How to Plan, Design and Build a Highly Resilient DR Solution

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OnLINE TECH

Presenter CV

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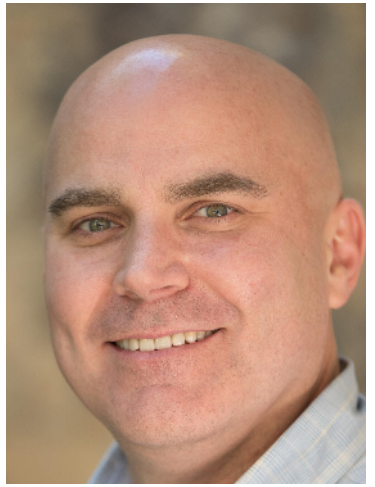

Derek Adair

Cloud Architect
Zerto
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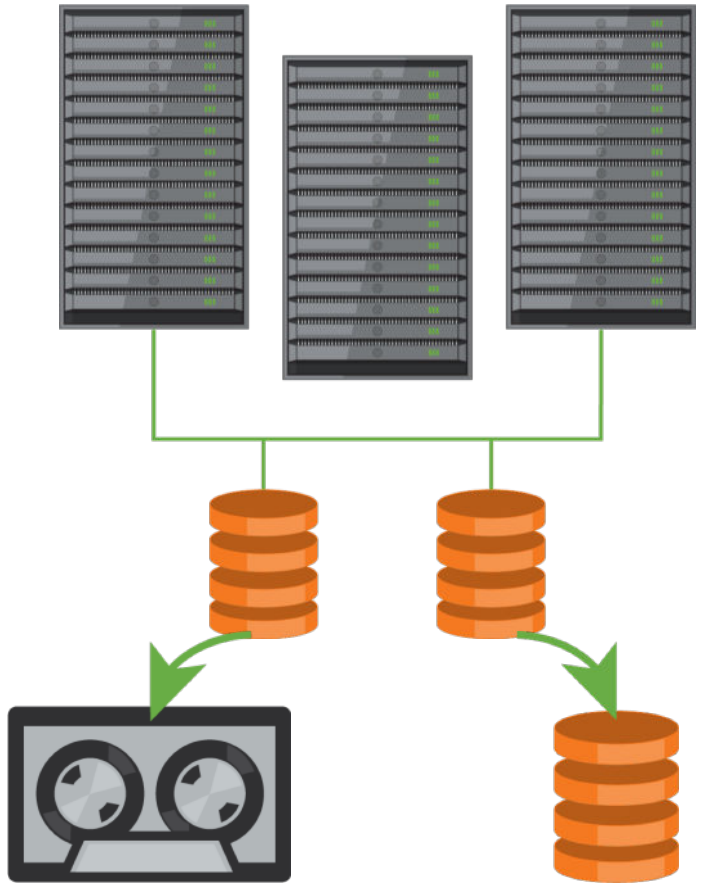
Protection Technology



VM Backups

- Data loss of 24 hours
- Recovery in 24+ hours
- Not tested, high failure rate
- Complex & time consuming
- On premise, limited use for DR

Storage Replication

- Data loss in hours
- Hours to recover
- Tested annually
- Complex, not VM aware

