RED HAT ENTERPRISE LINUX
HIGH AVAILABILITY ROADMAP 2019

Helping customers protect what is most important

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AGENDA

› Introduction

› Red Hat Enterprise Linux 8 enhancements

› General futures

› Questions
WHY DO WE NEED HA AND DR?

High availability and disaster recovery

Focus on ensuring enterprise applications remain online

- Recovery when an application has an issue on one server
- Migration to another server when an issue persists
- Movement of an application across sites when a disaster occurs

Reduce the cost of downtime

- Multiple costs involved with downtime
- Employee costs, customer purchases, and loss of reputation
RED HAT ENTERPRISE LINUX 8
HIGH AVAILABILITY ENHANCEMENTS
What is Kronosnet?

The simplest definition is that knet is the new underlying network protocol for Pacemaker components corosync, and in general has better performance compared to the old network protocol.

Project features

- 8 links per host vs. 1 current
- Supports multiple pluggable protocols: UDP/SCTP
- FIPS compliant pluggable data encryption models, nss/openssl
- Offers automatic link recovery
- Allows redundant communication between nodes without changing upper layers
- Works across subnets
- Allows runtime reconfiguration of almost everything without service disruption*

* clearly removing nodes will drop traffic
CLOUD ENABLEMENT

Where does high availability belong in the cloud?

Traditional enterprise workloads continue to be ported to the cloud

- SAP HANA® and NetWeaver
- Microsoft SQL on Linux
- Standalone Oracle Database

Cloud platforms supported with Pacemaker as of Red Hat® Enterprise Linux® 8.0

- Amazon Web Service (AWS)
- Microsoft Azure
- Google Cloud Platform (GCP)
- Alibaba Cloud
GENERAL HIGH AVAILABILITY FUTURES
DISASTER RECOVERY

Helping move applications between datacenters or locations

- Application visibility across clusters
- 1-node clusters
- Disaster recovery testing
- Replication status and control

Application disaster recovery is understanding where the application should run, validating that it runs on only 1 site at a time, and ensuring that all of the application components move together.
ADDITIONAL ROADMAP CONSIDERATIONS

Ensure current workload environments are enabled

Virtualization
- Live migration support

Policy enforcement
- Enforce dependency check on offline

Hardware enablement
- ARM chipset, PowerPC

Ease of use
- User interface (UI) and user experience (UX) enhancements
THANK YOU

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