



IBM OmniFind Enterprise Edition 9.1

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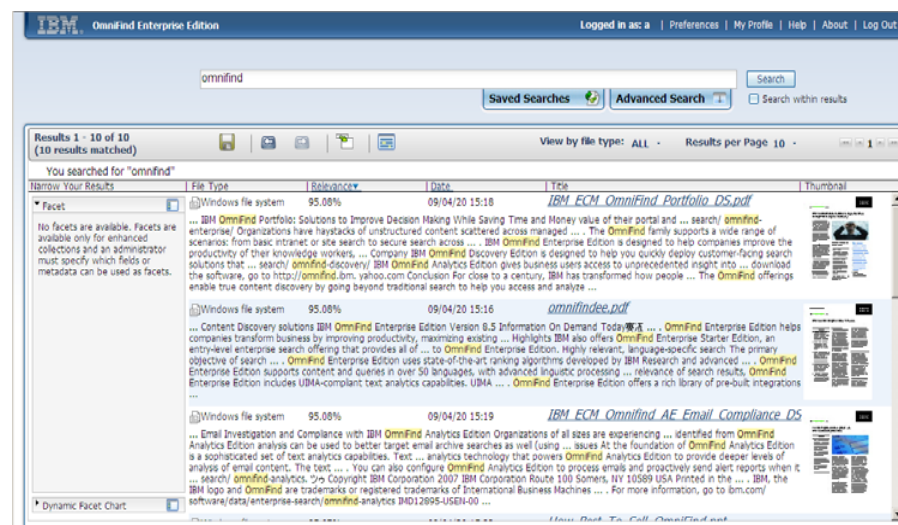
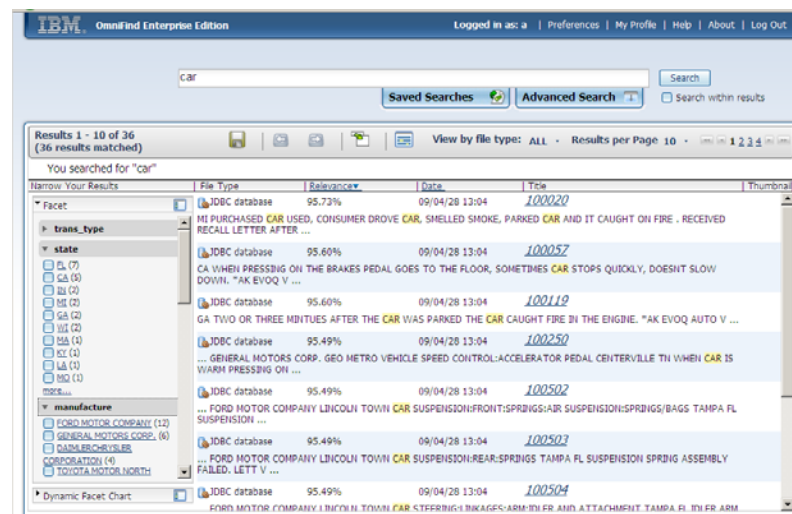
Did You Know

- **IBM powers search for more than 600 companies worldwide**
- **IBM has more than 200 R&D staff focused on search technologies**
- **IBM is a leader in search patents**

