

使用 NetIQ 建构更好的业务 连续性

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业务连续性的重要

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传统的方案

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NetIQ PlateSpin® Protect 和
PlateSpin Forge® 方案

业务连续性的重要

业务连续性的推动力

- 更好地鉴定、评估、量化风险
- 更了解灾难与突发事件造成的经济损失
- 需要提高合作伙伴与客户对我们应急能力的信心
- 尽量把停机时间和数据损失降到最低

停止运营的原因

- 意外的停机时间
 - 病毒入侵
 - 人为失误
 - 机器故障
 - 程序故障
- 计划的停机时间
 - 机器升级
 - 软件升级
 - 维护（补丁更新、进行备份）
 - 数据迁移

目标定制

恢复时间目标

Recovery Time Objective (RTO)

- 服务暂停与再可用之间的时间差
- 恢复服务至可使用状态所需要的时间

恢复点目标

Recovery Point Objective (RPO)

- 于灾难时可容忍丢失的数据
- 从上次备份到目前的新数据

测试时间目标

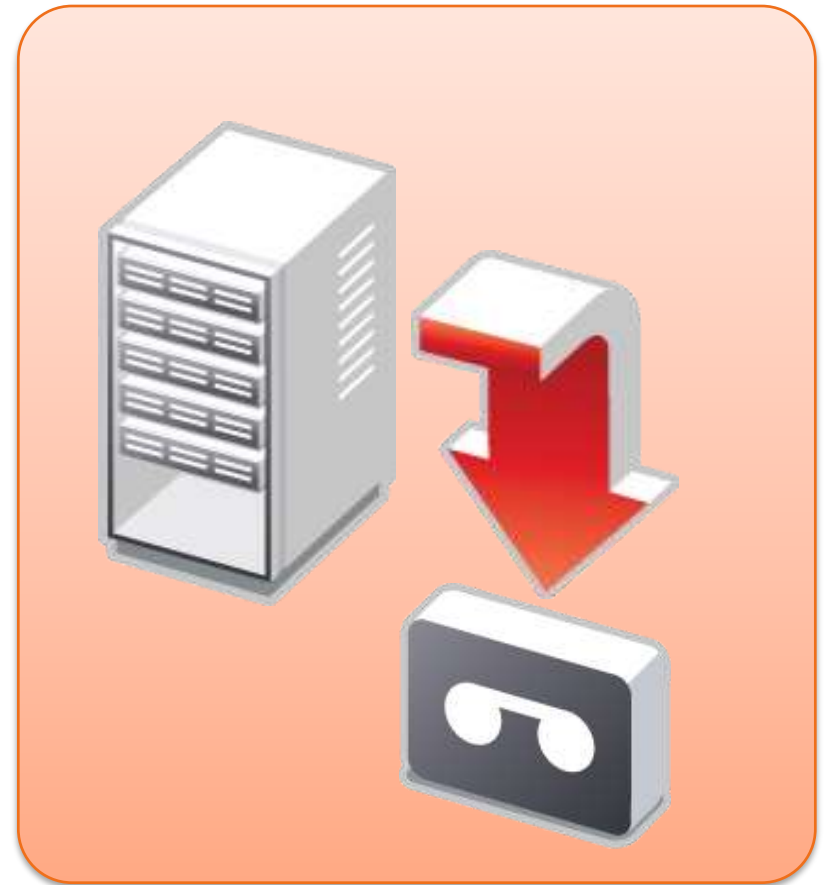
Test Time Objective (TTO)

