. MFT also adds a message digest and sequence number to each record to prevent man in the middle attacks.
4. Tunnel Mode. All data is sent over a negotiated TLS connection. Each transfer creates a new TLS connection.

Tunnel Mode is the most secure option and is strongly suggested when communicating to partners over the internet. Tunnel Mode requires MFT Internet Server V8.2 and MFT Platform Server V8.0 or higher.

## OFTP2 Security

OFTP2 allows you to transfer files in TLS and non-TLS mode. When using non-TLS mode, you can encrypt the data. Nonetheless, we suggest only supporting TLS Mode when performing OFTP Transfers.

To support only OFTP2 in TLS mode, complete the following steps.

### Procedure

1. Go to **Administration > Transfer Servers > OFTP2 Server > Configure OFTP2 Server**.
2. Enter the TLS Port. All communication over this port is encrypted in a TLS session.



**Caution:** Do not enter the IP Port. This is the clear text port.

3. In the **OFTP2 Options > Outgoing Parameters**, set **Use TLS** to Yes.

## PGP Encryption

TIBCO MFT Internet Server supports PGP in a streamed mode.

PGP is important in two ways:

1. It provides an additional level of encryption above what is provided in the file transfer protocol.
2. It can validate the identity of the user or server that created the file.

Whenever you are transferring any personal data, financial data or any data that must be secured, we suggest using PGP encrypting the data prior before being transferred over a network connection. This is particularly important when transferring data over an unsecured FTP connection.

MFT has the following PGP capabilities:

- For incoming File Upload requests
  - Decrypt the PGP data
  - Verify the signature of the PGP data
- For incoming File Download requests
  - Encrypt the PGP data
  - Add a signature to the PGP data
- For Outgoing Upload requests to a target Server
  - Encrypt the PGP data
  - Add a signature to the PGP data
- For outgoing File Download requests
  - Decrypt the PGP data
  - Verify the signature of the PGP data

# Miscellaneous Security Features

Follow these general recommendations to secure TIBCO MFT Internet Server.

## Java System Security

Use the newest Java JDK that is supported by the product.

Do not use GNU Java that is shipped with some Linux instances. Use Oracle Java or IBM Java that is appropriate for your MFT instance.

## Setting Cookies to HTTPOnly

By default, HTTPOnly is not set for MFT server generated cookies. Cookies created by the MFT Application will be set to HTTPOnly when the cookie is not used by client javascript code. Cookies that do not specify HTTPOnly contain no security or private information.

Set the `usehttponly` parameter in the `cfcc.xml` file which is located in the `MFTIS_Install/server/conf/catalina/localhost` directory to true.

## Configuring the Session Timeout

The session timeout is set to 30 minutes by default. This is good for most installations. If you need to lower this, you must make the following two changes: :

- The `session-timeout` parameter in the `web.xml` file located in the `MFTIS_install/server/conf` directory
- The `SessionTimeout` parameter in the `web.xml` file located in the `MFTIS_install/webapps/cfcc/WEB-INF` directory

## Certificate Authentication

MFT supports certificate authentication for the following protocols:

- Platform Server SSL and Platform Server Tunnel
- SFTP
- FTPS
- HTTPS



- OFTP2

Whenever possible, use certificate authentication. Certificate authentication is relatively simple to set up on SFTP, Platform Server, and FTPS. It is much more complicated on HTTPS, because you need to update the certificate manager and select a certificate for the browser. Because of the difficulty in implementing HTTPS certificate authentication, it is good practice not to use this.

HTTPS can be secured using an SSO (Single SignOn) connection. See the Single SignOn Support section for more detail.

OFTP2 does not perform certificate authentication. However, you can set the **Configure OFTP2 Server > Require Client Certificate** to Yes to require the client to send a certificate that is validated by the MFT OFTP2 server.

## Two factor Authentication

MFT supports multi-factor authentication in the following ways:

1. By requiring users to log in with a password and with a key or a certificate. This is support for multiple incoming protocols, including FTPS, SFTP, Platform Server, and HTTPS.
2. When using HTTPS, MFT supports OIDC and SAML. SAML and OIDC are described in more detail in the topic titled "Single SignOn Support".