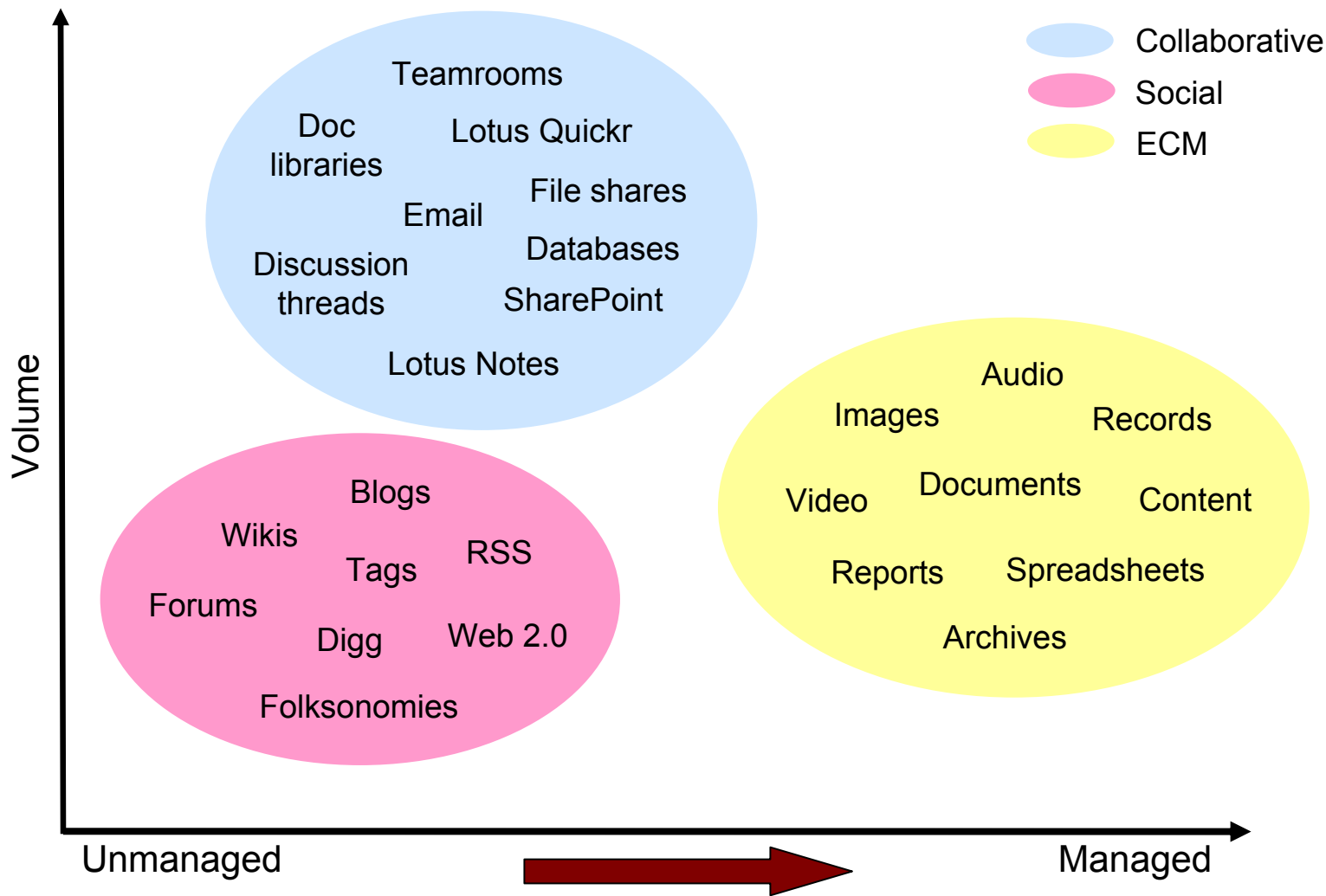
OmniFind Enterprise Edition 9.1

Defining and Delivering Knowledge-Driven Search

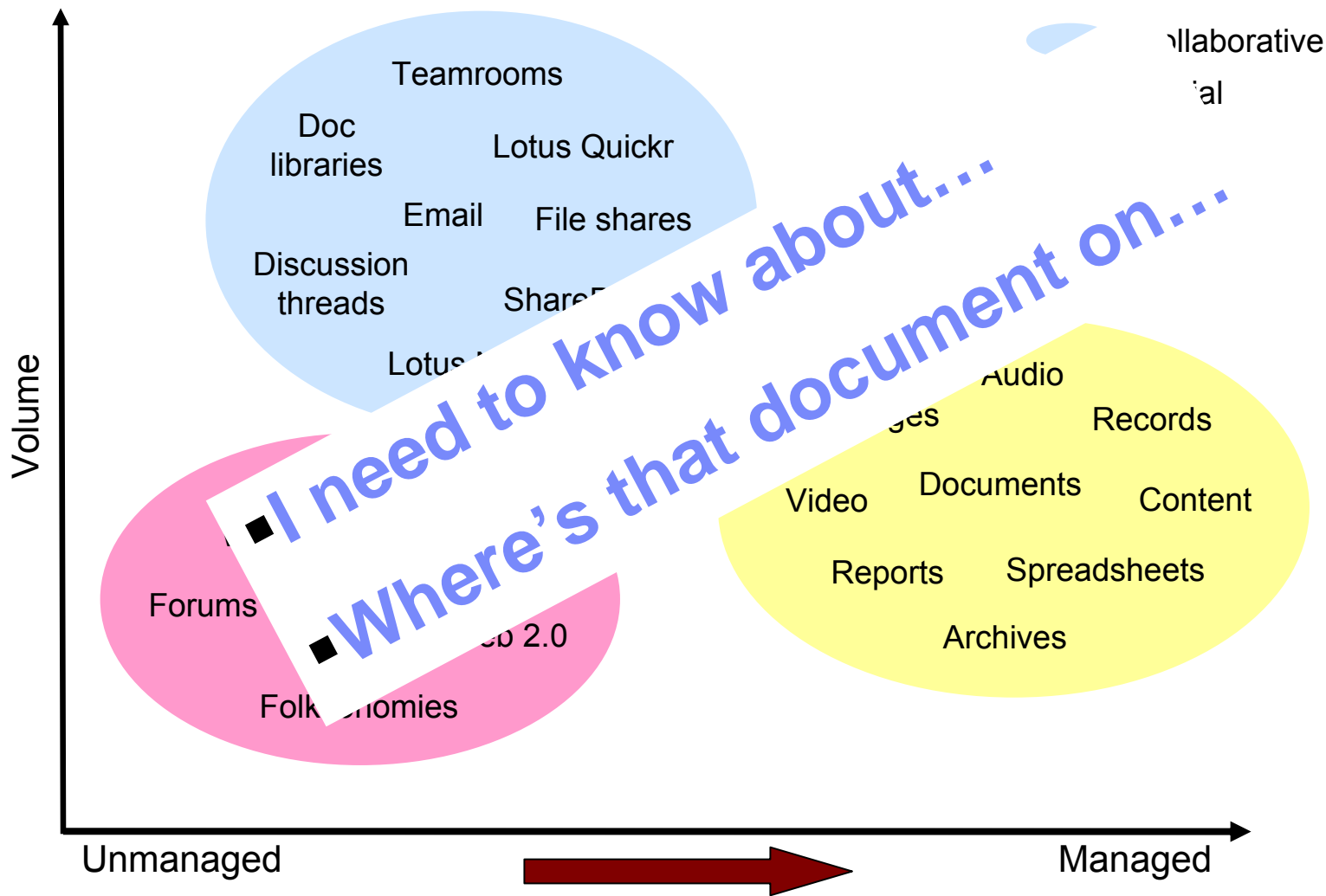
- **Enhanced End-User Experience**
 - High-performance faceted navigation
 - Saved searches
 - Search profiles
 - Document previews
 - And more...
- **Enhanced Administrative Experience**
 - Scalability improvements
 - Incremental indexing support
 - Reduced resource requirements
 - More flexible scale-out & HA
 - New relevancy tuning options
 - And more...
- **Lucene & UIMA based platform**
 - Shared technology base with eDiscovery, Content Analytics and other IBM products



The Problem: A fragmented content landscape



The fragmented content landscape



Enterprise Search Matters Because...

- **Workers are disconnected from content**
 - Knowledge is required to succeed, connecting users to knowledge is hard
- **Organizations are dynamic, content is dynamic and knowledge is dispersed**
 - Enterprise search is needed to bridge and unify this dynamic environment

**Enterprise search succeeds
when users are driven to the knowledge they seek**

The *Knowledge-Driven Search* Imperative

- **Knowledge Driven Search**
 - Delivering enriched search capabilities and advanced content findability for knowledge workers
- **The Five Pillars of Knowledge Driven Search:**
 - Dynamic – Guides users to relevant content through business understanding, and alerts when new relevant content is found
 - Tailorable – Finds content the way the business works, and how users expect to find it
 - Supportable – Works with the systems in place today, requiring no special infrastructure to access & index structured or unstructured business content
 - Secure – Enforces the business security requirements for information regardless of source
 - Scalable – Scales to the needs of the enterprise

Customer Examples



- **VanMarcke leverages OmniFind to search across structured Master Data Management information and unstructured enterprise content**



- **For the City of Karlsruhe, OmniFind provides Internet facing search for city provided services and information**



- **Haldor Topsøe A/S uses OmniFind to support 1,300 users searching Lotus Notes, Intranet sites and file shares**



- **Global media company uses OmniFind to improve knowledge sharing and search on 5 Terabytes of Lotus Domino content**

