



# IBM Lotus Extended Search

Fast, Parallel, Distributed Search

# Agenda

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- **Extended Search Overview**
- **Architecture**
  - Administration, Security, Scalability
  - Client Customization, Portal integration
  - Extensibility via Extended Search APIs
- **Demo**

# IBM Lotus Extended Search

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Server based technology supporting search and retrieval of information across multiple enterprise and web based sources, bringing critical data to application and portal interfaces.

# Typical 'Wide Area Search' for Knowledge

The screenshot displays a typical 'Wide Area Search' for knowledge. It features three overlapping windows:

- HotBot - Netscape:** A web browser window showing the Lycos Network search engine interface. The address bar contains `http://hotbot.lycos.com/`. The search bar is empty, and the page title is "The LYCOS Network".
- DB2 Control Center - localhost - Signed in as=inst1 Default user=inst1:** A database management window showing a tree view of the database structure. The selected table is "CURLYCOAT - DB2 - SAMPLE - Tables".
- Find: Files named \*.doc,\*.txt,\*.prz containing text Domino Extended Search:** A search window showing the results of a search. The search criteria are: "Name: \*.doc,\*.txt,\*.prz", "Containing text: Domino Extended Search", and "Look in: Local hard drives (C:,D:,E:,F:)". The search results are displayed in a table:

Name	In Folder	Size	Type
Readme20.txt	D:\Program Files\Lotu...	18KB	Text Document
DESMessages.txt	D:\Program Files\Lotu...	49KB	Text Document
Readme20.txt	D:\Program Files\Lotu...	18KB	Text Document
WhitePapers11.doc	D:\Program Files\Lotu...	345KB	Microsoft Word Doc...

The search window also shows a status bar at the bottom indicating "65 file(s) found".



"This is hard because there are too many..."

- ✗ Interfaces to use
- ✗ Grammars to learn
- ✗ Results to interpret
- ✗ Sign-ON's

# Extended Search for Knowledge

**Lotus** **domino** Extended Search

Search

**Results**

- Hit Title** [DESMessages.txt](#)  
**Document Date** 30 Jul 1999 04:00:00 GMT  
**Source:** Future Proposal **Rank:** 100
- Hit Title** [NotesUsersGuide.nsf](#)  
**Document Date** 21 Feb 2000 05:00:00 GMT  
**Source:** Future Proposal **Rank:** 100
- Hit Title** [readme20.txt](#)  
**Document Date** 30 Jul 1999 04:00:00 GMT  
**Source:** Future Proposal **Rank:** 100
- Hit Title** [ProgrammersGuide.pdf](#)  
**Document Date** 30 Jul 1999 04:00:00 GMT  
**Source:** Future Proposal **Rank:** 15
- Hit Title** [InstallationGuide.pdf](#)  
**Document Date** 30 Jul 1999 04:00:00 GMT

Extended Search  
Security Review & Recommendations

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Last Updated: April 4, 2000  
Author: T. Lupton

