

Disks as Separate Objects

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Overview

- 1 State prior to version 2.12
- 2 Disks as config top-level citizens (Ganeti v2.12)
- 3 Future work



Ganeti Disks

In Ganeti prior to version 2.12:

- Disk objects are coupled with Instances
- No support for attach/detach operations
- Disks are not taggable objects



Disk Representation

Up to version 2.12:

- Disks stored as a list of objects under `instance.disks`

Currently:

- A new ConfigData slot, namely *disks*
- Instance's *disks* slot is now a list of UUIDs
- *GetInstanceDisks* replaces `instance.disks`



Apply Disk Modifications

Disk operations can be divided into:

- Create a new Disk (*AddDisk*)
- Remove an existing Disk (*RemoveDisk*)
- Attach an existing Disk (*AttachInstanceDisk*)
- Detach an existing Disk (*DetachInstanceDisk*)



Apply Disk Modifications

Disk operations can be divided into:

- Create a new Disk (*AddDisk*)
- Remove an existing Disk (*RemoveDisk*)
- Attach an existing Disk (*AttachInstanceDisk*)
- Detach an existing Disk (*DetachInstanceDisk*)

AddInstanceDisk/RemoveInstanceDisk wrapper functions



Future work

Support for attach/detach disk operations

- Disks not necessarily belong to an Instance

Separate LUs for the Disk operations

- Implement locking for disks
- Refactor code and clean up *LUInstanceSetParams*
- *gnt-instance* commands will translate to multiple LUs

Implement a new client, namely *gnt-disk*

- Basic commands: *list*, *show*, *remove*, *modify*
- Create empty disks (not attached to any instance)
- Remove disk creation/deletion from *gnt-instance* command?

Allow instances with disks of different templates

- Remove the disk template from the instance

