Innovative VM Backup Expert www.vinchin.com | sales@vinchin.com

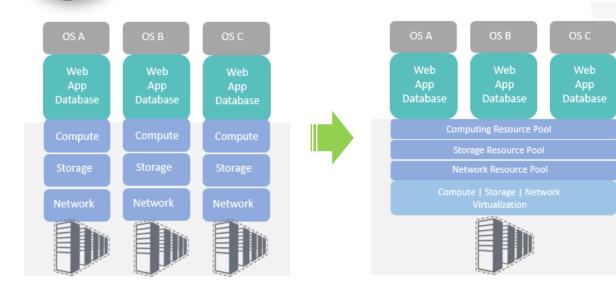
Next-Gen Backup & DR Solution for oVirt

Vinchin Backup & Recovery

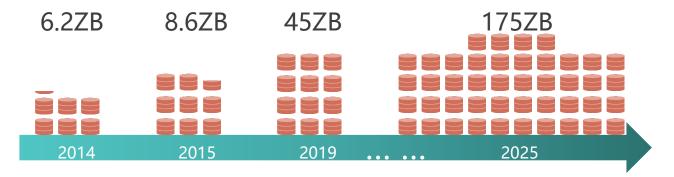
Shall Ao | Director of Sales, Vinchin



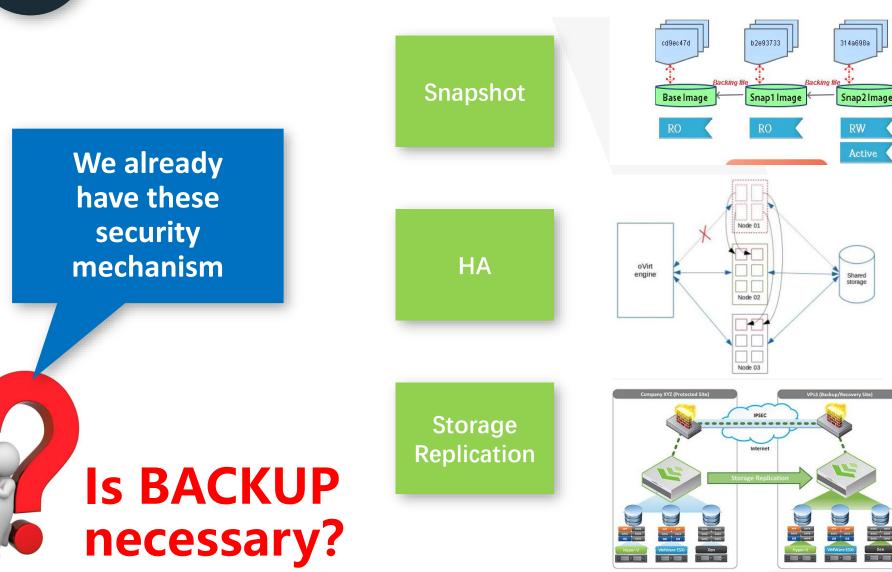




IT Infrastructure is changing from Legacy to Digitalized



Global data is growing at tens times continually



Xen

Hardware Failures Hard disk, RAM, CPU, motherboard damage...

Improper operation

Human error, unauthorized operation...

Malicious failure

Computer viruses, ransomeware...

Software crashes

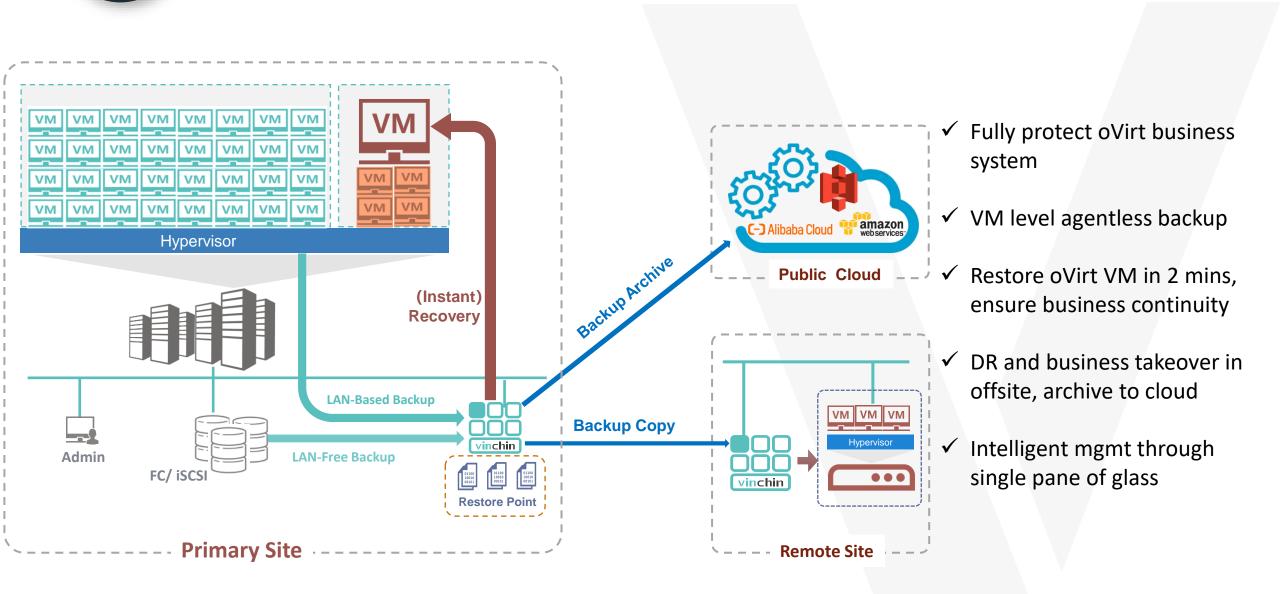
Bugs in app sys, file sys breakdown...

