The Global Exchange Understood

Presented by:

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Global Exchange

**Mission:**

• The GEX provides broker or mediation services that enable the exchange of transaction data between DoD entities and private sector commercial industry

• Facilitates integration between government eBusiness systems and our private sector trading partners

• GEX validates, secures, translates, routes, archives, and delivers mass volumes of EDI and other transactions with guaranteed delivery and end-to-end accountability

**Focus on Program Manager Support:**

• GEX mitigates integration risk for DoD Business Systems Program Managers allowing them to focus on their core missions

• Streamlined data flow and connections to support Business Systems’ security requirements
History

• ECPN (Electronic Commerce Processing Node) - 1995
  – DISA replacement for Network Entry Point (NEP)
  – Comms and Routing

• DEBX (DoD E-Business EXchange) - 1998
  – JECPO – Joint Electronic Commerce Program Office
    • Joint effort between DISA and DLA
  – Introduction of DEBX at DAASC
  – Translation

• GEX (Global EXchange Service) - 2004
  – Continued evolution to utilize new technologies and expanding use of GEX to support increasing volume

• GEX Program Management Transition to DLA - 2011
  – DLA assumed responsibility upon shutdown of the BTA (Business Transformation Agency)
GEX Services

• Front door for EDI transactions
  • Modern, variable length transaction sets such as X12, XML, iDoc and User Defined Format (UDF) transaction file types
  • Supports 50+ different transaction sets
  • Supports Defense Logistics Management System (DLMS) transactions and many other X12 EDI transactions
  • Supports interoperability
• Mapping, translation, and data conversion services
  • Routing of EDI data (38,000+ trading partners)
  • Connections to commercial Value Added Networks (VANs), DoD Service and Agency business systems, Commercial companies, Federal systems
GEX Capabilities

• Translation:
  • Decoding and validation of X12 and XML transactions
  • Application of appropriate translation and mapping rules
  • Provides opportunities for trading partners to migrate to compliance w/standards

• Sorting and Routing:
  • Secure transmission and receipt of transactions
  • Use of multiple different telecommunications protocols
  • Configurable processing alerts
  • Application of routing/distribution list processes

• Metrics:
  • Monitoring, Logging and archiving of all data/activities

• Scalability:
  • Dynamically sizes to increased volumes of transactions
DoD System Interoperability
DoD System Interoperability
GEX as a Key FM Strategic Enabler
GEX Benefits

- Flexibility to leverage and reuse existing connections and agreements for transactions where applicable
- Enables complex transformation and validation of data between a range of disparate formats and standards
  - Single location for data translation
  - Reduces integration costs
  - Isolates systems from changes
  - Improves accuracy
  - Minimizes interruptions to business operations with a hot COOP arrangement

Interfaces

Without GEX

With GEX
GEX Capabilities Evolution

**GEX 1.0/2.0**
- Audit/Alerts
- SFTP/MQ/HTTP
- Encryption
- Content Router
- Data Correlation
- Web Services
- X509 Certs
- FIPS 140-2 Spt
- Priority Queues

2004-2006

**GEX 3.0/4.0**
- Enhanced Data Processing
- GEX Dashboard
- Datamarts/Reports
- CAC Authentication
- WS Security
- JMS and WebDAV
- Enhanced Admin/Audit
- Priority Comms
- System Health Monitor
- Performance Enh
- CEP-based Alerts
- Performance Metrics
- Expanded BI

2008-2014

**GEX 5.0**
- Centralized Config
- GEX Nodes
- 64-bit Migration
- Distributed Processing
- Remote Comms
- Enhanced Sys Tuning
- Enhanced Prioritization
- Expanded Audit
- Performance Upgrades
- Auto Error Handling
- Enhanced Metrics
- Ab Initio Performance
- Health Monitoring Enh
- Expanded Datamarts
- Enhanced XML Proc
- LDAP Integration

2016

**GEX 6.0**
- Centralized Admin/UI
- Centralized Data Store
- Admin Efficiency Enh
- Distributed Processing
- Enhanced Failover
- Load Balancing
- Multi-version support
- Auto Msg Reprocessing
- Expanded Audit
- Performance Upgrades
- Enhanced Dashboard
- Configuration Wizard
- Configuration Tags
- High Perf Passthrough
- Multi-System Summary
- Centralized Reports
- Reduce Node Footprint

