



iBOLT for iSeries: Reviewer's Guide

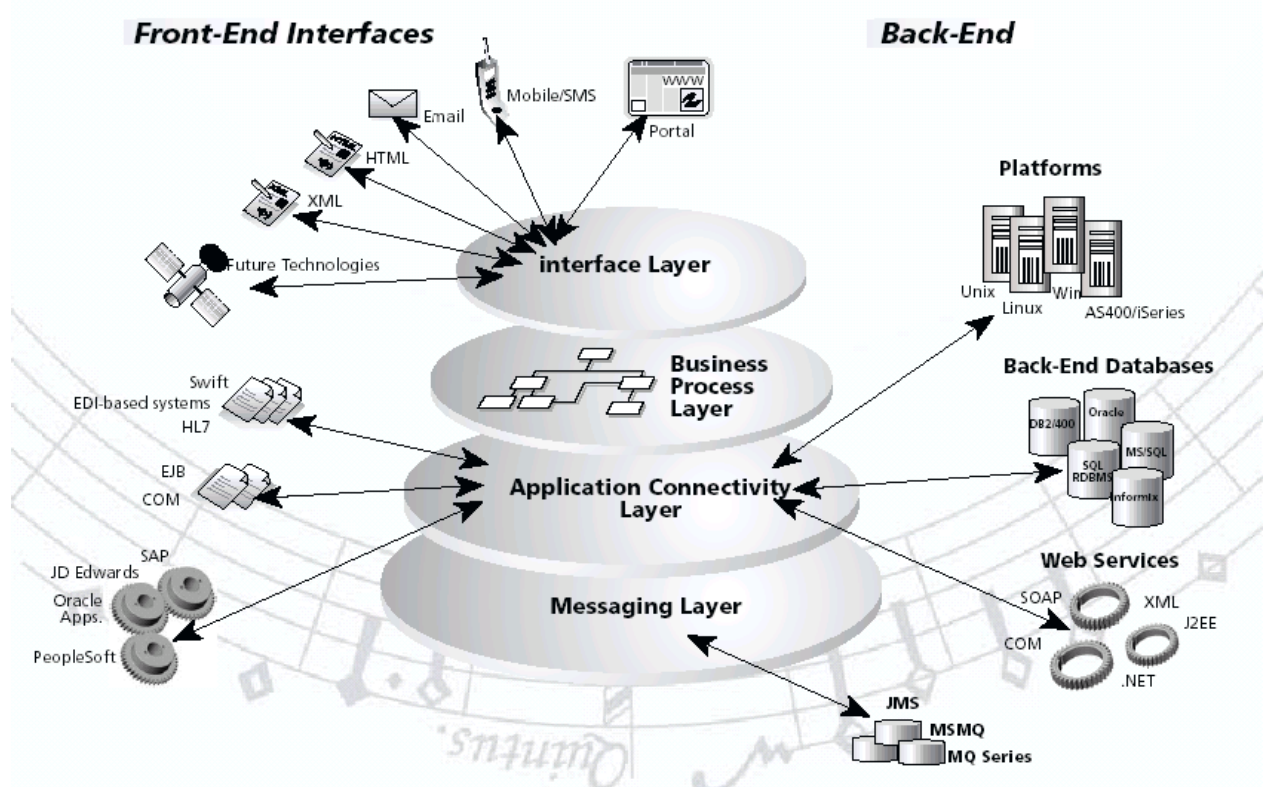
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Introduction

iBOLT, the leading **business integration** and **process management and development solution**, provides enterprises with the agility to deal with the never-ending stream of business challenges. Utilizing iBOLT, enterprises can quickly and easily align their business needs with their IT infrastructure. Enterprises can deploy new **business processes**, create new **composite applications**, and implement more flexible **Service-Oriented Architectures** that help reduce operational costs and improve internal operations.

The **iBOLT Integration Suite** encompasses all aspects of business integration and process management. The Suite consists of a rich set of symbiotic tools that support the entire integration process from architecture design, through mapping and testing of business processes and flows, to project deployment, ongoing business activity monitoring, and business performance measurement.



Utilizing the iBOLT EAI/BPM framework, enterprises can leverage their existing legacy environment to quickly and easily deploy new business processes and composite applications that improve the way they conduct business.

The Integration Challenge

Integration projects involve the tying together of disparate systems and entities that have to be mapped together to meet business requirements. The pieces may include:

- Diverse operating systems and platforms.
- Multiple applications, both packaged and homegrown.
- Multiple databases and file management systems.
- Geographically dispersed organizations.

