[Cinder] Support LVM on a shared LU

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Contents

- 1. Detail of Proposed LVM volume driver
 - 1-1. Big Picture
 - 1-2. Preparation by administrator
 - 1-3. Work flow of volume creation and attachment
- 2. Target of Proposed LVM volume driver
- 3. Comparison of Proposed LVM volume driver

1-1. Big Picture



1-2. Preparation by administrator



nodes as a /dev/sdx.

3

1-2. Preparation by administrator



1-3. Work flow of volume creation and attachment



1-3. Work flow of volume creation and attachment



1-3. Work flow of volume creation and attachment



2. Target of Proposed LVM volume driver

There are many kinds of Cinder plugins available.



3. Comparison of Proposed LVM volume driver

	LVMiSCSI	Proposed LVM volume Driver	FC (Vendor Driver)	
Implementation of volume	LV (managed by LVM)	LV (managed by LVM)	LU (managed by storage)	
Volume Operation	By software	By software	By hardware (Storage)	Less volume operations to storage.
Supported Storage	Any storage (Storage independent)	Any storage (Storage independent)	Specific storage (Requires specific plugin)	Better support
Volume Access Path	Via software iSCSI target	Direct from fibre channel	Direct from fibre channel	Better I/O