- 进行容灾演练测试所需要的时间
- 进行容灾演练测试所需要的资源

传统的方案

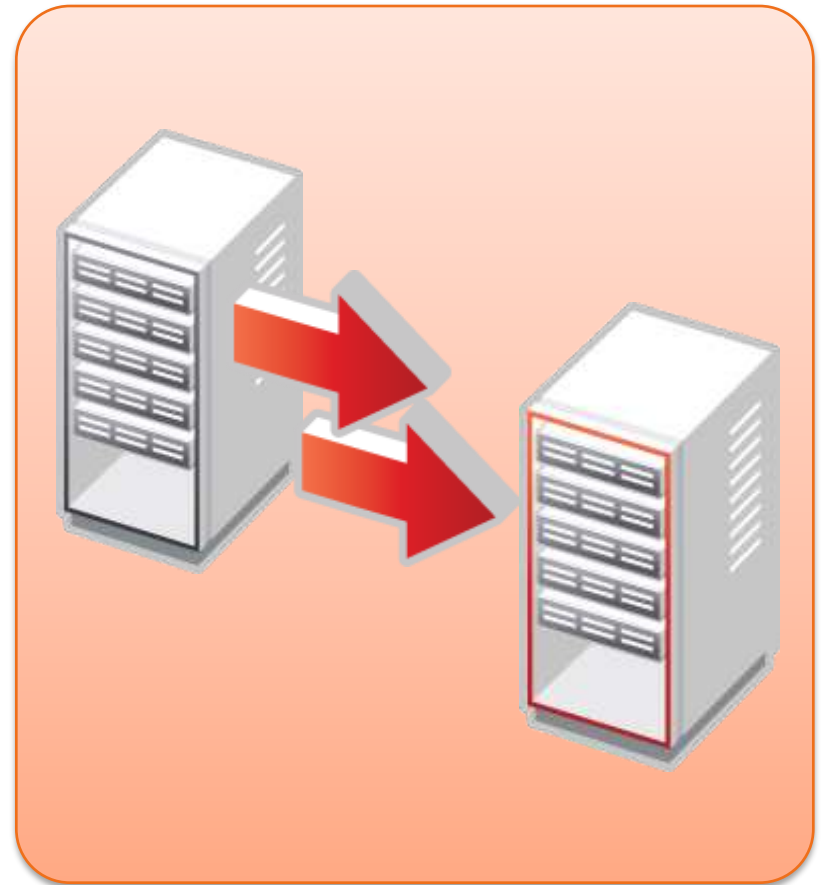
数据备份

- 重点放在保护数据
 - 磁带备份
 - 镜像
- 低效率
 - RTO 时间长, RPO 单位为“天”
- 很多隐藏成本
 - 怎样把数据恢复到**可使用**状态?
 - **重建**服务器, 需要多长时间?



完全复制

- 重点放在保护应用
 - Clustering
 - 一对一复制
- 高效率，但成本？
 - RTO, RPO 接近实时
- 方案昂贵
 - 基础设施**完全复制**
 - 管理**复杂**



