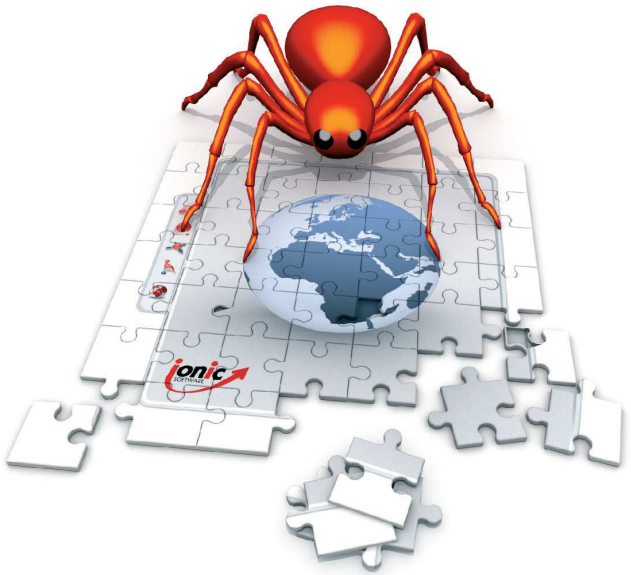


RedSpider Enterprise 3.5.2

Product Information

- when it has to be **right**

Leica Geosystems

Introduction

RedSpider Enterprise is the state-of-the-art enterprise toolkit for building geospatial applications

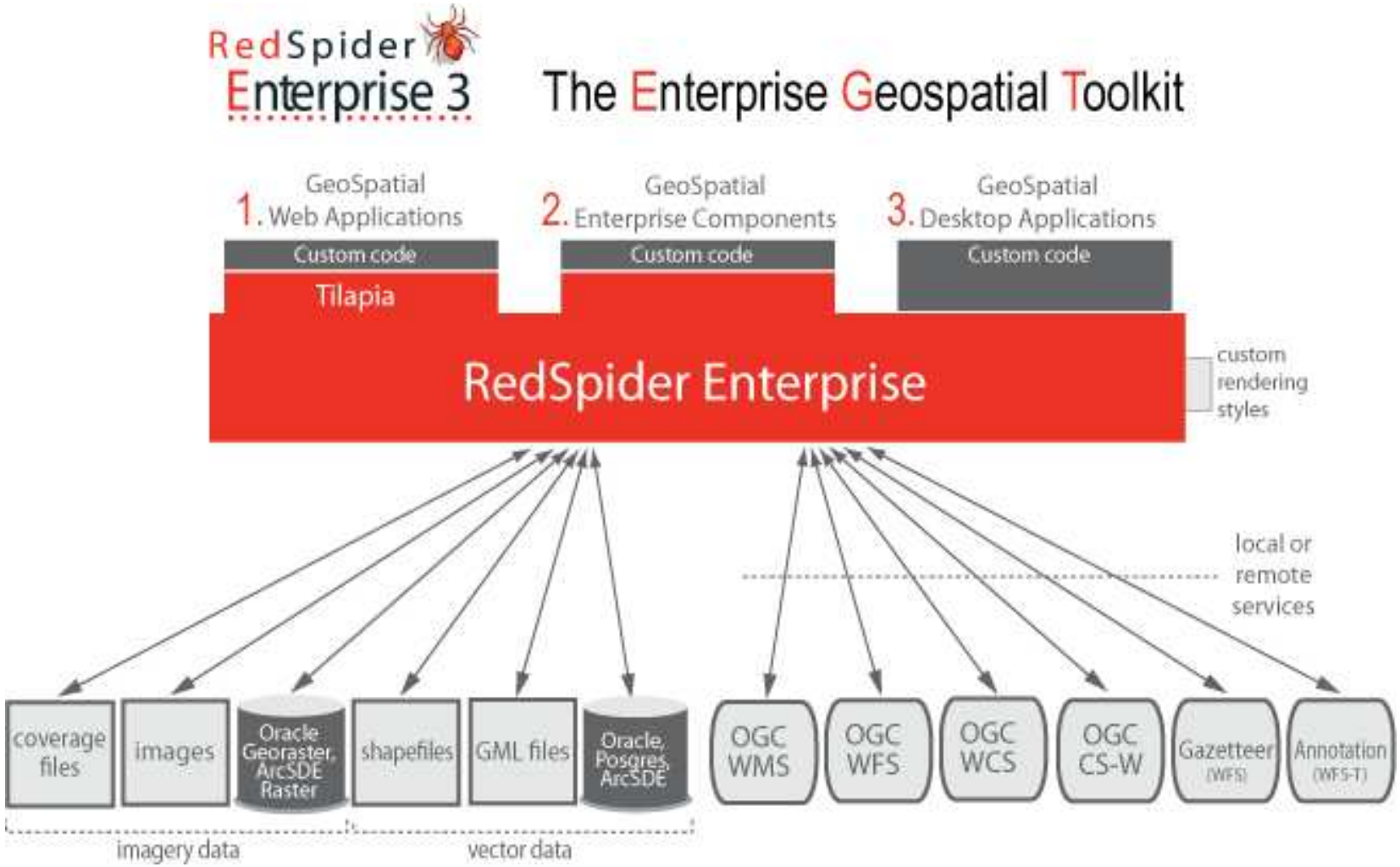
RedSpider Enterprise can be used to build the following types of applications:

- **Geospatial Web Applications**: build Rich Internet Applications (RIA) with the help of the Web Toolkit

- **Geospatial Enterprise Java Components**: implement custom services and expose them using JavaEE, RMI or any desired protocol

- **Geospatial Desktop Applications**: build Java SWING/SWT desktop applications

Architecture



Service Access And Instanciation

- **Support of the following services:**
  - WMS: v1.0, v1.1.0, v1.1.1, v1.3
  - WFS: v1.0, v1.1
  - WCS: v1.0
  - CS-W: v2.0, v2.0.1, 2.0.2

Service Access And Instanciation (cont'd)

- **Remote access**
  - HTTP (GET/POST)
  - WSDL/SOAP
  - Any remote protocol with a minimal amount of custom code
- **Local access**
  - Not only can you access services remotely but you can also create them locally on the fly

Service Access And Instanciation (cont'd)

- **OGC/ISO compliance: a wide number of related specifications are supported**
  - SLD v1.0
  - Metadata (ISO19139 v1.0, ISO19115)
  - Context v1.0.0, v1.1.0 with many extensions
- **Strong involvement at the OGC**
  - Constant evolution with new specifications
  - Leading evolution of the specifications

Supported Data Sources

- **Imagery**
  - png, gif, tiff, jpeg, Oracle Georaster and ArcSDE Raster
- **Coverages**
  - Geotiff, DEM, BIL, BSQ, Landsat, JPEG2000, DTED, NITF, ECW, HDF4, Hdf-Eos, Spot
- **Vector access**
  - GML, shape files, flat files
  - Oracle 8i, 9i, 10g, PostGIS, ArcSDE 8.2, 9.0, 9.1 (JDK 1.4+) ; 9.2 (JDK5)
  - Configurable mapping between feature types and datastore

Portrayal Engine

- **Transforms features into either an image or a textual representation through a rendering process defined by rules**
  - OGC Styled Layer Descriptor (SLD)
  - Properties, XML (internal format)
  - Java-based rule
- **Ability to enhance output from other services**
  - Change the output format, the color palette, etc

Portrayal Engine (cont'd)

- **Portrayal API**
  - Render content with text, marker, geometry, raster, etc.
  - Anti-clashing, anti-aliasing, halo, etc.
- **Complete rules priority mechanism**
- **Pre-rule & post-rule hooks**
- **Output format**
  - png, gif, jpeg, svg, pdf, html, csv

Outstanding WFS Abilities

- **GML support**
  - GML2 and GML3
  - ISO19107 geometries
  - ISO19109 feature model
- **Feature manipulation API**
  - Very complete feature type definition and manipulation
  - Transactional WFS API: feature editing
  - OGC filter builder API: filter a features set with powerful predicates