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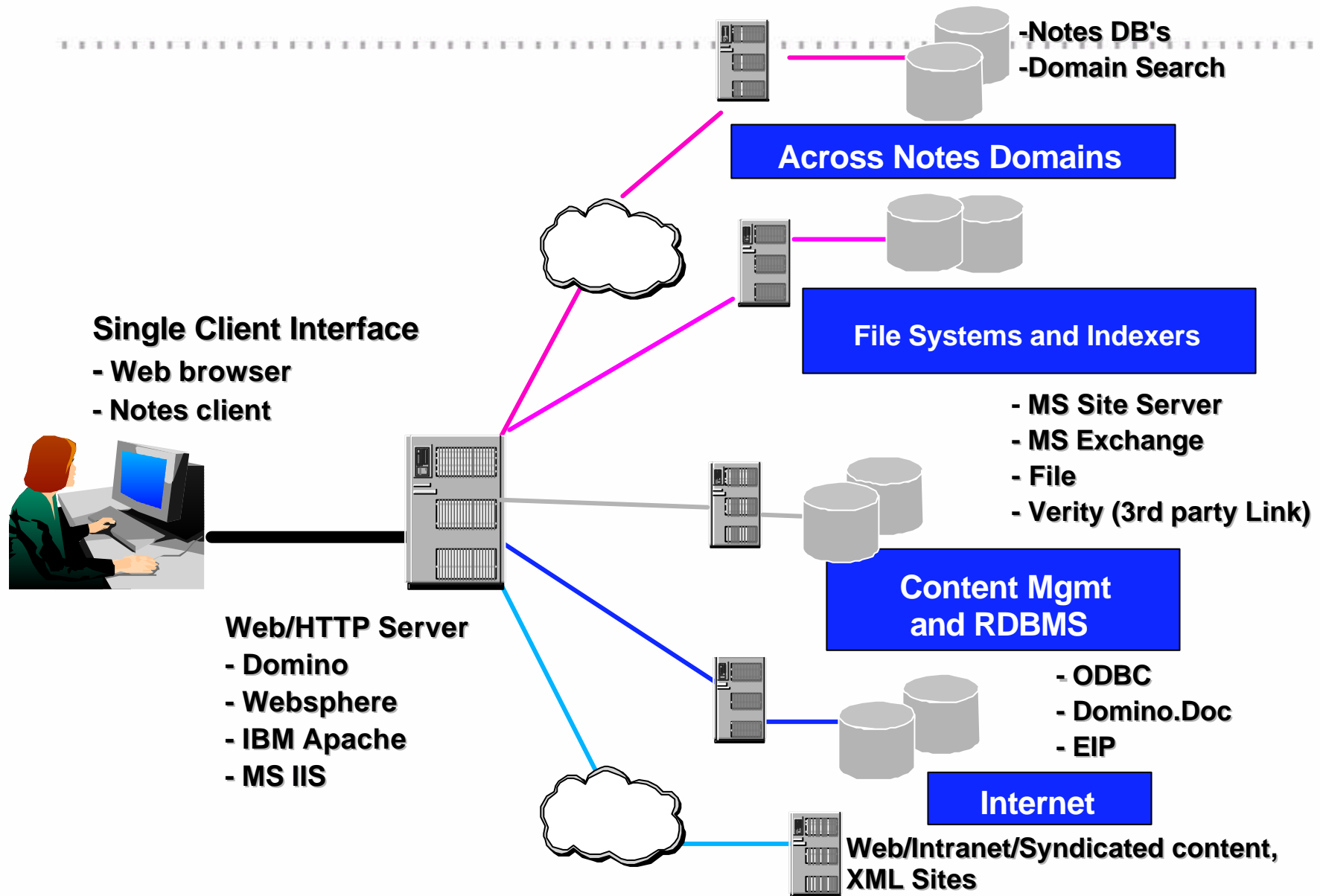
Local intranet zone



