EXTOL EDI Integrator (EBE) is an integrated software extension of EXTOL’s Business Integrator (EBI) product. It provides a combination of integration services, tools, and metadata needed to create, deliver, manage, and maintain EDI collaborations, extending the services and tools foundation used in EBI to support non-EDI collaborations and business integration.

In conjunction with its EBI foundation, EBE enables you to rapidly create, test, and deliver inbound and outbound EDI integration processes, including “lights-out” synchronization with your enterprise applications and data. Using a combination of automated tools, built-in EDI collaboration logic, and object reuse, EBE lets you implement processes that send and receive orders, invoices, shipment notices, or use any other standard EDI message type faster and easier than with competing integration products.

With EXTOL EDI Integrator, you can:

- Automate “lights-out” integration between external partners and internal applications and data
- Install in minutes and produce custom EDI integration processes in hours, without coding
- Integrate with external partners using X12 or EDIFACT EDI, including their subsets
- Integrate directly or indirectly with ERP and other enterprise application systems
- Process high volumes of EDI data in narrow time windows
- Implement collaborations using mixed syntaxes (EDI, XML, flat file) and communications *
- Automate generation and reconciliation of functional acknowledgements
- Send notifications to alert relevant personnel about EDI processing status and exceptions
- Activate EDI processes based on events, schedules, data flows, or application CALLs
- Rapidly create or extend EDI collaborations by reusing existing integration components
- Choose from multiple deployment options, with identical capabilities on all platforms

* Note: B2B integration using non-EDI syntaxes (XML, flat files, spreadsheets, web services) is supported by optional EXTOL Data Integrators that integrate seamlessly with the EBE product.
EDI Integration Features

Design-Time

- **Full EDI Standards Libraries included** – allowing you to process and X12 or EDIFACT documents
- **Inbound and Outbound EDI Processing Generation via Wizards** – saves time by creating key objects by guided specification for EDI integrations
- **EDI standards updates included under annual maintenance agreement** – ensures that your system is capable of handling the latest data formats
- **Implement collaborations using mixed syntaxes (EDI, XML, flat file) and communications** – easily allows complex integrations requiring data conversion between systems such as Warehouse Management, Data Warehousing or Web-based applications
- **Rapidly create or extend EDI collaborations by reusing existing integration components** – promotes consistency and reduces development time requirements
- **Collaboration and Endpoint editors support partner and application profile reuse** – allows rapid development of a Trading Partner hierarchy that only requires identifying unique information to support alternate

Run-Time

- **Collaborations Specification, Identification and Routing** – allows data-driven decisions to be made regarding how information is processed
- **Multi-step EDI processes can sequence and invoke applications in an automated, “lights-out” fashion** – reduces the involvement of IT resources to dealing with exception cases; saving time
- **Deliver EDI collaborations that integrate with applications and IT resources across platforms** – extends your process automation by integrating data across applications/systems
- **Process mixed inbound batches containing EDI, XML, and other data** – reduces development time and maintenance support/requirements
- **Automate generation and reconciliation of functional acknowledgements** – allows you to maintain SLAs and performance requirements with trading partners
- **Activate EDI processes based on events, schedules, data flows, or application CALLs** – reduces latency caused by batch processing, allowing you to process information on an as-needed basis rather than a time-schedule
- **Choose from multiple deployment options, with identical capabilities on all platforms**
- **Email notifications alert relevant personnel about EDI processing status and exceptions** – promotes a lights-out environment by implementing exception notification procedures
**EXTOL EDI Integrator**