The Cost of Downtime

Daily Backups

RPO - 24 Hours

Up to **$273,972.60**

Snapshot Based Replication

RPO - Hours

Up to **$45,662.10**

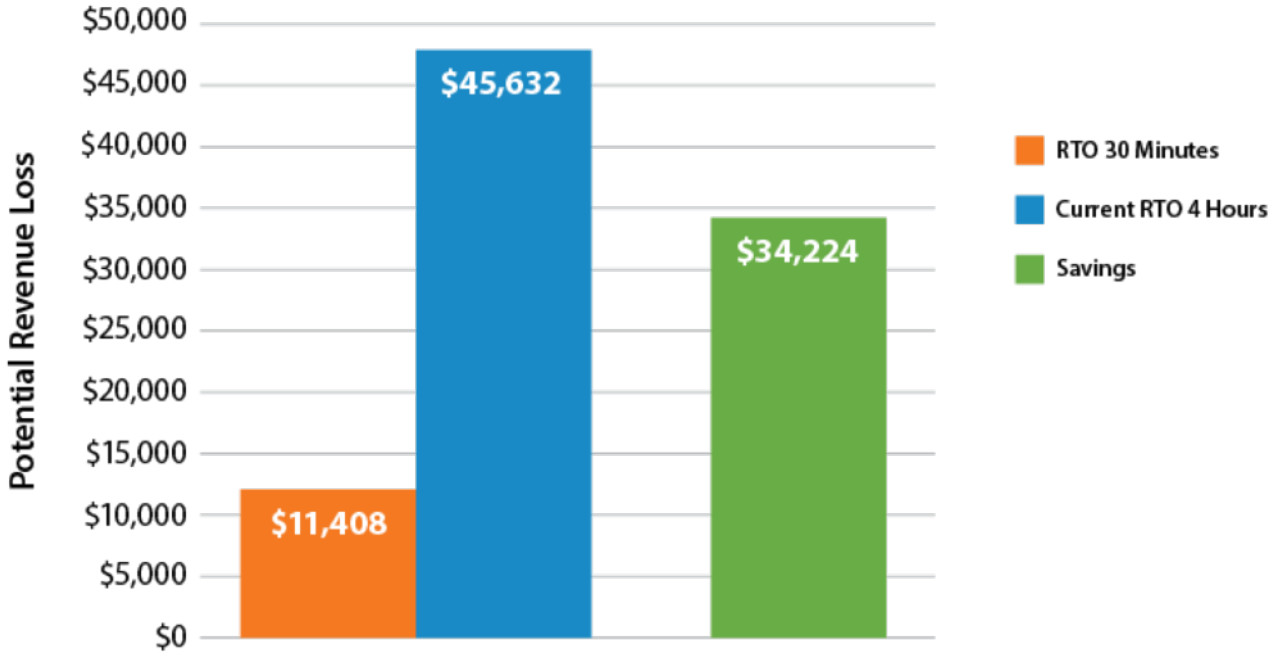
Continuous Replication

RPO - Seconds

Up to **$7,610.35**

Potential Revenue Loss

for a Company with a turnover of $100M



72%

of companies have experienced an IT outage in the last year

Source: Gartner BCM Survey
https://www.gartner.com/doc/3200321/survey-analysis--bcm-survey

94% were not able to meet the expected RPOs and RTOs

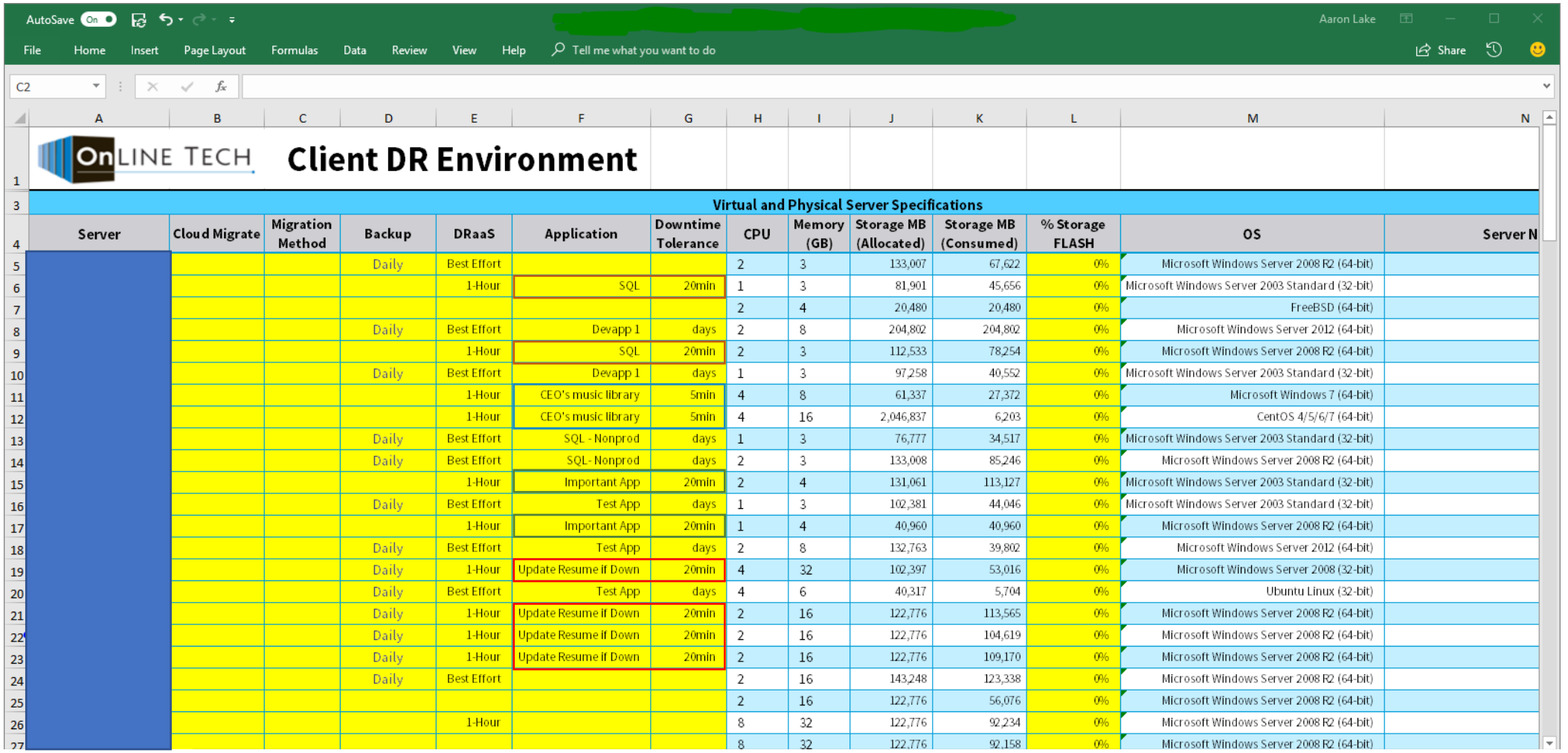
Source: Gartner BCM Survey
https://www.gartner.com/doc/3200321/survey-analysis--bcm-survey