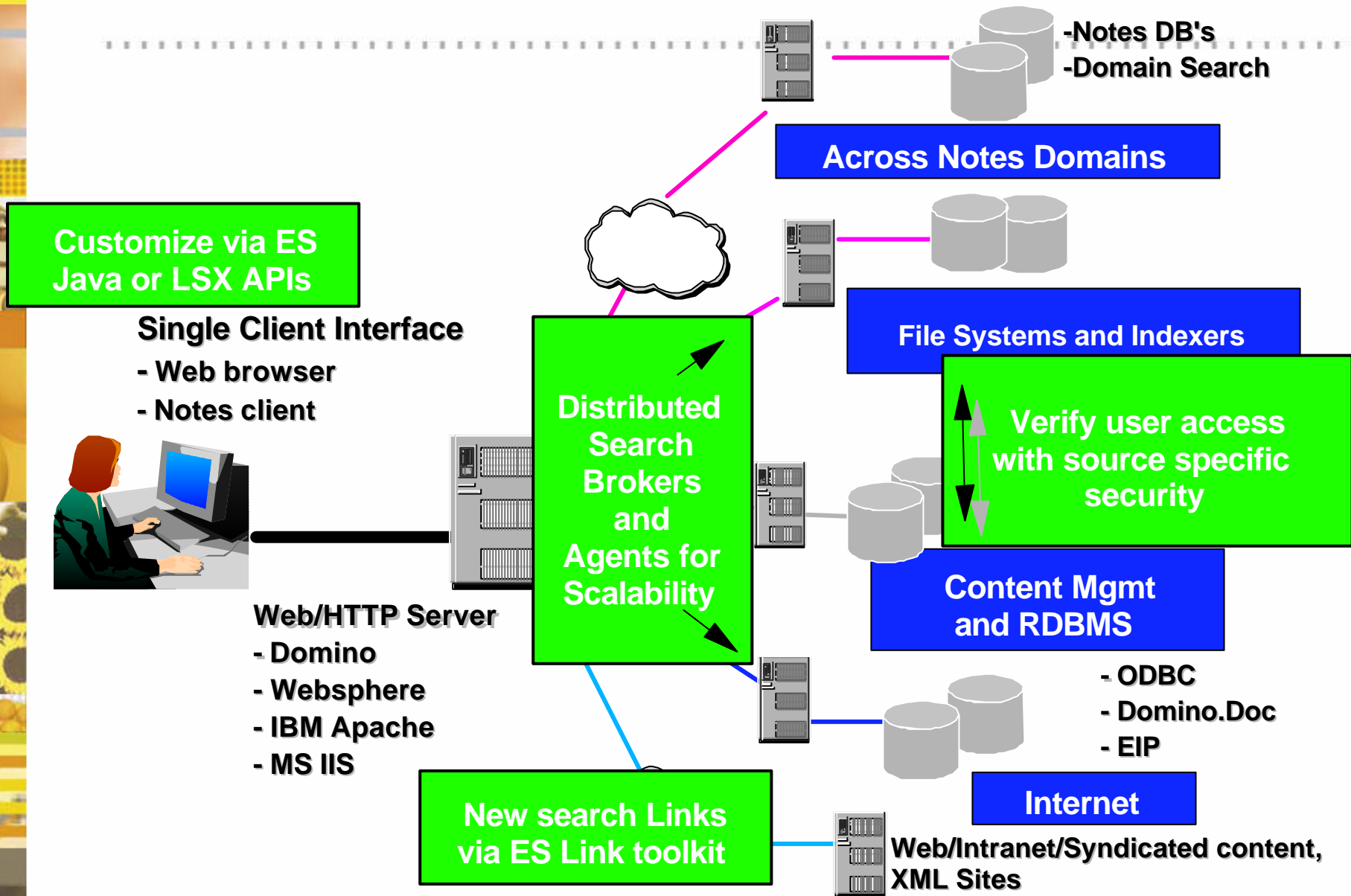
"This is much easier"

- ✓ Single Interface
- ✓ One Grammar
- ✓ Consolidated Hitlist
- ✓ One Sign-on

# Extended Search - Parallel Distributed Search Architecture



# Extended Search - Integrates with the Enterprise



# Breadth of Extended Searching

- Lotus Databases/Products
- Document Mgmt Systems
- Microsoft Indexes
- Mail Systems
- Directories
- Relational Data
- File System Content
- World Wide Web
  - Web Configuration Toolkit
- ES Link Toolkit and Java APIs





# Admin Console (Multi - Server View)

Extended Search **IBM Lotus**

ES Administration Contents of Servers

Search Domain

- Servers
- Data Sources
  - By Link
  - By Agent
- Mapped Fields
- Categories
- Applications
- Search Templates
  - Demo
  - Other Samples
- Links
- Grammars
- Documentation
- Event Log Viewer
- Saved Queries
- Wizards

Apply Connections

Web Server

amelia wildcats pottsville

greenville

fairfax exodus

- Discover Data Sources... Ctrl+D
- Monitor... Ctrl+M
- Copy Ctrl+C
- Delete Delete
- Connect to Ctrl+T
- Position... Ctrl+O
- Properties... Ctrl+P

# 'Demo' Web Client

## Sample provided with ES displays all search options

Extended Search: All Options Form - Microsoft Internet Explorer

File Edit View Favorites Tools Help Links

# Search Extended

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**Query** Sources Options Schedule Results

Enter one or more words or a full GQL expression

A sample GQL expression is... (IN "Title" (AND "K-station" "Portal"))

Alternatively, you can build a valid GQL expression by specifying values in the following fields and then pressing the "Show GQL" button:  
Note: The following fields are for demonstration only. Your fields may vary.