- Auditor utility supports diagnosis and reporting, via configurable, filtered views of log data – easily identify exceptions for re-processing
- **Intelligent syntax analyzer decomposes and processes mixed syntax transaction batches** - reducing the requirement to separate data batches by format
- **Automated envelope router envelopes, de-envelopes, and routes EDI transactions** – reducing end-user development requirements, saving time and reducing implementation complexity
- **Automated multi-stage logging and FA generation and reconciliation maintain auditability** – provides non-repudiation enforcement to ensure trading partner governance and SLA compliance
- **EDI reprocessing supports regeneration of EDI results from captured log data** – reducing resolution time required to address data-related issues
- **Increase awareness of data throughout the business cycle** – Document Life-Cycle portlet provides visibility to the entire document chain and acknowledgement statuses, not just a single document
- **Web-based view of standard EDI data** – in an easy-to-view format using the included EXTOL Dashboard
- **Van and or Direct communications** - allowing flexibility in connectivity options

**Using EXTOL EDI Integrator**

EXTOL EDI Integrator is designed to be easy to use for IT professionals and technical business analysts. It can be used by a single individual to create, test, and deploy EDI integration processes from beginning to end, or by teams that include multiple participants and roles, including Business Analysts, Developers, and IT Operations personnel.

The basic EXTOL EDI Integrator Lifecycle comprises a handful of stages:

1. Create or reuse objects required to implement the desired EDI integration process, including document schemas, processes, transformations, adapters, events, schedules, etc. There is no prescribed order governing the creation of objects that constitute an EBI integration process, but the following sequence is typical:
   - Generate document definitions (“schemas”) for transformation sources and targets by referencing the included X12 and EDIFACT standards, importing external metadata or (when external metadata is not available) using metadata wizards.
   - Create a transformation rule set, using the drag-and-drop Transformation Ruleset Editor.
   - Configure source and target adapters, using appropriate configurators for each adapter type.
   - Create a business process, using the graphical process modeler, connecting the transformation(s) and adapters created / configured previously. Add additional tasks, as required, to meet the functional requirements for your business process.
   - Configure an activation mechanism, if needed, using listeners, events, and / or schedules.
2. Test, and if necessary, modify objects in the process until the desired behavior is achieved.
3. Set global variables, if required, for the intended target system, and deploy the integration process.
4. Monitor the execution of deployed integration processes and manage EBI Server operations.
5. As business needs change, modify configured objects, test, and redeploy to meet new requirements.

This life cycle is supported by EXTOL Integration Studio (EIS), an integrated, repository-driven collection of graphical, design-time tools for EBI, and the EBI Dashboard, a collection of browser-based portlets for monitoring and managing the EBI system.

EXTOL Integration Studio – Model-Driven Specification

There are two ways to create a new EDI integration projects using EIS:

- Using the EDI Inbound and Outbound project wizards. These wizards generate project folders and “starter” projects based on inputs supplied to a wizard dialog.
- Implicitly, by creating a set of objects that reference each other, following your preferred sequence. EBI automatically tracks references from business process objects to adapters, transformations, and other “contained” objects.

The specific actions you take when creating or modifying an integration process will vary, depending on the type (EDI, web service, etc.) and sophistication of the business process you need. EIS makes it easy to create larger, more functional business processes by composing or chaining smaller ones.

Integration processes can be deployed to your choice of supported platforms. You can create and test systems using online or offline PCs, then deploy them to production on any other supported OS environment.

Once deployed, you can monitor and manage your EBE system using the included EBI Dashboard. The EBI Dashboard includes portlets for monitoring system status, suspending and resuming the system, listener adapter statuses, process status, document history, and other system functions.
Application Examples

EDI transactions are commonly viewed in two separate categories; Inbound and Outbound. Inbound transactions take data from an external source, such as a Value-Added Network (VAN) for FTP site and convert the EDI data into a consumable format that back-end systems can accommodate. AS2 communication can also be implemented (using the optional EXTOL Secure product), to send/receive EDI information securely over the Internet.

