

# Extensio Information

## Delivery Technology

### Extensio Information Delivery Architecture: Benefits

- A Multi-Channel Platform Solution:** Due to its extensible SOA based architecture, Extensio provides a platform for multi-channel delivery for business users, capable of supporting multiple types of delivery for the same transaction on multiple user-touch points. With its build-once-deploy-many design and rich development tools, Extensio provides the right mix of value for enterprise technology buyers.
- End-to-end Comprehensive Footprint:** Covers end-user Microsoft desktops, Windows 2000+ versions, MS Office applications, web interfaces, mobile phones and applications.
- Powerful Development Tools:** Enables enterprises to build their own information services for their data stores
- Lower TCO:** Needs no upgrade to end-user desktops or to back-end sources
- Speed of Delivery:** Results in deployment in weeks, instead of months
- Services based Technology with Build-once-Deploy-many features:** Services architecture enables customers to build information services with data elements from multiple sources once for one end-user interface, and then re-use the information service for quick deployment for several other interfaces.

### Extensio Information Delivery Server

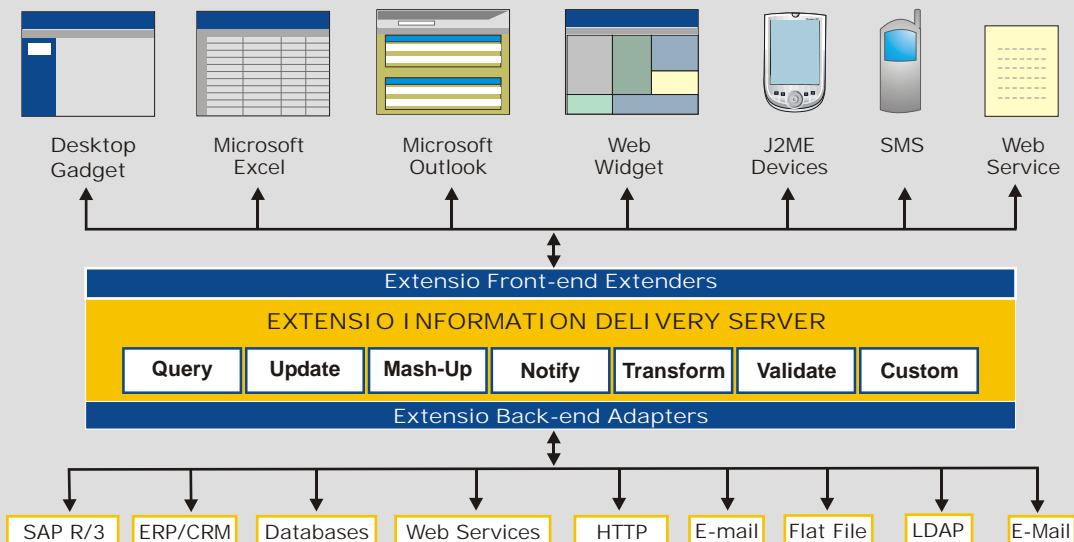
The Extensio Information Delivery Server is the core engine that powers the Extensio Symphony Information Suite. The Extensio Server creates the SOA-based information delivery layer that extracts information elements residing in enterprise and web data stores using Extensio Adapters, assembles the extracted information elements using its query, update, mash-up, transform, validate and custom engines to create Extensio Information Services, and delivers information services to multiple user-front ends, in front-end specific format, by means of Extensio front-ends Extenders.

The Extensio Information Delivery Server is built using patented J2EE technology, and is designed to be scalable with multiple caches at the data extraction, assembly and delivery layers. With its extensible adapter and extender interfaces, new data sources and new delivery mechanisms can be added quickly.