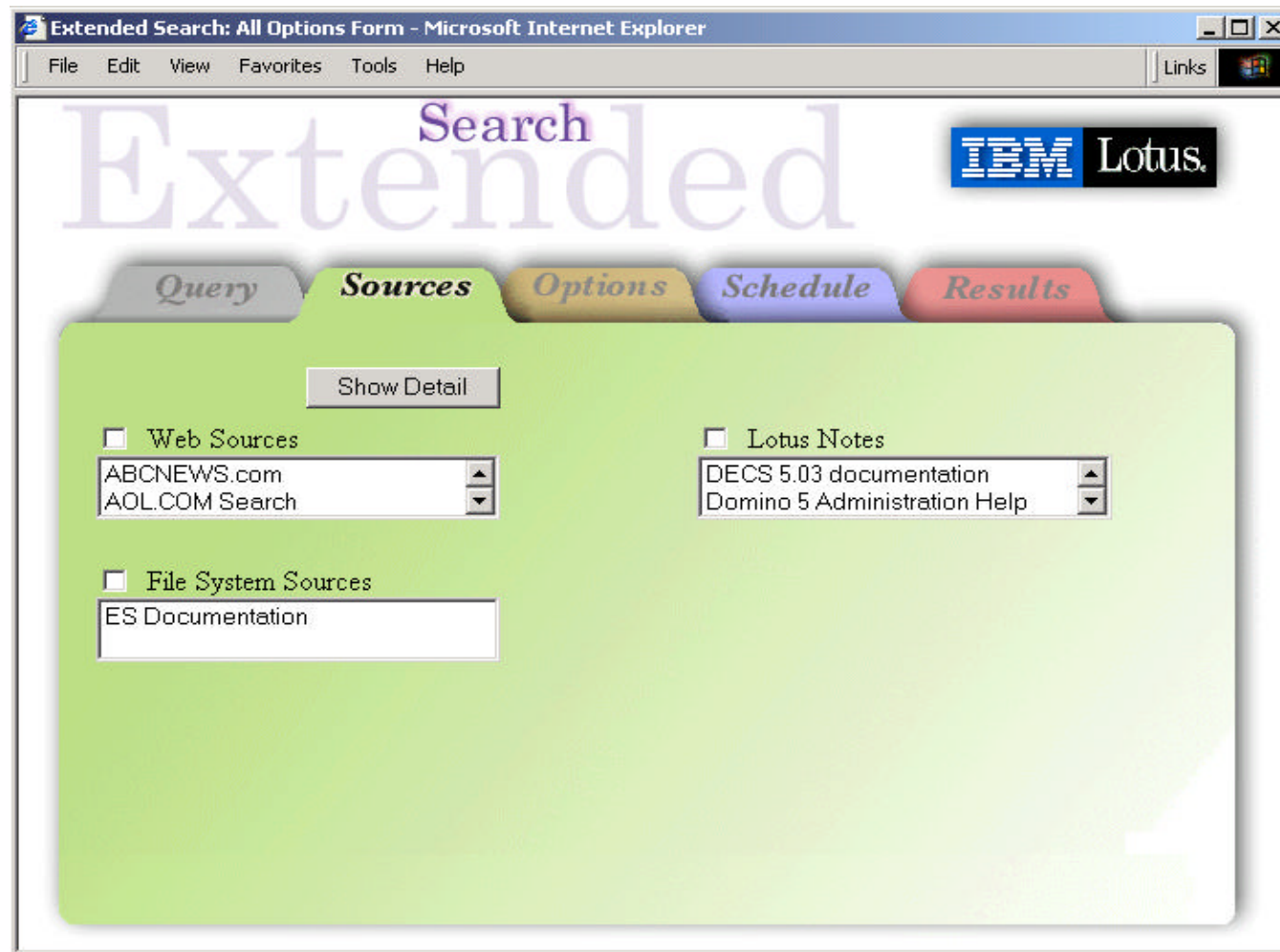
Document content contains:

Document title contains:

The author's name is:  [See GQL Reference](#)

The publication date is:

# 'Demo' Web Client: End User Search Options Sources Tab



# Demo Web Client Search Options: Options Tab

Extended Search: All Options Form - Microsoft Internet Explorer

File Edit View Favorites Tools Help Links

# Search Extended

IBM Lotus

Query Sources **Options** Schedule Results

Max. hits returned in results list  
 Max. hits returned by each source  
 Max. hits displayed per page  
 Max. number of seconds to wait  
 Format of results template

How keywords are applied

How results are returned  
 If sorted, then select a sort field  
 If sorted, then select a sort order

**Constraints entered below**

Name	Operator	Value
<input type="text"/>	<input type="text" value="EQ"/>	<input type="text"/>
<input type="text"/>	<input type="text" value="EQ"/>	<input type="text"/>
<input type="text"/>	<input type="text" value="EQ"/>	<input type="text"/>

Note: A Constraint further filters the results of the query. They are expressed in Name, Operator, Value triplets. Not all links may support the constraints you provide above. Refer to the [Programmers Guide](#) for more information.

