

## DOCUMENT COLLABORATION SUITE USING A COMMON DATABASE

### CROSS REFERENCES

[0001] This application is a continuation-in-part of and claims priority to, U.S. patent application Ser. No. 10/023, 010, titled "Method and System For Document Collaboration," filed Dec. 17, 2001 which is incorporated by reference herein.

[0002] This application claims priority to U.S. Provisional Application Serial No. 60/341,935, titled "Document Collaboration Suite Using a Common Database," filed Dec. 18, 2001, which is incorporated by reference herein.

### FIELD OF THE INVENTION

[0003] The invention relates generally to the field of document collaboration, and in particular to a method and system for document collaboration over a communications network.

### BACKGROUND OF THE INVENTION

[0004] Document management systems (DMSs) have typically provided the infrastructure for document collaboration between professionals, particularly in corporations and the legal industry, and in other areas where a managing author, who maybe the originating author, of a document needs to keep control over the evolution of the document, e.g., from original document to final document. In recent years, document management systems have been extending their functionality to encompass even more aspects of document collaboration, for example, including a workflow system to notify collaborators of the progress of work on any given document. Nevertheless, despite this progress, document management systems do not provide for incorporating the individual changes proposed by different collaborators into the managing author's document. This means that if person A wishes to have a document reviewed by persons B and C, once persons B and C have reviewed the document and suggested changes to it, person A is still left with the problem of incorporating those changes into the original document.

### SUMMARY OF THE INVENTION

[0005] The present invention provides a system and method for document collaboration between a managing author and one or more contributing authors using a document management system (or local file system). The present invention formalizes the roles of the individuals involved in the collaboration involved in working on a document. A contributor (i.e., "author") may have one of two roles per a collaboration: managing author or contributing author. A managing author is responsible for the collaboration on an original document, and has sole control over which suggested modifications offered by the contributing authors are incorporated into the final document. While the contributing authors are able to edit and otherwise change a replica of the original document, the present invention treats the changes made by contributing authors as only suggestions or proposed changes to a document. "Editing," as used herein, comprises: revising, commenting, redlining, or changing a document or any combination thereof.

[0006] A collaboration starts with an original document, which includes any document selected by the managing author, and goes through revisions under control of the managing author, until a final document is obtained. Each revision may include proposed changes from responses from contributing authors.

[0007] One embodiment of the present invention comprises a method, using a computer system for collaboration on a document stored in at least one computer readable medium, between a managing author and at least one contributing author. First, access rights are assigned to the document by the managing author using the DMS, where the access rights exclusively control changes to the document. Next, a replica of the document is created using the computer system and is provided to each contributing author for review and editing. After each contributing author edits his/her replica, the managing author reviews the edits. If the managing author accepts a change due to an edit, the change is incorporated into the document.

[0008] In another aspect of the present invention the computer system comprises a plurality of individual computers or computer terminals linked via a communications network, such as a local area network, a wide area network, the internet or combinations thereof. The system includes: a common storage area coupled to the plurality of user computers via the communications network; manager software stored on a first user computer of the plurality of user computer systems, where the manager software exclusively controls change to a document stored in the common storage area; and contributor software stored on a second user computer of the plurality of user computer systems, where the contributor software provides a proposed change to a replica of the document stored in the common storage area.

[0009] One aspect of the present invention comprises a method for document collaboration utilizing a contributor computer and a manager computer connected together via a network. First, the contributor computer receives a replica of a document sent by the manager computer. The replica and the document are stored in a common database. Next, a proposed change is generated by editing the replica. And the contributor computer displays a portion of the document having the proposed change, after the proposed change is incorporated by the manager computer into the document.

[0010] An embodiment of the present invention comprises a method for document collaboration using a plurality of contributing computers and a managing computer, the manager computer controlling changes to a document. A part of a first replica of the document is displayed by a first computer of the plurality of contributing computers. And concurrently with displaying the part of the first replica, the first computer displays a part of a second replica of the document, wherein the second replica includes a change to the document by a second computer of the plurality of contributing computers.

[0011] Another aspect of the present invention comprises a system for document collaboration comprising a computer storage area and a software application stored in a computer readable medium, that executes on a computer connected to the computer storage area, where the software application includes a manager mode for controlling changes to a document stored in the computer storage area and a contributor mode for providing proposed changes to a replica of the document stored in the computer storage area.