利用虚拟化技术缩窄差距

缩窄距离

完全复制

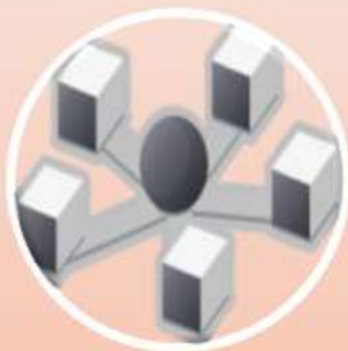
- 快速的RTO与RPO
- 双份资源
- 昂贵和复杂

数据备份

- 缓慢的RTO与RPO
- 容易产生过高承诺



利用虚拟化技术作为新的灾难恢复方案



一个虚拟主机，
能保护多台生
产服务器



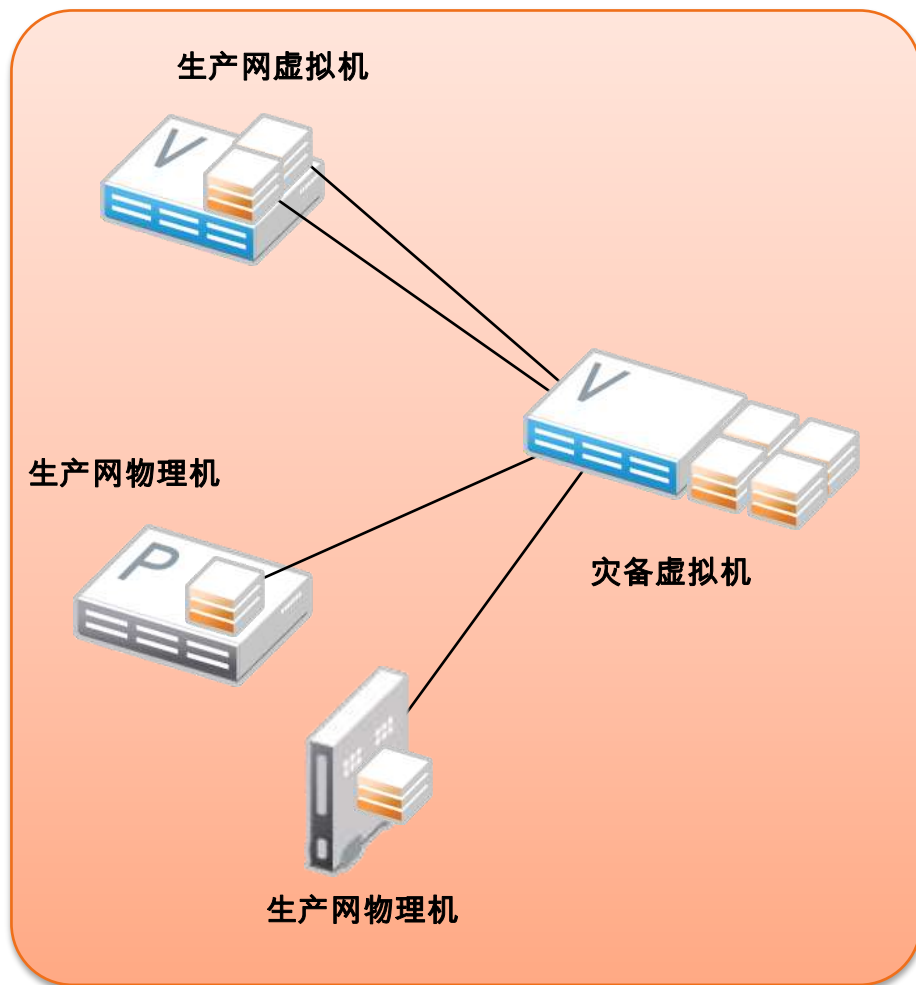
减少多种平台
的灾备困难



由于虚拟机能
进入隔离状态，
因此简化了测
试的复杂性



集中式的灾难恢复方案

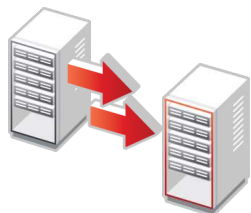


方案

- 把每个 workload **复制** 到灾备服务器相对应的虚拟空间
- 单击 **Failover** 业务恢复
- 单击 **Test restore** 测试演练
- 灵活的 **Failback** 故障回退

NetIQ PlateSpin® 灾难恢复方案

PlateSpin® 缩窄保护技术的差距



完全复制

- 恢复最快
- 双份资源
- 昂贵和复杂

虚拟化方案

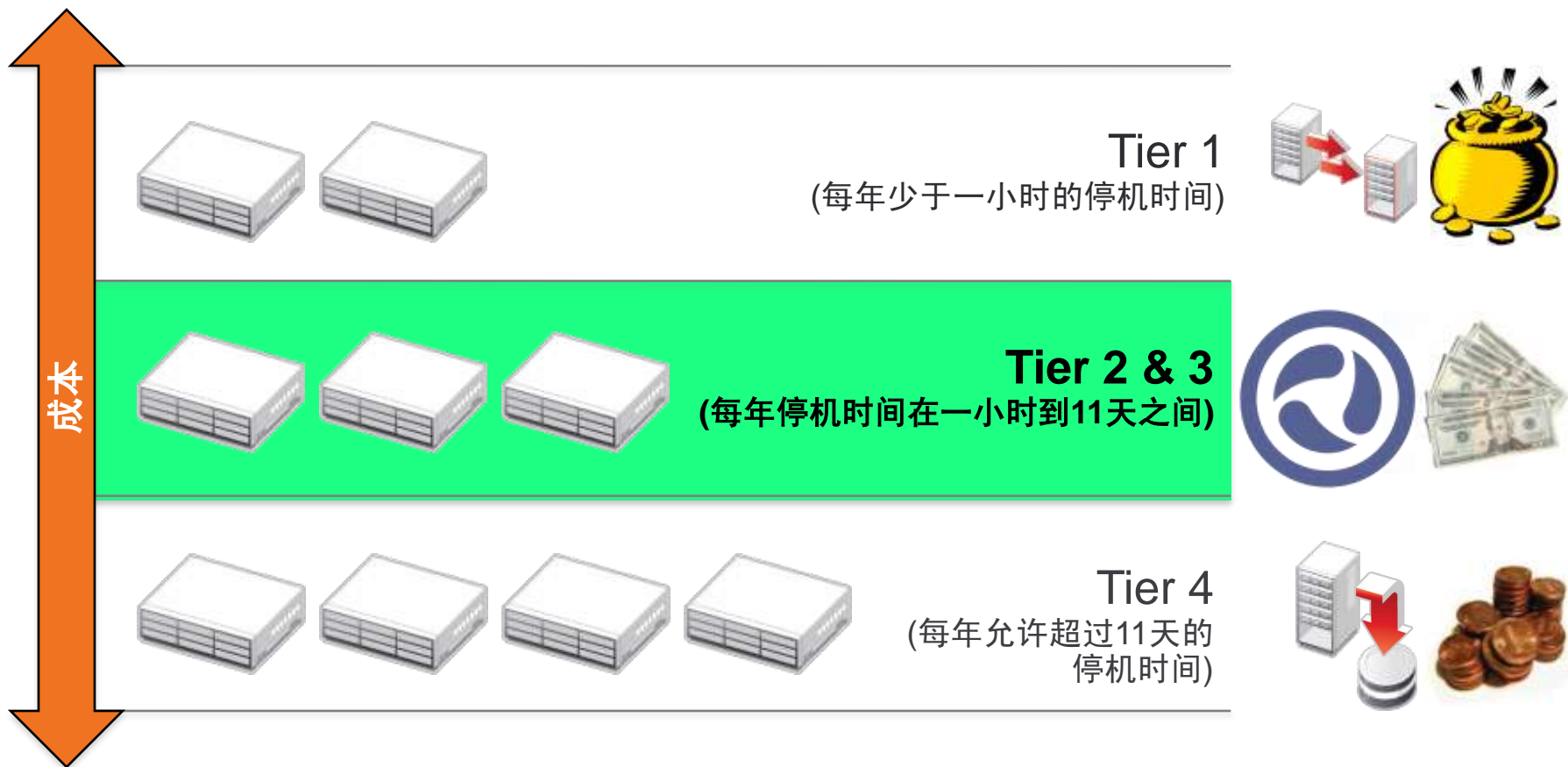
- 中速恢复
(10分钟)
- 少量额外资源
- 低风险

数据备份

- 恢复最慢
- 最少额外资源
- 高风险

PlateSpin 能保护什么

- 保护中度保障需求的 Windows 与 Linux 服务器 (Tier 2 & 3)



