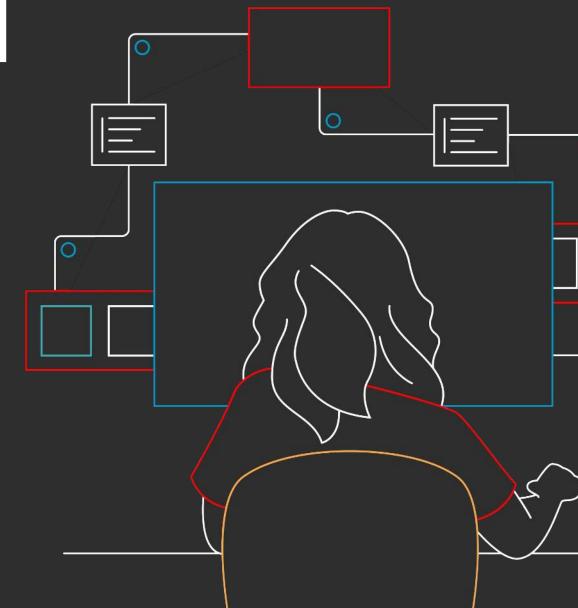
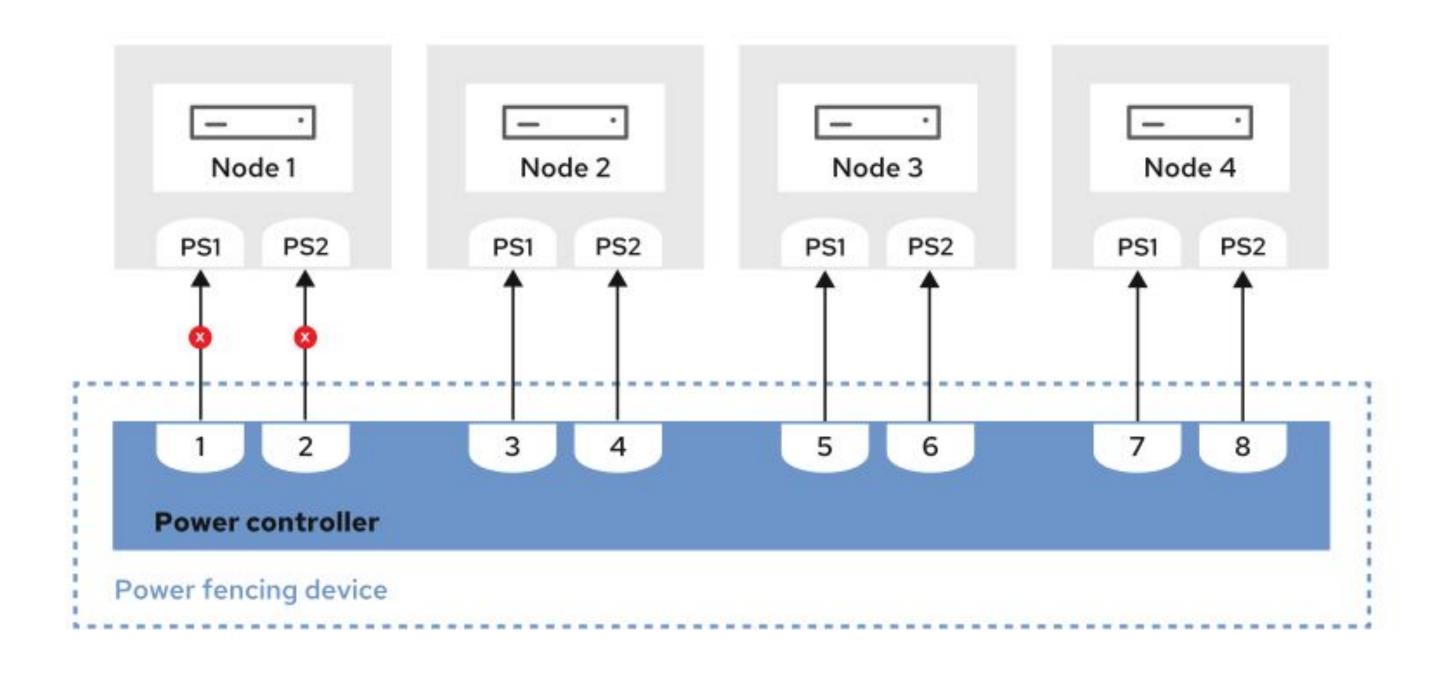
Operation, Update, and Monitoring

