Evaluating Federated Search Engines

What’s the difference between federated search vendors?

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Choosing a federated search solution

Federated searching has quickly become an invaluable tool for library systems large and small. The concept of federated searching is simple: search any or all of your library's databases simultaneously with a single intuitive interface. Federated searching brings a Google-like ease and familiarity to searching multiple library resources that most library patrons now demand. Besides the obvious advantages of federated searching for users, library staff can also benefit tremendously with the successful implementation of a federated search solution. Such benefits include maximizing database usage, saving resources otherwise devoted to training and providing valuable usage tracking and reporting.

A successful federated search implementation delivers to users what they want—a powerful, easy-to-use research tool—while helping libraries to maximize resources and save money. Unfortunately, not all federated search vendors' products can deliver these benefits. As with any sophisticated technology, not all vendors' products will perform at the same level (some may even fail to perform altogether), nor will each product or vendor provide the same features and benefits. With library budgets ever tightening, it is essential to carefully evaluate every potential vendor before spending precious resources on a federated search engine. This document will address how the products and services of WebFeat differ from other federated search vendors and what to look for when evaluating a federated search engine.

<table>
<thead>
<tr>
<th>How does WebFeat differ from other federated search vendors?</th>
<th>WebFeat</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatible with standards</td>
<td>✓ Yes</td>
<td>✓ Yes</td>
</tr>
<tr>
<td>100% database compatibility</td>
<td>✓ Yes</td>
<td>◘ No</td>
</tr>
<tr>
<td>Displays full text in true native interfaces (no screenscraping)</td>
<td>✓ Yes</td>
<td>◘ No</td>
</tr>
<tr>
<td>Unlimited number of databases can be included in a search</td>
<td>✓ Yes</td>
<td>◘ No</td>
</tr>
<tr>
<td>OpenURL compatibility with ALL database results</td>
<td>✓ Yes</td>
<td>◘ No</td>
</tr>
<tr>
<td>Export any database citation to ProCite®, EndNote®, or RefWorks</td>
<td>✓ Yes</td>
<td>◘ No</td>
</tr>
<tr>
<td>Parse citations for all databases</td>
<td>✓ Yes</td>
<td>◘ No</td>
</tr>
<tr>
<td>Sort by relevancy, date, author, title, and publication</td>
<td>✓ Yes</td>
<td>◘ No</td>
</tr>
<tr>
<td>Track and report both federated AND native search usage</td>
<td>✓ Yes</td>
<td>◘ No</td>
</tr>
<tr>
<td>Track and report results citation metrics</td>
<td>✓ Yes</td>
<td>◘ No</td>
</tr>
<tr>
<td>Track and report concurrent user limit &quot;Turnaways&quot;</td>
<td>✓ Yes</td>
<td>◘ No</td>
</tr>
<tr>
<td>COUNTER-compliant usage tracker</td>
<td>✓ Yes</td>
<td>◘ No</td>
</tr>
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</table>

Patented technology

WebFeat's method and technology for managing database authentication and session management required to search any/all licensed resources is covered by US patent # 6,807,539.
Compatible with standards
Is the federated search engine compatible with standards like Z39.50? Most are, but if Z39.50 is all you need, you don't need to spend your money on a federated search engine. Z39.50 tools are cheap and plentiful. The problem is that most databases are either not Z39.50-compliant or require considerable time and trouble to implement. Additionally, with Z39.50, you lose the advanced functionality built into databases search interfaces.

100% database compatibility
If the federated search engine can't search your databases, then what's the point of buying a federated search engine?

WebFeat's patented technology (US #6,807,539) enables it to search any searchable database. This means any free database, any licensed database, any catalog, any proprietary database - anything. WebFeat supports over 4,000 databases and counting! To our knowledge, WebFeat is the only federated search provider capable of searching any searchable library database. Because if you can't search your databases, what's the point?

Displays full text in true native interfaces
Have you heard of "screen scraping?" This is where the federated engine "scrapes" the content out of the database's full text interface window and displays it in the federated search interface. In a screen scrape, the user loses all the native functionality built into the database's native interface. All the buttons, links, native functions - all gone. With WebFeat, using its proprietary read-write proxy technology, the true native full text interfaces are preserved intact, with all built-in functionality fully enabled.

Unlimited number of databases
Perhaps you've heard about federated search engines that can only search a handful of databases at a time? Not WebFeat! WebFeat is not a toy, it's a serious research tool used by ARL libraries, the world's largest public libraries, as well as global 1000 and government information centers. There is no limit to the number of databases that can be searched simultaneously with WebFeat.