## Restrict IP Addresses

Internet Server and Command Center provides two ways to restrict usage based on IP Address:

- **User Definition:** You can restrict that users can only log in from specific IP Address or IP Address subnets.
- **Transfer Definition:** You can restrict that transfer definitions can only be used when the user logs in from specific IP Address or IP Address subnets.
- Note: When a load balancer is used, these restrictions apply:
  - **HTTP/HTTPS:** You should use the `web.xml LoadBalancerIPAddressList` parameter with the IP addresses of all Load Balancers. This will extract the originating IP Address from the HTTP X-Forwarded-For header.
  - **FTP/FTPS, SFTP, Platform Server:** The `LoadBalancerIPAddressList`

parameter does not work since there is no way for the load balancers to specify the originating IP address. Some load balancers can be configured to use the originating IP address when connecting to Internet Server. When the load balancer uses the originating IP address when connecting to Internet Server, these parameters can be used.

## Single SignOn Support

MFT Supports two methods of Single SignOn for HTTPS clients: OIDC (OpenID Connect) and SAML (Secure Access Markup Language). OIDC is a newer SSO protocol and is simpler to configure than SAML. When possible, we suggest using OIDC instead of SAML.

**OIDC:** OIDC is built on the OAuth2 protocol and allows https clients to verify the identity of users based on the authentication performed by an authorization server. MFT supports multiple OIDC servers in an MFT cluster. For example, you could create an OIDC server for internal users and a separate OIDC server for external users.

**SAML:** SAML is an open standard for exchanging authentication and authorization data between an identity provider (SAML server) and a service provider (MFT). It allows browser clients to authenticate to the SAML Identity Provider and the security assertions are sent to MFT. Only one SAML server is supported by an MFT cluster.

There are three `web.xml` parameters that allow you to enforce that users use OIDC or SAML. See User's Guide for more information on the following parameters:

- `SSOLoginRequired`
- `SSOExcludedUsers`
- `SSOAllowRest`

## Users/Passwords

After the product is installed,

- Change the password for the administrator and for other predefined users.
- Disable any predefined users that you do not use.
- Optional: Configure time of a day and days of the week that users can access the system.
- Optional: Configure an IP address for a user that limits the user to log on to MFT only from that IP address.

- Set the System Configuration: Global Settings: Email Template Settings Login from Different IP Template parameter so that MFT sends an email if the user logs on with a different IP address. MFT saves the last 10 IP addresses that the user logged on from. If the user logs on with a different IP address, an email is sent to the user, assuming the user is configured with an email address. See the System Configuration help page for more information on this parameter.

## Anonymous Access

You must not give anonymous users rights to upload or download sensitive data.

## End User Education

- When the browser offers to save MFT password, you should select No.
- After using MFT, you have to log off and close the browser.
- You should not use MFT and browse other websites at the same time.

## Security

- For SSH, we recommend that all partners use SHA-256/384/512 with a key size of 2048 bits or higher.
- For PGP, we recommend that all partners use SHA-256/384/512 with a key size of 2048 bits or higher.

## Recaptcha Support

MFT can be configured to support ReCaptcha. ReCaptcha is a Captcha service that allows web servers to distinguish between human and automated access to a web site. ReCaptcha can be configured for the following pages:

- Logon
- Forgot User
- Forgot Password
- Self Register

ReCaptcha is configured in the **Configuration > System Configuration > Recaptcha Settings** tab. By default, ReCaptcha is disabled.

## SSH Algorithms

MFT allows you to define SSH Algorithm Groups and assign the algorithm groups to individual servers and to the SSH Listener service. Algorithm Groups are defined by the **Management > SSH Algorithm Group** pages.

SSH Algorithm Groups can be assigned in the following ways:

- **System Configuration > SSH settings:** This acts as the default value
- **Administration > Transfer Servers > SSH Server > Configure SSH Server:** This overrides the system configuration and is used for incoming SSH Connections.
- **Partners > Servers > Add Server > SSH Properties:** This overrides the system configuration and is used for outgoing SSH Connections.

