memory. By way of illustration and not limitation, RAM is available in many forms such as static RAM (SRAM), dynamic RAM (DRAM), synchronous DRAM (SDRAM), double data rate SDRAM (DDR SDRAM), enhanced SDRAM (ESDRAM), Synchlink DRAM (SLDRAM), Rambus direct RAM (RDRAM), direct Rambus dynamic RAM (DRDRAM), and Rambus dynamic RAM (RDRAM).

[00126] Computer 2012 also includes removable/non-removable, volatile/non-volatile computer storage media. Fig. 20 illustrates, for example a disk storage 2024. Disk storage 2024 includes, but is not limited to, devices like a magnetic disk drive, floppy disk drive, tape drive, Jaz drive, Zip drive, LS-100 drive, flash memory card, or memory stick. In addition, disk storage 2024 can include storage media separately or in combination with other storage media including~~, but not limited to,~~ an optical disk drive such as a compact disk ROM device (CD-ROM), CD recordable drive (CD-R Drive), CD rewritable drive (CD-RW Drive) or a digital versatile disk ROM drive (DVD-ROM). To facilitate connection of the disk storage devices 2024 to the system bus 2018, a removable or non-removable interface is typically used such as interface 2026.

[00127] It is to be appreciated that Fig. 20 describes software that acts as an intermediary between users and the basic computer resources described in the suitable operating environment 2000. Such software includes an operating system 2028. Operating system 2028, which can be stored on disk storage 2024, acts to control and allocate resources of the computer system 2012. System applications 2030 take advantage of the management of resources by operating system 2028 through program modules 2032 and program data 2034 stored either in system memory 2016 or on disk storage 2024. It is to be appreciated that the claimed subject matter can be implemented with various operating systems or combinations of operating systems.

[00128] A user enters commands or information into the computer 2012 through input device(s) 2036. Input devices 2036 include, but are not limited to, a pointing device such as a mouse, trackball, stylus, touch pad, keyboard, microphone, joystick, game pad, satellite dish, scanner, TV tuner card, digital camera, digital video camera, web camera, and the like. These and other input devices connect to the processing unit 2014 through the system bus 2018 *via* interface port(s) 2038. Interface port(s) 2038 include, for example, a serial port, a parallel port, a game port, and a universal serial bus (USB). Output device(s) 2040 use some of the same type of ports as input device(s) 2036. Thus, for example, a USB port may be used to provide

~~CLAIMS~~

What is claimed is:

1. A method for creating a sync relationship in a secure peer-to-peer data synchronization community~~system that facilitates synchronizing data within a data storage system,~~ comprising:

receiving user input at a first computing device that specifies that a first folder on the first computing device is to be synchronized with a second folder on a second computing device~~an interface component that leverages a synchronization technique within the data storage system~~; ~~and~~

in response to the input, the first computing device creating an invitation that includes information for creating a sync relationship between the first and second folders, the information including a membership list that defines access rights to the first folder for each user in the~~a sync component that provides a secure peer to peer data~~ synchronization community, such that the membership list includes at least one other user of another computing device in the~~based at least in part upon the~~ synchronization community in addition to a user of the second computing device as well as the access rights for the at least one other user and the user of the second computing device for accessing the first folder; and~~technique to allow at least one user a tiered access to the synchronized data.~~

sending the invitation from the first computing device to the second computing device such that upon the second computing device executing the invitation, the sync relationship is established between the first and second folders such that the second folder stores the membership list including the access rights for the user of the second computing device as well as the access rights of the at least one other user for accessing the first folder.

2. The method~~system~~ of claim 1, wherein the access rights specify whether a user of the second computing device is a manager such~~synchronization technique utilizes a track component~~ that the user may modify the access rights of any user in~~captures a data change to an entity within~~ the synchronization community~~data storage system to facilitate synchronizing data between two disparate systems maintaining sets of data~~.

3. The method~~system~~ of claim 1, wherein the first folder~~tiered access~~ includes a requests folder for storing requests sent to and from the first computing device for

establishing sync relationships in the synchronization communityat least one role and associated access permission.