PlateSpin Forge®



世界上第一个使用虚拟化技术的灾备硬件设备

可以最多保护 25 个 workload

Plug-in 保护方案:

- 中型企业
- 大型企业的下级办事处

PlateSpin Forge 配备:

- 存储
- 资料复制软件
- Hypervisor

PlateSpin® Protect

全面保护 workload，适合所有服务器。



以虚拟机
装载备份

增量式
的复制

简单的
演练测试

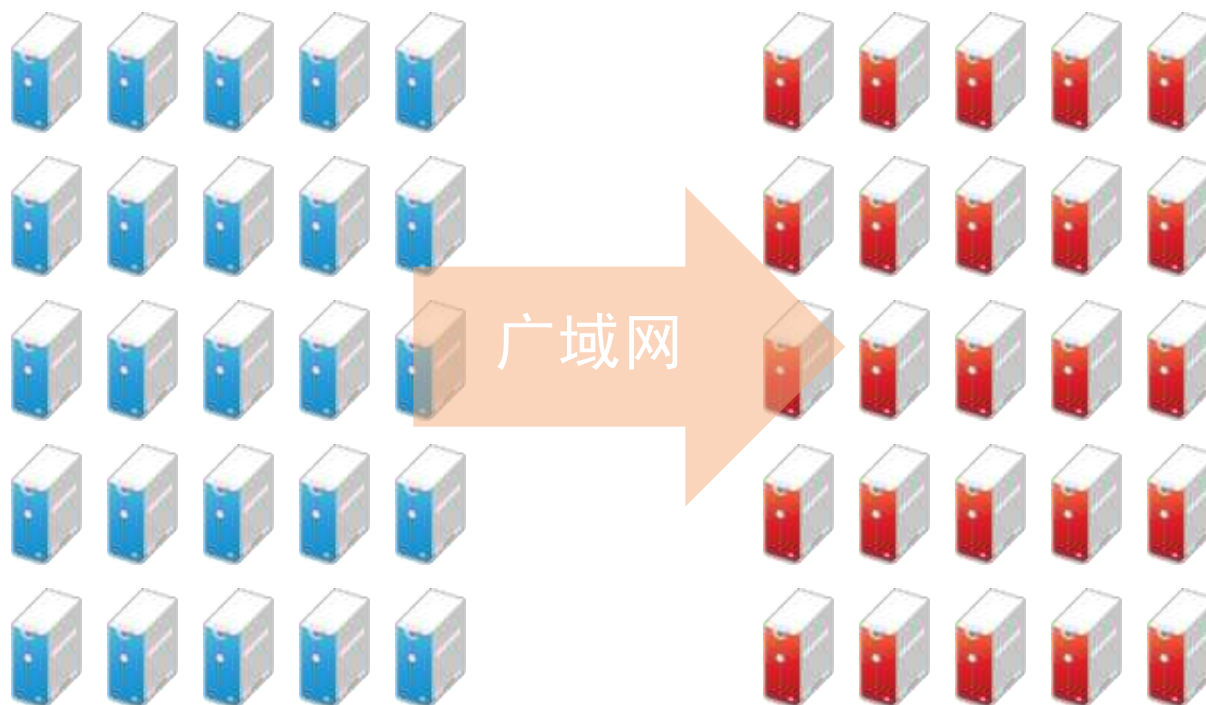
单击服务恢复
(Failover)

PlateSpin 方案针对 3 个挑战



减少设施，降低成本

使用实物方案



25 台服务器

\$125,000 (美元, 下同)

