

IBM Rational Spatial Integration Adapter

Deliver the capabilities of ESRI ArcGIS Server — the leading geographic information system application server

Highlights

- ***Spatially enable your enterprise applications***
- ***Publish industry-standard geographic information system (GIS) Web services with ease***
- ***Empower non-GIS developers by providing them with spatially aware development tools***

IBM Rational® Spatial Integration Adapter allows programmers working with the IBM Rational Application Developer environment to apply visual programming techniques, such as dragging and dropping spatial controls, when creating Web-based content.

The Spatial Integration Adapter is compatible with IBM DB2® Spatial Extender and IBM Informix® Spatial DataBlade information management

software, as well as other databases supported by the ESRI ArcSDE gateway for spatial databases.

IBM Rational Spatial Integration Adapter is designed to enable ESRI ArcGIS Server objects to be integrated into applications and Web services. Together, they deliver the following capabilities:

- *Browser-based access to GIS analysis functions*
- *Advanced GIS Web services*
- *Opportunities to develop custom applications using Java*
- *Integration of GIS with other IT technologies*
- *Centrally managed multi-user editing capabilities*
- *Focused spatial analysis operations on a server*

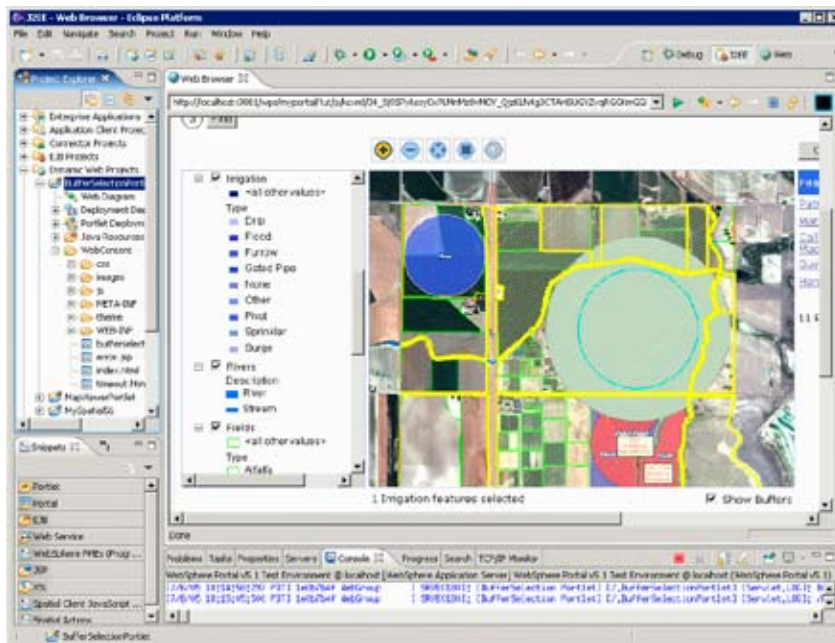


Figure 1. Testing a spatial portlet within IBM Rational Spatial Integration Adapter

The IBM Rational Spatial Integration Adapter helps application programmers:

- Design new spatial projects
- Create Java™ servlets and JSR 168 portlets with spatial components
- Work with design, source and quick-edit views in Rational Application Developer
- Drag and drop ESRI ArcGIS Server spatial objects:
 - Geocode
 - Map
 - Identify results
 - Add north arrow
 - Produce overview map
 - Set page layout
 - Include scale bar
 - Insert table of contents
- Integrate the ESRI spatial JavaServer Pages (JSP) tag library
- Use ESRI Java ADF templates in a WebSphere environment
- Produce new spatial Web services

IBM Rational Application Developer provides:

- Dynamic Web project wizards
- Integrated help
- Page designer palette and visualization
- Drag-and-drop support
- Quick-edit view
- Attributes view
- Web services support

With IBM Rational Application Developer, you can:

- Accelerate the development of Web services and Java 2 Platform, Enterprise Edition (J2EE) applications with visual tools, templates and wizards
- Create and test portlets in a visual environment
- Increase the development speed for dynamic Web and Java applications and Web services

- Visualize and graphically edit code through the UML Visual Editor for Java and Enterprise JavaBeans architectures
- Detect performance issues early with graphical performance profiling and trace tools
- Collaborate and share assets across a team using the included IBM Rational® ClearCase® LT version-control application
- Leverage existing skills and reduce the learning curve for Web development with drag-and-drop functionality, reusable components and point-and-click database connectivity
- Integrate business applications with interoperable Web services
- Customize the development environment to increase productivity and meet your specific needs
- Streamline application testing with a quick-loading unit test environment and visual debugger
- Adapt and extend the development environment with a wide range of