# Security Tasks

---

It is a good practice to perform security-related tasks mentioned in these sections:


- [Installation](#)
- [Server Configurations](#)

## Installation

You can follow the following recommendations to secure TIBCO MFT Internet Server at installation.

### Installation User on UNIX

Install as a non-root or an unprivileged user. If you want to use ports below 1025, use the UNIX iptables command to redirect these ports to ports 8443 and 8080. See *Network section in the Installation Guide* for more details on redirecting ports.

 **Note:** Some FTP Clients fail when connecting to MFT in a non-root environment due to the way that the FTP Protocol works. We recommend using the SFTP/SSH protocol in these cases.

Provide only the necessary rights to update the `MFT_Install` directory and any directories where `*LOCAL` files are saved.

### Installation User on Windows

Install as a normal user, for example: Non Administrator. Normal users can use ports below 1024.

Provide only the necessary rights to update the `MFT_Install` directory and any directories where `*LOCAL` files are saved.

## Securing the JDBC connection

If possible, configure the JDBC driver to use SSL/TLS. Contact your database administrator for instructions on how to do this.

## Using Secure Ciphers

During the installation process, you are prompted to select the TLS/SSL Ciphers used. There are three options:


1. Most Secure ciphers (excludes CBC ciphers)
2. All Secure ciphers (includes CBC ciphers)
3. All ciphers

We suggest using the default value of "Most Secure Ciphers (excludes CBC Ciphers)". This ensures that the most secure ciphers are accepted during TLS/SSL negotiation. This applies to all the following TLS/SSL processing:

- HTTPS connections
- FTPS connections
- Platform Server TLS/SSL and Tunnel connections
- OFTP2 TLS connections

The HTTPS ciphers are then set in: `<MFT-Install>/server/conf/server.xml`

TLS Ciphers used by FTPS, Platform Server, and OFTP2 are defined in: `<MFT-Install>/server/webapps/cfcc/WEB-INF/web.xml`

 **Note:** By default, only TLSv1.2 is enabled.

## Perfect Forward Secrecy

Perfect forward secrecy is an encryption feature whereby the keys used to encrypt data are changed on a frequent basis. If a key is compromised, a limited amount of information can be decrypted.

To implement Perfect Forward Secrecy on the HTTPS connection, complete the following steps.

### Procedure

1. Edit the server.xml:

```
<MFT-Install>/server/conf/server.xml
```

2. Locate the ciphers parameter for the HTTPS connector.
3. Remove all ciphers starting with "TLS\_RSA" and "TLS\_ECDH\_".
4. Restart the MFT Server.



**Note:** Keep the cipher starting with "TLS\_ECDHE"

## Admin Service

Do not install the MFT Admin service or MFT Internet Servers on computers located in the DMZ. Do not install Internet Server with the Admin service enabled in the DMZ. Only install the MFT Admin service on computers in the internal network. We suggest using the MFT Command Center to perform all admin functions and to disable the admin service on all MFT Internet Server instances.

## HTTPS Certificate

Purchase an HTTPS SSL certificate from a well-known certificate authority. The default certificate is a self-signed certificate, which will prompt the browser users a warning that the certificate is not trusted. When creating a keystore, use a strong password instead of the default password.

## Use SFTP/SSH instead of FTP

We suggest using the SFTP protocol instead of using FTP or FTPS. While FTPS is a secure protocol, it is difficult to configure firewalls and load balancers due to the FTP requirement for Control and Data connections.

Additionally, it is difficult getting FTP and FTPS working in the cloud. If you are considering moving to the cloud, FTP/FTPS client and server transfers should be migrated to SFTP/SSH.

## server.xml Parameters

There are a variety of `server.xml` parameters that affect security mentioned in the following sections.