OpenURL compatibility with ALL database results
If your library uses a link resolver, WebFeat can actually enrich its results citations to include a link to it. WebFeat can handshake seamlessly with any link resolver, enabling your users to find articles indexed in your library's digital collection. WebFeat is the only federated search engine that can embed links to any link resolver for all searchable databases.

Export any database citation to ProCite®, EndNote®, or RefWorks®
Users can save WebFeat results in a variety of formats, even export to bibliographic management packages like ProCite, EndNote, and RefWorks.
Comparing features and performance - continued

Parse citations for all databases
WebFeat's unique ability to structure and parse unstructured citations enables it to perform a variety of different functions, including results sorts by date, title, and author, as well as citation exports into ProCite, EndNote, RefWorks, and Reference Manager. Additionally, this ability gives WebFeat the ability to track results usage at the article level, making its usage tracking COUNTER-compliant.

Sort by relevancy, date, author, title, and publication
Does WebFeat's results sorting stop at relevancy ranking? No! WebFeat's unique citation parsing capability gives it the ability to sort by date, title, author, and publication as well. Additionally, WebFeat's Dynamic Results display capability enables users to change results on-the-fly, from merge-sort-de-dupe to grouped by resource.

Comparing usage tracking and reporting capabilities

Track and report both federated AND native search usage
WebFeat's COUNTER-compliant SMART™ (Statistical Measures Available Real Time) is the most sophisticated database usage tracking and reporting system ever developed. SMART tracks and reports the usage of any database integrated into the WebFeat system, regardless of whether it is web-based, Z39.50, XML, SQL, Telnet, etc.

SMART logs and reports key metrics for each database, including number of search requests, number of full record/next set requests, search terms/arguments, turnaways, location, and date/time information. SMART can provide granular information on usage by individual library, branch, or department. Additionally, SMART provides a variety of downstream search information, including journal (or source), title, author, publication date, volume, issue, pages, ISSN, and ISBN when available in the citation.

Remarkably, SMART can even track usage within the native database user interface, enabling libraries to track all database usage in one place.

COUNTER-compliant usage tracking
SMART captures and reports all upstream and downstream metrics required for Level 1 COUNTER compliance. WebFeat's ability to structure and parse unstructured web results enables it to report downstream journal statistics necessary to meet COUNTER requirements. SMART actually exceeds this requirement by not only reporting journal level information but article-level as well.
Choosing a service, not just a software product

24 x 7 monitoring and updates
What drives a federated search engine are "translators" that connect the dots between a single user interface and dozens of databases searched by the federated search engine. Each time one of the target databases changes its search engine or changes features, the corresponding translator must be upgraded rapidly. This means that a system accessing 100 databases is subject to between 200 and 300 software updates per year—almost one per day! Without frequent software updates, entire databases can become periodically unavailable for searching. It is unacceptable for a database subscription that could cost a library thousands of dollars or more per year to be offline for any amount of time. With WebFeat, our translators are automatically monitored 24 hours a day, 365 days a year. Upgrades are made transparently to users and library staff.

Custom user interfaces and system hosting
Can the federated search engine be customized? Yes! WebFeat custom configures the user interface to library specifications and can actually seamlessly embed it within the library's own web pages. What's more, WebFeat will even host a library's WebFeat system at no additional charge, handling all the installation, configuration, and maintenance so the library doesn't have to.

Making a choice between federated search engines

Make sure it works before you buy it
Would you buy a new car without first taking it for a test drive? As absurd as this sounds, many libraries actually buy federated search technology without first ensuring that it works with all of their library's databases. Remarkably, some libraries do not even check references before spending precious resources on federated search engines. This is analogous to buying a car based solely on the glossy brochure.

What is the proper way to choose a federated search engine (or any other product)? Make sure it works before you buy it. Here are some tips:

- Require that the vendor build a trial system capable of searching ALL of your library's databases, not some of them. WebFeat actually encourages libraries to trial federated search systems before purchasing.

- Make sure the databases can be searched by both remote and walk-up users. WebFeat systems are fully functional regardless of whether the user is in the library or working remotely.

- Check references for at least three systems that have been in production for at least a year. Why a year? To check the vendors' responsiveness and transparency regarding database translator updates. WebFeat is used by over half of the top 20 largest US public libraries and one of every 10 ARL institutions. WebFeat proudly furnishes references upon request.