Akraino Feature Project – Snappy (Backup and Restore)

Feature	Description	Companies Participating / Committers	Requested Release / Timeline	Informational
Snappy – Backup and Restore	An extensible backup and restore framework for use with cloud storage systems. For use with multiple blueprints.	AT&T	R2 for Telco Appliance	Initial Blueprints that will use Snappy: Telco Appliance, Network Cloud See next slides for additional details

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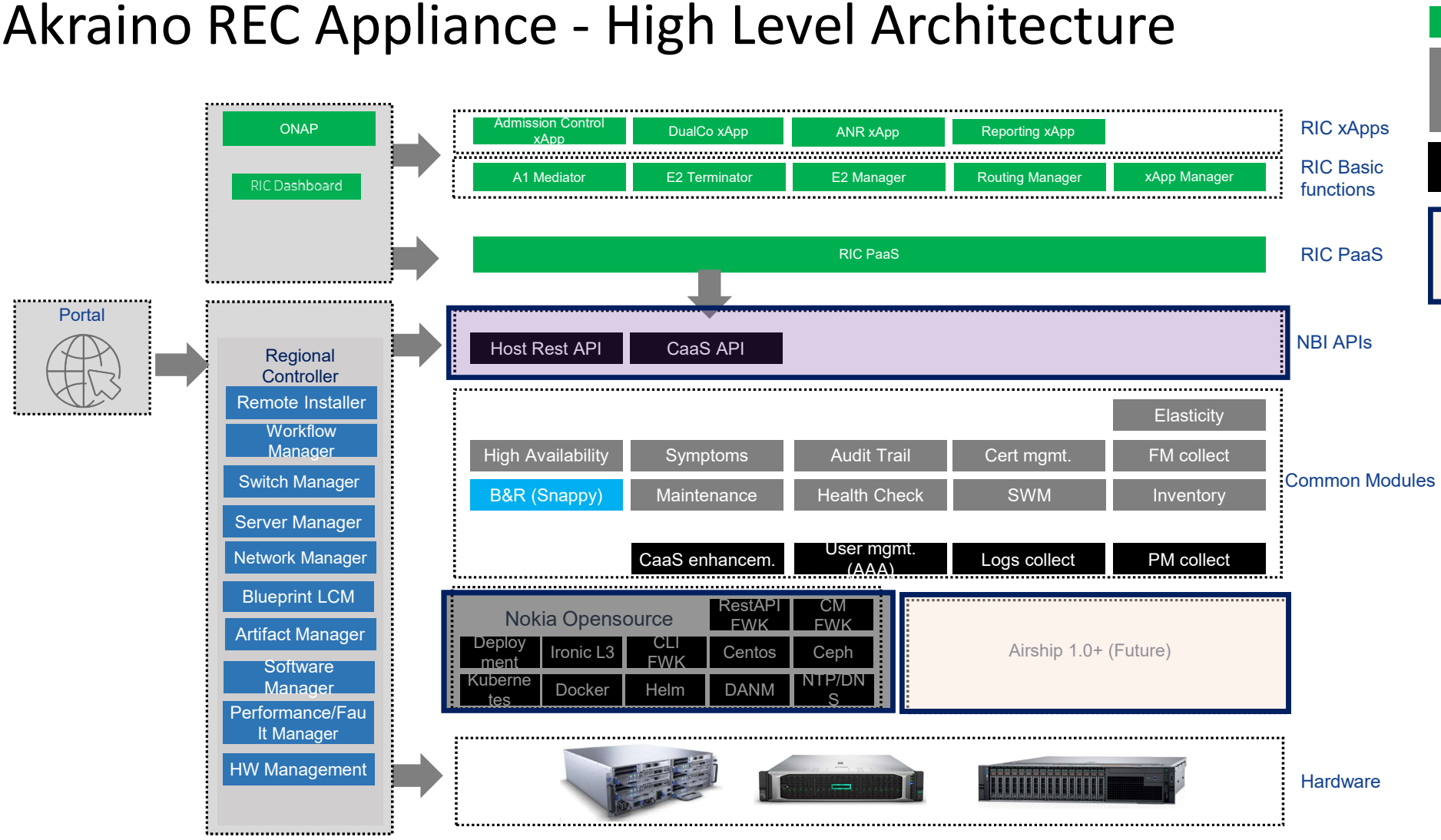
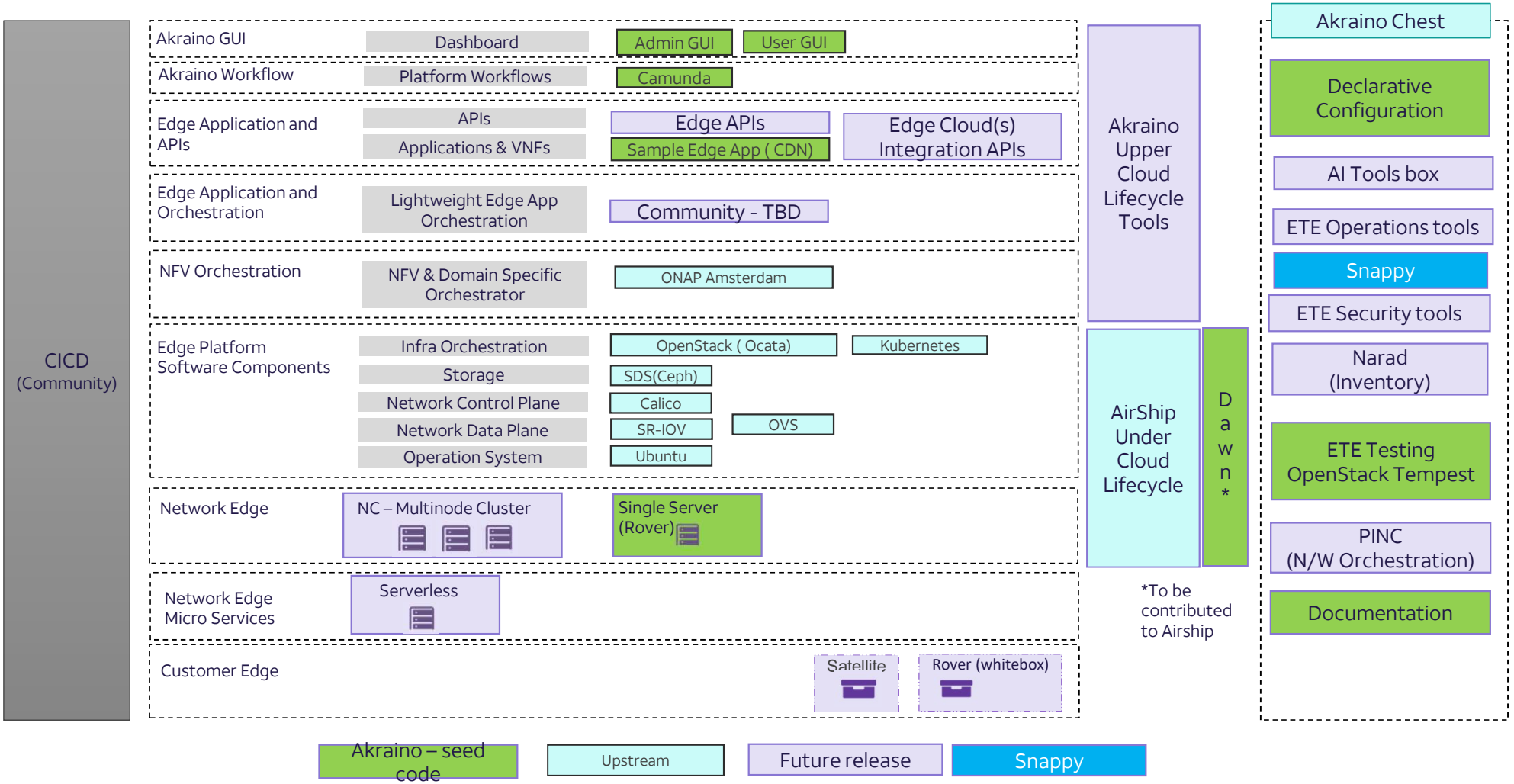
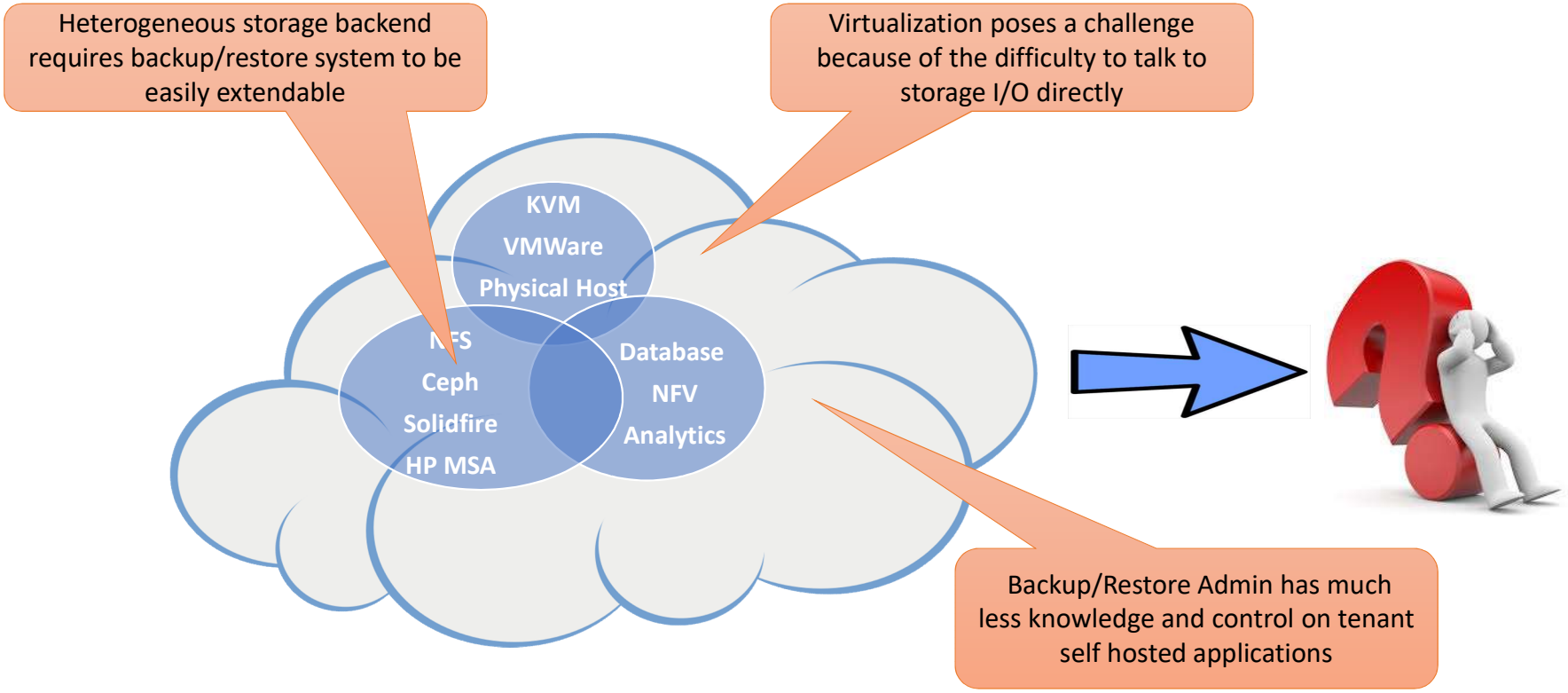
Akraino REC Appliance - High Level Architecture