Parameter	Description
<code>allowHostHeaderMismatch</code>	<p>This parameter defines whether the MFT server must reject requests that specify a host in the request line but specify a different host in the host header. This can occur when a customer is using the MFT File Transfer CLI (Command Line Interface) or has created an internal application using file: <code>NonGUIApplet_0.0.0.1.jar</code> Or <code>JavaApplet_0.0.0.1.jar</code>.</p> <p>The problem occurs when an older version of <code>NonGUIApplet_0.0.0.1.jar</code> Or <code>JavaApplet_0.0.0.1.jar</code> is used. MFT releases prior to 8.2.1 do not set the header value correctly and transfers fail if the value is set to false. If the following are all true, then you can set this value to false:</p> <ul style="list-style-type: none"> <li>• You do not use the MFT FT File Transfer CLI.</li> <li>• You use the MFT FT File Transfer CLI, but are using the FT Command Line distributed with MFT V8.2.1 or above.</li> <li>• You have not created any file transfer applications using files <code>NonGUIApplet_0.0.0.1.jar</code> Or <code>JavaApplet_0.0.0.1.jar</code>.</li> <li>• You have created file transfer applications using file <code>NonGUIApplet_0.0.0.1.jar</code> or <code>JavaApplet_0.0.0.1.jar</code> but you are using versions of these files from MFT 8.2.1 or above.</li> </ul> <p>Valid values are:</p>



Parameter	Description
	<ul style="list-style-type: none"> <li>• false: MFT rejects requests where the header host name does not match the host in the request line. This causes problems if older versions of the file transfer jar files (NonGUIApplet_0.0.0.1.jar or JavaApplet_0.0.0.1.jar ) are used.</li> <li>• true: MFT will accept requests where the header host name does not match the host in the request line. This will allow older versions of the file transfer jar files (NonGUIApplet_0.0.0.1.jar or JavaApplet_0.0.0.1.jar ) to be used.</li> </ul> <p>This is the default value for MFT 8.2.1, but may be changed to false in a future release.</p>
clientAuth	<p>This parameter defines whether the MFT Server supports https certificate authentication. Valid values are:</p> <ul style="list-style-type: none"> <li>• false: Certificate authentication is not supported. This is the default value.</li> <li>• want: Certificates are requested from HTTPS client, but are not required. This is the value that we suggest sign when you want to perform HTTPS Certificate Authentication.</li> <li>• true: Certificates are required for HTTPS requests. But MFT can still use certificate or password authentication, based on the System Configuration HTTPS Client Authentication Method parameter definition. Browser, REST, or Command Line clients that do not have a certificate cannot log in.</li> </ul>
ciphers	<p>This parameter defines the TLS ciphers that are supported. The MFT installation fills in this field with</p>

Parameter	Description
	secure ciphers. But you may want to limit the supported ciphers even more. For example, some customers remove CBC ciphers from the supported ciphers.
<code>sslEnabledProtocols</code>	This parameter defines whether TLSv1.0, TLSv1.1, or TLSv1.2 is supported. By default, the MFT Server sets this parameter to TLSv1.2.

## web.xml Parameters

There are a variety of `web.xml` parameters that affect security mentioned in the following sections.

## Referer HTTP request header

The Referer HTTP request header contains a complete or partial URL of the page that initiated the HTTP request. The Referer header allows MFT to identify the URL that initiated the MFT request. All MFT web pages are initiated from within the MFT application. This parameter allows you to reject HTTP requests that were initiated from another URL.

MFT has two `web.xml` parameters that allow you to set the referer header:

- `AllowedReferersForXferNavigation`: Used by the file transfer browser interface when navigating through a directory structure.
- `AllowedReferersAdminJSP`: Used by the Admin interface.

Refer to the following table for more information on defining these parameters.

Parameter	Description
<code>admincc-service-enabled</code>	This parameter enables Command Center Admin API REST calls. The default value is True. Only Command Center supports "admincc" calls.

