

Discovery Tools Knowledge Bases

Link Resolvers

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Main focus of the of the presentation

- What a Discovery Tool is
- How they work (are empowered) Knowledge Bases and Link Resolvers
- Opinion How & who should use them

Note: Discovery tools functionality is too technical and complicated... therefore the focus will be based on a summarised and simplified version of these concepts



Examples of Discovery Tools & their Knowledge Bases & Link Resolvers

Discovery Tool	Knowledge Base	Link Resolver
Primo	SFX Global	SFX link resolver
OCLC WorldCat Local	WorldCat Knowledge Base	WorldShare License Manager
Summon	KnowledgeWorks	360 Link
EBSCO Discovery Service (EDS)	EBSCO Integrated Knowledge Base	LinkSource
Encore	CASE	WebBridge

Note: The presentation is NOT about any of these tools specifically, BUT is generally about the functioning of a discovery tool and its infrastructure



A Discovery Tool

- A Discovery Tool is a new breed of library search tool/interface that provides a simple unified keyword search of the combined:
 - Catalogue
 - Online resources the library subscribes to (or offers its clients), such as:
 - Full text articles
 - Institutional repositories
 - Archives
 - Traditional bibliographic sources (journal articles, subject databases, course material, ETDs, etc.)

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A Discovery Tool...

- A Discovery Tool operates in the same manner as Google by indexing metadata from different library resources into a single searchable database or index
- It also uses facets to further refine search results
- Therefore this means:
 - Faster, more convenient and more accurate results than the Library
 Catalogue alone
 - Increased scope and depth of the results



Why a Discovery Tool

- Libraries need a discovery tool to:
 - Enable them to compete with Google; clients want a single search
 box for everything
 - Demonstrate to clients the advantages of using the Library services rather than Google
 - Ensure that the catalogue has a friendly interface for clients to use and access its excellent resources
 - Ensure that clients do not have to know the databases names, or to sift through long lists of resources to do their searches
 - Offer increased opportunities to get more out of the library resources



The Current Library Electronic Resources Scenario

- The coverage of e-content packages is constantly changing, and it demands a systematic and collective approach - managing such data manually is no longer feasible
- The increasing volume of electronic resources and their changing nature makes it difficult to provide access to e-journals and their articles via manually encoded links
- Therefore, to provide access to large electronic collections, a library requires a reliable and efficient mechanism to directly link clients to individual resources...

A Link Resolver & a Knowledge Base

 A Link Resolver and a Knowledge Base of e-resources' holdings are the essential library infrastructure required to manage electronic resources and to facilitate client access to those resources

 The Link Resolver and Knowledge Base rely on each other, and can be integrated with a discovery tool, federated search, electronic resource management and other library automation products



A Link Resolver

- A Link resolver is an information ecosystem based on OpenURL, and its functions are to:
 - Source OpenURL links from database platforms
 - Efficiently manage linking in a scalable manner
 - Interpret OpenURLs and calculate the best link to connect the clients to full texts, or to other relevant resources
- Instead of using hard-coded links, OpenURL uses a standardised structure to present links to the resource metadata



A Knowledge Base

- A knowledge base is required in order to:
 - Track contents of subscription packages by describing specific
 materials that the library has access to
 - Describe and manage the coverage dates for each title
 - Describe and manage the details relevant to linking to specific electronic resources



A Knowledge Base...

- There is no freely available central database that comprehensively describes the electronic holdings of a library's content package
- Instead, various independent knowledge bases have been developed to support resources discovery
- The **creation and maintenance** of a knowledge base requires:
 - An ongoing comprehensive, consistent, and correct automated and manual archival process
 - A continual flow of updated information from publishers
 - Library staff's effort to eliminate errors and to ensure its completeness

Knowledge Base & Link Resolver Challenges

 There are structural dependencies between discovery services and their knowledge bases and link resolvers

Even though it is possible to mix and match link resolvers and knowledge
 bases between various discovery tools, it comes with a heavy burden of
 staff maintenance



Knowledge Base & Link Resolver Challenges...

- Each knowledge base provider has access to different source data from different content providers
 - Therefore:
 - A specific vendor's knowledge base might not be compatible with other discovery tools
 - Using a third-party knowledge base might require repetitive synchronisation of the library's electronic holdings or links to resources
- The OpenURL linking process is very fragile, often resulting in dead-end links and other end-user frustrations

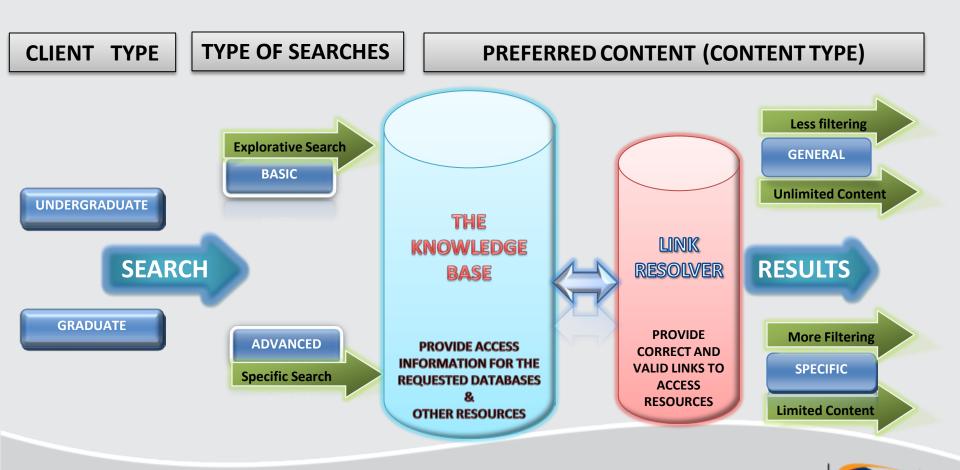


The Solution

- The development and advancement of tools) working group
- KBart is a joint initiative tasked with exploring data problems related to OpenURL
- KBart's recommended practices will ensure that:
 - Content providers make their resources lists KBart compliant
 - Content providers make their resources lists available to all Knowledge Bases producers
 - Knowledge Bases become similar in terms of the quantity and quality of their coverage
 - Each knowledge base provider is granted access to similar source data from content providers

Conclusion

- Who should use Discovery Tools (empowered by Knowledge Bases and Link Resolvers)?
- How they function (Discovery Tools, Knowledge Bases and Link Resolvers)
- How they are integrated (Discovery Tools, Knowledge Bases and Link Resolvers)



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