Data Exchange Services

Nov 8th 2023



Agenda

- Data Exchange Services
- > Onboarding Prerequisites
- Supported Communication Protocols
- Key Guidelines
- > Appendix



Data Exchange Services

EDI (Electronic Data Interchange)

> B2B Integration (application to application)

- Exchange EDI Transactions e.g. 810, 820, 830, 861, 862 etc.
- Connections available via various communication protocols (refer to slide 4)
- Data transformations in various EDI formats (e.g. ANSI, CIF, VDA, EDIFACT, JSON)
- Both External and internal Ford applications can exchange data via GEC Hub

Non-EDI (aka - Managed File Transfer)

Onboarding & Connection Maintenance

 \geq B2B Integration (application to application)

- Files can be in any format e.g. Zip, PDF, TXT, EXCEL, CSV, JPEG, etc.
- Files are routed based on the file name, sender ID or Receiver ID
- Files are a pass thru with no validations
- Connections available via various communication protocols (refer to slide 4)
- Both External and internal Ford applications can exchange data via GEC Hub
- \geq U2A Integration (user to application for Ford Internal Users only)
 - Upload or download files using Web Trader (file size upto 2GB)

> User Interface - www.gtpcm.ford.com

- Important Bulletins, upcoming changes
- Request new connection or change existing connection
- View Request Status, Update Contact Information, FAQ, Contact Us
- Maintain Credentials e.g. password, SSH key, certificates, etc.
- EDI Specifications
- Submit Low/Medium Incidents (External Users only)

Onboarding - Prerequisites

Supplier/Dealer/ External partners (able to obtain GSDB code)

Step 1: Obtain GSDB Code GSDB Homepage (ford.com)

Step 2: Get Covisint ID and associate with GSDB Code

Note: Register your company and user, user guide is provided below

Covisint User Guide

Step 3: Submit 'New Connection' request at <u>www.gtpcm.ford.com</u> using GSDB code Ford Application

Step 1: Obtain Generic ID

- Mainframe Application RACF ID
 www.racf.ford.com
- Non-Mainframe Application Generic ID <u>Generic ID Creation</u> (LL6 can create) E.g. SFTPXXXX, OFTPXXXX

Step 2: Submit 'New Connection' request at <u>www.gtpcm.ford.com</u> using generic ID (CDSID/RACFID) External Partners (unable to obtain GSDB code)

Step 1: Ford Contact to Submit IT Connect Ticket (on behalf of Trading Partner) 962-GEC Hub Queue - request new GSDB code for data exchange

Step 2: Get Covisint ID and associate with GSDB Code Note: Register your company and user, user guide is provided below Covisint User Guide

Step 3: Submit 'New Connection' request at www.gtpcm.ford.com using GSDB code

Global Trading Partner Community Management

Data Exchange Services

Connection Requests

Status

Connection

Connection

Connection

Connection

Connection

New Connection

Connection

Connection

Connection

Update Contact

Onboarding analyst will contact to you as soon as they start working on the request. You can contact us or view the status using 'Connection Request Status' option at www.gtpcm.ford.com



Supported Communication Protocols

No.	Communication Protocol (inbound and outbound)	Maximum File Size	Comments
1.	SFTP	Up to 100 GB	 Authentication Password and SSH Key - Preferred SSH key only - For external partners this is only available as exception Connection mechanism Mailbox in GEC Hub (push/pull) - preferred for guaranteed delivery Push/push - exception only in case of technical challenges
2.	AS2	Up to 100 GB	mTLS 1.2 Certificate based
3.	OFTP2	Up to 100 GB	mTLS 1.2 Certificate based
4.	WebService (SOAP/XML)	Publisher's Limit	GEC Hub as a consumer can invoke any remote published WebService
5.	FTPS	Server Owner's Limit	For internal connections only
6.	MQ	Up to 4 MB	For internal connections only
7.	ALE Connector (SAP)	Not Defined	For internal connections only
8.	SMTP	10 MB	For internal connections only
9.	SharePoint Connector (HTTPS)	Tested up to 10 GB	Available for both Ford SharePoint and External SharePoint
10.	Google Cloud Storage (GCS) Bucket Connector	Up to 100 GB	Available for both Ford and External connections



Key Guidelines

- > Security
 - All transactions with PII/SPII or secret data should be encrypted by the sender and decrypted by receiver
 - AS2 and OFTP2 protocols Encryption at rest can be enabled in GEC Hub for host-to-host transfer
 - Each partner gets a unique connection and only able to access their own mailbox/folder
- > File Naming
 - EDI File name should be unique
 - MFT/Non-EDI File name should be unique and begin with Receiver ID followed by '_ (underscore)'
 - Additional information is in the user guide which will be shared at the time of establishing connection

