FIX TLS Certificate Renewal

Feb 2019



Overview

Bloomberg provides clients with FIX connectivity to facilitate the secure communication of potentially sensitive messages concerning trading, market data, or other transactions. To secure this connectivity, the use of TLS certificates is required for any FIX session to connect to Bloomberg infrastructure.

For inbound-to-Bloomberg FIX connectivity, Bloomberg issues a unique TLS certificate for each FIX session. These certificates expire two years from their date of issue.

This document explains how to acquire, renew, and manage these certificates via the <u>Bloomberg Enterprise Console</u>.

Getting Help

In the Enterprise Console, the green Help button will let you ask questions or get assistance with the FIX TLS certificate renewal screens and process.

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y 1, 2019	©
onths 0, 2019	Help

If your problem is related to TLS certificate renewal as described in this document, explain that you need assistance with "FIX TLS certificate renewal in the Enterprise Console."

If you are unable to log into the Enterprise Console at all, call the appropriate <u>Global Support</u> number. Be prepared to provide information about your role in your firm as it relates to FIX connectivity, and explain that you need authorization to access the "Enterprise Console."

If you are attempting to manage your **Outbound-from-Bloomberg** TLS certificates, contact 212-318-2000 (or your appropriate Global Support number) and ask for ETO.

If you require assistance with your Bloomberg FIX connectivity itself, contact 212-318-2000 (or your appropriate Global Support number).



Accessing the Bloomberg Enterprise Console

The Enterprise Console is available at console.bloomberg.com



Logging in with a Bloomberg Terminal Account

If you have a Bloomberg Terminal account, log in with your Terminal credentials.

Logging in with an Enterprise Console Account

If you do not have a Bloomberg Terminal account, log in with the credentials you received via email. If this is your first time logging in, you will be required to reset your password.



	Log In
Bloomberg	Terminal username
authentication service that allows you access to Bloomberg services from wherever you are.	B-Unit may be required to log in.
	NEXT

Requesting a New Account

Many FIX users will be receiving invitations via email to activate and log into an Enterprise Console account automatically. These invitations will be sent over the course of the first half of 2019.

If you have not received one of these invitations, and you do not have a Bloomberg Terminal Account or an existing Enterprise Console account, contact your Bloomberg service representative to request access to the "Bloomberg Enterprise Console."



Using the Enterprise Console

Setting a Default Dashboard

If you have never used the Enterprise Console before, you will be prompted to select your default dashboard. For FIX TLS certificates, this will be the **FIX TLS Certificate Manager**. Choose it, and you will default to this feature every time you log in.

Select your default dashboard To change your default dashboard, select "Settings" in the top right dropdown. Monitor Configure Develop Feeds SFTP Password Manager **Developer Console** Use the Secure FTP Password Manager Use the Feeds dashboard to monitor Use the Developer Console for selfthe status of your file transfers to and to create, stage, and activate a service tools such as Web API from Bloomberg. password for your SFTP accounts. Documentation, Credential and IP Whitelist Management. Secure FTP FIX TLS Certificate Manager Use the Secure FTP Dashboard to Use the FIX TLS Certificate Manager to monitor activity and issues with your download and renew the certificates SFTP accounts. necessary to connect to Bloomberg Secure FIX.

You may have access to other features of the Enterprise Console. You can change your default dashboard at any time under the **Settings** menu at the top right.

Support	Demo User 木
	Settings
	Log Out



Navigating to the FIX TLS Certificate Manager

This is accessible under **Configure > FIX TLS Certificate Manager** from the main navigation. It can also be accessed via the **Settings** menu.



Here, you will be able to view, download, and manage your FIX TLS certificates.



The FIX TLS Certificate Manager

This table will show all of the FIX sessions to which you are entitled, along with pertinent information about TLS certificate status and expiration.

Bloomberg ENTERPRISE CONSOLE	Monitor Configure	Develop	Alert	Support [Demo User 🗸
FIX TLS Certificate	Manager				
Compld 🗢	Connection Name 🗢		Active Certs. 🗢	Certificate Expiration 🖕	
BLP / TGTCMP_600001 Source / Target	FIX Test Connection 60000			None to show	
BLP / TGTCMP_600004 Source / Target	FIX Test Connection 60000			Expired Feb 04, 2019	
BLP / TGTCMP_600008 Source / Target	FIX Test Connection 60000			1 Day Feb 06, 2019	
BLP / TGTCMP_600006 Source / Target	FIX Test Connection 60000			2 Months Apr 15, 2019	
BLP / TGTCMP_600000 Source / Target	FIX Test Connection 60000	0		3 Months May 17, 2019	
BLP / TGTCMP_600009 Source / Target	FIX Test Connection 60000			2 Years Feb 24, 2021	
BLP / TGTCMP_600003 Source / Target	FIX Test Connection 60000			2 Years Feb 24, 2021	
BLP / TGTCMP_600011 Source / Target	FIX Test Connection 600011			2 Years Feb 24, 2021	
BLP / TGTCMP_600018 Source / Target	FIX Test Connection 600018			2 Years Feb 24, 2021	
BLP / TGTCMP_600019 Source / Target	FIX Test Connection 600019			2 Years Feb 24, 2021	
		2 Next Last S	ihow rows: 10 🗸		

Compld

The SenderCompID (FIX tag 49) and TargetCompID (FIX tag 56) of the FIX session.