Introducing OmniFind Enterprise Edition 9.1

- **Enables Knowledge Driven Search to:**
 - accelerate time to knowledge
 - provide greater accuracy
 - deliver business context with enterprise search
- **OmniFind delivers on the Five Pillars of Knowledge Driven Search:**
 - Dynamic – Delivers complete dynamic facet capabilities, type-ahead search, query saving and result exporting, and is reactive to searched content exploration
 - Tailorable – Delivers business adjustable relevancy and UIMA standardisation
 - Supportable – Delivers search on 5 platforms, connects to 30+ repositories
 - Secure – Delivers enforced security across content repositories
 - Scalable – Lucene-based index for enterprise level scalability

New Search UI

The screenshot displays the IBM OmniFind Enterprise Edition search interface. At the top, the header includes the IBM logo, 'OmniFind Enterprise Edition', and navigation links for 'Collection: oeeDocs (change)', 'Logged in as: Notlogg...', 'Preferences', 'My Profile', 'Help', and 'About'. The search bar contains the query 'ibm search analytics' and includes a 'Help for query syntax' link. Below the search bar are buttons for 'Search' and 'Clear', and a checkbox for 'Search within results'. A dropdown menu shows 'Saved Searches (0)' and 'Advanced Search'. The results section shows 'Results 1-9 of 9 (9 results matched)' and 'View by file type: ALL - Results per page: 10 -'. The search results are displayed in a table with columns for Source, Date, Title, and Thumbnail. The first result is 'OmniFind TalkinTech 102704.ppt' from a Windows file system, dated 4/20/09. The second result is 'IBM ECM OmniFind Portfolio DS.pdf' from a Windows file system, dated 4/20/09. The third result is 'IBM ECM Omnifind AE Email Compliance' from a Windows file system, dated 4/20/09. On the left side, there is a 'Narrow Your Results' section with a 'Facet Tree' and a 'Dynamic Facet Chart'. The 'Facet Tree' shows a 'date' facet with sub-facets for '2009(9)', '4(9)', and '20(9)'. The 'Dynamic Facet Chart' shows a bar chart for the 'date' facet with bars for '2009 (9)', '2009/4 (9)', '2009/4/20 (9)', and '2009/4/20/15 (9)'. The search results are displayed in a table with columns for Source, Date, Title, and Thumbnail.

Results 1-9 of 9
(9 results matched)

You searched for "ibm search analytics" Query language: English / Did you mean: [analytic](#)

Source	Date	Title	Thumbnail
Windows file system	4/20/09	OmniFind TalkinTech 102704.ppt	
Windows file system	4/20/09	IBM ECM OmniFind Portfolio DS.pdf	
Windows file system	4/20/09	IBM ECM Omnifind AE Email Compliance	

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New Search UI

The screenshot shows the IBM OmniFind Enterprise Edition search interface. The search bar contains the text 'state'. Below the search bar, a dropdown menu displays suggestions with estimated results counts and progress bars. The suggestions are:

Suggestion	Previous queries (Estimated results)	Count
state street	5	5
stated	440	440
state department	2	2
states	610	610
statement	1	1
staten	90	90
statesvehicle	4	4
stateed	2	2
stater	2	2
statesboro	2	2

The interface also shows a 'Facet Tree' on the left with a 'date' facet expanded to show '2009 (9)', '2009/4 (9)', '2009/4/20 (9)', and '2009/4/20/15 (9)'. A 'Dynamic Facet Chart' is also visible below the facet tree. The main search results area shows a snippet of text: 'Maximum length ... area. Place flush left, aligned at bottom, 8-10pt Arial Regular, white IBM logo must not be moved, added to, or altered in any ... For client presentations, client's logo may go in this area SVL New Blue Network http://w3.svl.ibm.com/newblue IBM ... Product Overview Direction for search in other products Technology Directions IBM Software Group IBM Confidential ... Almaden IBM Software Group IBM Confidential Almaden - R SVL - S Westford - S Watson - R Bethesda - S Raleigh - S Boeblingen - S Haifa ... R IBM Software Group IBM Confidential Why Search in IBM? Critical for many IBM products, services, and new ... search and text analytics as'.

Type ahead search:

1. Suggests queries based on index content and past queries
2. Shows estimated results count as part of suggestion
3. Customizable by Search Administrators

New Search UI

IBM OmniFind Enterprise Edition Collection: oeeDocs (change) Logged in as: Notlogg... | Preferences | My Profile | Help | About

ibm search analytics [Help for query syntax](#) Search Clear

Saved Searches (0)

Results 1-9 of 9 (9 results matched) Type: ALL Results per page: 10

You searched for "ibm search analytics"

Narrow Your Results

Facet Tree

- date
 - 2009(9)
 - 4(9)
 - 20(9)
 - 15(9)

Dynamic Facet Chart

date	Count
2009 (9)	9
2009/4 (9)	9
2009/4/20 (9)	9
2009/4/20/15 (9)	9

Source	Date	Title	Thumbnail
Windows file system	4/20/09	OmniFind TalkinTech 102704.ppt	
Windows file system	4/20/09	IBM ECM OmniFind Portfolio DS.pdf	
Windows file system	4/20/09	IBM ECM Omnifind AE Email Compliance	

Save your search and re-execute saved queries

New Search UI

The screenshot displays the IBM OmniFind Enterprise Edition search interface. At the top, the search bar contains the query "ibm search analytics". To the right of the search bar are buttons for "Search" and "Clear", and a checkbox for "Search within results". Below the search bar, the results section shows "Results 1-9 of 9 (9 results matched)". The search results are displayed in a table with columns for Source, Date, Title, and Thumbnail. The first result is "OmniFind TalkinTech 102704.ppt" from a Windows file system, dated 4/20/09. The second result is "IBM ECM OmniFind Portfolio DS.pdf" from a Windows file system, dated 4/20/09. The third result is "IBM ECM Omnifind AE Email Compliance" from a Windows file system, dated 4/20/09. A red box highlights the "Search within results" checkbox, and a red arrow points to the "Search within current results set" text overlaid on the first result. The interface also includes a "Narrow Your Results" section with a "Facet Tree" and a "Dynamic Facet Chart".