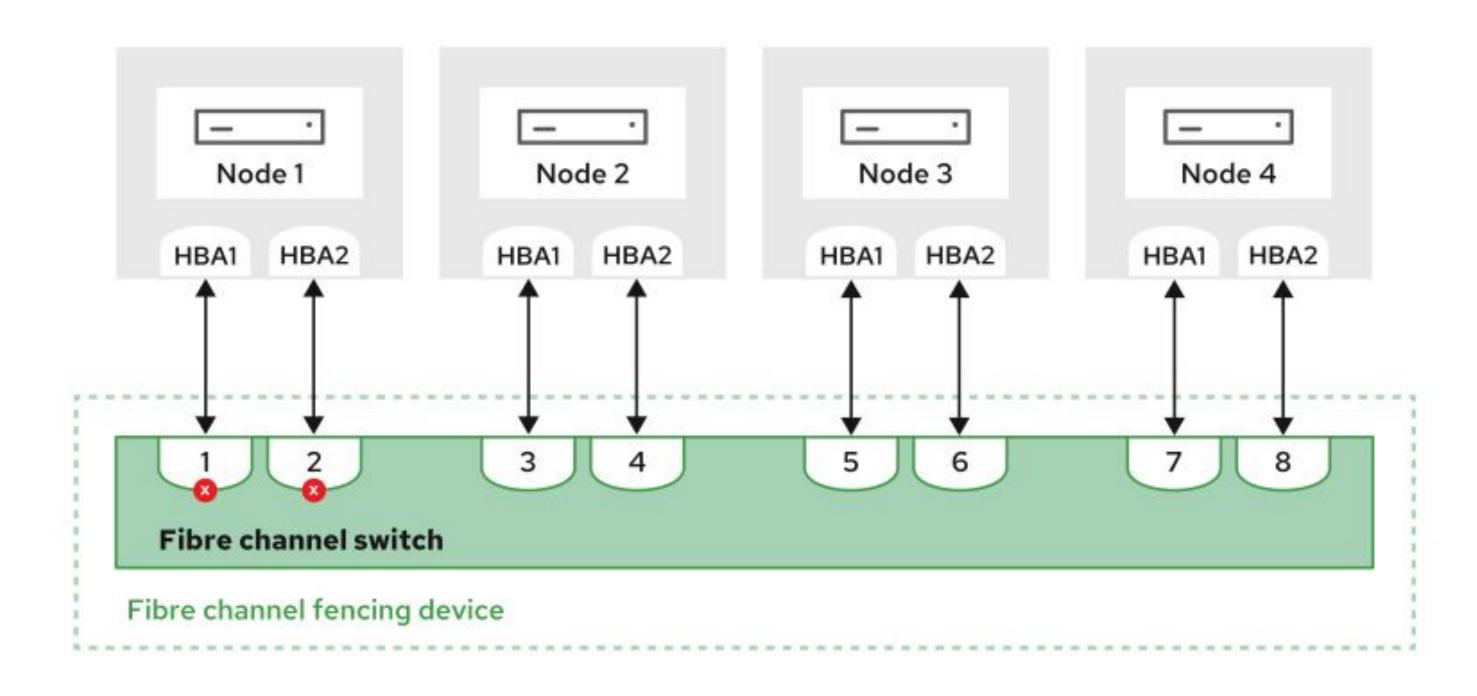
Testing System Integrity with Fencing



Power Fencing



Storage Fencing



Fencing configuration commands

pcs stonith list	list installed fencing agents
pcs stonith describe fence_agent	Describe fence agent configuration parameters
man fence_agent fence_agent -h	Parameters for running the agent directly from CLI