Connection Name

For Production FIX sessions, this will typically be your own CompID. For Beta FIX sessions, this will be Bloomberg's CompID for the session.

Active Certs

The number of active, unexpired certificates that are registered for the FIX session.

Certificate Expiration

This will show the time remaining before the expiration of your *longest lived* TLS certificate for the FIX session. If all certificates have expired, it will display **Expired** and the date the last certificate expired. If no certificates were ever created, it will display **None to show**.



Managing TLS Certificates

Click on any FIX session to see its TLS certificates.

Bloomberg ENTERPRISE CONS	Monitor OLE	Configure	Develop A	lert	Support	Demo User 🗸
← All FIX Certifi	icates					
FIX Test Conn BLP to TGTCMP_60000	ection 600000 ²⁰					
FIX Certificates	s can be added within 90 days	of expiration			+ 4	DD CERTIFICATE
ACTIVE	INACTIVE					
Status	CName	Serial Number		Certificate Creation	Expiration	Download
Active	600000:1	37 D3 28 A7 OF 4E	07 26 F1 07 3B FD 72 67	4 Months ago Oct 25, 2018	1 Month Mar 09, 2019	±

Active Certificates

These certificates are currently active, and can be used to connect the FIX session. Authorized users can re-download these certificates as-needed.

Status

Active means that the certificate is active and usable. If multiple certificates are listed as Active, then *any* of them can be used to connect the FIX session.

CName

The CName of the certificate. You can use this to confirm the specific certificate you may be renewing in your own environment. This can also be useful for general troubleshooting.

Serial Number

The serial number of the certificate. You can use this to confirm the specific certificate you may be renewing in your own environment. This can also be useful for general troubleshooting.

Certificate Creation

The date this certificate was created.

Expiration

The time remaining until this certificate expires. Once expired, it *can not be used to connect the FIX session*.



Inactive Certificates

These are your three most recently expired or otherwise deactivated certificates. This information is provided solely for record keeping and troubleshooting. Expired certificates can not be re-downloaded under any circumstances.

Bloomberg ENTERPRISE CONS	Monitor OLE	Configure	Develop	Alert	Support	Demo User 🗸
← All FIX Certifi	cates					
FIX Test Conn BLP to TGTCMP_60000	ection 600000 º					
FIX Certificates New certificates c	an be added within 90 days of	expiration			+ AD	D CERTIFICATE
ACTIVE	INACTIVE					
Status	CName	Serial Number		Certificate Creation	Expiration	
	600000:2	A6 EB 6C 0F 77 51 F	F 1E 57 72 E7 53 2C E6	9 Years ago Oct 25, 2010	Expired Oct 24, 2012	
Expired	600000:3	3E 2E EO 56 17 C4 C	D CC 09 E0 68 F1 5F	9 Years ago Oct 25, 2010	Expired Oct 24, 2012	
Displays up to 3 inactive con	tificates					

Renewing TLS Certificates

Beginning 90 days prior to your last certificate's expiration, you will be able to use the **Add Certificate** button to create and download a new one.

FIX Test Connection 60000 BLP to TGTCMP_600000	00
FIX Certificates New certificates can be added within 90 ACTIVE	Add days of expiration ADD CERTIFICATE
Status CName	Certificate Creation & Download
Expired 600000:2	A new certificate will be created and downloaded for the following FIX session: xpired bat 24, 2012
Expired 600000:3 Displays up to 3 inactive certificates	FIX Test Connection 600000 BLP to TGTCMP_600000 Certificate will be valid through Feb 05, 2021
	I understand certificate creation cannot be undone. CANCEL DOWNLOAD



This new certificate will be usable *immediately* to connect the FIX session. Note that your previous certificates will continue to work until they expire.

You must download the certificate at this time. The download will consist of a zip file with the new certificate, in the same format as the previous certificate(s) you may have received via an emailed link.

Once created, you can return to the Enterprise Console in the future to re-download the certificate if necessary.

Certificate Expiration Warnings

Viewing in the Enterprise Console

The TLS Certificate Manager can be filtered to display only sessions where all certificates have expired, or sessions where all certificates expire within 90 days.

Certificate Expiration 🗣	
	^
All	
Expired	
Expiring within 90 days	
1 Day Feb 06, 2019	
2 Months	

Email Notifications

The TLS Certificate Manager will send emails to all client contacts associated with each FIX session warning of upcoming expiration. As these warnings indicate that a session will, upon expiration, fail to connect to Bloomberg, they are non-optional.