IBM OmniFind Enterprise Edition Collection: oeeDocs (change) Logged in as: Notlogg... | Preferences | My Profile | Help | About

ibm search analytics

Search Clear

Search within results

Results 1-9 of 9 (9 results matched)

View by file type: ALL - Results per page: 10 - 1

You searched for "ibm search analytics" Query language: English / Did you mean: [analytic](#)

Narrow Your Results

Facet Tree

date

2009(9)

4(9)

20(9)

15(9)

New search

Add to search

Search Clear

Dynamic Facet Chart

date

Source	Date	Title	Thumbnail
Windows file system	4/20/09	OmniFind TalkinTech 102704.ppt	
Windows file system	4/20/09	IBM ECM OmniFind Portfolio DS.pdf	
Windows file system	4/20/09	IBM ECM Omnifind AE Email Compliance	

Search within current results set

New Search UI

The screenshot displays the IBM OmniFind Enterprise Edition search interface. At the top, the search bar contains the query "ibm search analytics". Below the search bar, a dropdown menu is open, showing "View by file type: ALL". A red box highlights this dropdown menu. Below the search bar, the search results are displayed in a table format. The first result is a PowerPoint file titled "OmniFind TalknTech 102704.ppt". A red box highlights the text "Quick select for file type searching" with an arrow pointing to the file type "ppt" in the first result. The interface also includes a "Narrow Your Results" section on the left, a "Dynamic Facet Chart" showing a bar chart for the date facet, and a "Results per page: 10" indicator.

IBM OmniFind Enterprise Edition Collection: oeeDocs (change) Logged in as: Notlogg... | Preferences | My Profile | Help | About

Help for query syntax

ibm search analytics

Search Clear

Search within results

Results 1-9 of 9 (9 results matched)

View by file type: ALL

You searched for "ibm search analytics" Query language: English / Did you mean: [analytics](#)

Narrow Your Results

Facet Tree

- date
 - 2009(9)
 - 4(9)
 - 20(9)
 - 15(9)

New search Add to search

Search Clear

Dynamic Facet Chart

date

Source	Date	Title	Thumbnail
Windows file system	4/20/09	OmniFind TalknTech 102704.ppt	
Windows file system	4/20/09	IBM ECM OmniFind Portfolio DS.pdf	
Windows file system	4/20/09	IBM ECM Omnifind AE Email Compliance	

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New Search UI

IBM OmniFind Enterprise Edition Collection: oeeDocs (change) Logged in as: Notlogg... | Preferences | My Profile | Help | About

ibm search analytics [Help for query syntax](#) Search Clear

Advanced Search Search within results

Results 1-9 of 9 (9 results matched) View by file type: ALL Results per page: 10

You searched for "ibm search analytics" Query mean: **analytic**

Narrow Your Results

Facet Tree

- date
 - 2009(9)
 - 4(9)
 - 20(9)
 - 15(9)

New search Add to search Search Clear

Dynamic Facet Chart

date

Source	Date	Title	Thumbnail
Windows file system	4/20/09	OmniFind TalkinTech 102704.ppt	
Windows file system	4/20/09	IBM ECM OmniFind Portfolio DS.pdf	
Windows file system	4/20/09	IBM ECM Omnifind AE Email Compliance	

1 – Toggles on and off document properties such as filesize
2 – Allows users to set individual results display preferences

New Search UI

The screenshot displays the IBM OmniFind Enterprise Edition search interface. At the top, the search bar contains the query "ibm search analytics". Below the search bar, there are buttons for "Search" and "Clear", and a checkbox for "Search within results". The search results are displayed in a table format, with columns for "Source", "Title", and "Thumbnail". The first result is titled "IBM ECM Omnifind AE Email Compliance" and is from a "Windows file system". A red box highlights a suggestion that says "Did you mean: analytic". Another red box highlights the text "Automatic query expansion suggestions and spell check". The interface also includes a "Facet Tree" on the left side, showing a hierarchy of dates: "date", "2009(9)", "4(9)", "20(9)", and "15(9)". There are also buttons for "New search" and "Add to search".

IBM OmniFind Enterprise Edition Collection: oeeDocs (change) Logged in as: Notlogg... | Preferences | My Profile | Help | About

ibm search analytics Help for query syntax

Search Clear

Search within results

Results 1-9 of 9 (9 results matched) view by file type: ALL Results per page: 10

You searched for "ibm search analytics". Query language: English

Did you mean: analytic

Automatic query expansion suggestions and spell check

Narrow Your Results

Facet Tree

date

2009(9)

4(9)

20(9)

15(9)

New search

Add to search

Search Clear

Dynamic Facet Chart

date

2009 (9)

2009/4 (9)

2009/4/20 (9)

2009/4/20/15 (9)

Source Title Thumbnail

Windows file system ... 4/20/09 IBM ECM Omnifind AE Email Compliance

Windows file system ... 4/20/09 IBM ECM Omnifind Portfolio DS.pdf

Windows file system ... 4/20/09 IBM ECM Omnifind AE Email Compliance

New Search UI

The screenshot displays the IBM OmniFind Enterprise Edition search interface. At the top, the search bar contains the query "ibm search analytics". The page shows search results for "ibm search analytics" with a query language of English. A red box highlights the text "Thumbnail view for first page of documents in results page" with an arrow pointing to the first document's thumbnail. The document is titled "OmniFind TalkinTech 102704.ppt" and is a Windows file system document dated 4/20/09. The thumbnail shows a slide with the text "IBM" and "Talkin' Tech Series".

Results 1-9 of 9 (9 results match)

You searched for "ibm search analytics" Query language: English / Did you mean: [analytic](#)

Narrow Your Results

Facet Tree

- date
 - 2009(9)
 - 4(9)
 - 20(9)
 - 15(9)

Dynamic Facet Chart

date	Count
2009 (9)	9
2009/4 (9)	9
2009/4/20 (9)	9
2009/4/20/15 (9)	9

Source	Date	Title	Thumbnail
Windows file system	4/20/09	OmniFind TalkinTech 102704.ppt	
Windows file system	4/20/09	IBM ECM OmniFind Portfolio DS...	
Windows file system	4/20/09	IBM ECM Omnifind AE Email Com...	

New Search UI

Faceted search provides drill-through capabilities out-of-the-box and customizable by the business

Numeric and Date Range Facets

The screenshot displays the IBM OmniFind Enterprise Edition search interface. On the left, a faceted search sidebar is visible, showing a tree view of 'location' with various city options like CA, SAN DIEGO, SAN JOSE, LOS ANGELES, LANCASTER, LOS ANGELE, LONG BEACH, SACRAMENTO, RIVERSIDE, ANAHEIM, and ESCONDIDO. Below this, a search input field contains the letter 'e', and a list of suggestions is shown, including EARLIMARK, EARLIMART, EARP, EAST HIGHLAND, EAST LOS A, EAST LOS ANGELES, EAST PALOALTO, EL CAJOM, EL CAJON, EL CENTRAL, EL CENTRO, EL CERITO, EL CERRITO, EL CERRITOS, and EL CHJON. The main search results area shows a list of documents with columns for 'Date' and 'IBM ECM C'. A 'Price_Range' facet is expanded on the right, showing various price ranges with counts: Less than \$50(105), Less than \$10(18), \$10-\$20(16), \$20-\$30(19), \$30-\$40(27), \$40-\$50(25), \$50-\$100(0), \$100-\$150(0), \$100-\$110(0), \$110-\$120(0), \$120-\$130(0), \$130-\$140(0), \$140-\$150(0), \$150-\$200(0), and Above \$200(0). Below the price range facet, the 'product_size_cc' facet is partially visible. The interface includes a search bar at the top, a 'View by file type' dropdown set to 'ALL', and 'Results per page' set to '10'. The page number '1' is also visible.