IBM, IBM Business Partner and Eclipse-based plug-ins

- Build dynamic Web user interfaces without coding skills using standards-based JavaServer Faces (JSF) components
- Visually design and develop rich user interfaces using drag-and-drop capabilities, reusable components and visual page designer layout tool
- Build data-driven Web pages and point-and-click database connectivity without-coding skills
- Write business logic and build data-driven Web applications using 4GL skills and Enterprise Generation Language (EGL) procedural language
- Build rich client user interfaces with performance and maintenance characteristics of thin clients using JSF extensions
- Create and test portlets in a visual environment with no coding using visual portlet layout and design tools
- Leverage both Struts and JSF Model View Controller (MVC) frameworks

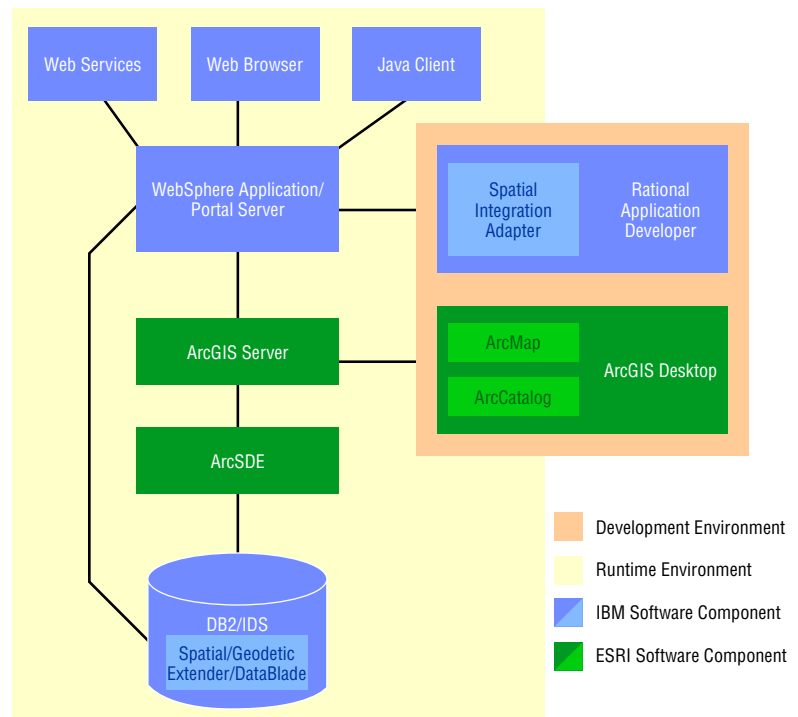


Figure 2. High-level architecture for IBM Spatial Server

IBM DB2

With its innovative capabilities, IBM DB2 minimizes the time-to-value for programmers, customers and business partners. DB2 delivers a broad array of autonomic enhancements that are designed to help reduce skills requirements and the time spent by database or system administrators on management, optimization and automation tasks. DB2 speeds up application development by enabling deeper integration with Microsoft® Visual Studio® .NET, IBM WebSphere Studio EGL, 4GL rapid application development (RAD), IBM Rational XDE™ Developer for Java and open source Eclipse-based development environments.

IBM Informix Dynamic Server

Designed to better leverage existing information assets, IBM Informix® Dynamic DataServer (IDS) helps businesses thrive in today's on demand business environment. Many administrative functions that were formerly manual are now automatic, thus reducing maintenance requirements and increasing database availability. Application Developers will appreciate the highly embeddable aspects of IDS plus its support of the latest open standards, platforms and integration options with other industry-leading technology from IBM. IBM is committed to continue improving the innovative and leading-edge database server that IBM and IDS customers and business partners expect.

For more information

To find out more about IBM Rational Spatial Integration Adapter and other IBM information management solutions, contact your IBM representative or IBM Business Partner, or visit:

ibm.com/software/data/spatial

IBM Rational Spatial Integration Adapter at a glance

Developer requirements:

- IBM Rational Spatial Integration Adapter, Version 1.0.2
- IBM Rational Application Developer, Version 6.0.0.1 or later
- IBM WebSphere Portal Server, Version 5.1 Test Environment (needed for testing spatial portlets)
- ESRI ArcCatalog, Version 9.1 or later
- ESRI ArcGIS Server, Version 9.1 or later
- ESRI ArcGIS Server Java ADF, Version 9.1 or later

Optional requirements for enterprise deployment:

- IBM WebSphere Application Server, Version 5.1 or later
 - IBM WebSphere Portal Server, Version 5.1 or later (for portlet deployment)
 - IBM DB2, Version 8.1 or later
 - IBM DB2 Spatial Extender, Version 8.1 or later, installed feature
 - IBM Informix Dynamic Server, Version 9.40 or later
 - IBM Informix Spatial DataBlade, Version 8.20 or later
 - Any database supported by the ESRI ArcSDE gateway for spatial databases
 - ESRI ArcCatalog, part of ArcGIS Desktop, Version 9.0 or later
 - ESRI ArcSDE, Version 9.1 or later
 - ESRI ArcCatalog, Version 9.1 or later
 - ESRI ArcMap, Version 9.1 or later
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