# Demo Web Client Search Options: Schedule Tab

Extended Search: All Options Form - Microsoft Internet Explorer

File Edit View Favorites Tools Help Links

# Search Extended

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Query Sources Options **Schedule** Results

**Save this search only...**

With the name

Described as

Into the folder

Existing folders

 [View saved searches](#)

**Save and run this search...**

To run every  Month(s)

Starting on

Starting at  (24 hour clock)

Save previous results

Produce detailed hitlist

**For Administrative Use Only...**

File System Sources:

Save documents in:

Save hitlist in:

**Note:** Care should be taken when saving results to the file system. See [Administrators Guide](#).

Scheduled queries can have their hitlist output saved as either an ES HTML or XML template file. This file can th

# Demo Web Client Search Options: Results Tab

The screenshot shows a web browser window titled "Extended Search: All Options Form - Microsoft Internet Explorer". The page features a navigation bar with tabs for "Query", "Sources", "Options", "Schedule", and "Results". The "Results" tab is active, displaying a table of search results. A "Show Detail" button is located above the table. The table has columns for Hit, Rank, Document Title, and Action. Below the table is a pagination control with buttons for "Prev", "Refresh", and "Next", and a status bar indicating "100 Total Hits Returned, with a Server Return Code of [0]".

Hit	Rank	Document Title	Action
6)	98%	<a href="#">Domino Extended Search for Win NT Only -- MyComputer.com</a> <b>Source:</b> Canada.com <b>Category:</b> Web Sources	--Select--
7)	85%	<a href="#">Lotus Development Corporation</a> <b>Source:</b> Yahoo! <b>Category:</b> Web Sources	--Select--
8)	85%	<a href="#">Introduction to Domino Designer</a> <b>Source:</b> Domino 5 Designer Help <b>Category:</b> Lotus Notes	--Select--
9)	85%	<a href="#">Upgrading Notes and Domino to Release 5</a> <b>Source:</b> Domino 5 Administration Help <b>Category:</b> Lotus Notes	--Select--
10)	85%	<a href="#">Lotus to introduce Domino Extended Search 1.0</a> <b>Source:</b> AOL.COM Search <b>Category:</b> Web Sources	--Select--

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

100 Total Hits Returned, with a Server Return Code of [0]

# Example - Customised Search Interface

**AllInOne Sample - Microsoft Internet Explorer**

File Edit View Go Favorites Help

Back Forward Stop Refresh Home Search Favorites History Channels Fullscreen Mail Print

Address <http://localhost/servlet/JKMSearchController?desTemplateFile=AllInOne.txt&SourceConfigNSF=desClient.nsf> Links

**Lotus** **domino** Extended Search Extending your reach into the enterprise...

**Information**

- [Technical Papers](#)
- [Query Options Desc](#)
- [User's Guide](#)
- [Programmer's Guide](#)
- [Administrator's Guide](#)
- [GOL Reference](#)
- [FAQs](#)

**Start searching right away!**  
Enter your search terms below and press go...

**Quick Search:**

- Return no more than  results
- List  hits per page
- Wait a maximum of  seconds
- Return results
- Sort results by
- Sort results in  order

**SOURCES**

- Web Sources**
- Expertise**
- File System Documents**
- Notes Sources**
- Experts**

**Results**

Page 1

**50 total hits returned**

**Paula Weaver**  
Source: Expertise Locator Profiles, Category: Notes Sources, Experts  
DocRank=87  
Hit Title=Paula Weaver  
eMail Address=Paula\_Weaver/CAM/Lotus%Lotus@lotus.com  
Expert's Name=Paula Weaver

**Actions**

- [Save document](#)
- [Forward document](#)
- [Mail document](#)

Local intranet zone