2018

“Proven Capability – ready off the shelf”
How GEX Works

CUSTOMERS

- DoD Departments of:
  - Army
  - Navy
  - Air Force
  - Marine Corps

- Defense Agencies
- Intelligence
- DoD Dependent Schools
- NATO
- FMS Countries

- Civilian Departments of:
  - Commerce
  - State
  - Justice
  - Transportation

- NASA
- GSA
- FAA
- VA

Secure Comms
- SFTP
- HTTPS
- MQ

Secure Comms
- SFTP
- HTTPS
- MQ

Translation/Validation
- IBM WebSphere TX
- Ab Initio

Translation/Validation
- IBM WebSphere TX
- Ab Initio

Routing
Many-to-Many – Content-based – Multiple Criteria

Data Access Layer
Audit Trail – Data Content – System Config – Datamarts – Metrics
Oracle DB w/Partitioning
OS (HPUX 11 or Linux)

User Interface Layer
Monitoring
Reports
Dashboard
Monitoring
Reports
Dashboard
• GEX audits transactions for conformance to X12/XML syntax, and message content if customer developed requirement.
• Invalid transactions can be returned to submitter for correction/retransmission.
• Help Desk available to provide customer assistance in trouble-shooting and tracking transactions.
GEX Customer Requirements

• GEX customers must:
  – Produce/maintain a valid Authority to Operate (ATO) for their system
  – Sign/maintain an agreement with DAAS
  – Provide funding for required new or updated mappings
    – Cost based on the number of maps and complexity of the requirements

• Provide technical support staffing capable of:
  – Establishing secure connectivity between their system and the GEX as required by DoD security requirements
  – Preparing and submitting test transactions during set-up/test phase
  – Monitoring/operating the local system originating the transactions
  – Processing and resubmitting error transactions received from the DAAS Customer Support personnel
GEX Website

- GEX Information
  - Fact Sheet
  - Operational Views
- Mapping Information
  - Contents of Map Updates
  - Map Release Schedule
- How to Place a Task Order for GEX Services
- Connection Guide
- FAQs
- Website is CAC protected

https://www.transactionservices.dla.mil/gex
How to Acquire New GEX Integrations/Capabilities

• Identify requirements for data transactions or GEX capabilities
• Coordinate with DAAS EBUS Program Office
• Northrop Grumman available via a single award IDIQ to provide customer funded integration/GEX capabilities support
• Integrations/capabilities developed and tested
• Coordinate security requirements and connectivity agreements with DAAS EBUS PMO

GEX New business needs contact:
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DAAS Business Services

Customers

DoD (98% of workload)
- Departments of:
  - Army
  - Navy
  - Air Force
  - Marine Corps
- Defense Agencies
- Intelligence
- DoD Dependent Schools
- NATO
- FMS Countries

Civilian (2% of workload)
- Departments of:
  - Commerce
  - State
  - Justice
  - Transportation
- NASA
- GSA
- FAA
- VA
- FEMA
- USPS
- GAO
- CG

Suppliers

- Defense Logistics Agency
- Military Services
- General Services Administration
- Commercial Suppliers

258,319 Business Partners Worldwide

Volumes

<table>
<thead>
<tr>
<th>Year</th>
<th>Volumes</th>
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<tbody>
<tr>
<td>CY 2016</td>
<td>7.5 Billion MILS &amp; EDI</td>
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<tr>
<td>CY 2015</td>
<td>8.0 Billion MILS &amp; EDI</td>
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<tr>
<td>CY 2014</td>
<td>8.7 Billion MILS &amp; EDI</td>
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<td>CY 2013</td>
<td>7.4 Billion MILS &amp; EDI</td>
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<tr>
<td>CY 2011</td>
<td>9.0 Billion MILS &amp; EDI</td>
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</tbody>
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DAAS Business Services Offered

- Enterprise Wide Order Fulfillment and Information Processing
- Editing, Validating, Routing & Archiving
- Performance Measurements
- Disparate systems interoperability

Customer Business Transactions:
- DLSS (MILS)
- DLMS (X12 & XML)
- ANSI X12, XML
- UDF and IDoc

Business Transport Methods:
- Websphere MQ
- SFTP
- SMTP
- HTTPS
PROCURER PAY TO TRAINING SYMPOSIUM

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