Is your VMware backup under control?
Thought not.

On our Regcast today

Adrian Moir
Dell Software

Jaap van Kleef
Dell Software

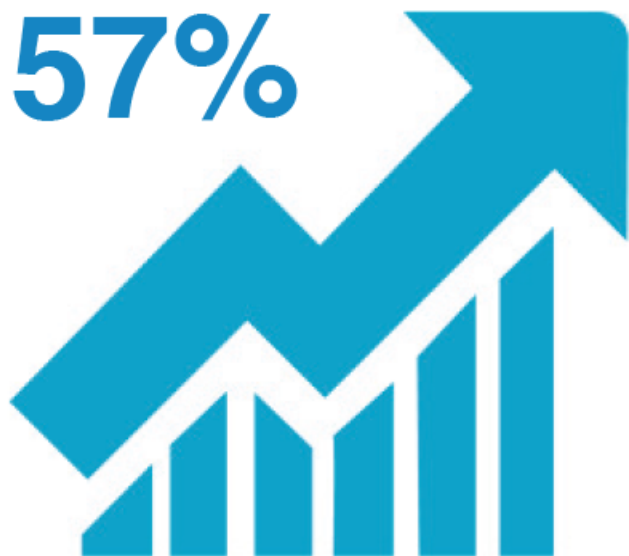## Charles "New blood" Brett
Freeform Dynamics

Tim Phillips
The Register

The⚡Register

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Virtualization creating new protection problems

Missed or unambitious **SLAs**, **cost** and **complexity** still vex you

57%

Of all **new server workloads are virtualized**
Source: Gartner[1]

68% of organizations see increasing recovery times as virtualization increases [2]

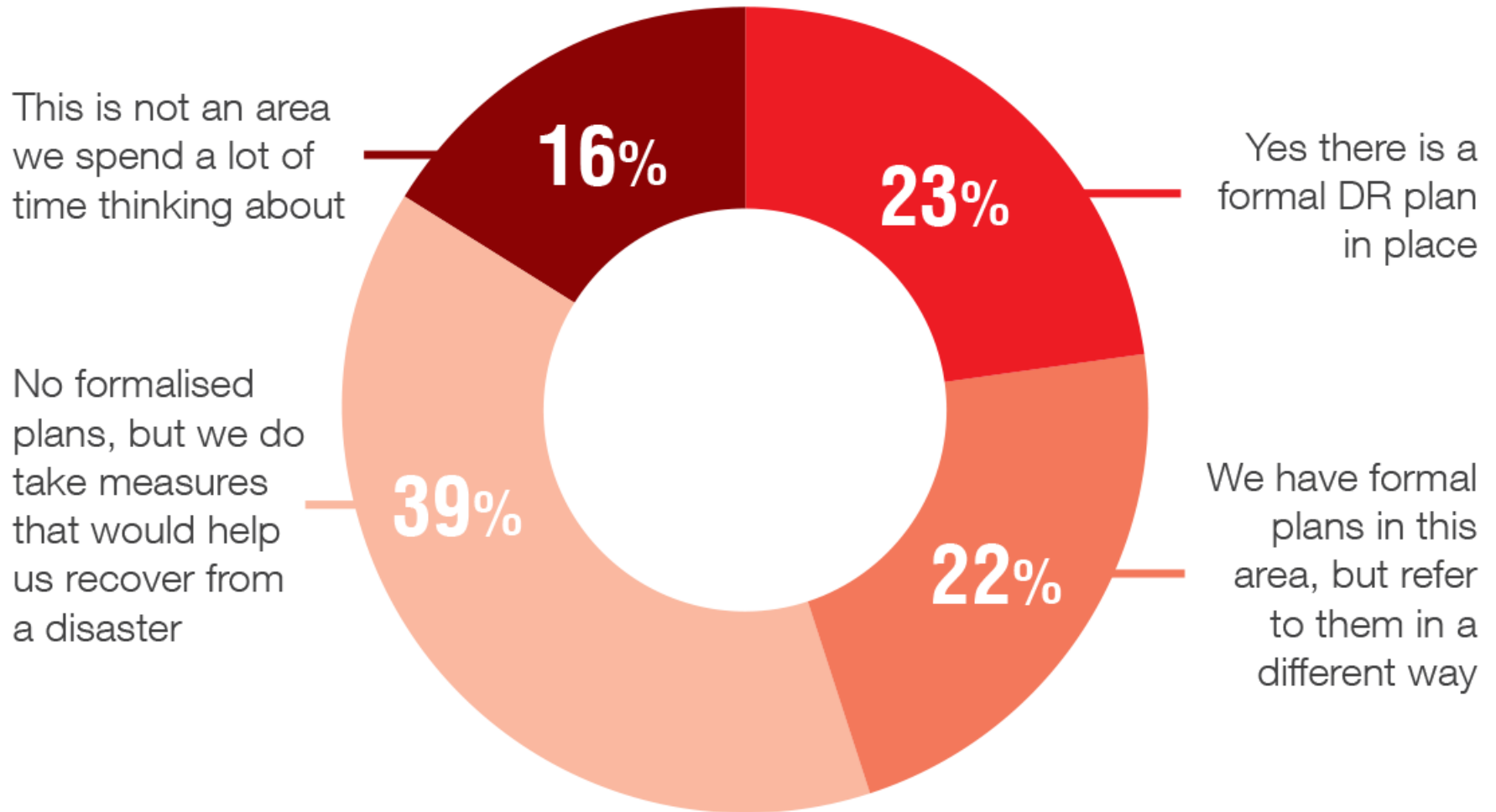Recovery time for a virtual server can take 5 hours or more. [2]

