X1® Enterprise Edition Software Development Kits
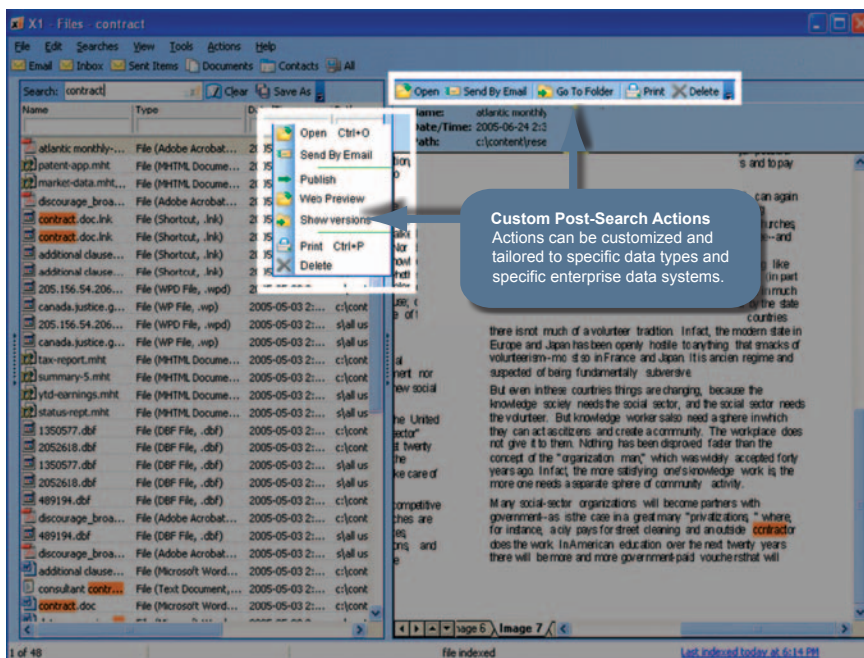
Empowers, Embraces and Extends

The X1 SDK: Unified, Actionable Search Customized for Your Usage and Content

X1 Software Development Kits (SDKs) let developers create customized client integrations and/or content connectors for enterprise data so end users can quickly find data—wherever it is situated—and act upon search results in accordance with your business rules and workflow.

Custom Post-Search Actions
Actions can be customized and tailored to specific data types and specific enterprise data systems.

DISPARATE APPLICATIONS AND DISPARATE SEARCH

End users spend countless hours searching for relevant data, not just in their email and shared files, but also in custom applications. Despite the time and the hours you've invested in developing integrations and customizing interfaces, they complain about not being able to find the most current information, or worse, they flounder in silence as they conduct multiple time-consuming searches throughout the heterogeneous enterprise.

A lack of unified, actionable search capability threatens your organization's productivity and discourages adoption of new applications. If it's too hard to find, users will stick with what they know, possibly relying on bad information, or abandon their search altogether. The result is unhappy customers, wasted time and increased risk through the fragmentation of enterprise data.

X1 SOFTWARE DEVELOPMENT KITS

X1 SDKs let companies add powerful front-end search to enterprise applications and repositories, including legacy applications designed before today's rapid search technology was available. Incorporating enterprise data sources and applications into an X1 search solution increases the productivity of your organization and maximizes the return on your storage investments.

The X1 Client SDK lets customers extend and customize the functionality of the X1 interface and more deeply integrate the X1 Client with other Windows® desktop applications. The X1 Server SDK lets customers extend the X1 Enterprise Server to make it capable of indexing additional enterprise data sources such as relational databases, Customer Relationship Management systems, Content Management systems, Document Management systems and many others.

With the X1 Enterprise Client, users can access all their mission-critical data, including email, in a unified interface. X1 SDKs let you customize X1 to the specific needs and data sources in your corporate IT environment, such as creating special post-search actions.

FEATURES AND BENEFITS

X1 Client SDK
The X1 Client SDK enables developers to add specific post-search actions, saved searches and unique previews that users need to conduct business. The Client SDK contains multiple APIs to make several types of modifications. The following capabilities are currently available in the Client SDK and some respective example uses follow.