Relevancy Tuning

- **Static Score Tuning**
 - Ratio of static score contribution in the ranking algorithm is adjustable
- **URL Pattern Matching**
 - Boost factor based on specific URL patterns
- **Boost Word Dictionaries**
 - Automatic term boosting for words specified in custom dictionary
- **Query Term Boosting**
 - Query term boosting based on query syntax

REST API

- **Custom Search and Admin applications can be implemented by REST API**
- **Language independent**
- **Provides all required functions for creating a search UI**
 - Search navigation
 - Facet navigation
 - Search functions
 - Faceted search
 - Fetch content, thumbnails and previous document
 - List spell correction, synonym expansions and type-ahead suggestions
 - And more...
- **Provides required functions for administrating search**
 - Managing collections
 - Controlling and monitoring components
 - Adding documents to a collection

REST API Examples

- **List available collections**

- <http://localhost:8394/api/v10/collections>

- **List available facets on specified collection**

- <http://localhost:8394/api/v10/browse?collection=sample>

- **Search documents on specified collection**

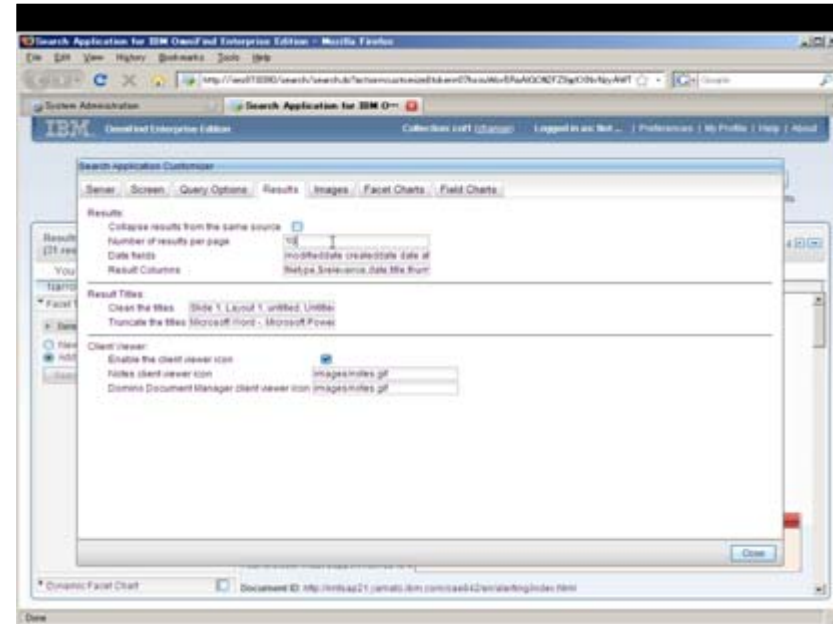
- [http://localhost:8394/api/v10/search?collection=sample&query=*&facet={"id":"date|directory|extension|filename|filepath|filesize"}](http://localhost:8394/api/v10/search?collection=sample&query=*&facet={)

- **Fetch document on specified collection**

- http://localhost:8394/api/v10/document/content?collection=sample&uri=file:///C:/Program+Files/IBM/es/docs/en_US/OmniFindEnterprise_910_qst.pdf

Search Customizer


- Administrator can modify major search UI configurations thru customizer GUI
- **Customization Points**
 - Server Configuration
 - Search server's hostname, port, and timeout...
 - Appearance
 - Displayed application name, logo image, show/hide links, data source icons...
 - Default value for search UI preference
 - Search page, facets, top results, results, result columns
- **No need to restart the search session**



Search Customizer – Examples


- Show fields as a result table column
- Change the order of columns in results pages
- Add or remove custom fields