50 个licenses 建立cluster

\$99,950

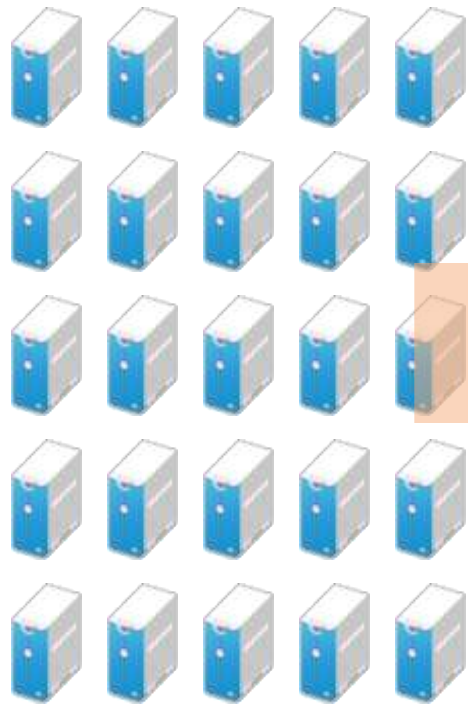
25 个备件 licenses

\$23,975

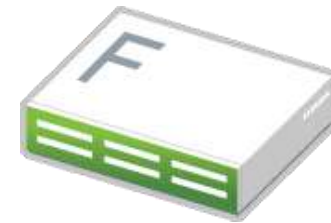
总预算

\$248,925

PlateSpin®. 虚拟方案的投资回报 (ROI)



广域网



潜在的成本节省
至少美元\$17.7万!