4. The methodsystem of claim 3, wherein the request folders includes only a single subfolder which contains requests sent torole and from a manager of the synchronization communityassociated access permission is one of the following: 1) a manager that can read data, write data, modify data, add data, invite a user, and revoke a permission; 2) a writer that can read data, write data, modify data, and add data; 3) a reader that can read data; and 4) a contributor that can read data and add data.

5. The methodsystem of claim 31, wherein the user of the first computing devicesecure peer to peer data synchronization is a manager of the synchronizedsynchronization community with at least one replica, and wherein the requests folder includes a subfolder for each peer in the synchronization community, each subfolder including the requests sent by the peer to the manager and requests sent by the manager to the peerreplica is a synchronized folder that belongs to a user within the community.

6. The methodsystem of claim 1, further comprising: manual sync component that allows a user to manual synchronize data.

receiving a request, from the second computing device, to remove the second folder from the synchronization community;

in response, deleting the sync relationship between the first and second folders, including updating the membership list to indicate the removal of the second folder from the synchronization community; and

synchronizing the membership list with a replica of the membership list stored on other computing devices that make up the synchronization community.

7. The methodsystem of claim 1, further comprising: an automatic synchronization component that provides an automatic synchronization of data elected to the peer to peer data synchronization.

receiving an indication from a component of the first computing device that the contents of the first folder have been changed; and

in response, synchronizing the first folder with the second folder.

8. The methodsystem of claim 71, wherein thefurther comprising a user sync manager component that provides at least one of the first computing device is a component of an underlying data storage system that maintains the first folder such

that no new mechanisms are required within the components of the~~following: a synchronized relationship; a synchronized container; an invitation to a user to participate in~~ synchronization~~; an acceptance of an invitation; a participation in a~~ community for tracking changes to the first folder~~; a removal of a user; and a maintenance of a membership list~~.

9. The method~~system~~ of claim 1, wherein the invitation also includes the data of the first folder that is to be replicated to the second folder~~sync component implements a management of a complex synchronization relationship based a synchronization technology~~.

~~10. The system of claim 9, the complex synchronization relationship is at least one of a setup; a tear-down; and a security management.~~

10. One or more computer storage media storing computer executable instructions which when executed by a processor perform steps for creating a sync relationship in a secure peer-to-peer data synchronization community comprising:

receiving user input at a first computing device that specifies that a first folder on the first computing device is to be synchronized with a second folder on a second computing device;

in response to the input, the first computing device creating an invitation that includes information for creating a sync relationship between the first and second folders, the information including a membership list that defines access rights to the first folder for each user in the synchronization community, such that the membership list includes at least one other user of another computing device in the synchronization community in addition to a user of the second computing device as well as the access rights for the at least one other user and the user of the second computing device for accessing the first folder; and

sending the invitation from the first computing device to the second computing device such that upon the second computing device executing the invitation, the sync relationship is established between the first and second folders such that the second folder stores the membership list including the access rights for the user of the second computing device as well as the access rights of the at least one other user for accessing the first folder.

11. The one or more computer storage media~~system~~ of claim 10~~9~~, wherein the access rights specify whether a user of the second computing device is a manager

such that the user may modify the access rights of any user in the synchronization communitytechnology relates to at least one of a suitable data synchronization technique; and a synchronization technique related to the data storage system.

12. The one or more computer storage mediasystem of claim 101, wherein the first folder includes a requests folder for storing requests sent to and from the first computing device for establishingfurther comprising a peer to peer sync relationships in the synchronization communityapplication that runs as a local system to expose at least one operation to an application.

13. The one or more computer storage mediasystem of claim 12, wherein the request folders includes only a single subfolder which contains requests sent to and from a manager of the synchronization communityoperation can be at least one of the following: create a share at a specified container; create a permission to a container; add a permission to a container; validate an owner of a container; set a group membership based on a list; and delete a share created on a container.