70%

of enterprises will have a hybrid cloud strategy by 2019

Source: Gartner “The Future of the Data Center in the Cloud Era”
https://www.gartner.com/document/3079122?ref=unauthreader&srcId=1-3478922254

Building Your Disaster Recovery Strategy



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Client DR Environment

Virtual and Physical Server Specifications

Server	Cloud Migrate	Migration Method	Backup	DRaaS	Application	Downtime Tolerance	CPU	Memory (GB)	Storage MB (Allocated)	Storage MB (Consumed)	% Storage FLASH	OS	Server N
			Daily	Best Effort			2	3	133,007	67,622	0%	Microsoft Windows Server 2008 R2 (64-bit)	
				1-Hour	SQL	20min	1	3	81,901	45,656	0%	Microsoft Windows Server 2003 Standard (32-bit)	
							2	4	20,480	20,480	0%	FreeBSD (64-bit)	
			Daily	Best Effort	Devapp 1	days	2	8	204,802	204,802	0%	Microsoft Windows Server 2012 (64-bit)	
				1-Hour	SQL	20min	2	3	112,533	78,254	0%	Microsoft Windows Server 2008 R2 (64-bit)	
			Daily	Best Effort	Devapp 1	days	1	3	97,258	40,552	0%	Microsoft Windows Server 2003 Standard (32-bit)	
				1-Hour	CEO's music library	5min	4	8	61,337	27,372	0%	Microsoft Windows 7 (64-bit)	
				1-Hour	CEO's music library	5min	4	16	2,046,837	6,203	0%	CentOS 4/5/6/7 (64-bit)	
			Daily	Best Effort	SQL - Nonprod	days	1	3	76,777	34,517	0%	Microsoft Windows Server 2003 Standard (32-bit)	
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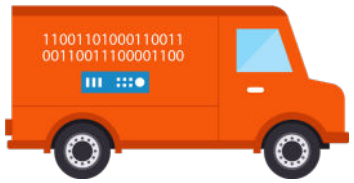
Protect, Transform & Innovate

Continuous Availability

- Outages & Disruptions
- Ransomware Attacks
- Complete Data Protection



Workload Mobility

- Infrastructure Modernization
- Consolidations & Migrations
- Testing & DevOps

Multi-Cloud Agility

- Cloud Integration & Migration
- Multi-Cloud Hybrid Cloud
- Analytics Across Clouds