Parameter	Description
admin-service-enabled	This parameter enables Admin API REST calls. The default value is True. Both Command Center and Internet Server (if Admin server is enabled) support "admin" calls.
ft-service-enabled	This parameter enables File Transfer API REST calls. The default value is True. Only Internet Server supports "ft" calls.
LoadBalancerIPAddressList	When MFT is behind a load balancer and a request is received, MFT allows the X-Forwarded-For HTTP parameter. This allows MFT to extract the initiating HTTP IP address. Otherwise, MFT uses the IP address of the load balancer.
AllowEmailServerDefinition	Defines whether you want to allow users to transfer files to servers defined with a Server Type of "Email". Setting this parameter to False does not allow servers to be configured as Email servers and rejects transfer requests for Email servers.
AllowLocalServerDefinition	Defines whether you want to allow users to transfer files to servers defined with a Server Type of LOCAL. Setting this parameter to False does not allow servers to be configured as LOCAL servers and rejects transfer requests for LOCAL servers.
AllowMailboxServerDefinition	Defines whether you want to allow users to transfer files to servers defined with a Server Type of "Mailbox". Setting this parameter to False does not allow servers to be configured as Mailbox servers and rejects transfer requests for Mailbox Servers.
MaxConnectionCntFTP	Allows you to set a maximum number of connections for the MFT FTP server. This can help protect against Denial of Service attacks.

Parameter	Description
MaxConnectionCntSSH	Allows you to set a maximum number of connections for the MFT SSH server. This can help protect against Denial of Service attacks.
MaxConnectionCntCF	Allows you to set a maximum number of connections for the MFT Platform Server. This can help protect against Denial of Service attacks.
MaxConnectionCntOFTP2	Allows you to set a maximum number of connections for the MFT OFTP2 server. This can help protect against Denial of Service attacks.
DenyLoginIds	This parameter allows you to define users that are NOT authenticated. For example, the default values of "root,administrator" ignores authentication request for users root and administrator. You can define additional users in this list.
SSOLoginRequired	Allows you define whether SSO (OIDC or SAML) is required for all users.
SSOExcludedUsers	Allows you to define users that can log in without SSO when <b>SSOLoginRequired</b> is set to True.
SSOAllowRest	When set to True, this allows REST calls to be used without using OIDC.
TLSCipherSuite	<p>This parameter defines the ciphers used by MFT in any SSL/TLS connections.</p> <p>If you select the <b>Use Secure Ciphers Only</b> parameter during the installation process, this parameter will be filled in with secure ciphers. When the FTP service is started, all secure ciphers supported will be displayed. You can select any ciphers from the displayed list to add to this</p>

Parameter	Description
	<p>parameter. Multiple ciphers must be delimited with a comma.</p> <p>This parameter only applies to FTPS (FTP over SSL) and Platform Server SSL connections. HTTPS connections use the parameters in the <code>server.xml</code> ciphers parameter.</p>
TLSProtocols	<p>This parameter defines TLS protocols that will be supported by FTPS and Platform Server SSL.</p> <p>The valid values are: TLSv1, TLSv1.1, and TLSv1.2.</p> <p>By default, any TLS protocol is supported.</p> <p>Before changing this parameter, ensure that all FTPS and Platform Server clients and servers support the defined TLS protocol.</p> <p>This parameter only applies to FTPS (FTP over SSL) and Platform Server SSL connections. HTTPS connections use the parameters in the <code>server.xml</code> <code>SSL-enabledProtocols</code> parameter.</p>
SSHCipherSuite	<p>This parameter defines the ciphers supported by MFT SFTP client and servers.</p> <p>When the MFT SFTP service is started, all SSH ciphers supported are displayed. You can select the ciphers that you want to support. Multiple ciphers must be delimited with a comma.</p>
SSHKeyExchange	<p>This parameter defines SSH key exchange algorithms supported by MFT SFTP client and servers.</p> <p>When the MFT SFTP service is started, all SSH key exchange algorithms supported are displayed. You can select the key exchange algorithms that you want to support. Multiple key exchange algorithms</p>

Parameter	Description
	<p>must be delimited with a comma.</p> <div data-bbox="786 373 1398 653"> <p><b>Note:</b> By default, the diffie-hellman-group1-sha1 protocol is removed by MFT, because it is vulnerable to the logjam attack. Some old SFTP clients and servers require this parameter; therefore, occasionally you need to update this parameter to include this key exchange algorithm. You must include all key exchange algorithms that are supported.</p> </div>
SSHDigestSuite	<p>This parameter defines the digest (hash) suites supported by MFT SFTP client and servers.</p> <p>When MFT SFTP service is started, all SSH digests supported are displayed. You can select the digests that you want to support. Multiple digests must be delimited with a comma.</p>
PasswordHashNew	<p>This parameter defines the password digest used by MFT.</p> <p>You have to use the defined value of SHA-256.</p>
UnsecuredHTTPSupport	<p>This parameter defines whether HTTP support is allowed.</p> <p>The default value is <code>No</code>, which indicates that HTTP support is not allowed and only HTTPS is accepted. If you require HTTP support, set this value to <code>Yes</code>.</p> <div data-bbox="786 1497 1317 1566"> <p><b>Note:</b> When using HTTP, no encryption of credentials or data is performed.</p> </div>
AllowedReferersForXferNavigation	<p>This parameter adds HTTP referrer checking to the JSP pages that are used to navigate the directory tree structure. In addition to the URL, you have to</p>