71% of organizations recover more than needed because they lack granular recovery. [2]

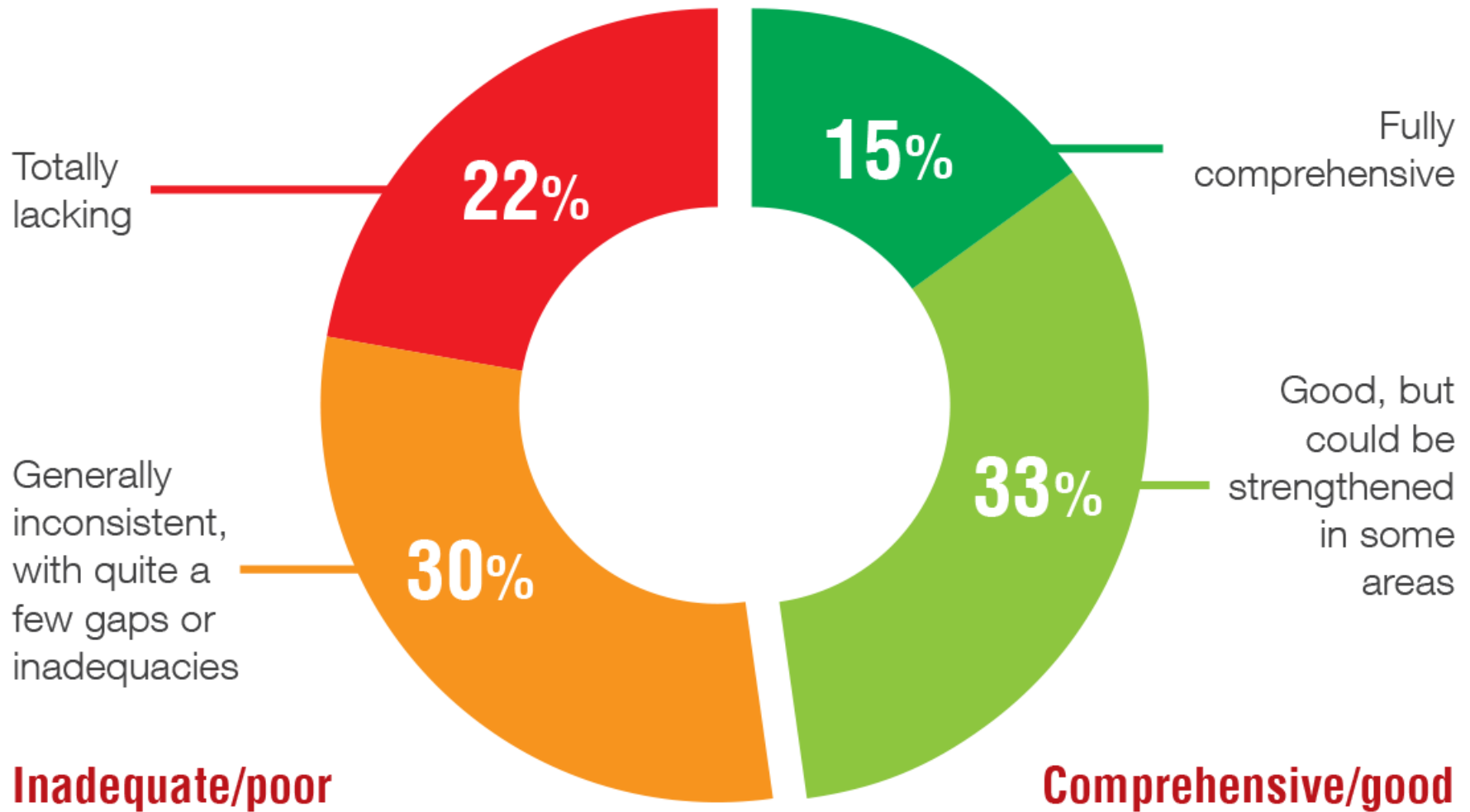Most organizations have separate backup and disaster recovery[1]

1 Gartner, Inc., "Best Practice: Virtualize Your IT Systems Incrementally to Reduce Costs," G00218910. Philip Dawson, September 23, 2011
2 Virtualization Data Protection Report 2013 Vanson Bourne, an independent market research organization

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Do you have something explicitly called a 'disaster recovery plan'?