Modify Previews and Preview Behaviors.
- Replace the preview pane in the X1 Client with a new pop-up window
- Add a preview window that shows Microsoft Excel® documents inside an Excel widget for editing, instead of in X1's default viewer
- Create a custom preview that shows content and metadata for documents from a content management system
- Expose a custom application within the X1 preview pane

Modify Post-Search Actions.
- Add or replace post-search actions within the X1 Client user interface
- Override a built-in X1 post-search action with a customized version
- Add a new post-search action to the X1 user interface
- Support post-search actions for new data sources

Embed X1 Queries into Other Programs.
- Query X1 from another desktop program
- Use X1 data in another desktop program or from the Windows® toolbar
- Use X1 queries in your program to dynamically search desktop information

Modify the X1 Index.
- Insert data into the X1 index from another desktop program
- Add new items to the X1 index in real time
- Dynamically modify, populate and define the contents of the X1 index

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▶ FEATURES AND BENEFITS (continued)

X1 Server SDK

The Server SDK creates powerful search front-ends for existing data stores and portals. For example, the Server SDK can be used to enable X1 to access the contents of a CRM system, allowing a salesperson to search and find immediately across mission-critical business information as well as key personal information such as email, giving the sales person a complete view of their interactions with a customer.

Develop connectors to index additional data sources, such as:

- Relational databases
- Proprietary CRM systems
- Third-party document or content management systems for which X1 does not offer a content connector
- Any Enterprise data system

Combining SDKs for Maximum Extensibility

The Client and Server SDKs can be used together to create a custom content connector that extends the X1 actionable search model to new data sources, all in a unified user interface. For example, a large financial services company has a call center that uses a custom CRM implementation. Call center agents perform a range of workflow actions, such as processing a form, validating an account or opening a new account. Agents spend several minutes to respond to customer calls because they lack adequate search capabilities and have to open multiple interfaces to find relevant files and take specific actions.

Using the X1 Client SDK and Server SDK, a developer could create a custom content connector for the CRM application to connect and index the repository and add saved searches and post-search actions to the X1 Enterprise Client. The net result would be that call center agents cut their response time by 30% or more because they only need to perform one search for relevant files or data, and once found, there is a built-in action button for agents to take the next step immediately, appropriate to the type of transaction—without having to launch the underlying CRM application. Delays vanish, costs decrease and customer satisfaction increases.

▶ THE X1 PLATFORM

The X1 Client and Server SDKs are optional components of the X1 Platform. The X1 Platform delivers these benefits to your organization:

- *Empowers.* Accelerate your users' productivity. X1's award-winning user interface lets you instantly locate, review and act upon any information you have access to.

- *Embraces.* Enforce and enhance your information security policies. X1 seamlessly integrates with your existing security and information systems and is easy to deploy and manage.

- *Extends.* Extend your search capabilities across the enterprise, including custom applications, databases and other content repositories, with X1's open architecture. Tailor the user experience by adding business-specific workflow actions.

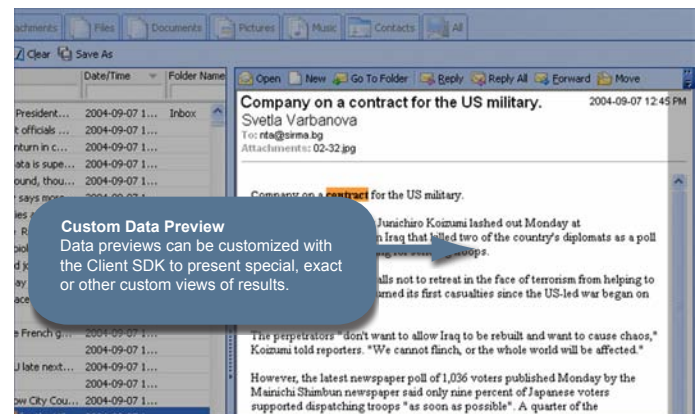## ▶ SPECIFICATIONS, REQUIREMENTS AND SUPPORT

X1 Client SDK

- Written in Microsoft® Windows® C++
- Length of implementation depends on complexity of preview and post-search actions to be implemented
- Most simple or straightforward post-search actions will take about a week, including QA time, documentation, etc.
- Sample applications for this SDK include a Web services plug-in that can be configured dynamically

X1 Server SDK

- Written in Java Enterprise Edition
- Fast-start code generator exists to jump-start scanner development with working implementations and sample code.
- Length of implementation depends on complexity of connection to data source
- Most common implementations will take about two to three weeks.
- The SDK should be tested with an X1 system integrator partner before deployment.

Support and Development Partners

For commercially licensed X1 SDKs, support is provided by X1 through phone and email according to a contractual service level agreement. Free support is available on development use of SDKs through Web forums. X1 has an active network of third-party integrators who work with the X1 SDK on a project basis for specific enhancements and customizations. Contact your X1 sales representative for further information on how to access the X1 integrator partner network.

Custom Data Preview
Data previews can be customized with the Client SDK to present special, exact or other custom views of results.

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