Parameter	Description
	<p>add the loopback address.</p> <p>This parameter is defined in the <code>web.xml</code> file. It only needs to be set in Internet Server instances. It is ignored in TIBCO MFT Internet Server.</p>
AllowedReferersAdminJSP	<p>This parameter adds HTTP referrer checking to the Administrator JSP pages. In addition to the URL, you have to add the loopback address.</p> <p>This parameter needs to be set both in TIBCO MFT Internet Server instances and Internet Server instances, where the Admin service is installed.</p>
DisplayFTPBanner	<p>This parameter defines whether MFT displays FTP and SFTP banners.</p> <p>If this parameter is set to Yes, you can define the banners or welcome message displayed in the Admin Configure SSH Server and Configure FTP Server pages.</p>
Anonymous	<p>This parameter defines whether an anonymous user can be used without authenticating the password.</p> <p>If you enter the value anonymous in this parameter, you must also create a user called anonymous. Because the password is not validated, you must not give anonymous user access to any secure file or folders.</p>
Redirect HTTP to HTTPS	<p>This parameter allows you to redirect HTTP requests to HTTPS port.</p> <p>Uncomment the following parameter from the <code>web.xml</code> file, which will automatically redirect HTTP requests to the HTTPS port.</p>

Parameter	Description
	<pre>&lt;!--user-data-constraint&gt; &lt;transport- guarantee&gt;CONFIDENTIAL&lt;/transport- guarantee&gt; &lt;/user-data-constraint--&gt;</pre>
SecurityFilter	<p>This parameter defines whether a browser can be allowed to render a page in a frame, an iFrame, or an object. This parameter prevents you from framing and clickjacking attacks.</p> <p>By setting this parameter to SAMEORIGIN, the browser can use the page in a frame if the server including it in a frame is the same as the one serving the page. By setting this parameter to DENY, all attempts to load the page in a frame will fail.</p> <p>The default value is SAMEORIGIN.</p>
ChangedPasswordEmailEnabled	<p>This parameter defines whether an email is sent to a user when the user changes the password. We suggest setting this parameter to Yes to notify the user that the password has been changed.</p>

## Server Configurations

You can follow the following recommendations to secure TIBCO MFT Internet Server through configurations.

### Configuration in Admin Client

- Remove unnecessary default users or unnecessary rights from these users.
- Assign only necessary rights to users.



- Use LDAP for authentication.
- Enable global password rules.
- Enable global lockout.
- Allow users to reset their passwords.
- Use the MFT delegated administration feature if possible.
- AdministratorRight must be limited to a selected few of people.
- Assign the minimum right that a user needs to access the system.
- Be cautious executing commands or Java class on an alert or scheduled job. Commands and java programs will execute under the rights of the MFT server process.
- Configure time of a day and days of the week that transfers can be executed.

## Server Options: Server File Name Prefix

When defining a server, you can expand the Server Options section on the Add Server page and use the **Server File Name Prefix** parameter.

This parameter defines the directory that is prefixed to the server file name defined on the transfer definition. It allows you to restrict user access to a particular directory and ensures that when a transfer definition is created, the transfer definition cannot access data outside of this defined directory.

This parameter can be used for all server types, but it is particularly important when defining a server of \*Local type.

## SFTP and FTP banners

Banner pages are displayed by MFT when you log in to the MFT SFTP and FTP servers. It is good practice to create a generic banner pages that do not include the name of the software running or the release.

