Teamcenter Full Text Search

Searching your Teamcenter documents by issuing keyword and attribute-based queries

Benefits
- Minimized labor costs – eliminating the workload associated with requiring document authors to manually classify unstructured content
- Increased user productivity – enabling knowledge users to locate product information more easily
- Increased re-use of document content – enabling users to locate and leverage existing content instead of having to create it entirely from scratch
- Reduced support cost – enabling knowledge users to locate product information through an intuitive search instead of having to contact a support or distribution services group

Summary
Teamcenter® software enables users to quickly find documents in your product lifecycle management (PLM) environment by issuing queries that contain keyword text and/or attribute references. Users are shielded from having to master database commands and esoteric PLM concepts to locate the product knowledge they need. Full text search greatly enhances your ability to identify, retrieve and re-use documents that reside in your PLM environment. Teamcenter's text searching capabilities are especially valuable for locating unstructured information, including word processing documents, spreadsheets and presentations.

Improving knowledge user productivity
Teamcenter's full text searching capabilities provide users with a quick and easy way to locate document-based product knowledge in their PLM environment. You implement this capability by creating keyword indices for the designated document types that you manage under Teamcenter. These indices can identify every word in your text documents (excepting specific exclusions), as well as metadata about each document (i.e., attributes that describe the document, such as its title, version level, publication date and subject matter).

Subsequently, knowledge users can search their PLM environment by using these indices. Users can combine metadata and keywords to narrow their searches. For example, a user can initiate a search for every document that contains the keywords "hybrid engine" and "hydrogen cell" and further focus
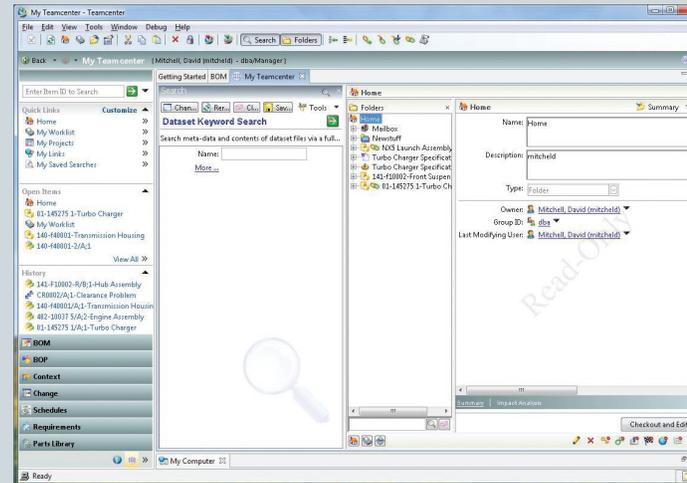

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the search by specifying a date-oriented attribute (e.g., documents published between 2001 and 2004). Once Teamcenter finishes its search, it presents the requesting user with a list of all of the documents that match the search criteria. Users can select specific documents from this list to retrieve and view these documents.

Challenges addressed by full text search
Companies retain many of their most important intellectual assets in digitally published documents. A large portion of this information appears in unstructured textual documents retained in plain text files and formatted documents.

Traditionally, knowledge users have not been able to search their PLM environment by using keywords or text phrases that would help them quickly and comprehensively locate the product documents they need to perform their jobs effectively. Instead, they were limited to attribute-based queries that frequently produced incomplete results.
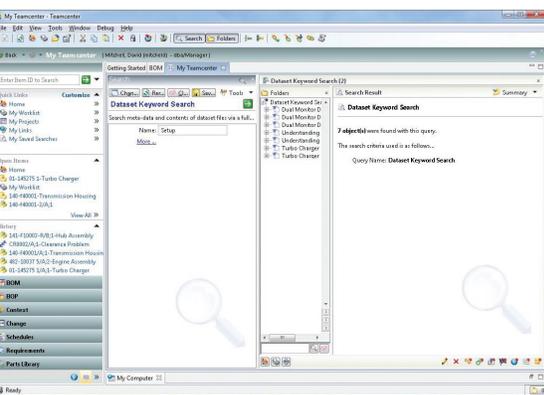
However, the addition of robust information retrieval capabilities into today's PLM solutions has removed these restrictions. These extensions enable you to combine the database management advantages of PLM (such as its ability to facilitate high performance access, rapid query response, secure remote access and integrated application-user interfaces) with document-oriented capabilities such as the ability to perform full text searches.

Teamcenter full text search allows users to perform linguistic searches on the structured and unstructured documents that reside in a PLM environment. This form of full text searching leverages the entire contents of a document in your retrieval process, thereby increasing the likelihood that users will be able to locate the right documents they require as quickly as possible.

Capabilities
Teamcenter uses Autonomy software to deliver its full text searching capabilities. Autonomy is widely recognized as a market leader whose capabilities are used by many of the world's most prominent automotive and aerospace and defense companies.
Teamcenter's full text search capability enables end users to search for text retained in the Teamcenter database even when this text appears in formatted documents. This functionality facilitates:
- Full text queries on plain text stored in relational tables
- Full text queries seamlessly integrated into the SQL language (a single query can combine both full text and "traditional" attribute-based search paradigms)
- Searching across all full text indexed columns in a table

Teamcenter supports the following full text search capabilities:
- Support for multiple search options, including case-sensitive or insensitive, sort and favorites
- Support for all math operators, as well as empty, not empty and wildcard searches
- Bi-directional reference search
- Ability to combine saved query with an in-class classification search
- Plug-and-play framework for multiple full text search engines
- Ability to search data locally, remotely or externally to a legacy database
- Refine search
- Data-type specific search
- Ability to index all document types supported by Autonomy
- Optional ability to index Teamcenter objects
- Ability to join a keyword search with a Teamcenter saved query
- Ability to perform a full text search from any Teamcenter client
- Incremental population (ability to update row entries inserted, deleted or updated since the last population)