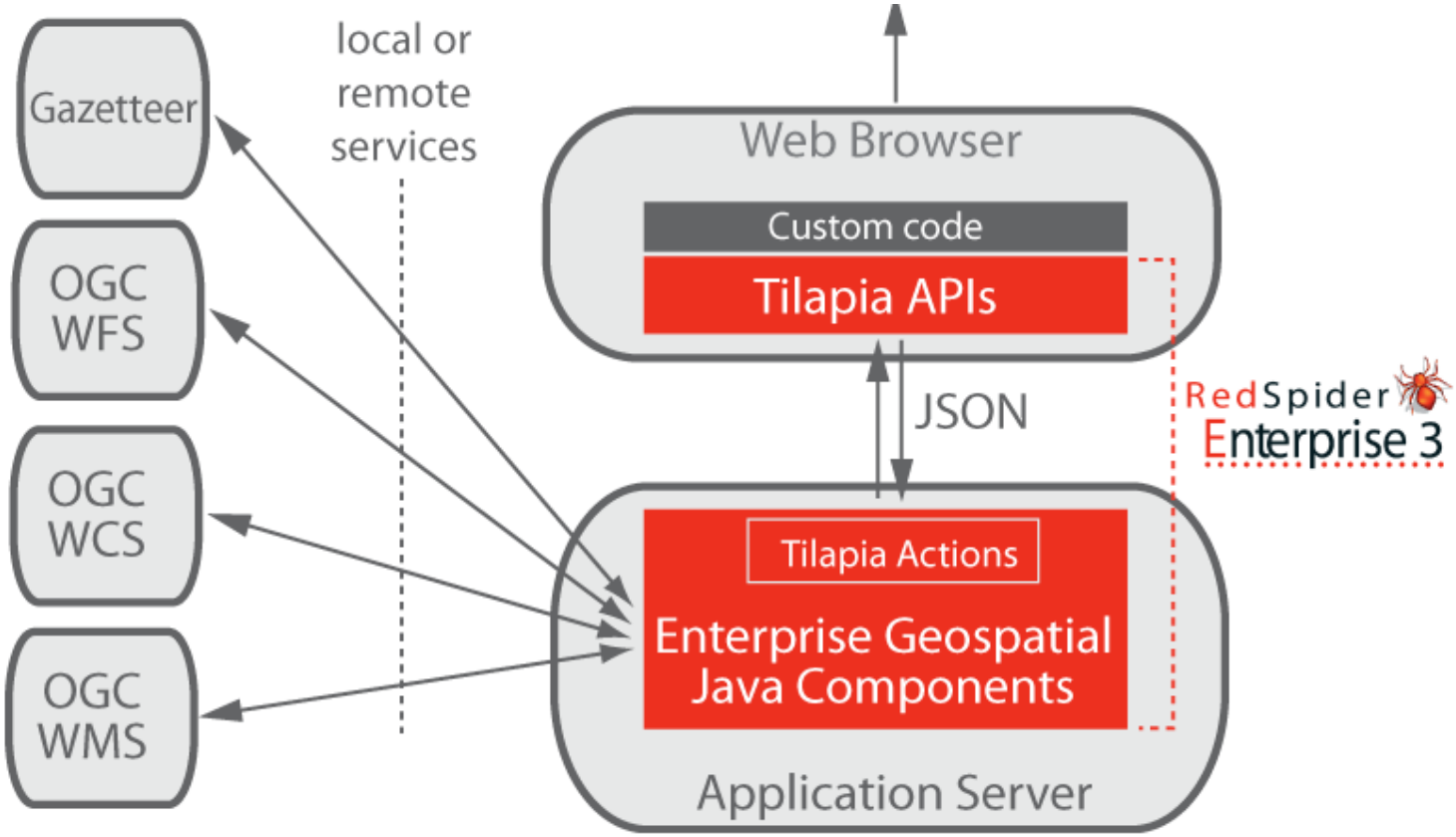
Geo-enabled Java Components

- **Map Generation Tool**
  - Read and write OGC-compliant contexts
  - Get a map based on the context's current state
  - Add or remove layers (such as a WMS, WFS, etc) from the current view
  - Customize layer's styling with support of SLD
  - Various options to customize the generated map
  - Fully integrated exception policy

Web Toolkit

- Quickly build Geospatial Rich Internet Applications
- No browser plugin is required
- UI-agnostic: fully customizable
- Uses recent, but proven technology
- Java & JavaScript (mostly JavaScript)
- Lightweight footprint on web servers
- For both beginners and experts web programmers