The Extensio Information Delivery Server consists of:

- Extensio Rules Engine:** Implements the engine to run the declarative, XML based Information Service rules defined by the Extensio service builders.
- Extensio Query Engine:** Queries data stores and extracts data
- Extensio Update Engine:** Updates data at data sources. Multiple records, multiple sources with multiple commit modes supported.
- Extensio Mash-up Engine:** Mixes and pipes extracted information between different information services to create full-bodied information services.
- Extensio Notification Engine:** Sends out e-mail/SMS notifications on occurrence of end-user specific / information service specific events.
- Extensio Scheduled Tasks Engine:** Executes information query and update tasks at scheduled time intervals, or on specified event occurrences.
- Extensio Transform Engine:** Transforms master key values from one structure to another. Normalized and canonical transforms supported.
- Extensio Validation Engine:** Validates user inputs. Data type, LOVs, date range and custom data types supported.
- Custom Engine Interface:** Provides the flexibility to add custom processing logic written in Java or Javascript on the information service elements

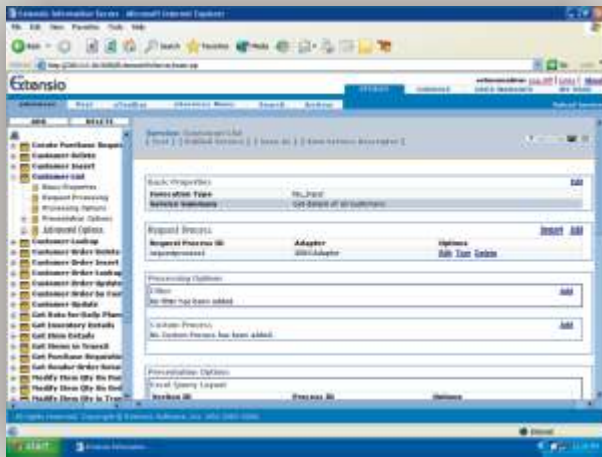
Widely supported on a choice of operating systems, J2EE application servers and databases, Extensio Information Delivery Server plugs into the existing customer infrastructure with ease.



# Extensio Server Deployment

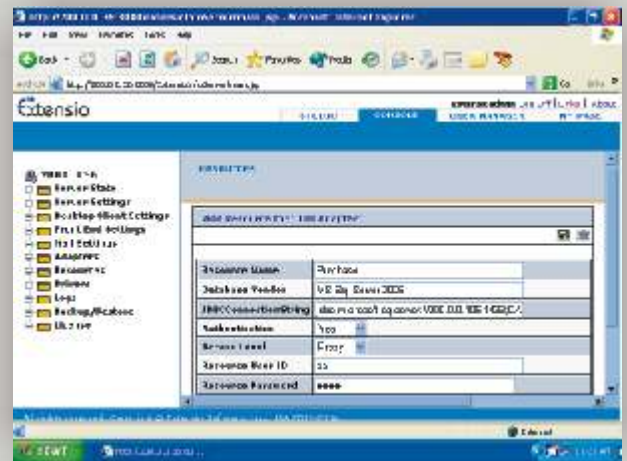
The Extensio Information Delivery Server is equipped with powerful deployment and development features and tools. With a combination of Extensio Service Packs and Extensio Service Development tools, customers can get up and running with multi-channel information delivery in days and weeks, instead of months.

Extensio Service Packs are pre-built Extensio Information Services that are imported and deployed within the Extensio Information Server. Pre-built services, on import, are customised to suit customers needs, provisioned for the users, and are deployed within days.

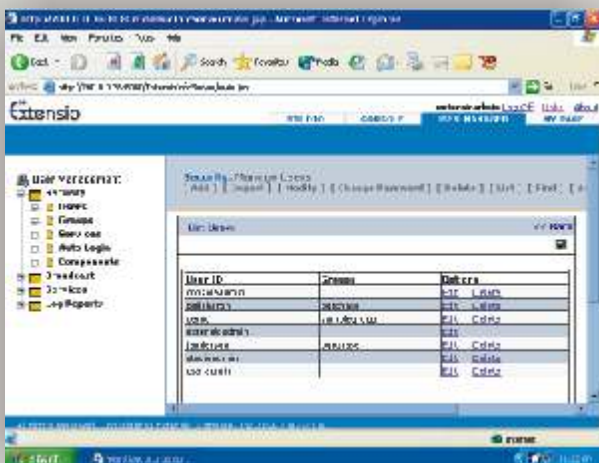


Extensio Console provides a browser based interface for managing the Extensio enabled multi-channel information delivery. System administrators configure the Extensio deployment for the supporting the data and network resources available, for the required user load and performance.

Extensio Studio provides an intuitive browser-based development environment for building, testing, and deploying Extensio information services. Customers IT department uses the powerful data extraction, assembly and delivery tools to built information delivery channels for their specific needs for their data sources.