Default

Source	Date	Title	Thumbnail
Windows file system	7/23/02	Training	

Customized



Thumbnail	Source	Title	Extension
	Windows file system	Training	.ppt

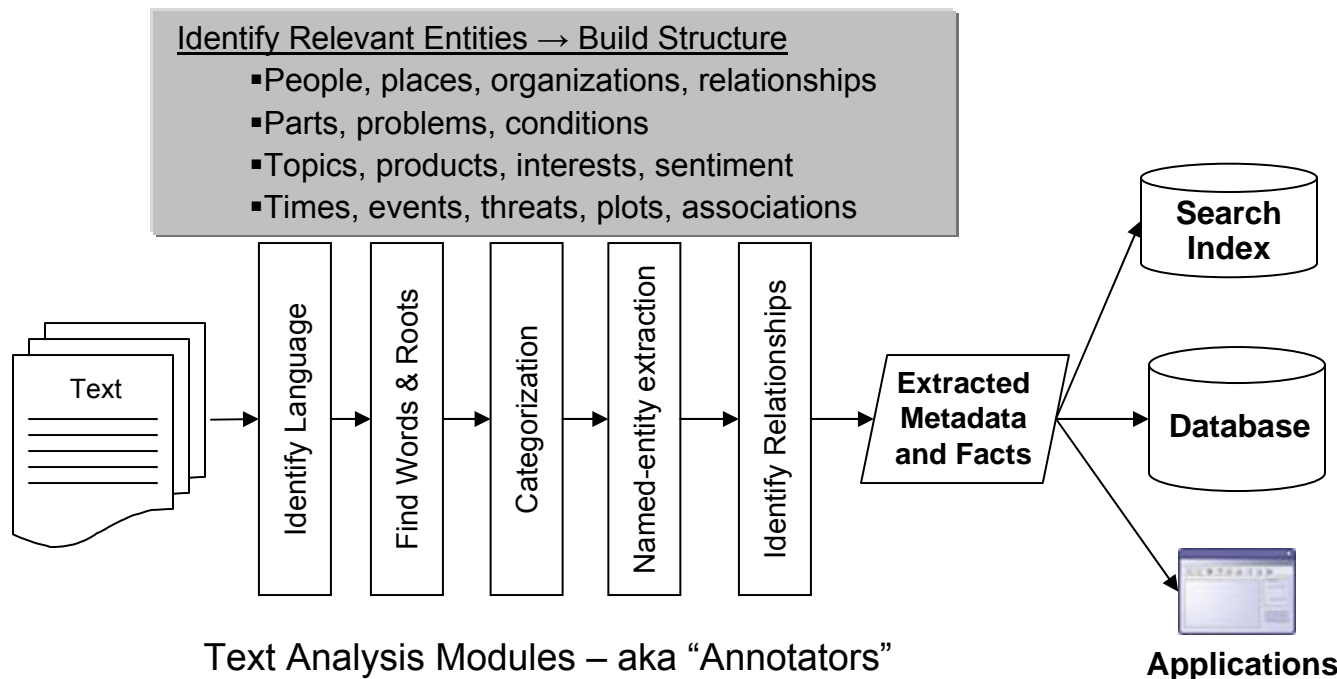
Apache UIMA

The industry standard for content processing

OASIS 



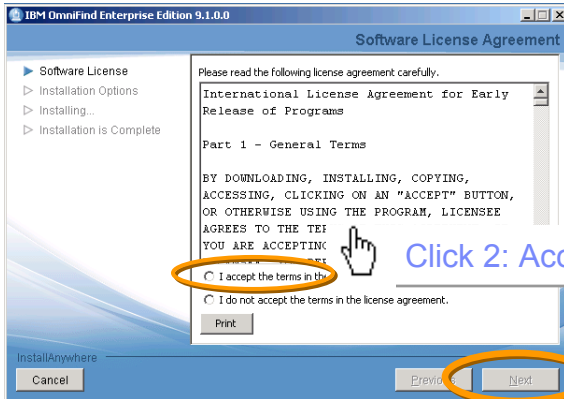
- OASIS Standard as of March 2009
- Enables interoperability of different analytics solutions and enterprise applications
- Provides an SDK for building and composing text analytics
- Defines a common interface for integrating text analysis modules
- Enables development of new and re-use of existing components for analysis



4 Click Installation

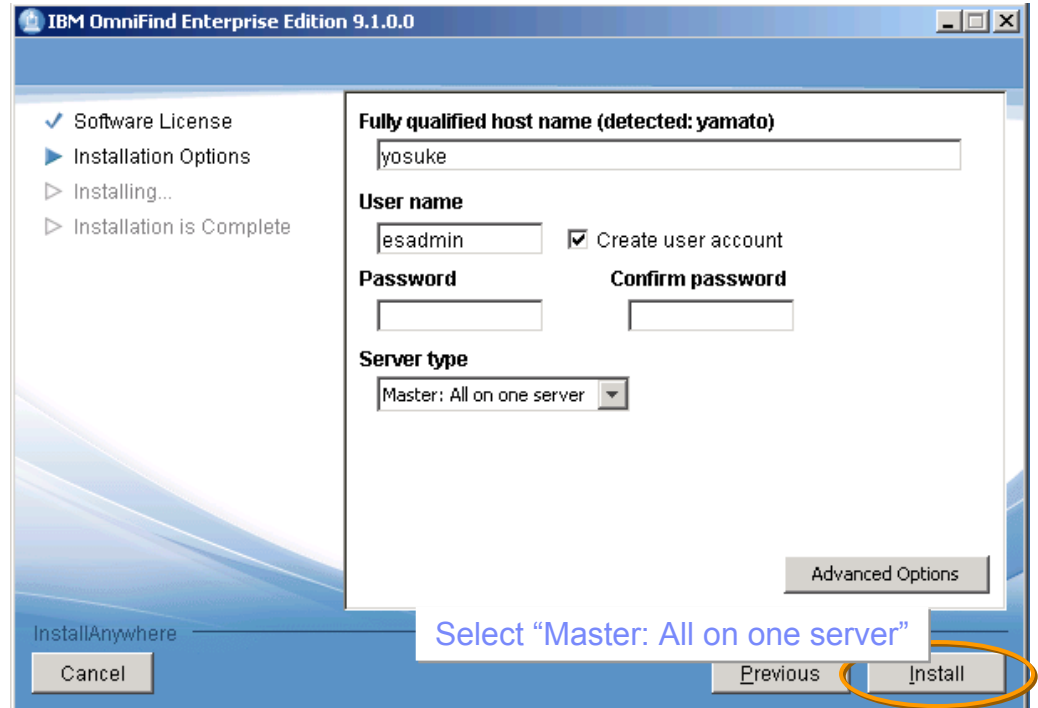


Click 1: Select Language



Click 2: Accept license

Click 3: Next



Select "Master: All on one server"

Click 4: Install

Extending Platform Support

- **Leveraging existing infrastructure to deliver Enterprise Search**
- **IBM AIX V5.3 & 6.1 (64 bit)**
- **Microsoft Windows Server 2003 (32 bit), 2008 (64 bit)**
- **SUSE Linux 10 & 11 (32 & 64 bit)**
- **Red Hat AS 5.0 (32 & 64 bit)**
- **Oracle Solaris 10 (SPARC)**
- **New z/Linux**



Rich Support for IBM Collaboration Products

- **Ongoing collaboration within IBM to optimize OmniFind search for WebSphere and Lotus**
- **Supports the latest Lotus protocols, frameworks and product releases sooner than competing products**
- **Designed to unlock the full value of Portal and Collaboration investments**