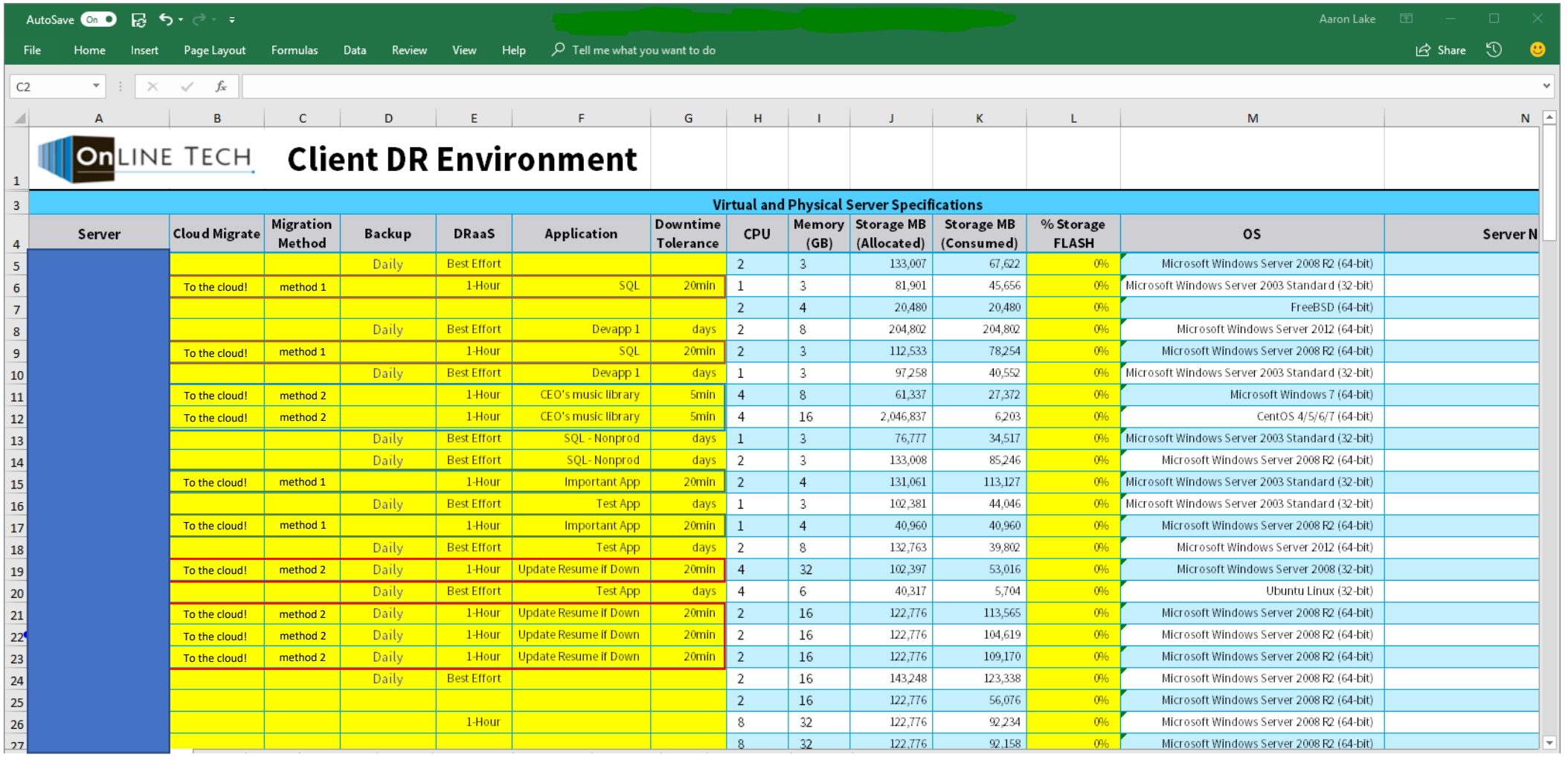
Building Your Disaster Recovery Strategy