Outbound transactions originate in the back-end systems, such as ERP applications, aggregate the data to be processed, invoke collaborations processing and then convert the data into EDI formatted documents for transmission to a VAN or AS2-enabled trading partner.
Common Examples of EDI Inbound Integrations

- Purchase Orders via X12 4010 850 to Database
- Purchase Orders via EDIFACT ORDERS D07B to Database
- 837 HealthCare Claims to ERP Interface File
- 204 Load-Tender documents to legacy interface file

Common Examples of EDI Outbound Integrations

- Financials ERP database to Invoices via X12 4010 810
EXTOL EDI Integrator

• Warehouse Management System (WMS) ASNs via X12 5030 856
• ERP Invoice Interface files to EDFIACI INVOC D06A
• Accounting application Purchase Order Change Request to X12 860

System Requirements

EXTOL EDI Integrator is available as an add-on option to EXTOL Business Integrator, or as a stand-alone EDI integration solution that includes the EBI foundation technology. EBE includes the EXTOL Integration Studio (EIS) modeling environment, which is used to create and maintain EDI integration applications.

EBE and EIS support multiple platforms with identical functionality, giving you freedom of platform choice. The tables below show the main runtime and design-time system requirements for the EBE system:

**EXTOL EDI Integrator (Runtime)**

**Processor**
64-bit processor. For optimum performance, EXTOL recommends a dedicated server.

**Operating System**
- Windows 2008 Server, 2003 Server 64-bit
- Windows Vista 64-bit
- Windows XP 64-bit
- IBM I OS V6R1 (recommended), V5R4, V5R3 *
- Red Hat Linux (RHEL) v4 or v5, 64-bit
- Novell SUSE Linux v10 64-bit
- Tested with VMWare ESX Server 3.0.2

**RAM**
4 GB or greater

**Disk space**
Minimum 500 MB plus storage for user integration projects and related objects

**Other**
- Minimum 1024 x 768 monitor resolution
- JDK 1.6 (included with product)
- JDBC driver v2.1 or higher for database adapters

**EXTOL Integration Studio (Design-time)**

**Processor**
32-bit or 64-bit processor

**Operating System**
- Windows XP 32-bit and 64-bit
- Windows Vista 32-bit and 64-bit
- Red Hat Linux v4 or v5, 32-bit and 64-bit
- Novell SUSE Linux v10

**RAM**
2 GB or greater

**Disk space**
Minimum 500 MB plus storage for user integration projects and related objects

**Other**
- Minimum 1024 x 768 monitor resolution
EXTOL EDI Integrator

JDK 1.6 (included with product)
JDBC driver v2.1 or higher for database adapters

* The following additional requirements apply to installation of EBE on IBM i OS (i5/OS):

1. Java PTFs (levels and options vary by OS release)
2. QShell Interpreter
3. PASE Environment
4. Developer Kit for Java
5. Java Developer Kit
6. J2SE 6.0 (32 bit)
7. Toolbox for Java
8. iSeries Tools for Developers
9. Crypto Access Provider 128-bit for AS/400

For IBM i OS installations, EXTOL provides the no-charge, automated EXTOL Readiness Suite, which analyzes your system configuration and identifies which of the PTFs and optional product features required for EBE operation are not currently installed on your system.

Reasons to Choose EXTOL EDI Integrator

Advanced EDI Integration Features:

- Integrate EDI with current integrations
- Full support for X12 and EDIFACT standards
- Same skill set no matter the data syntax
- Flexible Partner Setup
- Dashboard – Document History
- Not limited to Top Down mapping
- Automated Processing
- Automated FA processing
- FA reconciliation

Business Benefits:

- Comply rapidly with customer and industry mandates for EDI
- Shorten order-to-payment cycles and improve cash flow
- Reduce or eliminate manual data entry, freeing clerical resources to work on other projects
- Reduce errors, charge-backs, and product returns
• Improve error detection and response times
• Improve trading partner relationships and customer satisfaction

IT Benefits:
• Accommodate partner limitations and preferences for EDI version / subset, communications, and turnaround requirements
• Deliver more completed EDI projects faster, in less time, with fewer IT resources
• Apply EDI integration skills and IT resources to non-EDI integration projects
• Dramatically reduce B2B integration life cycle costs
• Deploy to your choice of supported platform, and protect investments in software and deliverables as your platform needs change
• Expand XML, flat file, spreadsheet, database, and web services integration support with a simple licensing change