Testing Fence Devices

pcs stonith list	list installed fencing agents
pcs stonith describe fence_agent	Describe fence agent configuration parameters
man fence_agent fence_agent -h	Parameters for running the agent directly from CLI

```
[root@node ~]# fence_ipmilan --ip=192.168.100.101 \
> --username=admin --password=password
Success: Rebooted
```

Configuring Fencing agents

common parameter overview

pcs stonith create name fencing_agent [fencing_parameters]

pcmk_reboot_timeout	time to wait for fencing to complete (default 60s) can be changed on cluster level with pcs property set stonith-timeout=XXs.
pcmk_host_list	a space-separated list of nodes that the fencing device controls. It is required if pcmk_host_check is set to static-list.
pcmk_host_map	a semicolon separated list of hostname: port mappings. The port is the parameter that fence_device needs to address.
pcmk_host_check	 how the cluster determines the nodes that are controlled from the fencing device: dynamic-list: query the fencing device; expects list of ports and port-names that match the names of the cluster nodes (default) static-list: list of nodes from pcmk_host_list, or list of nodename:port mappings from pcmk_host_map none: cluster assumes that every fencing device can fence every node.

APC Network Power Switch Fencing

Agent Name: fence_apc

- > IP address of the APC fence device
- Username and password to access the APC fence device
- > Network protocol to access the device (SSH or Telnet)
- > The plug number, UUID, or identification for each cluster node

Management Hardware Fencing

Agent Name: fence_ilo, fence_drac5, fence_ipmilan

- > IP address of the management device
- > Username and password to access the management fence device
- > The machines that the management fence device handles

SCSI Fencing

Agent Name: fence_scsi

- > nodename or unique key
- > list of devices to be blocked

Virtual Machine Fencing

Agent Name: fence_rhevm, fence_vmware_rest, fence_lpar

- > IP or host name of the hypervisor manager
- > Username and password to access the hypervisor manager
- > The virtual machine name for each node

Libvirt Fencing

Agent Name: fence_virt

required (parameters):

- > fence_virtd running on all nodesIP address of the APC fence device
- > hypervisor on which vm runs

optional use of multicast mode:

> shared secret

Cloud Instance Fencing

Agent Name: fence_aliyun, fence_aws, fence_azure_arm, fence_gce

- agents are not part of fence-agents-all packages and have to be installed via individual packages
- typical parameters are site, location and user/service principal with appropriate rights

Managing Fencing Devices

Command Overview

pcs stonith status	View the list and status of configured fencing devices
<pre>pcs stonith config [fence_device_name]</pre>	Shows the configuration options of all STONITH resources
pcs stonith update fence_device_name parameters	Add or change parameters in a configured fence device
pcs stonith delete fence_device_name	Stop and remove fence device from cluster
pcs stonith fence <i>nodename</i>	Use for testing fencing configuration in cluster

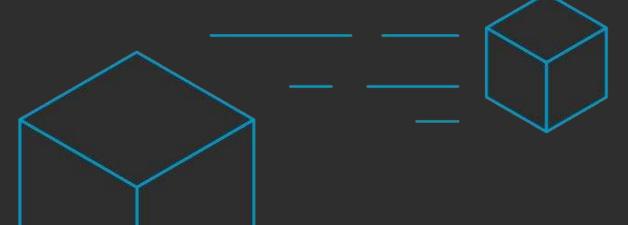
Select fencing method

important to make sure your cluster is supported

- check the requirements of your customer and environment
- check recommended fencing method in RH knowledge base
 - be careful with SBD(!!)
- use multiple fencing methods
- test fencing before you deploy productive data
- re-test when you made changes (e.g. to hardware)







Thank You!

- https://linkedin.com/company/Red-Hat
- https://facebook.com/RedHatinc
- https://youtube.com/user/RedHatVideos
- https://twitter.com/RedHat