Extensio User Manager is browser-based tool that is used to manage the users and the user groups, and the service permissions. With support for multiple directories and authentication mechanisms, Extensio integrates well with existing deployments of user directories.



## Extensio Extenders

### Supported Environments

#### Required on Users' Desktop Machine

Required Hardware: Minimum Celeron based CPU, 128 MB RAM, 3 MB disk space  
 Required Software: Windows 98+, Microsoft Office 2000+, Internet Explorer 5.5+

#### Extensio Extender for Desktop Gadgets

Supported Desktop OS versions: Microsoft Windows 2000+  
 Supported documents for Alt-Click Hot Key: Office 2000+ documents, text files, PDF

#### Extensio Extender for Outlook

Supported versions: Microsoft Office 2000, 2003, XP

#### Extensio Extender for Excel

Supported versions: Microsoft Office 2000, 2003, XP

#### Extensio Extender for Web Widgets

Works on any web site. Supported Browsers: Internet Explorer 5.5+, Firefox ver 1.2+

#### Extensio Extender for SMS

**Supported Users' Device:** Any GSM/CDMA device

**Required Server Software:** Nokia Data Suite 3.0, Java Communication API

**Supported Server Devices:** Nokia 3310, Nokia 3315, Falcom GSM900/1800 modem

**Bulk SMS:** HTTP(s) connector to GSM Service Providers' SMSC

#### Extensio Extender for J2ME Devices

Supported Users' Device: Any J2ME Client with MIDP 1.0, CLDC 1.0

#### Extensio Extender for Web Services

SOAP 1.2 Compliant, WSDL 1.1 compliant

#### Extensio Extender for Applications

Supports scheduled data transfers between applications, with master transforms and validations

#### Extensio Alerts

Delivered on E-mail and SMS, on user specified periods and events

## Extensio Adapters

### Supported Data Sources

#### Extensio Adapter for SAP R/3

- Based on SAP JCO 2.1.6
- Uses RFC/BAPI interfaces
- Supports read and write operations
- Supports three level commit
- Works on SAP 3.1H+

#### Extensio Adapter for ERP/CRM

- With XML/web services interfaces

#### Extensio Adapter for Databases

- Connects to IBM DB2, Oracle, Microsoft SQL Server, My SQL
- Supports two level commit
- Supports Standard SQL, Prepared Statements, and Stored Procedure

#### Extensio Adapter for HTTP sources

- Web APIs, Rest Style XML/HTTP
- Read/write operations
- Supports Authentication and HTTP(s) for EIP sources

#### Extensio Adapter for Web Services

- Supports MS SOAP and Apache

#### Extensio Adapter for Excel

- Supports read and write operations
- Supports SQL & Excel POI interfaces

#### Extensio Adapter for E-mail Stores

- Supports read operations with To, From, Subject and Content fields

#### Extensio Adapter for Flat Files

- Connects to .txt and .csv files
- Supports read and write operations

#### Extensio Adapter for LDAP Sources

- Supports read operations with Users and Group parameters
- Supports Active Directory, Netscape LDAP and Oracle Directory Servers

## Extensio Information Server

### Supported Environments

#### Hardware Required

Minimum Pentium III Server Class machine, 512 MB RAM, 1GB disk

#### Server Operating System

Microsoft Windows Servers: Windows 2000, 2000 Advanced, 2000 Professional, 2003, XP  
 Linux: Red Hat Linux 7.2, 9.1

#### Application Servers

IBM WebSphere App Server 4.0, 5.0  
 Oracle App Server 9i, 10g  
 SAP Netweaver 2004 SP16  
 JBoss App Server 3.0.3, 3.2.3  
 Tomcat App Server 3.3, 4.1, 5.5

#### Database Repository

Oracle Database 8i, 9i, 10g  
 IBM DB2 Database 7.2, 8.0  
 Microsoft SQL Database 2000, 2005  
 MySQL Database 3.23, 4.0

#### Directory Server

Microsoft Active Directory 2000  
 Netscape LDAP 4.1  
 Oracle Directory Server 10G

#### Security and Encryption

Transport: HTTP, HTTP(S)  
 Authentication Modes: Basic, Digest, Form, Kerberos, LDAP based  
 Passwords: Stored using Sun JCE Cryptography algorithm