Credential Management (protocol dependent)

- Passwords Renewal is required annually (ALE or SFTP or FTPS or FTP-exception only)
- Certificates Renewal is required every 1-2 years (AS2 or OFTP2 or Web Service or MQ)
- OAuth2 Client ID Secret Renewal is required annually (Rest API or SharePoint MS Graph API or Web Service)
- GCP Service Account Authentication Key (JSON Format) Renewal is required annually (Google Cloud Storage Bucket)



Key Guidelines

- Notification Process
 - EDI Files -

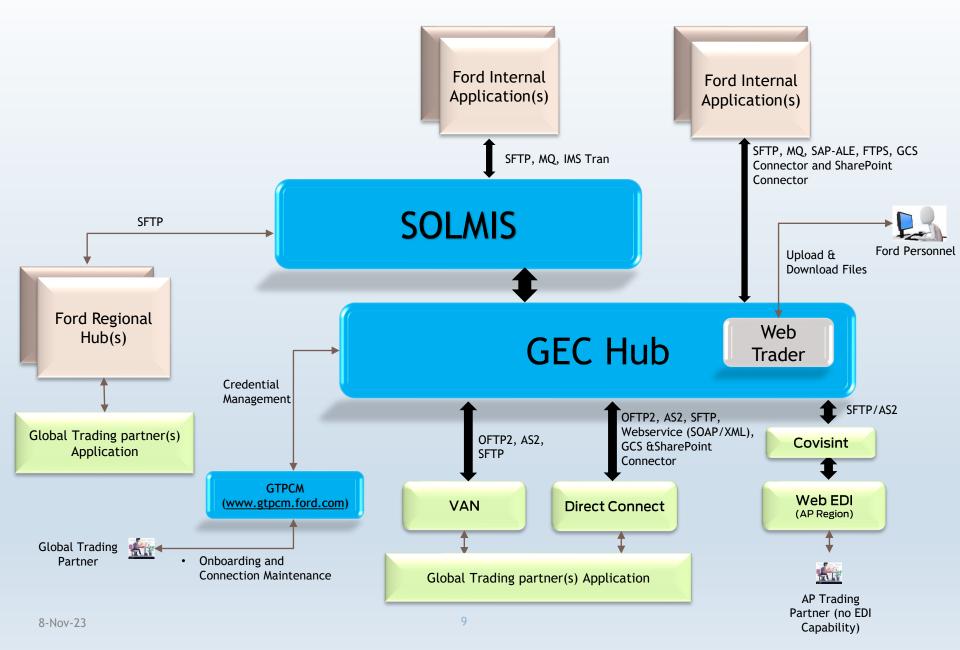
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- 997 acknowledgements are available for ANSI X12
- CONTRL is available for EDIFACT
- MFT Files -
 - Email process can be set-up for up-to 4 IDs to provide success and failure notification with following information:
 - Date and time
 - Sender and receiver ID
 - File Name
 - Status
 - Mechanism with Splunk index can be set-up upon request
- User Guide
 - User guides will be provided once the request gets assigned to an analyst.
 - User guide contains technical details required to set-up required communication protocol.
- > Web Trader Feature (User to Application Data Exchange)
 - Available for Internal Ford Users only
 - File size limit 2GB



Appendix

GEC Hub/SOLMIS - Data Flow



VAN Responsibilities

- 1. VAN completes following steps
 - Obtain GSDB code and Covisint ID
 - Add Ford Supplier Portal as Service Package on Covisint site
 - Add Global Trading Partner Community Management (GTPCM) as sub-service package on Ford Supplier Portal
 - Select GSDB code(s) to be assigned to GTPCM sub-service package
 - Submit new connection request form in GTPCM with Van's contact info
- 2. Maintain Credentials in GTPCM
- 3. Ensure Trading Partner completes the following steps
 - Obtain GSDB code and Covisint ID
 - Add Ford Supplier Portal as Service Package on Covisint site
 - Add Global Trading Partner Community Management (GTPCM) as sub-service package on Ford Supplier Portal
 - Select GSDB code(s) to be assigned to GTPCM sub-service package
 - Submit new connection request form in GTPCM with required VAN in the VAN drop down



VAN Responsibilities cont....

- 4. Communicate GEC Hub changes to customers
- 5. Provide testing support when there is change in connection or new GSDB Code is added
- 6. Provide testing support as required by GEC Hub Team
- 7. Accountable for connectivity and demerit points when VAN experiences issues
- 8. SPOC for all issues related to their customers
- 9. Annual maintenance of Active users