Akraino Edge Stack – Snappy Feature Project Mapping



Why is Snappy needed?



The backup/restore challenge does not automatically disappear in the cloud. In fact, it is even more challenging!

Snappy: 3 Main Components

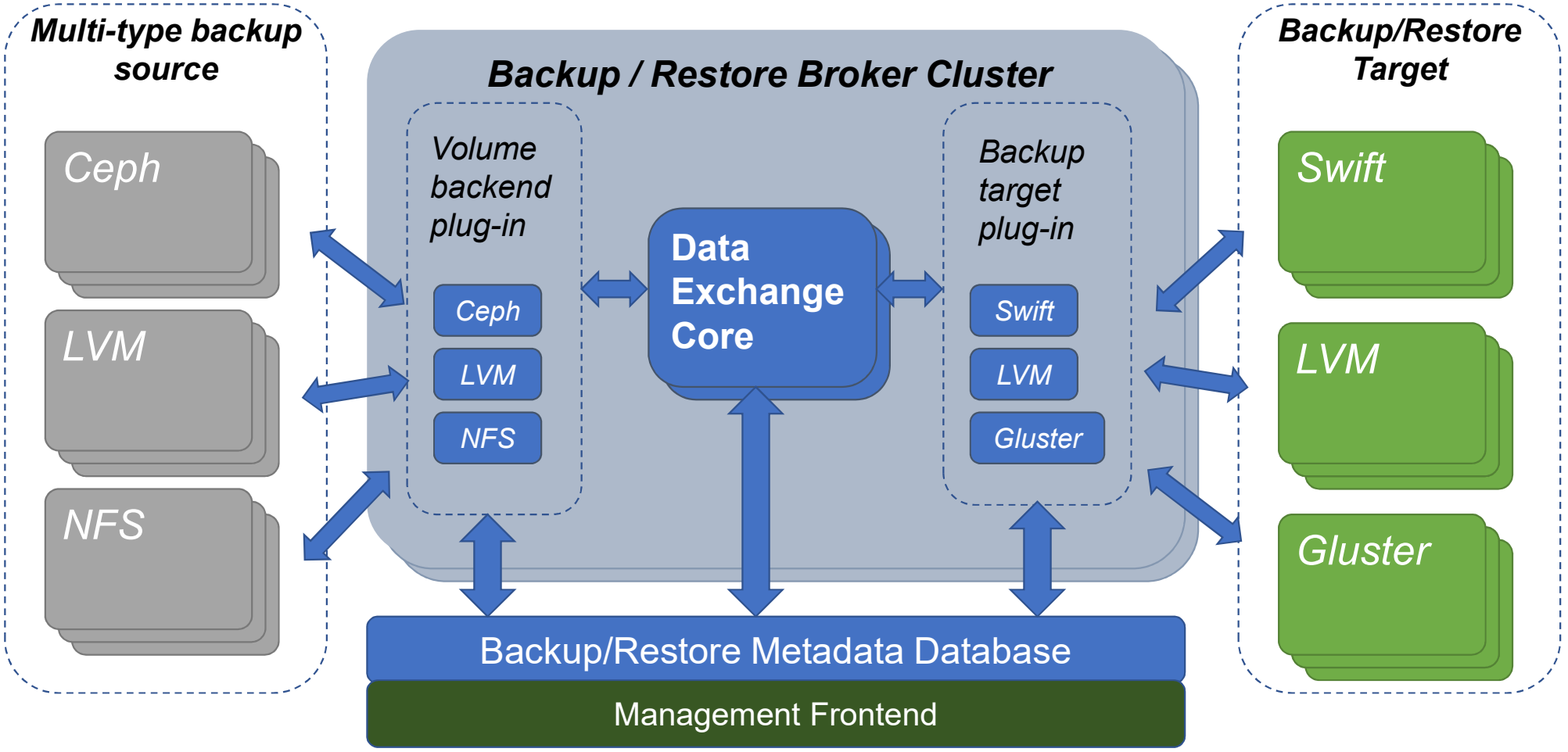
- **Frontend**: *receives* jobs
  - Interface to the outside world

"job" = backup or restore

- **Database**: *stores* jobs
  - Past, current and future

- **Core**: *runs* jobs
  - Plug-ins for different types of sources and targets

Snappy Architecture



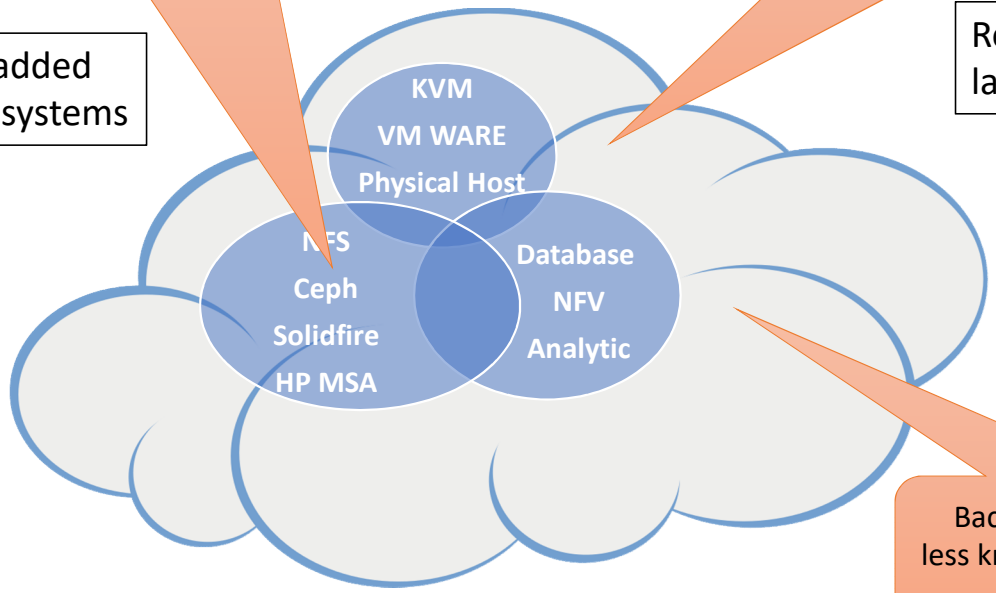
How Snappy Can Help

Heterogeneous storage backend requires backup/restore system to be easily extendable

Virtualization poses a challenge because of the difficulty to talk to storage I/O directly

Plug-ins can be added for new storage systems

Required parameters for virtualization layer specified in setup



Backup/Restore Admin has much less knowledge and control on tenant self hosted applications

Snappy provides flexible ways of doing backups (both agentless and agent based)

Snappy Implementation – Kubernetes Example