The notifications will be sent on a schedule based on the *number of days remaining before the session's last active certificate expires*.

90, 60, 45, 30, 25, 20, 15, 10, 9, 8, 7, 6, 5, 4, 3, 2,1,0 (expired)



The email notifications will be formatted generally as follows:

Subject Line

Upcoming expiration of Bloomberg FIX security credentials

Message Contents

The following alert was triggered by a FIX session connecting to Bloomberg:

Upcoming expiration of security credentials

Summary: Credential Expiration Time of occurrence: YYYY-MM-DD HH:MM:SS UTC

Detail: Your TLS Certificate for FIX Session CONNECTION_NAME will expire on YYYY-MM-DD Severity: warning

Alert Properties: Component: FIX Connection Name: CONNECTION NAME Connection Details: CompIDs SenderCompID / TargetCompID; FIXID FIXID

Usage Notes: Log into the Bloomberg Enterprise Console to create and download a new certificate under Configure > FIX TLS Certificate Manager. If you are unable to log in, do not see your FIX session, or do not believe you are the correct person to address this problem, contact your Bloomberg support representative immediately.

This email was sent by the Bloomberg Enterprise Console. For more details go to <u>https://console.bloomberg.com</u>



These notifications will begin in March 2019. Some FIX sessions may receive fewer notifications during the initial period immediately after they are activated. This format may change at any time.

Adding a Notification Contact

If you need to add additional email addresses to these contact notifications for a given FIX session, contact your Bloomberg service representative.

FAQ - Frequently Asked Questions

I can't log into the Enterprise Console.

If you have a Bloomberg Terminal account, use those credentials. If you do not, check your email for an invitation to the Bloomberg Enterprise Console. If you have not received this and need an account, contact your Bloomberg service representative.

I only see a "Demo Firm" when I log into the Enterprise Console.

You have not been authorized for your FIX sessions. Contact your Bloomberg service representative to confirm your account details and receive authorization.

I don't see all of my FIX sessions.

If you believe a specific FIX session should appear in your TLS Certificate Manager, but does not, contact your Bloomberg service representative. Be prepared to provide additional information, such as the FIX CompIDs, to assist in identifying and authorizing your session. Some sessions that have certificate expirations more than one year from now may not appear initially. **Outbound-from-Bloomberg** connections are not managed in this portal.

I didn't receive an email notification of an upcoming certificate expiration.

Check you spam filter. If you still are unable to find it, contact your Bloomberg service representative to confirm that your contact information is correctly associated with the FIX session(s) in question.

What about my Beta FIX sessions?

The Enterprise Console shows both Beta and Production FIX sessions.

Why can't I re-download this particular Active TLS certificate?

Certificates generated by the earlier Bloomberg FIX TLS workflow will be visible in the Enterprise Console, but can not be re-downloaded. Any further certificates you create will be re-downloadable.

I can see my FIX sessions, but I can not add a new certificate.

You may have been given READ-ONLY access to this feature of the Enterprise Console. Contact your Bloomberg service representative if you believe you should have access to



manage and download TLS certificates. Certificates can only be renewed when all remaining certificates expire in 90 days or fewer.

I am not sure which FIX session I am renewing.

For most users, the FIX CompIDs and/or the Connection Name will be enough to determine which FIX session is being managed.

Some users have a large number of FIX sessions with potentially similar or duplicate names. In this case, you can identify the correct session by inspecting the TLS certificate already in place in your FIX environment.

The **CName** of your previous certificate consists of multiple parts. The number underlined in yellow is a unique identifier for the session, while the number underlined in red is simply an iterator showing the number of certificates that have been generated. Match the former between your current certificate and the one displayed in the Enterprise Console.

This value in the **CName** is also known to Bloomberg, and by providing it your Bloomberg service representative can help you identify the FIX session.

The **Serial Number** is similarly helpful. Every TLS certificate has a unique serial number. By looking at the value in the Enterprise Console, you can find the matching certificate in your own FIX environment. Remember that both active and inactive (expired) certificates can be viewed in the Enterprise Console.

FIX Certificates	i i			
New certificates o	an be added	within 90 days of	expiration	
ACTIVE	1	INACTIVE		
Status	CName		Serial Number	Cer
Active	600000:1		37 D3 28 A7 OF 4E 07 26 F1 07 3B FD 72 67	4 N Oct
	FIX Certificates New certificates of ACTIVE Status Active	FIX Certificates New certificates can be added ACTIVE Status CName Active 600000:1	FIX Certificates New certificates can be added within 90 days of ACTIVE INACTIVE Status CName	FIX Certificates New certificates can be added within 90 days of expiration ACTIVE INACTIVE Status CName Active 600000:1 37 D3 28 A7 0F 4E 07 26 F1 07 3B FD 72 67



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