		Recovery Hypervisor	Recovery Hypervisor	Recovery Hypervisor
RPO	15 Min	VM1 App1, VM1 App2	VM1 App3	VM9 App1
RPO	1 Hour	VM2 App1	VM5 App1, VM2 App3	VM4 App3
RPO	4 Hours		VM6 App1	VM10 App1
RPO	8 Hours	VM3 App1	VM3 App2, VM8 App1	VM12 App1
RPO	12 Hours	VM2 App2	VM7 App1	VM5 App2, VM5 App3
RPO	24 Hours+	VM4 App1	VM4 App2, VM3 App3	VM11 App1

IT Resilience

PLANNED	+	UNPLANNED
Mergers & Acquisitions		User Errors
Move to Cloud		Infrastructure Failures
Datacenter Consolidation		Security & Ransomware
Maintenance & Upgrades		Natural Disasters

Migrate to the Cloud



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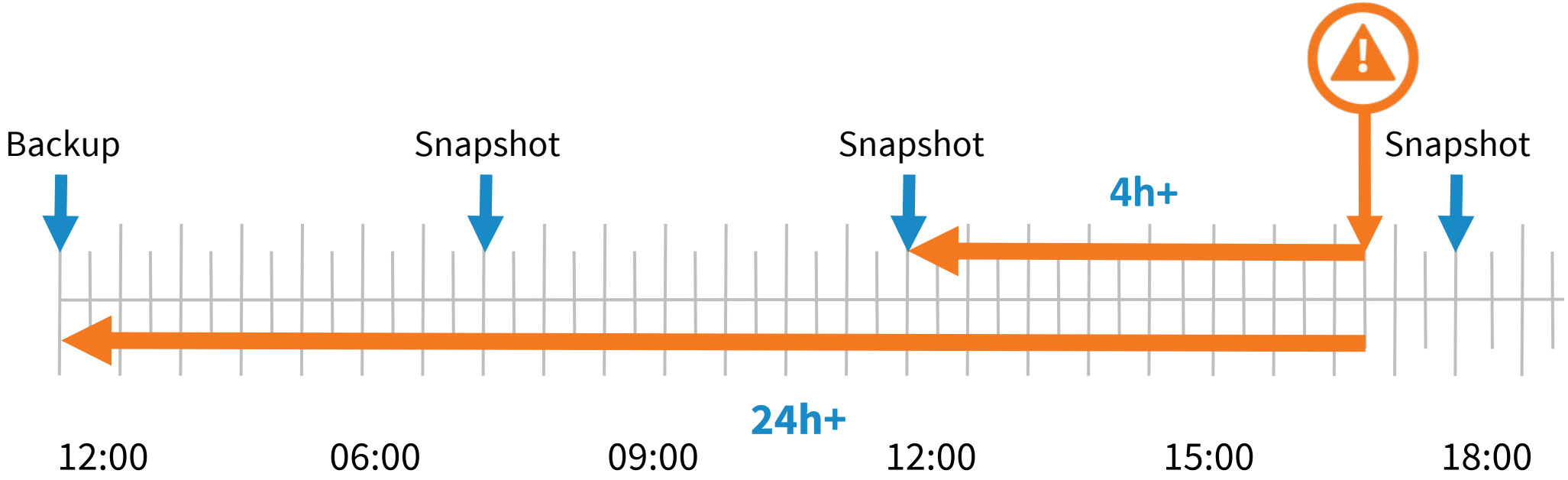
Typical Data Protection Solutions



