

What is the Insight XML Gateway?

Luna's Insight software provides strong interaction between users and digital content through the Insight Java and Browser clients. Insight client software enables end-users to search for and use the rich content and functionality available in Insight. The development of the Insight XML Gateway addresses a different requirement: how to let other applications search and use Insight collections as a resource. The Insight XML Gateway allows other applications to interact with and incorporate Insight content and capabilities.

Features

Built on the XML 1.0 and HTTP 1.1 standards, the Insight XML Gateway provides a simple to implement, cross-platform, and programming-language-independent method to access Insight collections.

- The XML Gateway has access to multiple Insight collections, controlled only by security restrictions established by Administrators.
- The XML Gateway is multi-threaded so it can respond to simultaneous service requests.

The current version of the XML Gateway provides access to the following information:

- Basic collection information, including collection name, description, and current availability.
- Field information, including field names, field types, and available support for metadata standards.
- Results of keyword, single field, complex multi-field searches, and cross collection searches.

The XML Gateway also provides optional settings for managing and displaying search results, including selection of the metadata standard for thumbnail labels, sending a full data record, and incorporating special links (Remote Launch Strings) that activate Insight JVA and Browser clients with specific collection content.

Potential Uses (*Insight XML Gateway as an Application Framework*)

The main purpose of the Insight XML Gateway is to provide dynamic access to Insight collections across an organization's architecture. In addition to using Insight's built-in Java and browser clients, Insight content and capabilities now can be incorporated into any software system or even Web pages. The Gateway enables use of Insight collection content within the full context of an organization's information resources. It extends Insight's system and user functionality to any software or Web development environment that can communicate with XML over the Internet. Examples of intended uses for the Gateway are:

- Allow OPACs, custom programs, and commercial search systems, and courseware tools to interact with Insight collections. Luna's first use of the Gateway is to open Insight resources to Endeavor's Encompass federated search system.

- Use the Gateway as the underlying platform to make Insight compliant with the many standards-based API's. Standards-based API's could include OAI, Z39.50
- Create custom Websites incorporating Insight data, media, and functionality. Developers can use the Gateway to let Insight do all the collection and image management, and embed Insight content within their own Website design, look, and feel interface.

How it works

The Insight XML Gateway is authenticated by the Insight User Manager to determine the collection resources it can access. Then when the Gateway receives XML requests, it translates the XML into standard Insight Client requests, and forwards them to the respective collection server. Finally, the gateway re-packages results received from collection servers into XML, and sends responses out to the requesting application.

Types of requests:

Collection List Request: Provides access to general collection information including a list of the collections available to the gateway, the standards they support, a full description and a remote launch string for the Browser or Java client.

Field List Request: Provides field-level information on each of the data standards that a collection supports including the list of fields and the field type (text / numeric).

Search Request: Allows an application to perform a search on one, or multiple collections. A request may specify the maximum number of records to return, the metadata standard to return the data in, whether to include full-data records, or remote launch strings.

Full Data Request: Provides the full data for a given record (or set of records).

When applications using the Gateway make links to media available to end-users, activation of the links will invoke normal Insight user security. Standard measures might include IP address validation, username/password entry, or querying an organization's security system.

System Requirements

Supported Platforms	- NT 4.0 or higher (service pack 5) - Sun Solaris 8+ - UNIX (with java support) - Linux (with java support)
Memory	Ideal: Dependent upon collection size and number of users Minimum: 256MB
Hard Drive Free Space	60 MB
Additional Software Requirements	- JRE 1.4.1 - Resin JSP Server or Apache Tomcat 4+