An integration project endeavors to solve an organization's challenges of managing business processes and workflows, ensuring that back-end systems can talk to front-end systems, legacy applications communicate with the emerging technologies and applications, processes are seamless and fine tuned for efficiency throughout the organization and in the interfaces with external entities. The main objectives when undertaking an application integration project are Business Process Management, and Application and Legacy Integration.

The iBOLT Solution

The sections below describe how iBOLT provides the comprehensive integration solution outlining its benefits to business, describing the modules that are part of the iBOLT Suite, and iBOLT's ability to integrate with a wide-range of technologies.

iBOLT Benefits for Business

The iBOLT comprehensive integration solution benefits business by:

- Reducing maintenance costs.
- Maintaining transactional integrity.
- Enabling the Real-Time enterprise.
- Eliminating the gap between modeling and integration.

iBOLT Integration Suite

The iBOLT Integration Suite consists of:

- **iBOLT Studio**, the development environment for modeling, creating, and mapping out business processes and flows, as well as development of integration components, including adaptors, logic components, and data processors.

The Studio also includes out-of-the box **Integration Components**, which are the connectors, adapters, or converters that contain the business Logic. The table below describes the components included in iBOLT Studio:

Component	Description
iSeries	The iBOLT iSeries (AS/400) component lets you connect to an iSeries server and perform these functions: <ul style="list-style-type: none"> • Calling iSeries programs. • Executing iSeries commands.
Java	Lets you access Java Classes and EJBs.
JavaGenerator	Creates a Java class using standard methods.
EJB	Lets you create a new Enterprise Java Bean (EJB) component interface.
Web Services	Lets you create and access Web Services.
MQ	Lets you access an MQ Series server.
Domino	Lets you work with the Domino server.
Email	Sends and receives emails, including attachments.
HTTP	Retrieves information from a URL that you specify.
COM	Lets you create a new COM component interface.
Encryption	Can encrypt or decrypt files.
FedEx	Enables connections to FedEx shipping tools via the Internet.
UPS	Facilitates connection to United Parcel Service (UPS) applications via the Internet.
File	Lets you perform various file and FTP operations.
FileSplit	Splits a file into several smaller files and regroups split files.
FTPJAVA	Lets you carry out a range of FTP operations.

Component	Description
ItemField	Lets you transform data from and to different formats, such as PDF, MS Office, .txt, XML, and EDI.
iWay	Lets you use iWay's adaptive capabilities to integrate with a range of applications and technologies.
JMS	Lets you access a JMS-compliant messaging server.
Logic	Lets you create a component providing additional logic functionality in your flow.
MSMQ	Lets you work with MSMQ messaging.
SMS	Lets you send SMS messages.
ApplinX	Lets you use an ApplinX Server to execute ApplinX Paths to provide an emulation of legacy green-screen recorded scenarios.
DirScanner	Checks network and/or FTP directories to see when new files are created. You can use the component to perform these two actions: <ul style="list-style-type: none"> • Delete. • Move.

- **iBOLT Server**, which provides fundamental services, such as bus, store and forward, message routing, logging, Operational Data Storage (ODS), recovery, fault tolerance, etc. **iBOLT Monitor** that monitors real-time technical and business performance and provides full online monitoring and control of the overall integration process **iBOLT Portal**, which provides role-based, personalized access to business services.

iBOLT Integration Capabilities

iBOLT has tremendous integration and connectivity capabilities that include database interoperability, the ability to work with multiple databases in the same process, and the capacity to work with a range of systems on varied platforms. The table below describes the technologies supported by iBOLT.