This is not an area we spend a lot of time thinking about — **16%**

Yes there is a formal DR plan in place — **23%**

No formalised plans, but we do take measures that would help us recover from a disaster — **39%**

We have formal plans in this area, but refer to them in a different way — **22%**

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Sum up your IT DR capability

Fully comprehensive — 15%

Good, but could be strengthened in some areas — 33%

Comprehensive/good

Generally inconsistent, with quite a few gaps or inadequacies — 30%

Inadequate/poor

Totally lacking — 22%

How joined up are your management tools?

| | > 5000 | 250-5,000 | 25-250 | < 25 |

Categories (y-axis):
- Windows to non-Windows
- Physical to virtual desktop
- Mobile devices
- Desktop to mobile
- Business to personal
- Server to client
- App and server security

Legend:
- Fully joined up-5
- 4
- 3
- 2
- Not at all joined up-1
- Unsure

Protecting VMware virtual infrastructures

Understanding RPO and RTO objectives
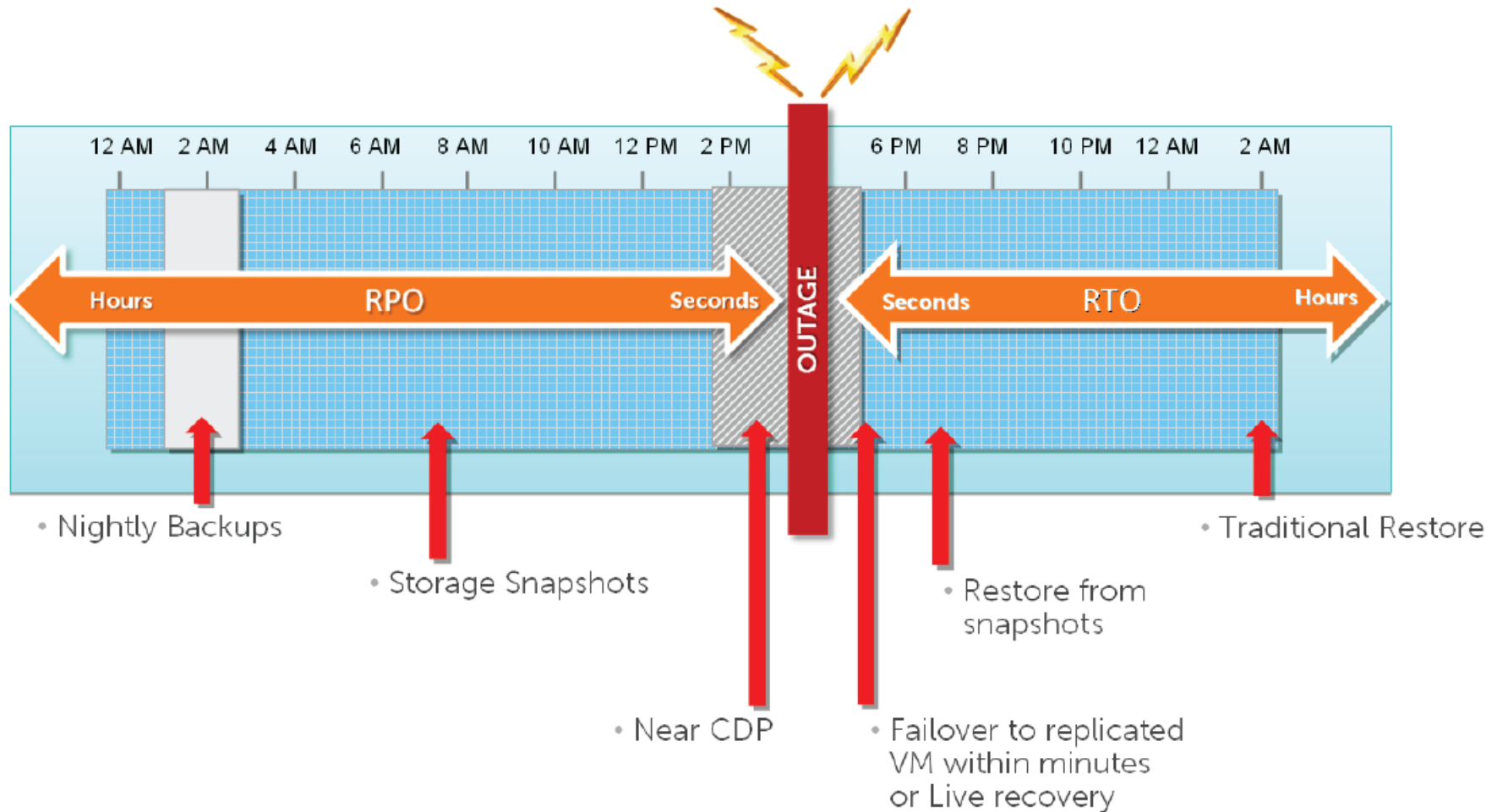
Understanding RPO and RTO objectives

Why not have CDP for the entire VMware virtual infrastructure?

- Near CDP solutions require additional time, effort and money to deploy in VMware environments

- Many VMs don't need to be recovered to the point of failure as they contain static data

- Nightly backup and recovery solutions with agentless architectures can save time and money protecting stable data

- The Holy Grail of near-real time CDP is being able to recover to any point in time in seconds – not just to the point of failure