Web Toolkit Architecture

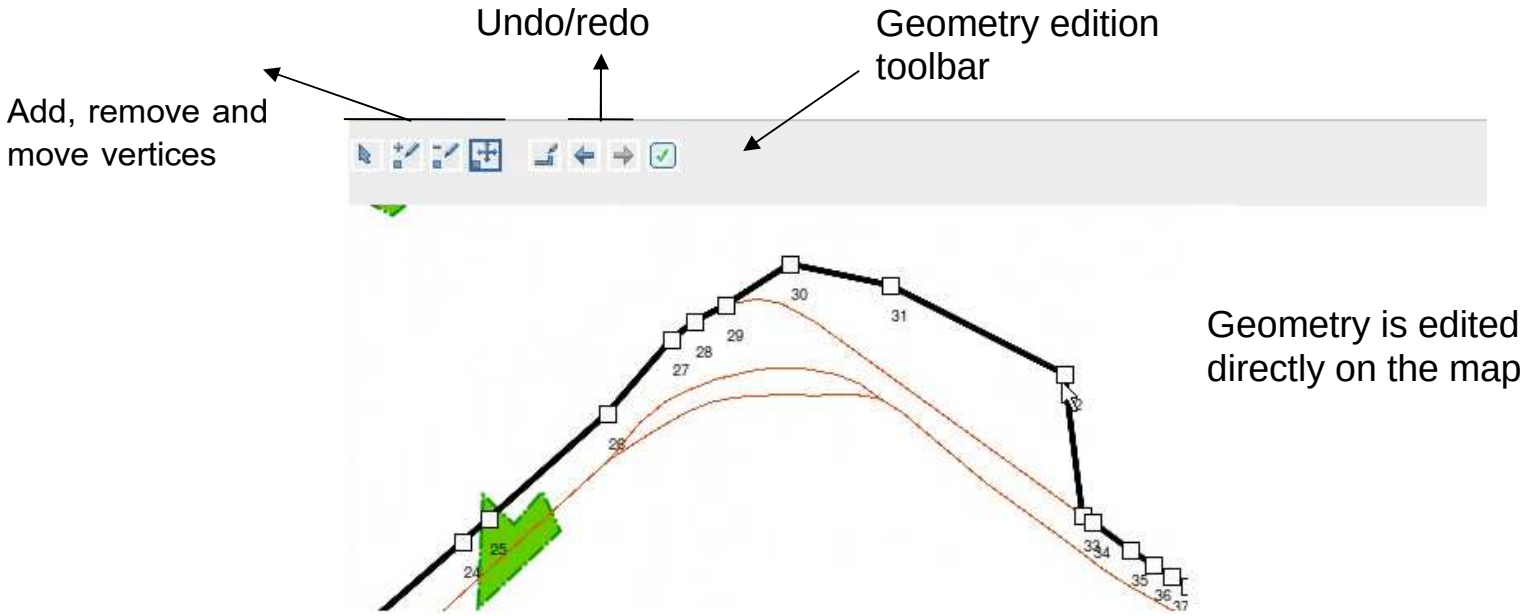


Web Toolkit Features Set

- **Create maps based on WMS, WFS, TMS and ECWP services**
- **Map management and configuration**
  - Pan, zoom, history management, etc
  - Scale, coordinate system (SRS)
- **Layers management and configuration**
  - Title, output format, style (including SLD), visibility and opacity
  - Security and tiling configuration, when appropriate
- **Transparent access to secured services (HTTP authentication)**

Web Toolkit Features Set (cont'd)

- **Feature Editing**
  - Insert, edit and delete features on transactional WFSes (WFS-T)
  - Support for editing all types of properties: Literal, Numeric, Enumerations, Geometries

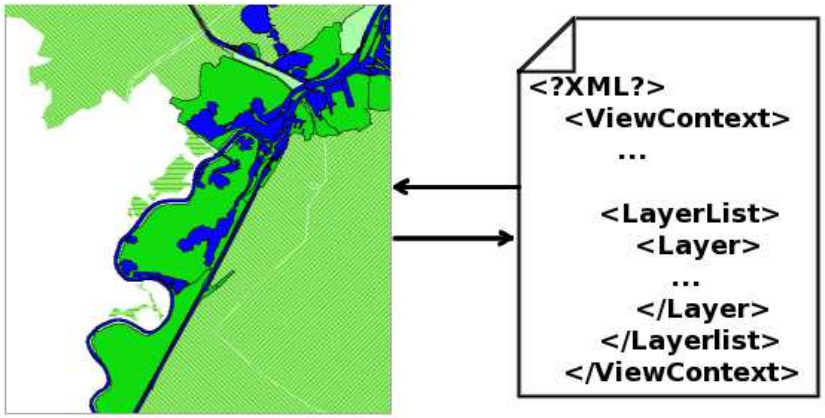


Web Toolkit Features Set (cont'd)

- **Create overview maps (child maps)**
- **Obtain info about map objects (Get feature information)**
- **Tiling support**
  - Client-side tiling on any WMS
  - Support of OSGEO Tile Map Service (TMS)
- **Portlet integration (JSR 168)**
- **Upload & Download vector data (on-the-fly WFS)**

Web Toolkit Features Set (cont'd)

- **Gazetteer support**
- **Transparent ECWP support**
  - Auto-detection of the ERMapper plug-in
  - Fallback to the WMS service if it is not avalable
- **Save and load the state of the map in a Web Map Context file (WMC)**



Conclusion

- **Redspider Enterprise is the solution to build your geospatial enterprise applications**
  - Wide fine grained API to build any type of applications/services
  - Seamless access to local spatial data sources and remote third party OGC services
  - Server-side components are 100% Java based and integrated in the Java Enterprise architecture
  - Powerful web toolkit fully integrated with the server-side capabilities