



ILlicom



TradeXpress Enterprise™

EDI, EAI Integration Server

Technical Features of TradeXpress Enterprise

• Application Domains

B2B Integration (or eEAI)
Electronic Data Interchange (EDI)
Professional Electronic Interchange (EEP)
Extraction Translation Loading (ETL)
Enterprise Extra Integration (EEI)
Enterprise Application Integration (EAI)
File transfer, etc.

• Operating Systems

Unix (Aix, HP-UX, Linux, Solaris)
and Windows (NT and 2000).

• Architecture

Simple or 3-level client server.

• TradeXpress Enterprise Clients

Text, X.Motifs, 32-bit Windows and HTTP-Java.

• Data Storage

Integrated database or Oracle DBMS.

• Multiple Environment Architecture

Unix or Windows user

• RTE (Reliable Transaction Engine) language features

C or C++ compiled L4G,
possible insertions of external code
(C, C++, shell, script, executable files, Java classes,
etc.), addition of personalized objects

• RTE Language Objects/Statements

DBMS/R access, FTP function library,
loops, calculations, CGI,
communication between processes,
table management, variable management,
inputs/outputs, idoc Sap, character string handling,
tests/conditions, sockets, XML etc.

• Task Planning

Internal or external classification.

• Business Process Management *

Business Process modeling, execution, and supervision
workspace with application or user intervention
(WORKFLOW).

• Operating or Supervision Functions

Interchange tracking, archiving, multiple criteria
searches, alerts, error message routing,
interface with alert management software,
reprocessing, debugging, display of interchanged data
by processing stage, etc.

• Acknowledgement Management

Protocol-based (DR/SR X.400, Exit CFT, EERP, etc.),
EDI (CONTROL messages, APERAK, 997 ANSI, etc.),
application-based (ERP) and operational with standby
timer and alerts.

• Security functions

Services (encryption and electronic signature),
EDIFACT messages (AUTACK and CIPHER),
algorithms (RSA, triple-DES, AES, IDEA, SQUARE, MD5,
SHA-1, PGP, etc.),
protocols (HTTP-S, S-MIME, X.509 and LDAP),
hardware interfaces (card readers, etc.),
third-party Public Key Infrastructures (PKI).

• Application Interchange Modes

Directory scanning, file removal, file collection,
messaging between applications, NFS,
program to program, DBMS queries, message queues,
transactional, ERP APIs, etc.

• Supported formats

Supported EDI standards:

ANSI X12, B2, CFONB, EANCOM, EDIFACT, GENCOD,
FIBEN, GTDI-TRADACOMS, INOVERT, LIDIC, NOÉMIE,
ODETTE-GALIA, SPEC2000C, SPEC2000M, TDFC,
VDA, etc.

XML Support (DTD or schemas):

Biztalk, cXML, ebXML, GCIP, Rosettanet, Xcbl, etc.

Supported formatting:

Fixed positions/lengths, Tag (HTML) separators,
DBMS query result, etc.

File types:

Office (PDF, RTF, XLS, TIFF, etc.),
plans, programs, binary elements, images,
text files, HTML, etc.

• Software interfaces

ERP interfaces :

Baan, BPCS, JD Edwards, MFG PRO, Movex,
Oracle Applications, People Soft, SAP, etc.

Interfaced SCMs:

Gold, I2, Infolog, Manugistics, Reflex, etc.

E-commerce interfaced applications:

Ariba, Commerce One, Content Europe, Intershop,
etc.

Interfaced DBMS:

JDBC, ODBC, native Oracle, etc.

Other interfaced management software:

Anabel, Adonix, Agrostar, Cegid, Coda, Conex,
EWR+, EDIRIS, ELIT, Genacod, Generix, Gesica,
Logdis, Logali, Logistar, Mapics, Minos, Navision,
OCS, Phare, Pop Corn, Sage, Siebel, Tolas, VIF, etc.

Operating software:

Operation Center, Open View, Patrol, Tivoli, etc.

Security:

PGP, Open SSL, Utimaco Safeware, Safex, etc.

• SAP R/3 Interface

Translation of XML documents and structure,
SAP Business Connector Interface, ALE*, tRFC*,
Start RFC, BAPI *, Status management

• Transport mechanisms

Communication protocols:

Allegro V9/V10, EDIINT/AS2, Etebac 3, Etebac 5,
FTP, Extended FTP, FTP-S, G-COPE, HTTP, HTTP-S,
Odette FTP, Pedi, PeSIT HS, Sesam Vitale,
SMTP+MIME, X.400P1 (X.APIA), X.400 P7, X.435.