Lotus Notes



Lotus Domino



Lotus Quickr



Lotus Connections



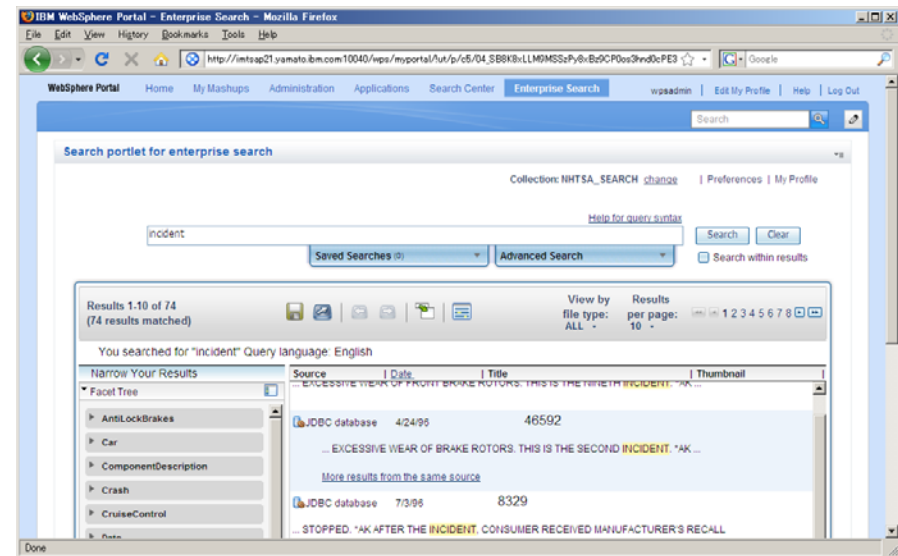
Lotus Sametime

Connectors to Enterprise Repositories

- Lotus Web Content Management 6.1, 6.1.5
- Microsoft Exchange 2000, 2003
- Microsoft SQL Server Enterprise 2005, 2008
- MySQL 5.0
- Network News Protocol Newsgroup (NNTP)
- Open Text Livelink Enterprise Server 9.6, 9.7, 9.7.1
- Oracle 9i, 10g, 11g
- QuickPlace 6.5.1, 7.0
- SharePoint Server 2003 SP2, Sharepoint Server 2007
- Software AG Adabas 7.1
- Sybase 11.9.2, 12.0, 12.5.x
- UNIX file systems
- VSAM for z/OS 1.4
- Web servers (HTTP or HTTPS)
- WebSphere Portal 6.0, 6.0.1, 6.1, 6.1.5
- Windows 2000, 2003, 2008 Server
- Workplace Web Content Management 2.5, 2.5.1, 6.0, 6.0.1
- DB2 Enterprise Server Edition 8.1, 9.1, 9.5, 9.7
- DB2 Express Edition 8.1, 9.1, 9.5, 9.7
- DB2 for iSeries 5.4 and 6.1
- DB2 for z/OS 8.1 and 9.1
- DB2 Workgroup Server Edition 8.1, 9.1, 9.5, 9.7
- Domino Document Manager 6.5.1, 7.0
- Domino R7, R8, R8.5
- EMC/Documentum 6.0, 6.5
- FileNet P8 CM 4.0, 4.5, 4.5.1
- Hummingbird DM 5.1.0.5, DM 6.0.4 with SR6
- IBM Content Manager 8.4, 8.4.1, 8.4.2
- IBM IMS 10, 11.01
- Informix Dynamic Server Enterprise Edition 11.10, 11.50
- Lotus Connections 2.0, 2.0.1, 2.5.01
- Lotus Notes R6.5, 6.5.1, R7, R8, R8.5
- Lotus QuickPlace 6.5.1 and 7.0
- Lotus Quickr Services for Domino 8.0, 8.1, 8.2
- Lotus Quickr Services for WebSphere Portal 8.0.0.2, 8.1

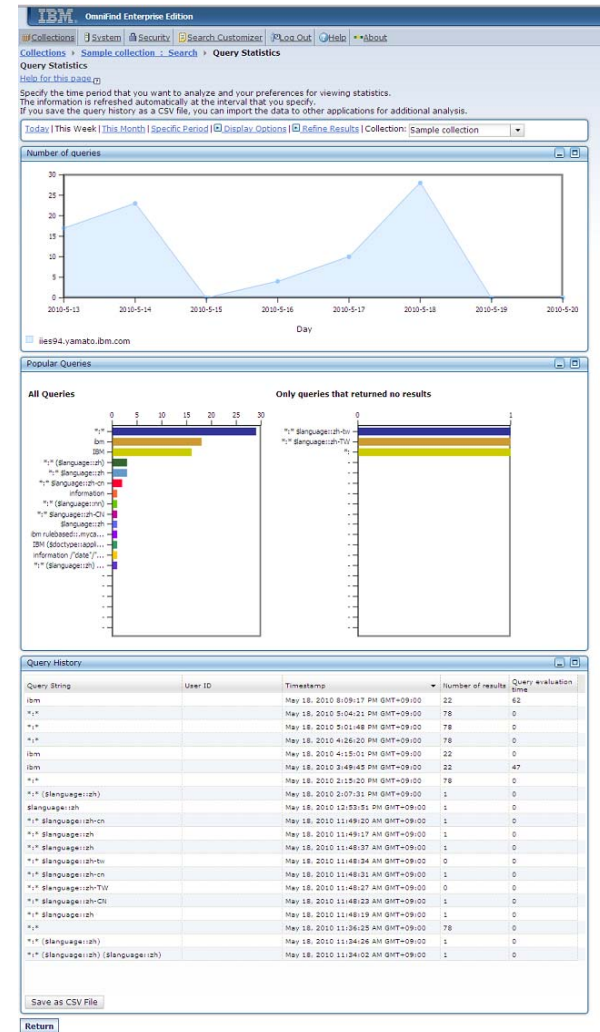
WebSphere Portal Integration

- **OEE V9.1 provides Knowledge-Driven enterprise search capabilities to WebSphere Portal and related products**
- Provides new search portlet and ESSearchPortlet (for classic search collections)
- Provides service for search center
- Provides search bar integration



Query Statistics

- **Query statistics UI shows:**
 - Time transition of
 - Number of queries, number of users, average response time (ms), worst response time (ms)
 - Query popularity
 - History of submitted queries
- **Query Statistics enables you to:**
 - Export history data to CSV file
 - Change time range, collection or user ID
 - Change display of charts or a table
 - Refresh data automatically



