



The SFX framework for context-sensitive reference linking

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by

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SFX is the name for a framework that allows context-sensitive linking between web-resources. It finds its origin in research on linking between scholarly information resources. The SFX framework is context-sensitive in that the target of a link within the framework depends on the context of the user that follows the link. The context of the user is determined by the digital library collection that is available to him. Information resources that want to allow for such context-sensitive linking have to be made SFX-aware, by providing a hook to allow other servers to intervene dynamically in the decision regarding the target of a link.

SFX is also the name of a server-software that facilitates the management of a library's linked environment. The innovative SFX software product results from the same research project that revealed the context-sensitive linking framework. After having been tested in several environments, it has recently been acquired by Ex Libris (USA) Inc. The SFX server is a groundbreaking tool for discovery and navigation that can deliver powerful linking services in the scholarly information environment. The software enables context-sensitive linking between all parts of an electronic collection: full-text repositories; abstracting & indexing and citation databases; online library catalogs; citations appearing in research articles, e-print servers and other web resources.

SFX offers unique benefits to libraries, information providers and the end users of the information services.

SFX for libraries

SFX provides libraries with an independent means of providing seamless interconnectivity between their ever-increasing collection of heterogeneous resources. The SFX solution allows links between these resources to be library-defined and, as such, information resources become fully integrated in the overall library service, irrespective of whether the resources are hosted by the library itself or by external information providers. The SFX solution offers libraries flexibility and choice. Reference librarians can choose appropriate content from a range of information vendors and interconnect these in a manner of their choosing. They can then provide service links that they feel are appropriate for their end-users. They do not depend solely on the linking services defined by the information providers; nor on a specific set of identifiers and/or communications protocols.



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SFX for the information providers

For the information providers, SFX offers a thrilling opportunity to fully integrate their information resources into their customers' overall information services. By creating the SFX hooks that link back to individual libraries, information providers allow libraries to add customized linking services based on the libraries' local resources and environment. All companies in the information industry have embraced the opportunities created by the Web by delivering interlinked services. Now, the SFX framework allows those companies to make a leap forward on this path, by enabling their customers to add local services that link to other institutional resources. The SFX framework provides an elegant solution to accomplish this. It requires minimal investment from the information provider to make resources SFX-aware. This has already been ably demonstrated by a number of information providers.

SFX for the users of information

Scenario: Professor Coetzee has recently joined the faculty of a university offering innovative facilities to its researchers, including SFX. She is delighted to discover that, on searching the BIOSIS database, for each of her search results, SFX presents her with a number of options for navigating further within the university's collection and beyond. For the first reference she considers, she notes that the full-text of the article is not available electronically. But SFX suggests that she could check the availability of a print copy in her library, using the direct link to the library OPAC that SFX has generated. Her attention is also drawn by another service that has appeared in the SFX menu-screen. The genome sequence identifiers that were mentioned in the first reference have been turned into links pointing to the Public Genome Database, allowing her to look up some detailed sequence information. Professor Coetzee moves on to a second reference of interest, for which she also asks the SFX system to generate extended services. The result is an extraordinary list of highly relevant links. The first link brings her directly to the full-text of the article. It is an article published in *Cancer*, a Wiley InterScience journal to which the University Library subscribes. Professor Coetzee is somehow surprised to see SFX buttons appearing next to each of the citations included at the end of the article; she thought that the SFX service was only available for resources run by her universities' library automation department. She clicks the SFX buttons for one of the citations and finds that her institutional SFX server generates a list of services that is similar to those that she obtained when clicking the button for the BIOSIS records. One of the links points at full-text at HighWire Press; another allows her to do a cited reference search in the citation databases at her institution; yet another one links into her library's OPAC system. Professor Coetzee follows the link into the citation databases and, again, SFX buttons appear for each of the search results. She finds she is able to navigate with great ease through the information landscape presented to her, and that the services she is offered at all times are appropriate to her own environment. She is pleased with this new SFX service, but makes a note to contact the librarian that handles the system. She feels it would be interesting to add another service to the SFX menu-screen that does an author lookup in PubMed, whenever the

SFX button is clicked for a reference to a biomedical journal. Judging by the range of other services available, she expects this should present no problems.

For more information on SFX, visit <http://www.exlibris-usa.com/sfx>, or contact Ex Libris:

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