Power Interruption or Hardware Failure

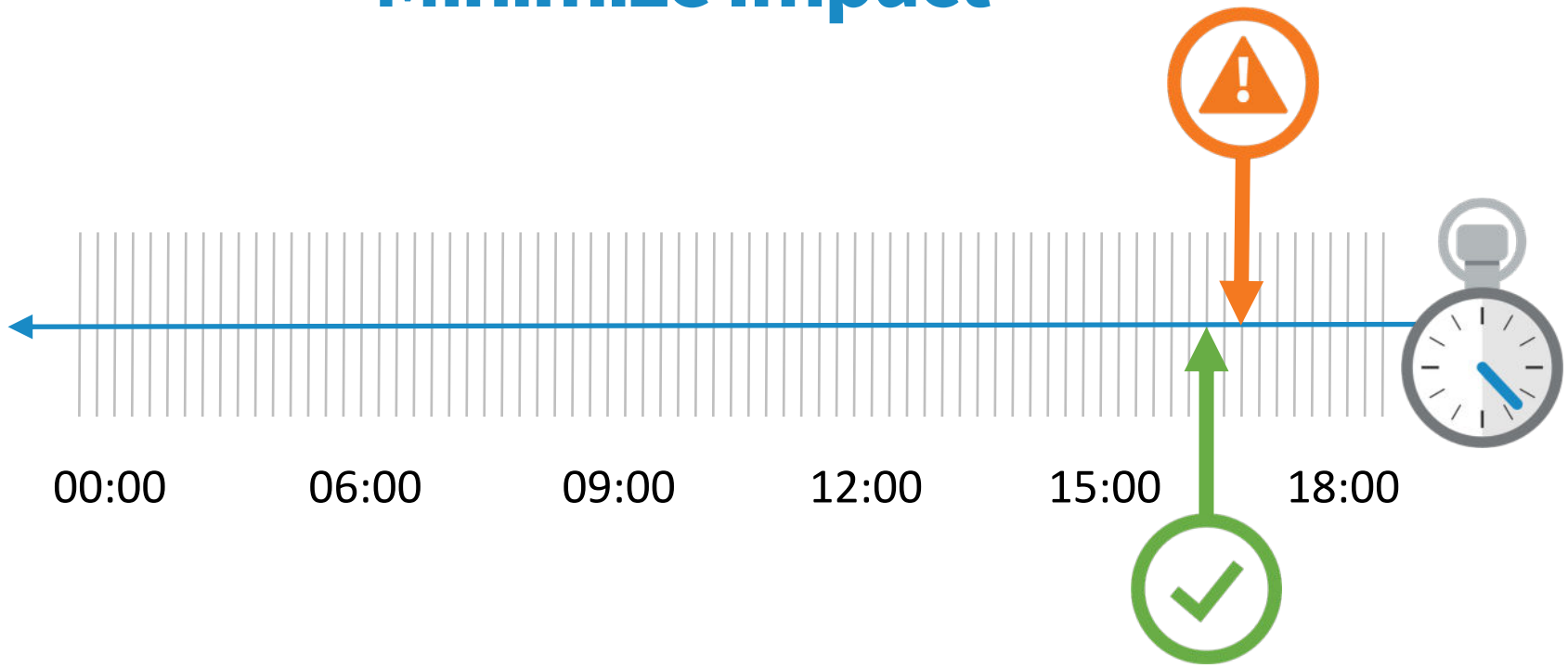
Cryptolocker Virus Infection

File deletion, Application or Human Error

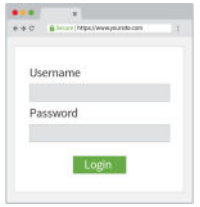
= Data Loss & Downtime

Minimize Impact

Recovery Points



Rewind and recover from any point in time



Sites

Apps

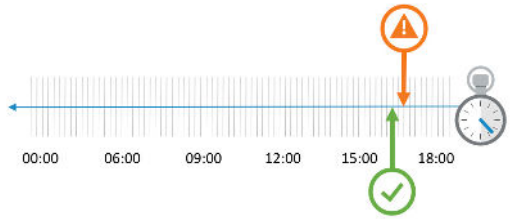
VMs

Files

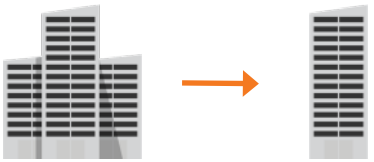
Resilience for Evolving IT™

1. **CHANGE** No lock-in, enable new tech

2. **PROTECT** Low RPOs/RTOs, testing, compliance



3. **CONSOLIDATE** Migrations, self-service



4. **EVOLVE** DRaaS to the Cloud

5. **SIMPLIFY** Single future-proof solution

Disaster Recovery as a Service

Disaster recovery at the enterprise level

We take the complexity that comes with constructing, operating, testing and maintaining a disaster recovery infrastructure and make it simple with DRaaS. Recover in minutes, not hours.

> I just have a few clicks of a button, and I can access my server and get it up and running. It's hard for a lot of other providers to say, 'We'll get your servers back in an hour.' Zerto and Online Tech can do that.

Steve Werner, Director of Technology | **MILHAUS**

3 CLICK RECOVERY

SHORT RPOs, FAST RTOs

TRACK YOUR TESTING

Q & A