

Jetstream Overview: Hands-on with Atmosphere

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Fischer, J. (2019). Jetstream Overview: A national research and education cloud (Hands on portion). Woods Hole, MA.
Retrieved from <https://jetstream-cloud.org/research/publications.php>



Cloud Computing Terms...simplified

Image: a file on a disk. It will be booted to create an...

Instance: a running virtual server; i.e. something you can log into.

State: something worth remembering; i.e. the state of the system

Cloud Computing Terms...simplified

Flavor: the size of a running instance; i.e. #core, RAM, disk

Hypervisor: the thing the instance runs on; something akin to a software defined hardware compute server.

Snapshot: the process of taking an instance and turning it to an image.

Cloud Computing Terms...simplified

States:

Running: the *instance* is up & running

Suspended: the *instance* is memory resident but not running

Stopped: the *instance* is shutdown akin to powering down

Shelved: the *instance* is shutdown, written to disk, and stored

Cloud Computing Terms...simplified (Cont.)

Object store: a blob of bits; it has a starting address & a size. There may be metadata associated with the object. The data is consumed in a streaming manner.

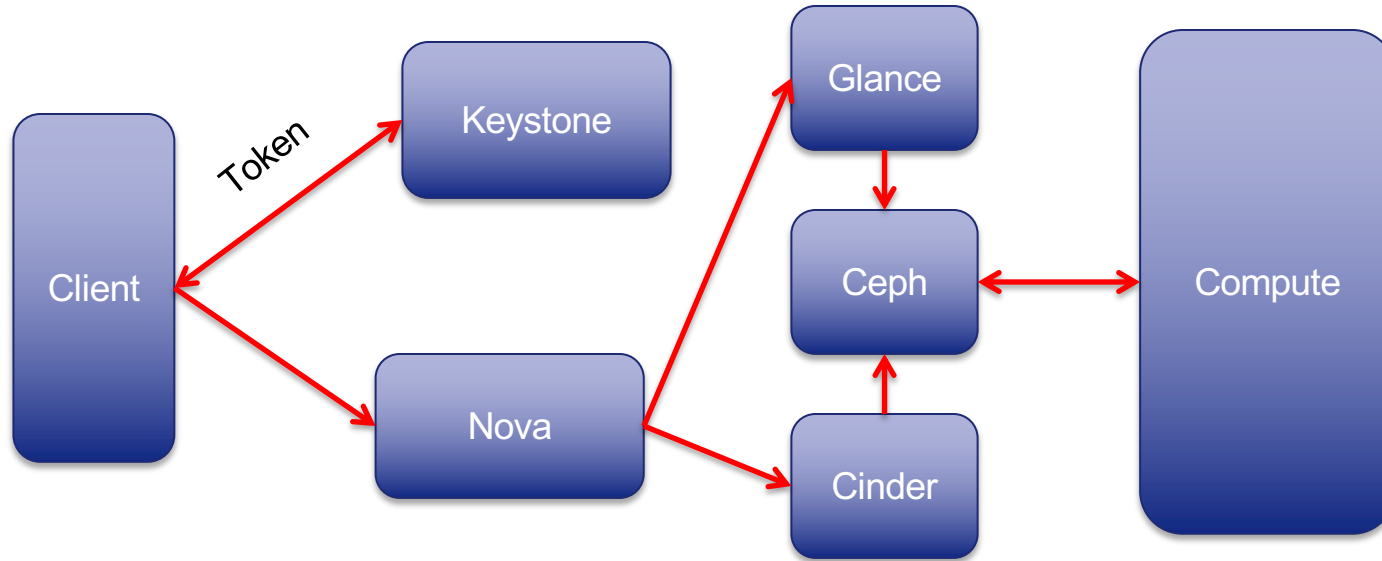
Block store: a software defined entity akin to an unformatted hardware disk drive.

Filesystem: hierarchical in nature, directories & files, ability to open, seek, read, write.

Persistent storage: If you pull the plug, it will still exist when power is restored. Safe to store data or state here.

Ephemeral storage: If you pull the plug, it no longer exists. (Don't leave your data here!!!)

OpenStack Overview



Getting into the hands on part -

Open <https://use.jetstream-cloud.org> in your browser

Login slips will be distributed momentarily!



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