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The risk-versus-cost conundrum
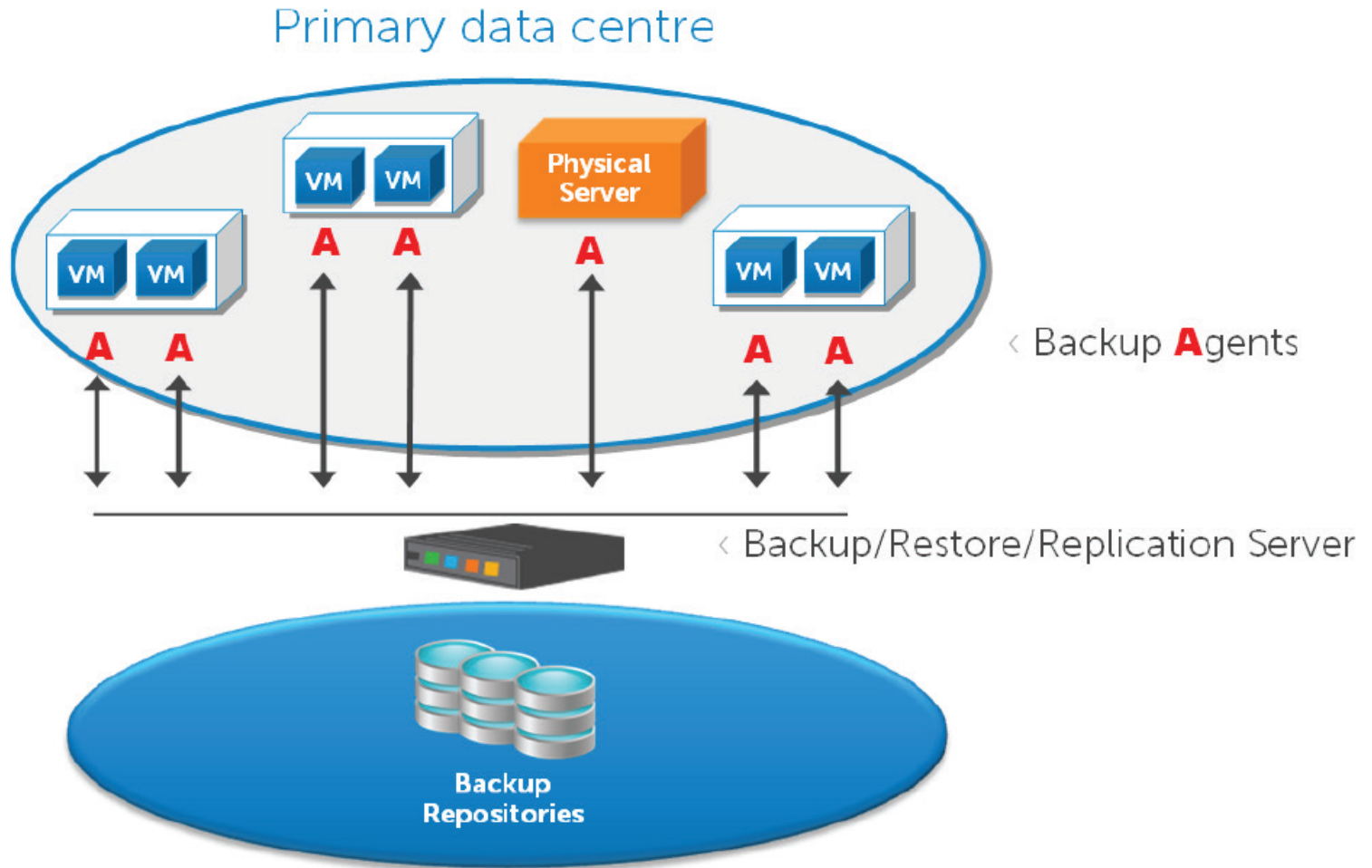
Balancing asset value against availability costs

The lower the RPO/RTO requirements, the greater the cost of meeting them

The higher the RPO/RTO requirements, the greater the risk of data loss & system downtime

The ideal solution meets or exceeds RPO/RTO requirements for a cost that does not exceed the value of the assets, the cost of downtime