EDI VANS:

Allegro, D'Arva, Atlas400, ATT, BT, Dillicom, GEIS,
IBM/GN, MCI, Telebox 400, Telepost, Telefonica, etc.

Fax transmission operators:

Atlas fax, FCR, Graphnet, Xpedite Système, etc.

Interfaced communication software:

CFT by SOPRA, Connect (Direct, Express, Tom) by
Sterling, Edith by RCS-TRS, Exchange by
MICROSOFT, Interpel by SOPRA, Isoplex by CRITICAL
PATH, MQ Series by IBM, Notes by IBM, Route400
by CLEARSWIFT, mail servers (Sendmail, Qmail,
Post Office), HTTP servers (Apache, Microsoft,
Netscape, etc.), UA TEDECO by X and Mail, UAFI by
MAXWARE, etc.

Supports JMS (Java Message Services) *

• Web Service *

UDDI directory access
Publication of services in WSDL format
SOAP invocation

Designed for



Microsoft
BackOffice



* Functions and modules available in 2003

Intra- and inter-company communications server for EDI, EAI, and B2B Integration

TRADEXPRESS ENTERPRISE OFFERS SIGNIFICANT OPERATIONAL VALUE WITHIN A SINGLE SOFTWARE APPLICATION: FORMAT TRANSLATION, COMMUNICATION BETWEEN APPLICATIONS, ROUTING, CONSIDERATION OF APPLICATION RULES (OR BUSINESS PROCESS), SECURITY FEATURES FOR DATA, AND DATA TRANSPORT. IT MEETS TODAY'S COMPLEX INTERFACE, SYNCHRONIZATION BETWEEN APPLICATIONS, APERTURE, RELIABILITY AND PERFORMANCE NEEDS. FURTHERMORE, WITH ITS VARIOUS ADMINISTRATION AND OPERATIONAL TOOLS, TRADEXPRESS ENTERPRISE SIGNIFICANTLY SIMPLIFIES CONFIGURATION AND SUPERVISION OF INTERCHANGES BY GUARANTEEING FAILURE-FREE TRACEABILITY.

TRANSLATION OF FILES OR DATA FORMATS

TradeXpress Enterprise ensures translation of even the most complex formats through its fourth-generation language, called Reliable Transaction Engine (RTE).

This language has been developed for manipulating and translating data or files within an EDI or EAI context.

The RTE includes about one hundred programming statements that are used as objects to allow simplified processes (changes in time, date, digit, characters, etc.) or very complex processes with combined and nested rules on several levels (transcoding table management, processing on character strings, mathematical functions, data extraction, file dispersion or clustering, consistency management, etc.).

Should the need arise, users can also integrate programs or functions created with other programming technologies (C, C++, shell, script, executable files, etc.) or created with their own RTE objects.

The RTE language was designed to respond to the performance requirements of the largest users of format conversion technology.

Language compilation is based on the intermediary production of a C/C++ source program.

More than twenty benchmarks with other products available help confirm that it is indeed the most powerful tool on the market.

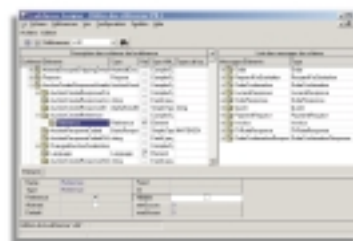
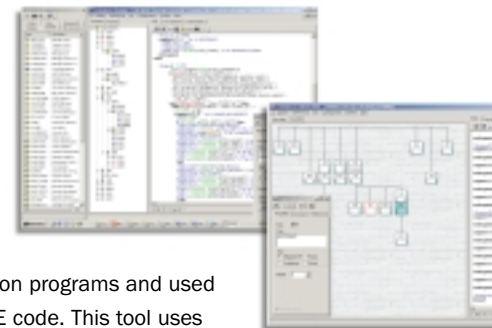
Use of the RTE language is significantly easier thanks to TradeXpress Designer, its graphical workspace to

create translation programs and used to generate RTE code. This tool uses drag-and-drop functions through source and target windows.

TradeXpress Designer responds to various scenarios for conversion program writing: EDI/XML to application-based, application-based to EDI/XML, application-based to application-based, ODBC table migration/synchronization, etc.

Supported EDI syntaxes (EDIFACT, GALIA, GENCOD, ODETTE, SPEC 2000 C/M, TRADACOM, VDA, etc.) are delivered with the various existing versions.

