



V-spaces

# Information Portal & Federated Search

V-spaces is a personalized portal that integrates sophisticated tools for powerful federated searching, information discovery and data enrichment. Through a single access point, the user can find and retrieve dynamic, customized and enriched information from heterogeneous information resources.

## The V-spaces Information Portal

Today's information landscape is characterized by the extraordinary proliferation of Web sites and online databases. For the user, the Internet facilitates instant access to a wealth of information resources from virtually any location. At the same time, the user frequently faces a daunting challenge to navigate the maze of all available resources in pursuit of relevant, context-specific, and customized information. Information centers must therefore offer structured, simultaneous, and personalized access to multiple information resources at the right time and through the right interface.

## Federated Searching

With V-spaces, the user can search multiple information resources simultaneously through a single interface and a single query. Search results are subsequently presented in a single, integrated, list. V-spaces also ensures that search results are always up-to-date. In principle, the system does not create indexes of its own or maintain local copies of external databases. Search results are therefore as current as the information resources in which the records are found.

Besides the support for prevalent search protocols and metadata schemas, V-spaces emphasizes user experience. An intuitive interface enables the user to view search results without the need to wait for the completion of the search process. In addition, the user can customize the interface and search capabilities according to his or her own taste and preferences.

## Resource Discovery

While the majority of common search engines on the Internet provide access to the "surface" Web, V-spaces enables access to the "deep" Web, which contains information that is invisible to search engines such as Google. Using the integrated resource discovery tools, the information center can define groups of resources and offer users a structured access point to information on the Internet or subscription databases. Resources can be grouped by type, for example search engines, news agencies, newspapers, or bibliographic databases. It is also possible to group resources by subject - news, history, math etc. Besides the grouping of resources by type or subject, the information center can also define search trees. By implementing search trees, the institution provides users with pre-defined searches that facilitate the easy navigation of an information center's collection and subscription databases.



## Data Enrichment

Once search results have been retrieved, V-spaces provides the user with the option to use each record as the starting point of a new search. The option is enabled through the integration of V-link, a link generator based on the OpenURL protocol. Through V-link, the users can search for additional, related, information in subscription databases or the Internet.

V-spaces also incorporates Fuzzy Logic technology to assist the user in his or her search. In the event that none of the selected resources return a search result, the system suggests alternative keywords to aid the user in reformulating the search query.

## The Search Process

The user enters the search query and may select from a list of predefined individual, or multiple, resources. If desired, the user can save his or her preferred resources and view details such as a description of the collection, available languages, subjects, and other relevant information.

While the search process is underway, the system advises the user regarding the status of the search in the selected resources. Information is presented as soon as it is available and the user can view search results while the search process is still active. Search results, which are received later on, are added to the bottom of the page without the need to refresh the Internet browser.

Search in: **i**

- Library databases
  - i** Cursor / Matrix
  - i** TU/e complete database
  - i** TU/e bestand via XML
- Miscellaneous databases
  - i** Cursor (full-text)
  - i** HRM system (disabled)
  - i** Metis (scientific publications ) through XML
  - i** TU/e website

Searching the following databases on 'science'.

Resource	No. of hits
<a href="#">Cursor / Matrix</a>	1-10 / 54
<a href="#">Cursor (full-text)</a>	1-10 / 250
<a href="#">Metis (scientific publications ) through XML</a>	1-10 / 98
<a href="#">TU/e complete database</a>	1-10 / 10115
<a href="#">TU/e website</a>	1-10 / 4433
<a href="#">TU/e bestand via XML</a>	1-10 / 9916