## SMTP TLS communication

MFT supports TLS communication to SMTP servers when sending emails. MFT Supports Implicit SSL and StartTLS. We suggest using Implicit SSL since it is more secure than StartTLS. However, this depends on the TLS support of the SMTP server.

# TIBCO Documentation and Support Services

---

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

## How to Access TIBCO Documentation

Documentation for TIBCO products is available on the [TIBCO Product Documentation](#) website, mainly in HTML and PDF formats.

The [TIBCO Product Documentation](#) website is updated frequently and is more current than any other documentation included with the product.

## Product-Specific Documentation

The following documentation for TIBCO® Managed File Transfer Internet Server is available on the [TIBCO® Managed File Transfer Internet Server](#) Product Documentation page.

- TIBCO® Managed File Transfer Internet Server *Managed File Transfer Overview*
- TIBCO® Managed File Transfer Internet Server *Installation*
- TIBCO® Managed File Transfer Internet Server *Quick Start Guide*
- TIBCO® Managed File Transfer Internet Server *User's Guide*
- TIBCO® Managed File Transfer Internet Server *Utilities Guide*
- TIBCO® Managed File Transfer Internet Server *API Guide*
- TIBCO® Managed File Transfer Internet Server *Transfer and File Share Clients User's Guide*
- TIBCO® Managed File Transfer Internet Server *Desktop Client User's Guide*
- TIBCO® Managed File Transfer Internet Server *Security Guide*
- TIBCO® Managed File Transfer Internet Server *Container Deployment*
- TIBCO® Managed File Transfer Internet Server *Release Notes*

## How to Contact TIBCO Support

Get an overview of [TIBCO Support](#). You can contact TIBCO Support in the following ways:

- For accessing the Support Knowledge Base and getting personalized content about products you are interested in, visit the [TIBCO Support](#) website.
- For creating a Support case, you must have a valid maintenance or support contract with TIBCO. You also need a user name and password to log in to [TIBCO Support](#) website. If you do not have a user name, you can request one by clicking **Register** on the website.

## How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employee subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the [TIBCO Ideas Portal](#). For a free registration, go to [TIBCO Community](#).

# Legal and Third-Party Notices

---

SOME TIBCO SOFTWARE EMBEDS OR BUNDLES OTHER TIBCO SOFTWARE. USE OF SUCH EMBEDDED OR BUNDLED TIBCO SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED TIBCO SOFTWARE. THE EMBEDDED OR BUNDLED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER TIBCO SOFTWARE OR FOR ANY OTHER PURPOSE.

USE OF TIBCO SOFTWARE AND THIS DOCUMENT IS SUBJECT TO THE TERMS AND CONDITIONS OF A LICENSE AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED SOFTWARE LICENSE AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP END USER LICENSE AGREEMENT WHICH IS DISPLAYED DURING DOWNLOAD OR INSTALLATION OF THE SOFTWARE (AND WHICH IS DUPLICATED IN THE LICENSE FILE) OR IF THERE IS NO SUCH SOFTWARE LICENSE AGREEMENT OR CLICKWRAP END USER LICENSE AGREEMENT, THE LICENSE(S) LOCATED IN THE “LICENSE” FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME.

This document is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of TIBCO Software Inc.

TIBCO, the TIBCO logo, the TIBCO O logo, and Slingshot are either registered trademarks or trademarks of TIBCO Software Inc. in the United States and/or other countries.

Java and all Java based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

This document includes fonts that are licensed under the SIL Open Font License, Version 1.1, which is available at: <https://scripts.sil.org/OFL>

Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro.

All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only.

This software may be available on multiple operating systems. However, not all operating system platforms for a specific software version are released at the same time. See the readme file for the availability of this software version on a specific operating system platform.

THIS DOCUMENT IS PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.

THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. TIBCO SOFTWARE INC. MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS DOCUMENT AT ANY TIME.

THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "READ ME" FILES.

This and other products of TIBCO Software Inc. may be covered by registered patents. Please refer to TIBCO's Virtual Patent Marking document (<https://www.tibco.com/patents>) for details.

Copyright © 2003-2022. TIBCO Software Inc. All Rights Reserved.