14. The one or more computer storage mediasystem of claim 12, wherein the user of the first computing device is a manager of the synchronization community, and wherein the requests folder includes a subfolder for each peer in the synchronization community, each subfolder including the requests sent by the peer to the manager and requests sent by the manager to the peer sync application runs live as an application to schedule synchronization and provide progress notification.

15. The one or more computer storage mediasystem of claim 101, further comprising:the data storage system is a database-based system that defines at least one of an item, a sub-item, a property, and a relationship to represent information as a complex type.

receiving a request, from the second computing device, to remove the second folder from the synchronization community;

in response, deleting the sync relationship between the first and second folders, including updating the membership list to indicate the removal of the second folder from the synchronization community; and

synchronizing the membership list with a replica of the membership list stored on other computing devices that make up the synchronization community.

16. The one or more computer storage mediasystem of claim 1015, further comprising:the data storage system includes at least one of a container structure, and

~~an item that is an instance of a type and the item can be stored within the data storage system in a single global extent of items.~~

receiving an indication from a component of the first computing device that the contents of the first folder have been changed; and

in response, synchronizing the first folder with the second folder.

~~17. A computer-implemented method that facilitates synchronizing data within a data storage system, comprising:~~

~~identifying data within a data storage system that is to be synchronized;~~

~~inviting at least one user to participate with a synchronization relationship; and~~

~~assigning at least one accessibility level to the at least one user within the synchronization relationship.~~

17. The one or more computer storage media of claim 16, wherein the component of the first computing device is a component of an underlying data storage system that maintains the first folder such that no new mechanisms are required within the components of the synchronization community for tracking changes to the first folder.

~~18. The method of claim 17, further comprising:~~

~~leveraging an existing synchronization technique within the data storage system; and~~

~~creating at least one replica within a peer to peer synchronization community.~~

18. A computing system configured as a manager in a secure peer-to-peer data synchronization community, the system comprising:

a processor; and

memory storing the following components:

a tracking component of a data storage system, the tracking component tracking changes that occur to the data storage system;

a sync component for creating sync relationships between folders on the computing system and folders stored on other computing systems in the synchronization community, the sync component including a user sync manager component for creating the sync relationships, creating synchronized folders, inviting users to join the synchronization community, accepting invitations to join the synchronization community, removing users from the synchronization community, and maintaining a membership list of each user's access rights to synchronized folders in the synchronization community; and

a sync application that receives user input to the computing system for communicating with the sync component;

wherein upon receiving user input specifying that a first folder of the computing system is to be synchronized within the synchronization community, the sync application communicates the user input to the user sync manager of the sync component, such that the user sync manager creates an invitation which includes an indication that the first folder is to be synchronized with another folder on a second computing system in the synchronization community and also includes the membership list that specifies the access rights the user of the second computing system as well as at least one other user of another computing system in the synchronization community will have to the first folder, the user sync manager further sending the invitation to the second computing system such that in response to the user of the second computing system selecting a second folder with which to synchronize the first folder, a sync relationship is created between the first and second folders such that the second folder stores the membership list including the access rights for the user of the second computing system as well as the access rights of the at least one other user for accessing the first folder.

19. The computing system~~method~~ of claim 18, wherein upon receiving a remove request from the second computing system, the user sync manager updates the membership list by removing the sync relationship between the first and second folders from~~further comprising the replica announcing at least one of a presence in~~ the synchronization community,~~;~~ and then synchronizes the updated membership list with a replica of the membership list that is stored on other computing systems that are part of~~an intention to depart~~ the synchronization community ~~by synchronizing a request~~.

~~20. A computer-implemented system that facilitates synchronizing data within a data storage system, comprising:~~

~~means for leveraging a synchronization technique within the data storage system; and~~

~~means for providing a secure peer to peer data synchronization based at least in part upon the synchronization technique to allow multiple users a tiered access to the synchronized data.~~

20. The computing system of claim 18, wherein the sync application further provides a user interface in response to user input that selects a user from the membership list, the user interface providing an option to specify the selected user as

a manager, reader, or writer in the synchronization community and an option to remove the user from the synchronization community.