PlateSpin Forge® 525型号	\$57,745 (美元, 下同)
优先客服支持	\$14,400
稳定无忧	无价
总预算	\$72,145

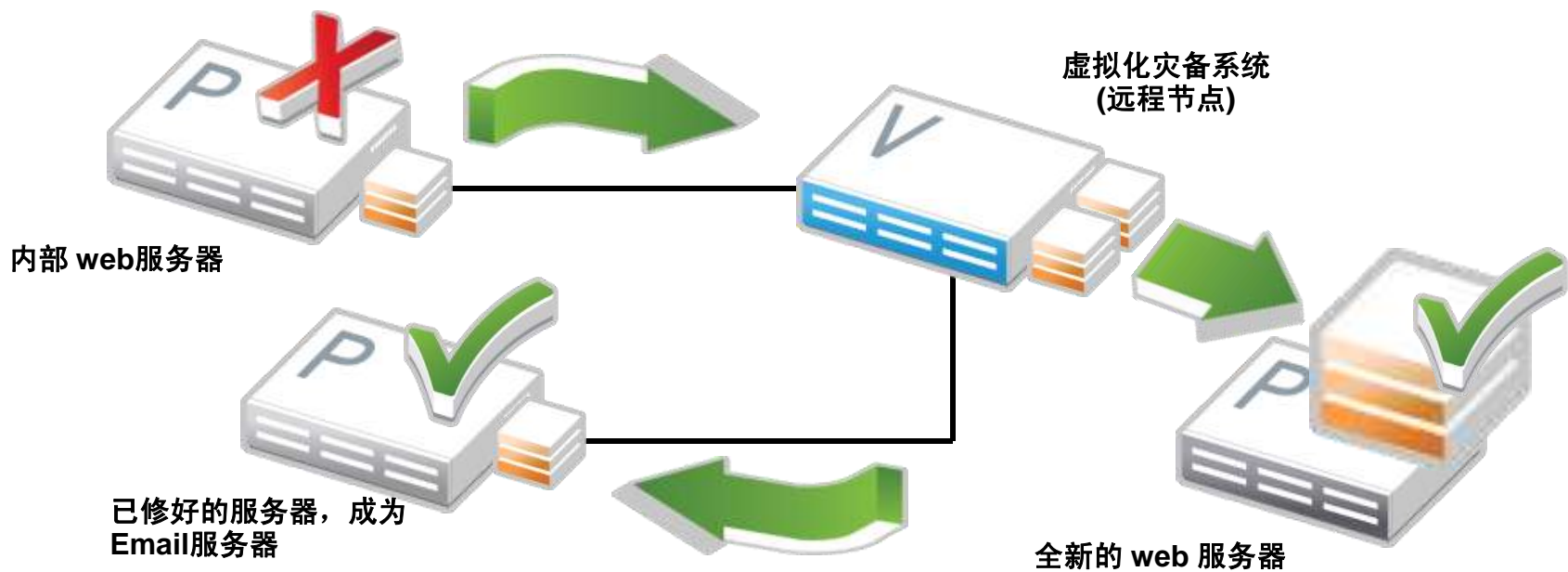
虚拟化的方案，实体化的价值

迅速将业务恢复正常

在虚拟环境里
运行复制品
workload

Failback 到
硬件配置不一样
的服务器上

Failback 并同步
到已修好的
服务器上

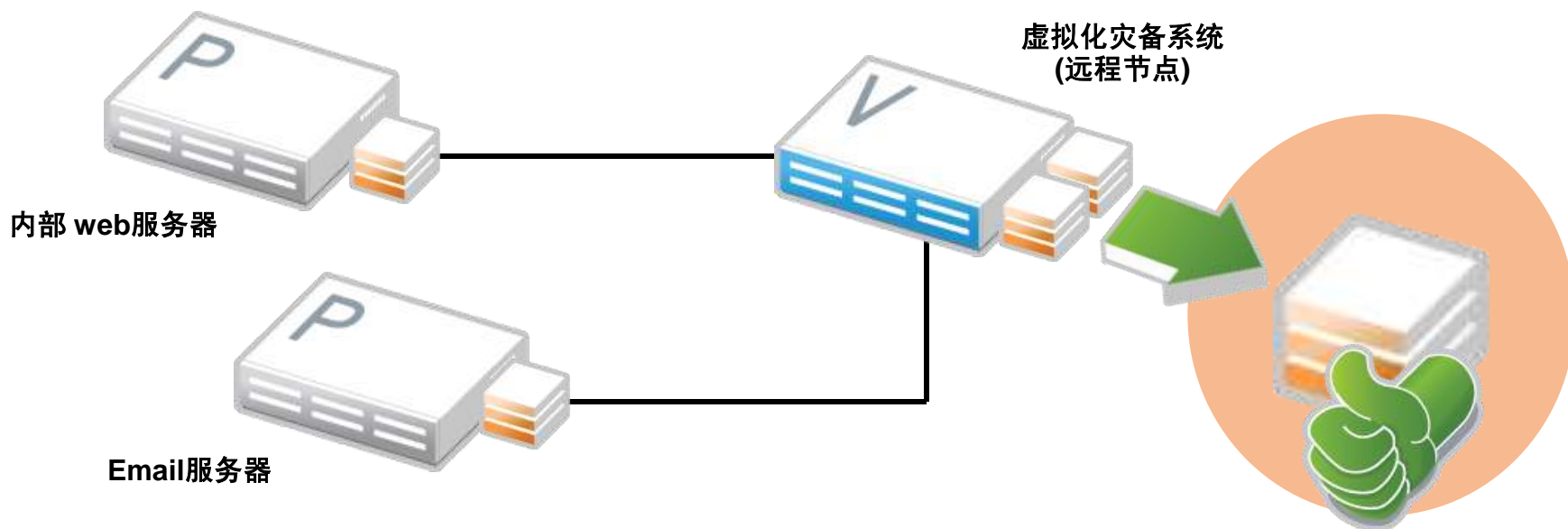


验证容灾计划

对复制品 workload
进行快速测试

保存测试结果
作为汇报与
合规检查

对复制品 workload
进行隔离测试

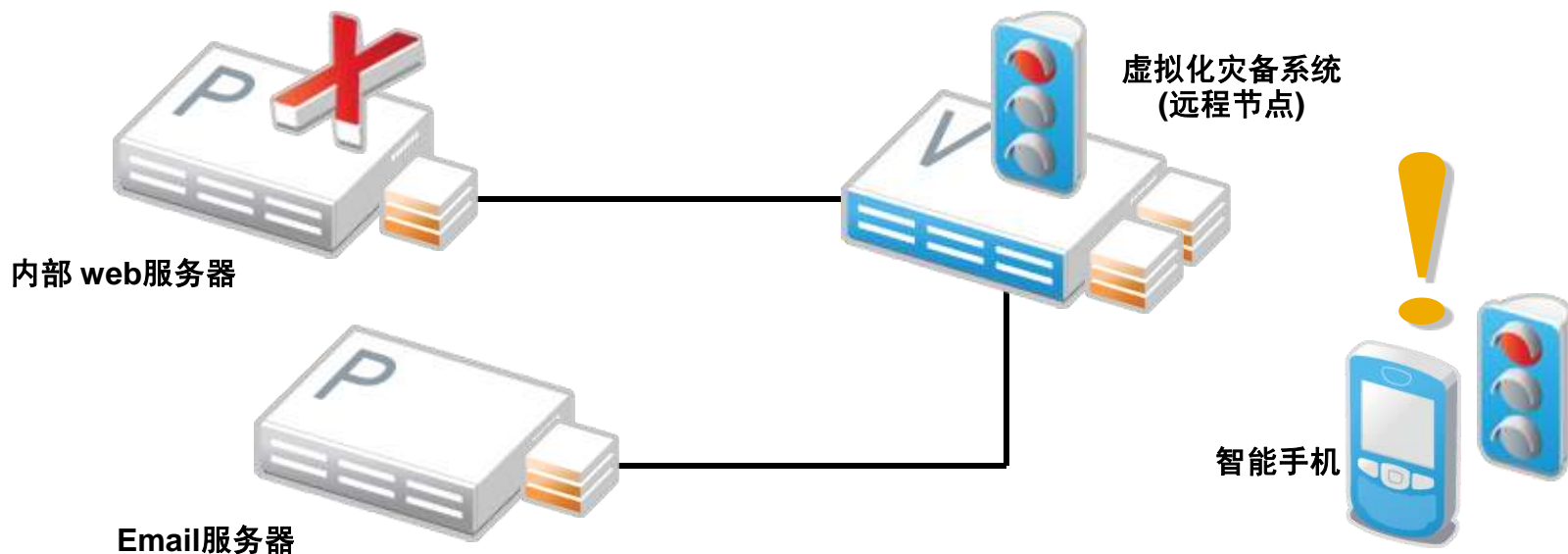


绝对掌控

展示政策/策略
的合规性

协助行动需要
的报警

失败通知



保护所有 Workloads

Windows
和 Linux

物理机和
虚拟机

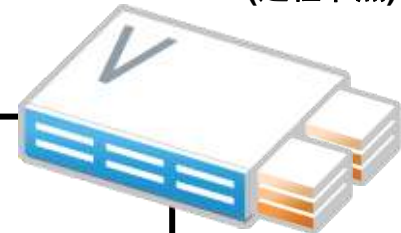
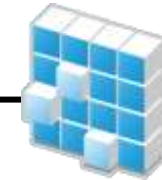
通用的
方案



.Net 应用服务器

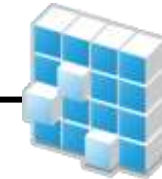


LAMP服务器



虚拟化灾备系统
(远程节点)

Block-based 复制



Block-based 复制

成功案例

全球大型用户



大中华地区用户



Government – 司法機構(Judiciary), 香港海關(Customs), 民航署 (Civil Aviation Department), 屋宇處(Building Department), 房委會(Housing Society), 稅務局(IRD), 財經事務及庫務局(FSTB), 政制及內地事務局(CMAB), 澳門行政公職局(SAFP), 澳門人力資源辦公室(GRH)

Commerce – Pacific Basin, Nikon, Hang Lung, L'Oreal, Giorgio Armani, ImaginX, PrintRite, Celki,, KPMG, CCI, Trinity, Yang Ming Line  KERRY PROPERTIES LIMITED
(Incorporated in Hong Kong and listed in the Mainland)
嘉里建設有限公司

Telecom –   

界面一览

添加需要被保护的 Workload

The screenshot shows the PlateSpin Protect web interface. The top navigation bar includes 'Dashboard', 'Workloads', 'Tasks', 'Reports', 'Settings', 'About', and 'Help'. The user is logged in as 'SELAB\SalesesA Local Administrator'. The main content area is titled 'Add Workload' and features a progress bar with five steps: 'ADD WORKLOAD', 'CONFIGURE PROTECTION', 'PREPARE REPLICATION', 'RUN REPLICATION', and 'TEST REPLICATION'. The 'ADD WORKLOAD' step is currently active.

Workload Settings

- Hostname or IP: SELABDC01
- Workload Type: Windows, Linux
- Credentials: User Name: SELAB\Administrator, Password: [REDACTED], Test Credentials: Credentials Passed

Replication Settings

- Initial Replication Method: Full Replication, Incremental Replication