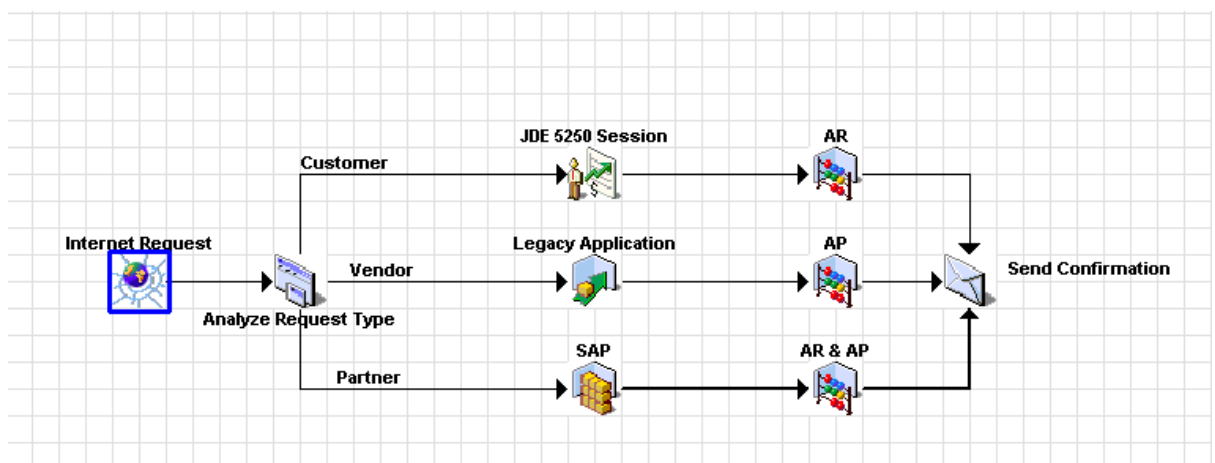
Technology	Support
Platforms and Operating Systems	iSeries, pSeries, Linux, Windows, SUN, HP, .Net, J2EE
Databases	DB2/400, DB2, Informix, Oracle, SQL-Server, ODBC, Pervasive.SQL
Communication Standards	SOAP, WebServices (WSDL), Directory Services (LDAP), HTTP/S, FTP, POP3, IMAP4, MAPI, SMTP, SNMP, File System, Network
Middleware	WebSphere, MQSeries, EJB, JDBC, JMS, MSMQ, ODBC, CORBA, WebLogic, Jboss, Sun
File formats	MS Office, printing files, HL7, FIX, EDI, COBOL, text files, tab-delimited and other delimited files, HTML, XML

iBOLT for iSeries

The next sections describe an integration scenario involving iBOLT and iSeries and an overview of the iBOLT features that support working with the iSeries platform.

iSeries Integration Scenario

The scenario shown below describes a typical integration situation leveraging ERP applications running on different platforms, a homegrown legacy application, and financial applications to a modern Web-based interface.



The scenario consists of these steps:

- A request via the Web to an iBOLT Server.
- The Server categorizes the request as **Customer**, **Vendor**, or **Partner**.
- **Customer requests** are directed to a JD Edwards 5250 application, running on an IBM iSeries server, which updates the JD Edwards database. The company's AR system, which runs on an IBM iSeries server, is then updated and a confirmation email message is sent.
- **Vendor requests** are directed to a homegrown legacy application, which runs on an IBM iSeries server, that updates the vendor database. The company's AP system, running on a Windows server, is then updated and a confirmation email message is sent.
- **Partner requests** are directed to a SAP ERP system, running on an IBM pSeries server, that updates the SAP database. The company's AP system running on a Windows server and the AR system running on an IBM iSeries server are then updated and a confirmation email message is sent.

iBOLT Features for iSeries

Database Access

- Physical files.
- SQL tables.
- SQL interface for accessing physical files.

Accessing iSeries Programs and Commands

- Invoke RPG/CL/COBOL programs.
- Run CL commands.
- Retrieve CPF error messages.

Accessing iSeries System Services

- Retrieve object lists.
- Retrieve system values.
- Retrieve and access spooler file entries.
- Retrieve and access IFS directory files.

Built-in Open Query File Function

- Allows record sorting on an iSeries server.
- Allows record selection on an iSeries server.

SQL Access to Physical Files

- Ability to use Direct SQL statements.
- Ability to access Views, Stored procedures, triggers, and functions.

Linux (Wintel/xSeries) and AIX (pSeries) Access to iSeries

- Communication with iSeries.
- DB2/400 Database access.
- iSeries command access.
- Native iSeries program (RPG/COBOL/CL) access.

Web Process

- Native iBOLT Server on iSeries.
- Native iBOLT Apache Internet Requester (CGI) for iSeries.
- Native iBOLT Apache Internet Requester (CGI and Apache module) for Linux partition on iSeries.

Integration/Exposure of iSeries Elements

- iBOLT Requester API allows invocation of external processes on any other platform from iSeries RPG/CL/COBOL programs.
- EJB support.
- Web Services support.
- Email support.
- XML format support.
- PDF format support.

Installing iBOLT

For iBOLT installation information, see the *iBOLT Suite Installation Guide*.

Getting Started

For an overview of how to develop an iBOLT project see the *iBOLT Getting Started* document.

Additional Reference Material

Click the link to open each document.

- [iBOLT Suite Installation Guide](#)
- [iBOLT Integration Suite Help](#)
- [iSeries Guide](#)
- [iBOLT – Platform-specific Deployment](#)
- [iBOLT – Getting Started](#)
- [iBOLT Whitepaper](#)
- [eDeveloper for iSeries Whitepaper](#)