

CLAIMS

1. A system for managing assets in a co-location facilities environment, the system comprising:

a central relational database containing information associated with assets and with agreements regarding access to the assets, wherein the assets are associated with two or more geographically distinct data center co-location facilities of a service provider, where each data center co-location facility houses computing systems included in the assets, where the computing systems includes racks of servers and storage devices housed in hot and cool zones and is used to transport data traffic between the racks of servers as well as transport traffic to a world exterior to the data center, and wherein the agreements include multiple separate agreements between a customer and the service provider, the service provider enabling users from the customer to access the assets in the two or more geographically distinct data center co- location facilities based on the multiple separate agreements,

wherein a permissions model is configured to enable at least one user from the customer to be designated as having authority to grant permissions to access the assets, the permissions granted to other users of the same customer,

wherein an asset hierarchical model is configured to enable grouping of the assets in one or more asset groups, and a user group model is configured to enable grouping of the users of the customer in one or more user groups and according to the geographically distinct co-location facilities, the user groups and the asset groups managed independently of one another,

wherein the permissions model and the asset hierarchical model are configured to cooperate using the granted permissions to access the assets to enable a first user of the customer to login using a first login identification (ID) to access a first asset in a first geographically distinct data center co-location facility, wherein access to the first asset is based on association of the first user with a first agreement in the central relational database between the customer and the service provider, including a server, in a first asset group, and

wherein the first user is enabled to login using the first login ID to access a different asset in a second geographically distinct data center co-location facility, wherein access to the different asset is based on association of the first user with a

second, separate agreement in the central relational database between the customer and the service provider, the different asset being in a different asset group,

a permission data store that is configured to keep track of the permissions granted to the users, to verify whether the users are associated with one or more of the multiple separate agreements in the central relational database, and to map a login ID of a user with its permissions, assets, and agreement information, so that at least one of the permissions model and the asset hierarchical model are configured reference the permission data store, and

wherein components of the system are implemented in hardware, software, or a combination of both, and where components of the system that are implemented in software are stored in an executable format on one or more non-transitory machine-readable mediums.

2. The system of claim 1, wherein permissions granted to an asset at a first level of the hierarchy model includes permissions granted to other assets at levels lower than the first level in the hierarchy model, and wherein the other assets at the levels lower than the first level in the hierarchy model is limitable to less than a total number of assets included in the levels lower than the first level.

3. The system of claim 1, wherein the assets are provided by the service provider, and wherein the at least one user from the customer to be designated as having the authority to grant the permissions to access the assets is an administrator responsible for managing the assets at an asset level, and wherein that designated user is authorized to administer over one of a single asset group, all of the asset groups, and some subsets of all of the asset groups.

4. The system of claim 3, wherein the agreements are grouped into one or more agreement groups, wherein each agreement group is associated with a logical customer organization, and wherein each logical customer organization is associated with at least one asset group and at least one user group.

5. The system of claim 4, wherein the one or more agreement groups are formed based on one of a region, an organization, and a department, and wherein the

first user is a member of at least one user group, and wherein an asset is a member of at least one asset group.

6. The system of claim 3, wherein the assets include logical and physical assets, and wherein a user interface is configured to display information associated with the first user according to permissions granted by the administrator to the first user, the user interface associated with a portal of the service provider.

7. The system of claim 6, wherein the user interface is presented to the first user based on the first user logging into the portal using a browser installed in a client computer system connected to an Internet in a client-server environment.

8. The system of claim 1, wherein the assets are associated with one or more data centers of the two or more geographically distinct colocation facilities, and wherein the designated user is further authorized to revoke the permissions to access the assets.

9. A method for implementing a unified user login system for a co-location facilities environment, the method comprising:

maintaining a number of agreements in a central relational database;

applying a permissions-based asset management model to manage assets associated with the agreements between a customer and a service provider, wherein at least one user from the customer is designated as an asset administrator having authority to grant or restrict permissions to access assets in two or more geographically distinct data center co-location facilities, the permissions applied to other users of the same customer, where each data center co-location facility houses computing systems included in the assets, where the computing systems includes include racks of servers and storage devices housed in hot and cool zones and is used to transport data traffic between the racks of servers as well as transport traffic to a world exterior to the data center;

applying a logical customer organization model to enable grouping of more than one separate agreements between the customer and the service provider into at least a first logical customer organization and a second logical customer

organization, the more than one separate agreements enabling users of the customer to access the assets;

applying an asset hierarchical model to enable grouping of the assets into one or more asset groups, wherein an asset can be grouped into one or more asset groups, and wherein each of the asset groups is assigned to one of the at least first logical customer organization and the second logical customer organization;

enabling a first user of the customer to login using a first login identification (ID) to access a first asset in a first geographically distinct data center co location facility, wherein access to the first asset is based on association of the first user with a first agreement in the central relational database between the customer and the service provider, including a server, in a first asset group assigned to the first logical customer organization via cooperation between the asset hierarchical model and the logical customer organization model, and enabling the first user to login using the first login ID to access a different asset in a second geographically distinct data center co location facility, wherein access to the different asset is based on association of the first user with a second, separate agreement in the central relational database between the customer and the service provider, the different asset being in a different asset group assigned to the second logical customer organization,

using a permission data store to keep track of permissions granted to the users, to verify whether the users are associated with one or more of the multiple separate agreements in the central relational database, and to map a login ID of a user with its permissions, assets, and agreement information, so that at least one of the asset hierarchical model and the logical customer organization model are configured reference the permission data store; and

wherein the method is implemented using hardware, software, or a combination of both, and where the method is implemented in software, the software is stored in an executable format on one or more non-transitory machine-readable mediums.

10. The method of claim 9, wherein information related to the assets, the users and the permissions is stored in the central relational database associated with the service provider, and wherein information related to the relationships among the users, the assets, and the permissions is established and stored in the central relational database.

11. The method of claim 9, wherein the administrator is responsible for managing the assets at an asset level and authorized to administer over a single asset group, all of the asset groups, or some subsets of all of the asset groups.

12. The method of claim 9, wherein permissions granted to an asset at a first level of the hierarchy model includes permissions granted to other assets at levels lower than the first level in the hierarchy model.

13. The method of claim 12, wherein the other assets at the levels lower than the first level in the hierarchy model is limitable to less than a total number of assets included in the levels lower than the first level.

14. The method of claim 9, wherein a first user is a member of at least one user group, and wherein an asset is a member of at least one asset group, wherein the agreements are grouped into one or more agreement groups, wherein each agreement group is associated with a logical customer organization, and wherein each logical customer organization is associated with at least one asset group and at least one user group.

15. The method of claim 9, wherein the assets include physical and logical assets associated with one or more data centers of the two or more geographically distinct co-location facilities, and wherein a user interface is presented to a first user based on the first user logging into the portal of the service provider using a browser installed in a client computer system connected to a network in a client-server environment.