- Protection Target: knasdemo01 (VMware ESX Server 4.1.0.260247)

Protection Targets Table

Name	Description	CPU	Memory	Free Space	Last Refresh	
knasdemo01	VMware ESX Server 4.1.0.260247	8 x Intel(R) Xeon(R) CPU E5320 @ 1.860GHz	23.5 GB	120.9 GB	0 Hours (1) ago	Remove
knasdemo02	VMware ESX Server 4.1.0.260247	4 x Intel(R) Xeon(TM) CPU 3.20GHz	15.2 GB	169.1 GB	272 Days (1) ago	Remove
SELABPROTECT	PlateSpin Image Container 9.1.0.8393	4 x Intel Core 2	2.0 GB	34.1 GB	272 Days (1) ago	Remove Add Container

Workload Commands

Add Workload | Add and flow

Thursday, March 14, 2013 11:10 AM - GMT Standard Time

- 配置 workload 需要被备份到哪个虚拟空间
 - Host 还是 DRS cluster

执行复制

The screenshot displays the PlateSpin Protect web interface. At the top, the user is identified as SELAB\SalesseA, a Local Administrator. The navigation menu includes Dashboard, Workloads, Tasks, Reports, Settings, About, and Help. The main content area shows the 'Command Details' for a replication task on SELABDC01, which is currently 'Idle'. A 'Command Summary' section provides a detailed log of the replication process, including a table of events and steps.

Event	Details	User	Date
Full replication completed		system	3/14/2013 12:17 PM

Step	Status	Start Time	End Time	Duration	Diagnosics
Copy data	Completed	3/14/2013 11:29 AM	3/14/2013 12:16 PM	47m 16s	3/14/2013 12:17 PM
Create recovery point	Completed	3/14/2013 12:16 PM	3/14/2013 12:17 PM	1m	3/14/2013 12:17 PM

Below the summary, a 'Replication Transfer Summary' shows: Average Transfer Speed: 37.35 Mbps, Duration: 34m 38s, Total Data Transferred: 9.0 GB, Total Files Transferred: 66,209, and Total Folders Transferred: 15,487. At the bottom, a 'Workload Commands' section contains buttons for Configure, Run Replication, Run Incremental, Pause Schedule, Test Failover, Prepare for Failover, Run Failover, and Remove Workload.