TradeXpress Designer provides modeling tools for application-based formats, EDI or XML design (creation/modification of EDI, DTD or XML diagram subsets), and importing DBMS table structures. It provides functions for test file production, documentation creation, version management, and RTE program re-engineering.





APPLICATION INTERFACING

TradeXpress Enterprise has been interfaced with several hundred different applications – either with a specific interface or by using a connector. TradeXpress Enterprise ensures advanced functions for format translation, supports the operational rules described by applications, manages integration supervision functions and interfaces with APIs of main ERPs.

Process initiation is performed according to the company's operating constraints: directory scanning, file reception, DBMS queries, transactional mode, etc.

Data interchange is done by either passing the files through directories, by supporting application-triggering modes (program start-up upon events), or through message mode.

TradeXpress Enterprise is currently interfaced with the main ERPs currently available on the market: Baan, JD Edwards, Movex, Oracle, QAD, SAP, etc., as well as various vertical, regional or industry-based applications.

PROCESSING MANAGEMENT

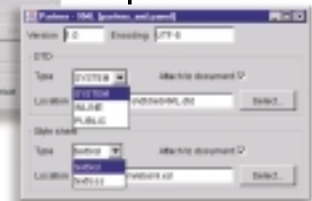
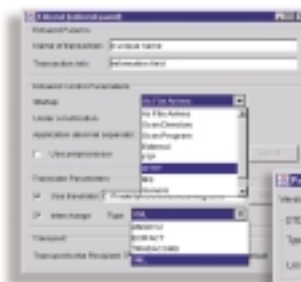
TradeXpress Enterprise's processing scenario management modules are the server's integration engines. They manage the translation and routing rules by considering the trade process linked to each application, flow or partner. They communicate with an internal directory that describes the characteristics of each partner or application: format used, transport mode, supervision functions, etc.

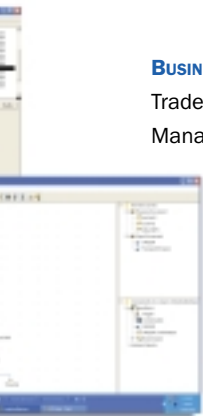
The scenario management modules have graphical interfaces that let users define the following: methods of communication with information systems or applications, operational processing to be performed, format translation, security levels and related transport modes.

These processing scenarios coordinate start-up of the tasks related to one or several technical or operational events and manage the extraction methods used in source applications into target applications.



Powerful routing functions analyze the structure and content of files in order to intelligently ensure data integration according to the identified objects and the related management rules.





BUSINESS PROCESS MANAGEMENT / WORKFLOW*

TradeXpress Enterprise BPM (Business Process Management) will soon offer a company business process management workspace. It models activity sequences and trade rules and invokes the applications and people that are affected. It also executes and controls flows at a functional level and simplifies the maintenance of processes and their related documentation.

DATA TRANSPORT

Through its management graphical interface, TradeXpress Enterprise allows using almost 20 different communication protocols and controlling the dozens of communication products currently available on the market.

It supports most synchronous/asynchronous data transport mechanisms. It interfaces with all EDI VANs, file transfer monitors, Message Oriented Middleware, messaging software, fax and paper dematerialization transmission systems, data extraction and replication technologies, etc. on the market.

In terms of communication and data transport, TradeXpress Enterprise integrates the following:

- most international protocols that are commonly used during electronic interchange - O-FTP, X.400, X.435, etc.
- mains Internet standards (FTP, FTPS, HTTP, HTTPS, SMTP / MIME, etc.)
- several national protocols (OVT, ALLEGRO, ETBAC, TEDECO, etc.)
- some file transfer monitors.

TradeXpress Enterprise is progressively expanding its connectivity in order to support emerging standards (EDIINT/AS2, SOAP, eb-XML, RNIF, JMS).

Through its connectors, TradeXpress Enterprise controls exchange configuration, transfer supervision and start-up of transmission or reception programs. Thus, interchange administration is simplified significantly.

ADMINISTRATION/OPERATION OF TRADEXPRESS ENTERPRISE

TradeXpress Enterprise is available for Unix and Windows main operating systems. It includes a client-server architecture that can be used in 3-level mode (data, processing, transport) and has three types of clients: X.Motifs, Windows and HTTP/Java.

TradeXpress Enterprise manages access profiles by providing each user with access rights for the various server functions. In standard form, TradeXpress Enterprise also offers a multiple environment architecture that is particularly valued by VAN operators, communities, ASP service providers and corporations that wish to centralize the applications of their subsidiaries.

