

CLAIMS

1. A system for creating a composite public cloud in a cloud-computing environment comprising:

a bus;

a processor coupled to the bus; and

a memory medium coupled to the bus, the memory medium comprising instructions for:

creating a plurality of tenants in at least one availability zone of at least one private cloud, wherein an availability zone comprises a physical instance of said private cloud and wherein a tenant comprises a virtual representation of certain compute resources situated within an availability zone;

allocating a portion of said tenants as a 'resale' tenant;

associating a description to each resale tenant; and

aggregating all of said resale tenants into a composite public cloud;

wherein aggregating all of said resale tenants into a composite public cloud comprises:

registering at least one resale tenant on a facility for transferring commoditized excess compute resources,

mapping each resale tenant to a public tenant within a public availability zone in a virtualized public cloud; and

publishing said description of said registered resale tenant.

2. The system of Claim 1, wherein said physical instance comprises a plurality of servers and associated storage, each of said servers having resident thereon an instance of a hypervisor application, said hypervisor application operative to virtualize said server so that each server is represented as at least one virtual machine; and

wherein a tenant comprises at least one virtual machine.

3. The system of Claim 1, wherein associating a description to each resale tenant comprises:

describing said resale tenant according to one or more predetermined attributes, said predetermined attributes including at least:

start of availability;

grace period;

cost; and

minimal duration.

4. A system for creating a composite public cloud in a cloud-computing environment comprising:

a bus;

a processor coupled to the bus; and

a memory medium coupled to the bus, the memory medium comprising instructions for:

creating a plurality of tenants in at least one availability zone of at least one private cloud, wherein an availability zone comprises a physical instance of said private cloud and wherein a tenant comprises a virtual representation of certain compute resources situated within an availability zone;

allocating a portion of said tenants as a 'resale' tenant;

associating a description to each resale tenant;

aggregating all of said resale tenants into a composite public cloud;

logically segregating computing resources from each other within the same cloud, to filter traffic between different members of the same cloud; and

specifying rules for how that traffic should flow.

5. The system of Claim 4, wherein said physical instance comprises a plurality of servers and associated storage, each of said servers having resident thereon an instance of a hypervisor application, said hypervisor

application operative to virtualize said server so that each server is represented as at least one virtual machine; and

wherein a tenant comprises at least one virtual machine.

6. The system of Claim 4, wherein associating a description to each resale tenant comprises:

describing said resale tenant according to one or more predetermined attributes, said predetermined attributes including at least:

start of availability;

grace period;

cost; and

minimal duration.

7. A system for creating a composite public cloud in a cloud-computing environment comprising:

a bus;

a processor coupled to the bus; and

a memory medium coupled to the bus, the memory medium comprising instructions for:

creating a plurality of tenants in at least one availability zone of at least one private cloud, wherein an availability zone comprises a physical instance of said private cloud and wherein a tenant comprises a virtual representation of certain compute resources situated within an availability zone;

allocating a portion of said tenants as a 'resale' tenant;

associating a description to each resale tenant;

aggregating all of said resale tenants into a composite public cloud;

establishing a portal for buying and selling commoditized excess compute resources;

automatically matching buyers and sellers by means of said portal; and

conducting speculative trading of commoditized excess compute resources.

8. The system of Claim 7, wherein said physical instance comprises a plurality of servers and associated storage, each of said servers having resident thereon an instance of a hypervisor application, said hypervisor application operative to virtualize said server so that each server is represented as at least one virtual machine; and

wherein a tenant comprises at least one virtual machine.

9. The system of Claim 7, wherein associating a description to each resale tenant comprises:

describing said resale tenant according to one or more predetermined attributes, said predetermined attributes including at least:

start of availability;

grace period;

cost; and

minimal duration.

10. A computer-implemented method for creating a composite public cloud in a cloud-computing environment comprising:

a computing device creating a plurality of tenants in at least one availability zone of at least one private cloud, wherein an availability zone comprises a physical instance of said private cloud and wherein a tenant comprises a virtual representation of certain compute resources situated within an availability zone;

a computing device allocating a portion of said tenants as 'resale' tenants;

a computing device associating a description to each resale tenant;

a computing device aggregating all of said resale tenants into a composite public cloud; wherein aggregating all of said resale tenants into a composite public cloud comprises:

a computing device registering at least one resale tenant on a portal for trading computing resources;

a computing device mapping each resale tenant to a public tenant within a public availability zone in said composite public cloud; and

a computing device publishing said description of said registered resale tenant.

11. The method of Claim 10, wherein said physical instance comprises a plurality of servers and associated storage, each of said servers having resident thereon an instance of a hypervisor application, said hypervisor application operative to virtualize said server so that each server is represented as at least one virtual machine; and

wherein a tenant comprises at least one virtual machine.

12. The method of Claim 10, wherein associating a description to each resale tenant comprises:

a computing device describing said resale tenant according to one or more predetermined attributes, said predetermined attributes including at least:

start of availability;

grace period;

cost; and

minimal duration.

13. A computer-implemented method for creating a composite public cloud in a cloud-computing environment comprising:

a computing device creating a plurality of tenants in at least one availability zone of at least one private cloud, wherein an availability zone comprises a physical instance of said private cloud and wherein a tenant comprises a virtual representation of certain compute resources situated within an availability zone;

a computing device allocating a portion of said tenants as 'resale' tenants;

- a computing device associating a description to each resale tenant;
- a computing device aggregating all of said resale tenants into a composite public cloud;
- a computing device logically segregating computing resources from each other within the same cloud, to filter traffic between different members of the same cloud; and
- a computing device specifying rules for how that traffic should flow.

14. The method of Claim 13, wherein said physical instance comprises a plurality of servers and associated storage, each of said servers having resident thereon an instance of a hypervisor application, said hypervisor application operative to virtualize said server so that each server is represented as at least one virtual machine; and

wherein a tenant comprises at least one virtual machine.

15. The method of Claim 13, wherein associating a description to each resale tenant comprises:

- a computing device describing said resale tenant according to one or more predetermined attributes, said predetermined attributes including at least:

- start of availability;
- grace period;
- cost; and
- minimal duration.

16. A computer-implemented method for creating a composite public cloud in a cloud-computing environment comprising:

- a computing device creating a plurality of tenants in at least one availability zone of at least one private cloud, wherein an availability zone comprises a physical instance of said private cloud and wherein a tenant comprises a virtual representation of certain compute resources situated within an availability zone;

a computing device allocating a portion of said tenants as 'resale' tenants;

a computing device associating a description to each resale tenant;

a computing device aggregating all of said resale tenants into a composite public cloud;

a computing device establishing a portal for buying and selling commoditized excess compute resources;

a computing device matching buyers and sellers by means of said portal; and

a computing device conducting speculative trading of commoditized excess compute resources.

17. The method of Claim 16, wherein said physical instance comprises a plurality of servers and associated storage, each of said servers having resident thereon an instance of a hypervisor application, said hypervisor application operative to virtualize said server so that each server is represented as at least one virtual machine; and

wherein a tenant comprises at least one virtual machine.

18. The method of Claim 16, wherein associating a description to each resale tenant comprises:

a computer device describing said resale tenant according to one or more predetermined attributes, said predetermined attributes including at least:

start of availability;

grace period;

cost; and

minimal duration.