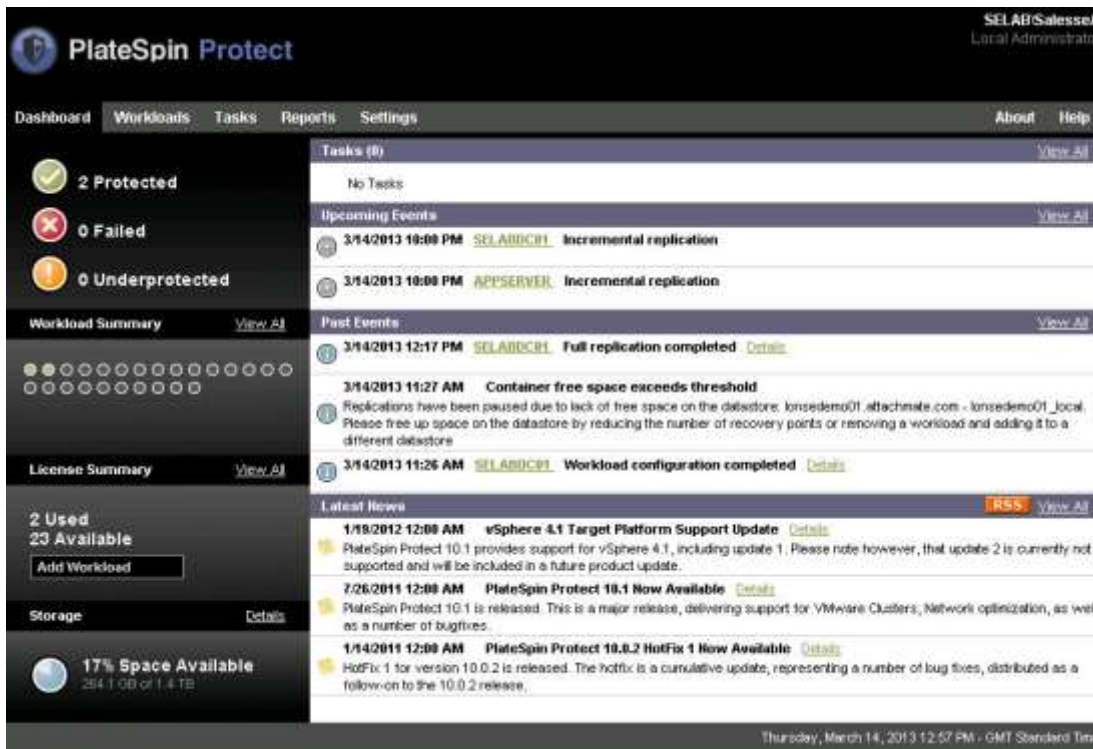
复制:

- 监控复制状态
- 修改与执行

两个点击即可:

- 启动服务恢复 (run failover)
- 执行容灾演练测试 (test failover)
- 准备服务恢复状态 (prepare failover)

面板 (Dashboard)



透视:

- 全面的保护状态显示
- 表列将要复制的项目
- 最近历史
- License 和存储空间状态

查看报告

Dashboard Workloads Tasks **Reports** Settings About Help

Replication Window What is the duration and size of my replications?

Current Week

Summarize by:

All Workloads

Workload	Full Replications				Incremental Replications			
	Total Time	Transfer Time	Transfer Size	Transfer Speed	Total Time	Transfer Time	Transfer Size	Transfer Speed
APPSERVER	--	--	--	--	21m 52s	4m 51s	1.4 GB	44.70 Mbps
SELABDC01	48m 17s	34m 38s	9.0 GB	37.35 Mbps	--	--	--	--

[Printable View](#) [Export To Xml](#)

Dashboard Workloads Tasks **Reports** Settings About Help

Current Protection Status How well are my workloads protected?

All Workloads All Protection Tiers

Workload	Tier	Target RPO	Actual RPO	Actual TTO	Actual RTO	Last Test Failover	Last Replication	Test Age
APPSERVER	Daily Schedule	1d	1h 59m 43s	1h 45m 1s	1h 33m 13s	6/15/2012 11:37 AM	3/14/2013 10:53 AM	272d 2h 16m 23s
SELABDC01	Daily Schedule	1d	35m 58s	--	--	--	3/14/2013 12:17 PM	--

[Printable View](#) [Export To Xml](#)



答疑环节



下载免费 eBook

- 《五个您需要知道的关于灾备计划的事情》
Five Things You Need to Know About
Disaster Recovery Planning

<https://www.netiq.com/promo/disaster-recovery/disaster-recovery-ebook.html?ref=productresource>

感谢大家。





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