Agent-based VMware data protection

Primary data centre

VM VM
A

VM VM
A **A**

Physical Server
A

VM VM
A **A**

‹ Backup **A**gents

‹ Backup/Restore/Replication Server

Backup Repositories

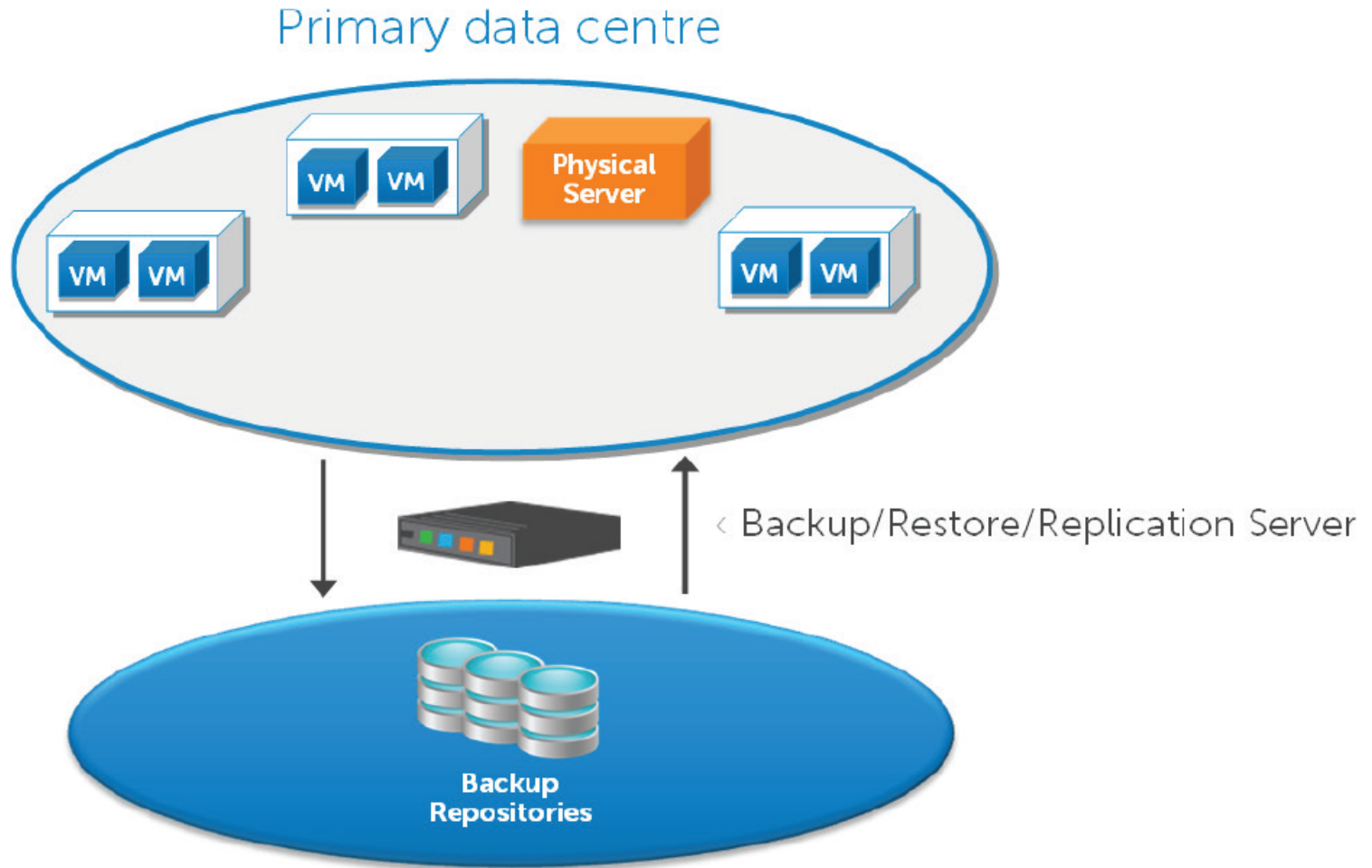# Agent-based VMware data protection

👍 Pros:

- Near CDP: recovery to any point in seconds
- Multi-site disaster recovery replication
- Application aware restore
- Simplified authentication

👎 Cons:

- Time, effort, and money spent installing, managing, and upgrading agents on each VM and physical host
- Can't automatically protect dynamic VMware environments
- Potential VM outages during restores

Agentless VMware data protection

Primary data centre

Backup/Restore/Replication Server

Backup Repositories

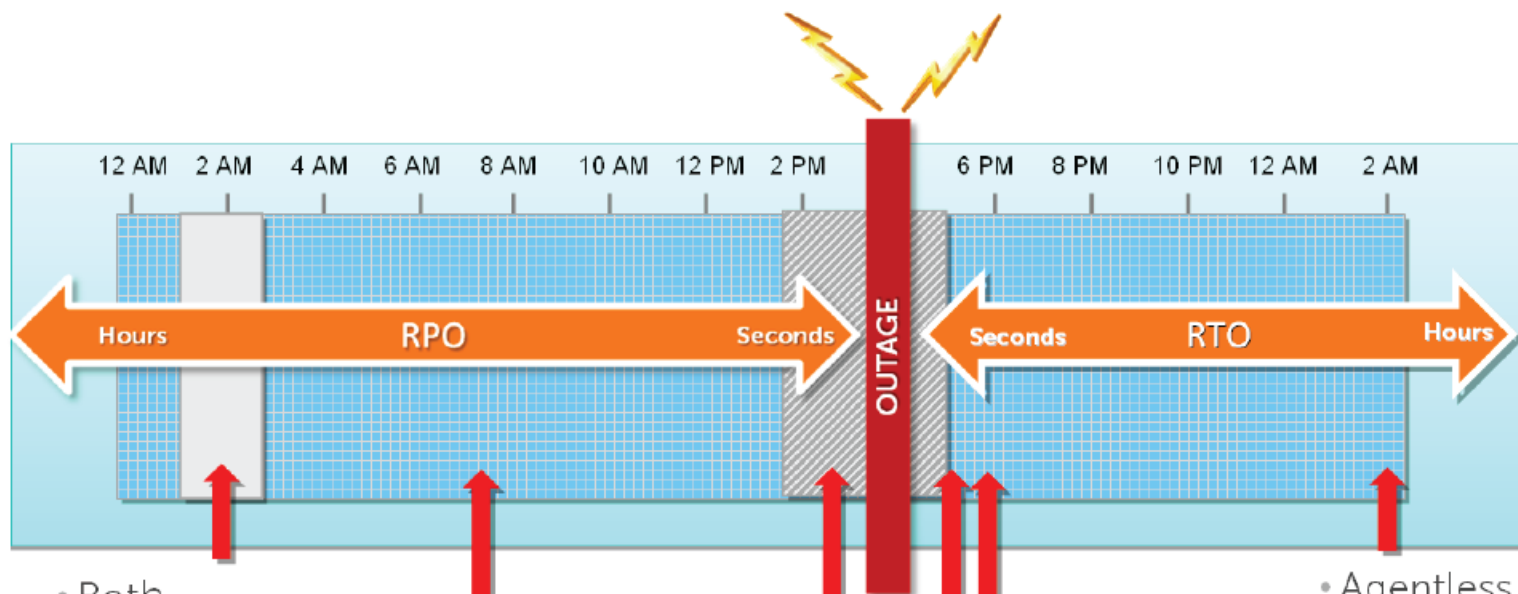# Agentless VMware data protection

👍 Pros:

- Cost-effective failover and nightly backup/restore
- Simplified deployment, management and upgrades
- VMware integration automatically detects virtual infrastructure changes
- Reduced time, effort, and money spent protecting VMware

👎 Cons:

- Loss of near CDP recovery to any point in time
- Reduced application-aware recovery capabilities
- Can't replicate multi-site disaster recovery images

Best of both worlds

Best of both worlds

✓ Protect a broad range of RPOs and RTOs by combining agent-based and agentless protection

✓ Deliver near CDP capabilities for key virtualised applications

✓ Provide nightly backup/restore data protection solution for stable, less critical applications

✓ Support granular recovery for VMware and physical Windows servers

✓ Reduce network traffic and storage costs

Dell AppAssure
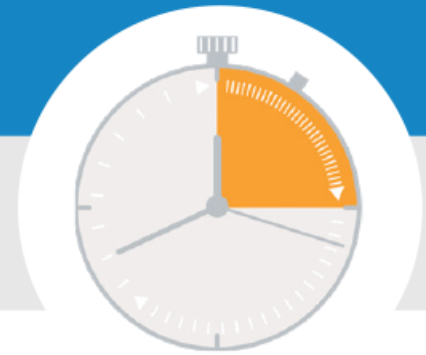
Protect key VMware assets continuously, move anywhere, and recover everything in as little as seconds

Recover from system failure in 15 minutes or less

Protect
Virtual or physical; Up to 288 snapshots/day; Bootable virtual standby; Failover & failback

Move
WAN-optimized replication; Built-in replication workflows; Customizable

Recover
Physical, virtual or cloud; Instantaneous & granular restore; Validate nightly; Track & monitor

AppAssure offers:
- Image-level snapshots for Windows, Linux, & virtual environments, including SQL, Exchange & SharePoint
- Auto-verifies protected apps
- Advanced deduplication & compression

Enhances your environment:
- Ensure recoverability of apps & data
- Provide users near-immediate access to critical applications after an outage

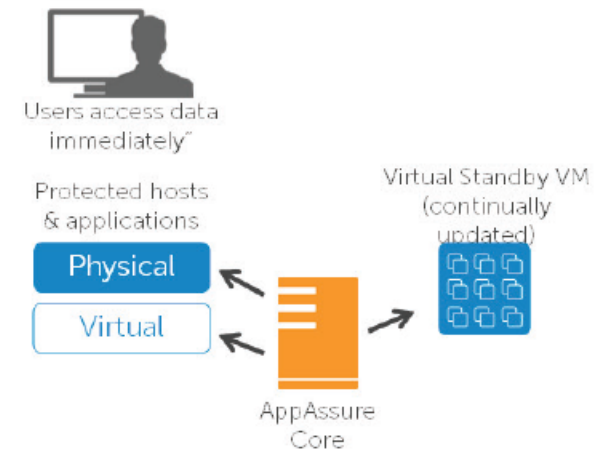DELL Software

Dell AppAssure

Take backup as frequently as every 5 minutes

AppAssure Agents capture changed blocks to allow very frequent backup of data
Technology ensures minimal impact on protected machine
All other processing done on the backup server

Protected hosts & applications
Physical
Virtual

Snapshot

AppAssure Core

Dedupe Compression Encryption

DAS/SAN/iSCSI
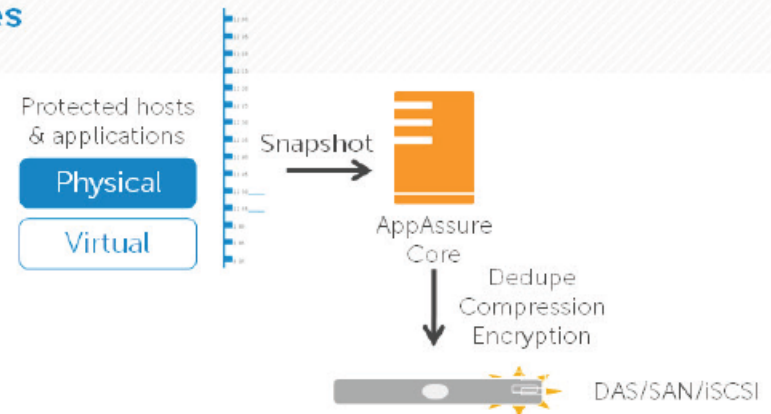
Fast restores

Make data available within minutes through AppAssure Live Recovery
Smart Agents make it possible to hide the restore process from the user
Administrators can use backups of any physical or virtual system to create a warm standby virtual machine

Users access data immediately"

Protected hosts & applications
Physical
Virtual

AppAssure Core

Virtual Standby VM (continually updated)