This technology gives users the choice of how to organize the use of the server: by project type (EDI, EAI, etc.), by entity (company services, group's subsidiaries, VAN subscriber, etc.), by technical domain (development, testing, and operation), etc.



INTERCHANGE SUPERVISION

TradeXpress Enterprise integrates an interchange supervision mechanism that ensures point-to-point traceability.

Detailed information for each event can be consulted using multiple criterion searches and insertion into graphical tables, statistics files and other operational reports.

TradeXpress Enterprise's standard interchange supervision database provides technical information on the progress of the interchanges (date, size, file type, status, acknowledgements, etc.). It is also very easy for users to create an interchange supervision database with a functional display (followed by the package number, type of department, etc.). To do so, users simply create new fields and fill them with the data that passes through TradeXpress Enterprise.

The supervision database provides access to various operating functions: transfer to history database, conditional purges, debugging, processing restarts, etc., and comes complete with an archiving database.

Alert management is ensured through a configurable module that offers multiple functionality: alert management by level of importance, technical event supervision (status, performance level, network availability, etc.) or application-based event supervision (receipt of a specific type of message, data value, etc.), error message generation and routing according to levels and recipient lists, multimedia broadcasting of errors, (alpage, e-mail, fax, terminals, SMS, etc.), and much more.

SECURITY

TradeXpress Enterprise supports the main data security technologies: installation on shared disks, mirroring, RAID at different levels, load sharing, and clusters (Legato, HA-CMP, MC service Guard, etc.).

Furthermore, TradeXpress Enterprise includes various data security modules. This allows configuring the desired security level (encryption, electronic signature, etc.) according to the type of partner or the type of data to interchange.

By integrating several commercially available security software (PGP, Utimaco Safeware, Safex, Open SSL, etc.), TradeXpress supports several algorithms (RSA, triple-DES, AES, IDEA, SQUARE, MD5, SHA-1, etc.), protocols and standards (X.509, S/MIME, HTTP-S, etc.), interfaces with different hardware and additional software (key files, card readers, etc.), as well as third-party Public Key Infrastructures (PKI).



TradeXpress Enterprise - flexible and robust integration.

In the course of business communication, cooperation between applications and e-commerce, the integration needs of information systems have multiplied.

Businesses must be able to communicate with their partners, increase cooperation between their applications, and share information to satisfy customer needs, improve productivity, and maintain their competitiveness.

Integration projects involve EDI (Electronic Data Interchange) and EAI (Enterprise Application Integration), as well as ETL (Extraction, Transformation, and Loading) and B2B Integration (E-commerce Application Integration).

To respond to all the integration issues within a company, ILLICOM recommends the implementation of the Business Process Integrator (BPI)

TradeXpress Enterprise that works in the heart of the information system as a unique and centralizing integration platform.

TradeXpress Enterprise provides a flexible and robust integration framework for the intercommunication of all types of applications and accompanies businesses as they move into e-commerce applications.

It protects existing investments, considerably reduces interface costs, and centralizes and unifies the various data sources or trade rules of a company.

TradeXpress Enterprise is the first solution that integrates all data flows through a single platform:

- **Electronic Data Interchange (EDI)**
external partner interchanges: administration, banking, clients, suppliers, logistics experts, carriers, etc.
- **Enterprise Application Integration (EAI)**
interchanges between enterprise information system applications: vertical software, specific developments, CRM, ERPs, SCM, etc.
- **Extraction, Transformation, and Loading (ETL)**
migration, data replication, and data warehouse construction projects.
- **B2B Integration (or eEAI)**
integration within data information systems to and from e-applications: e-procurement, market share, merchant sites, etc.

The first version of **TradeXpress Enterprise** was developed by the SONERA for its internal needs as an EDI Value Added Network, ASP services and market share operator.

Since 2001, **TradeXpress Enterprise** published by ILLICOM, the historical integrator of **TradeXpress Enterprise** in France.

Thanks to its research and development teams, its extensive experience, and its intensive use of the technology in its hosting department, ILLICOM ensures continuous evolution of the solution by taking into account new technologies and user demands.

TradeXpress Enterprise is commercially available through a worldwide network of distributors/integrators. Over 1200 copies have been installed in more than 25 countries, used by several thousand companies.





ILlicom

Headquarters

Espace Lumière - Bâtiment 8
51/57, bd de la République
78406 Chatou Cedex - France

Local Agencies : Lorient, Lyon, Marseille, Nantes
Tel. : +33 (0)1 30 71 00 91 - Fax : +33 (0)1 30 71 08 07
Email : information@illicom.com
<http://www.illicom.com>