Information Security Is Critical

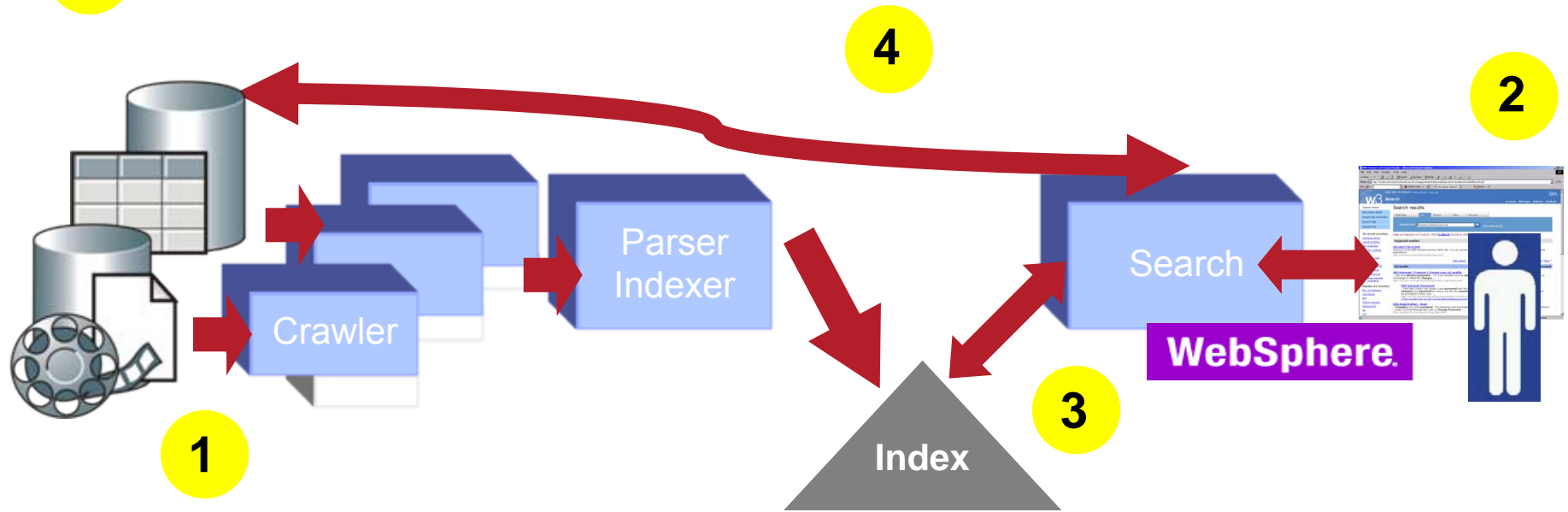
- **Not all users are allowed to search all corporation information**
- **OmniFind supports both early binding and late binding to achieve maximum security while maintaining optimum search performance**

**Pessimistic security
ensures information confidentiality**

Document Level Security

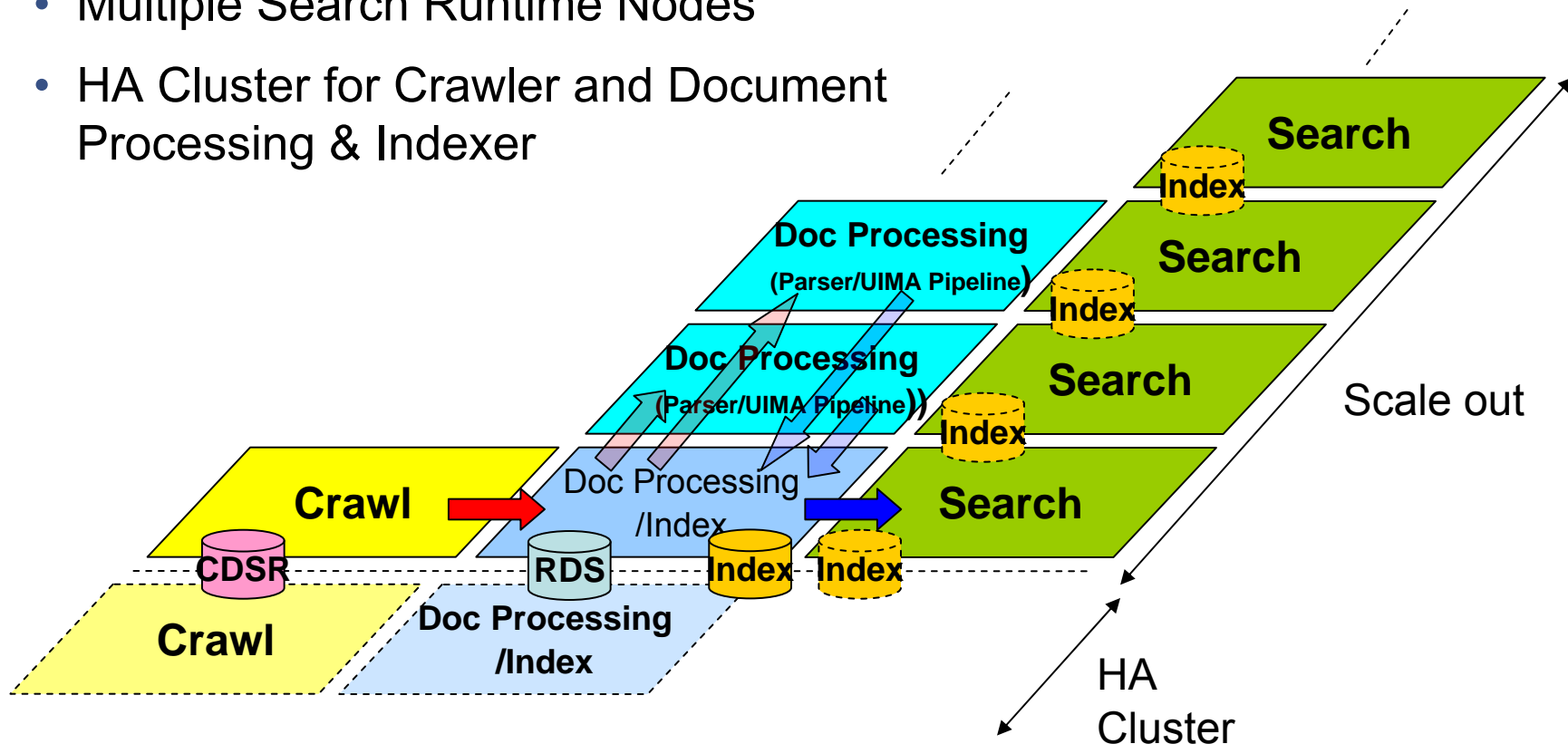
Users only see what they're authorized to see, every time

- 1 At indexing, extract and index the ACLs or static tokens
- 2 At search time, get the user credentials (SSO, LDAP, LTPA)
- 3 At search time, pre-filter results against indexed tokens/ACLs
- 4 Post-filter results against the secure data source; return results



Flexible Multi-Server Configuration

- **Support scalable and flexible configuration**
 - Multiple Document Processing Nodes
 - Multiple Search Runtime Nodes
 - HA Cluster for Crawler and Document Processing & Indexer



Live Demo

- **Billy Chang – IBM OmniFind Architect**



OmniFind Enterprise Edition 9.1

Defining and Delivering Knowledge-Driven Search

- **Enhanced End-User Experience**
 - High-performance faceted navigation
 - Saved searches
 - Search profiles
 - Document previews
 - And more...
- **Enhanced Administrative Experience**
 - Scalability improvements
 - Incremental indexing support
 - Reduced resource requirements
 - More flexible scale-out & HA
 - New relevancy tuning options
 - And more...
- **Lucene & UIMA based platform**
 - Shared technology base with eDiscovery, Content Analytics and other IBM products