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Dell vRanger

Fast, scalable, simple-to-use VMware data protection

Backup

High-speed, agentless backup of VMware virtual infrastructures and physical Windows servers

Replicate

Cost-effective data replication of key VMs and clusters provides failover/failback between primary and DR sites

Recover

Catalog search and fast restore for VMs, physical servers, and even individual files
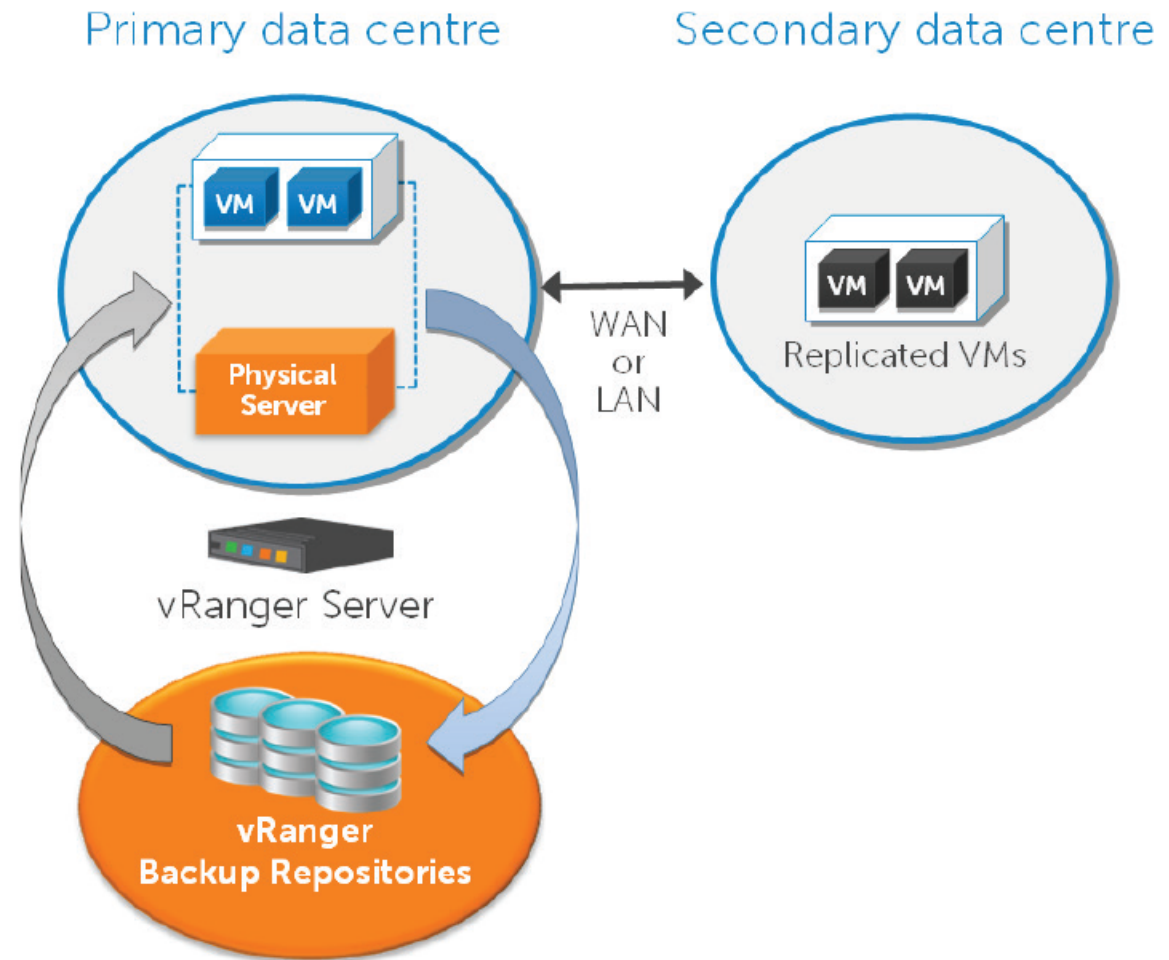
vRanger offers:

- Deep VMware integration automatically discovers and protects new VMs
- Virtual infrastructure and physical Windows server backup/restore from one easy-to-use interface
- Patented Active Block Mapping (ABM) and backup to Dell and 3rd party deduplication solutions
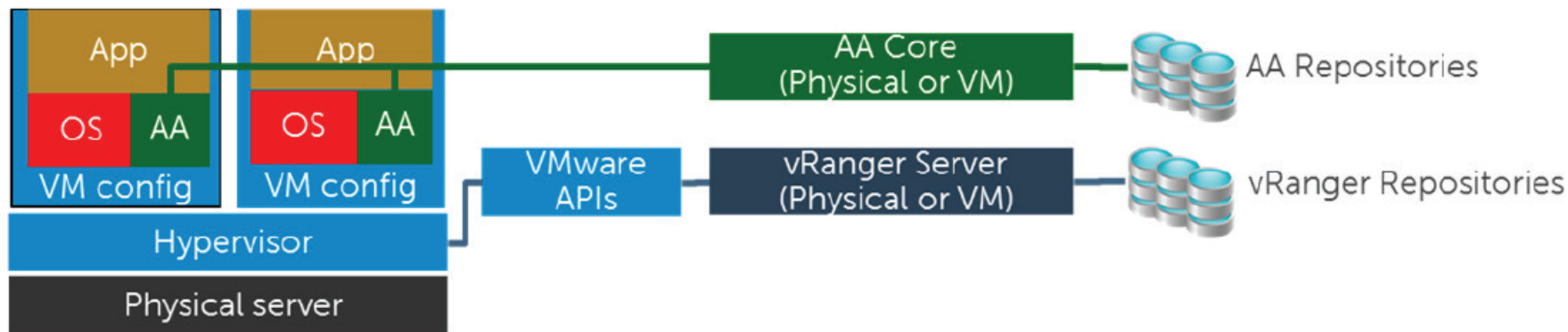
Enhances your environment:

- Minimize time and risk of managing VMware virtual infrastructures
- Reduce effort and cost of managing all data protection operations
- Significantly reduce backup storage requirements and shorten restore times

Dell vRanger

- High-performance, scalable VMware backup, recovery, and replication

- vRanger can be installed in minutes

- Perfect for simple, cost-effective nightly backup/restore

- Provides cost-effective failover for key VMs

- Also backs up physical Windows servers

Primary data centre

Secondary data centre

VM VM

Physical Server

VM VM

Replicated VMs

WAN or LAN

vRanger Server

vRanger Backup Repositories

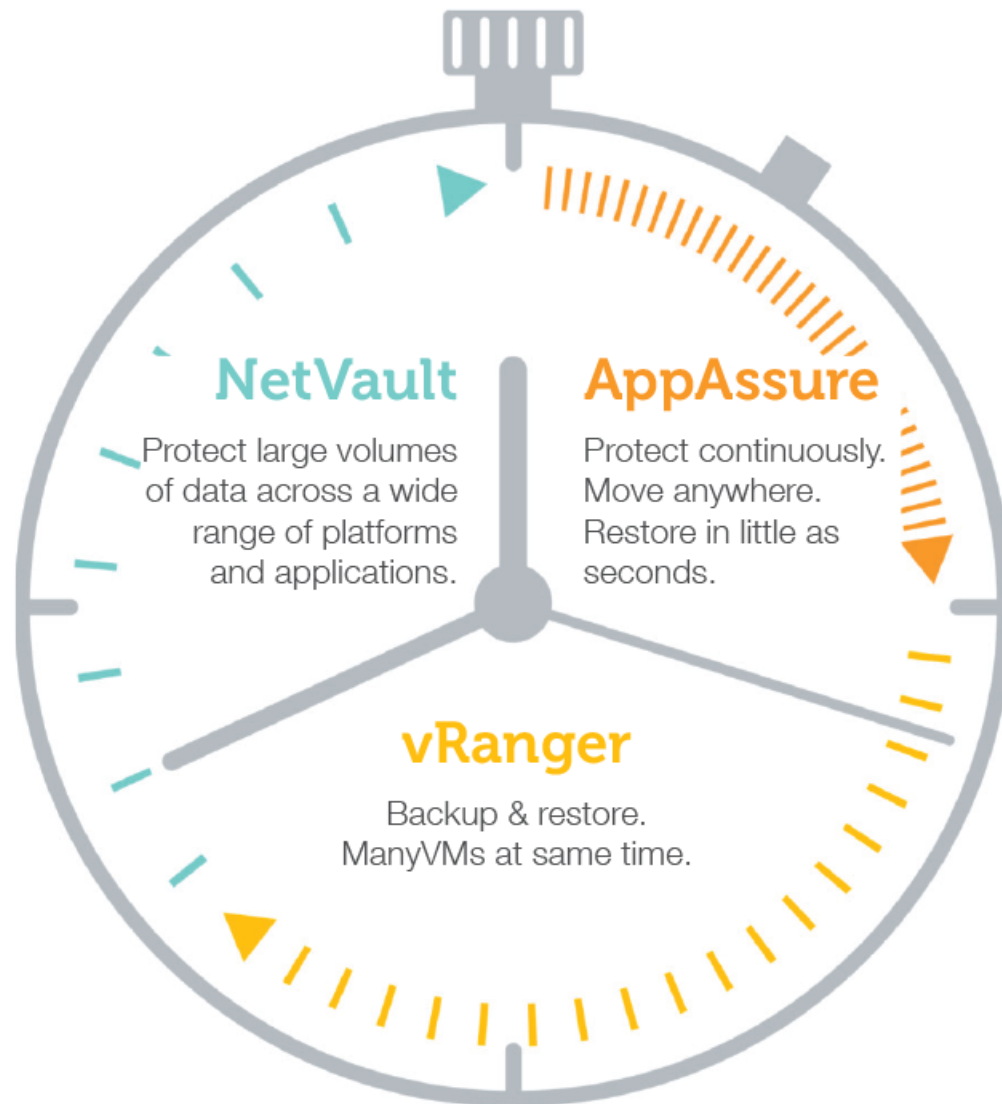*The* ***Register***

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AppAssure + vRanger = complete protection

- Protect mission-critical applications & data with AppAssure

- Protect virtual machine configuration with vRanger

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http://reg.cx/28jA

http://reg.cx/28jB

http://reg.cx/28jC

http://reg.cx/28jD

Freeform Dynamics

http://reg.cx/28jE

Thanks for joining us

An archived version of today's events will be made available on The Register in the near future.