natural disasters

Earthquakes, hurricanes, floods, and fires...

Threat of data loss is everywhere

vinchin – oVirt Backup & DR Architecture



vinchin LAN-Based oVirt Backup

How it works:

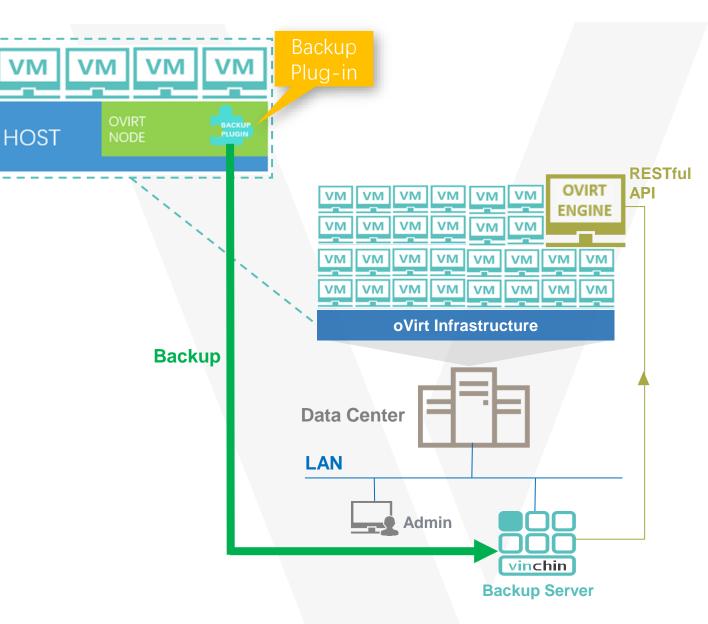
- Obtain VM info through oVirt RESTful API
- Notify oVirt engine to create snapshot for VM
- Locate VM host IP & connect it to backup plug-in
- Extract VM data & transfer to backup server via backup plug-in
- Notify oVirt engine to delete snapshot

Requirement:

A backup plug-in is required to install on oVirt node

Pros

No version limitation, support up to oVirt 4.4



vinchin LAN-Free oVirt Backup

How it works:

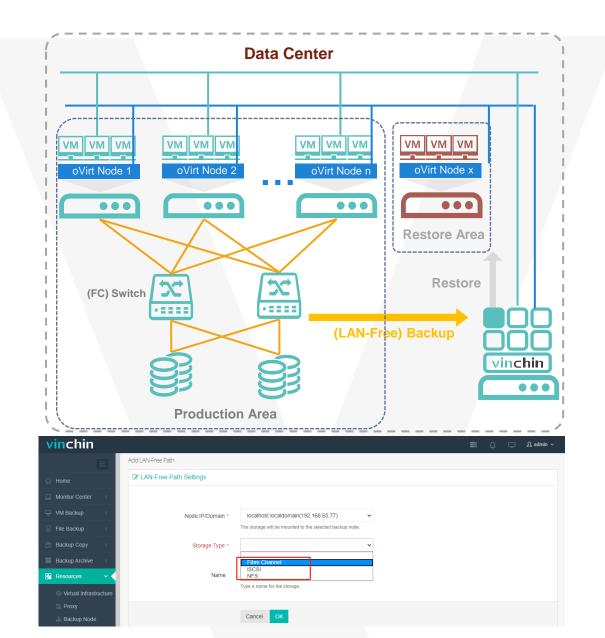
- Obtain VM info through oVirt RESTful API
- Notify oVirt engine to create snapshot for VM
- Map FC/iSCSI storage domain LUN to backup server
- Extract VM data & transfer to backup storage via SAN
- Notify oVirt engine to delete snapshot

Requirement:

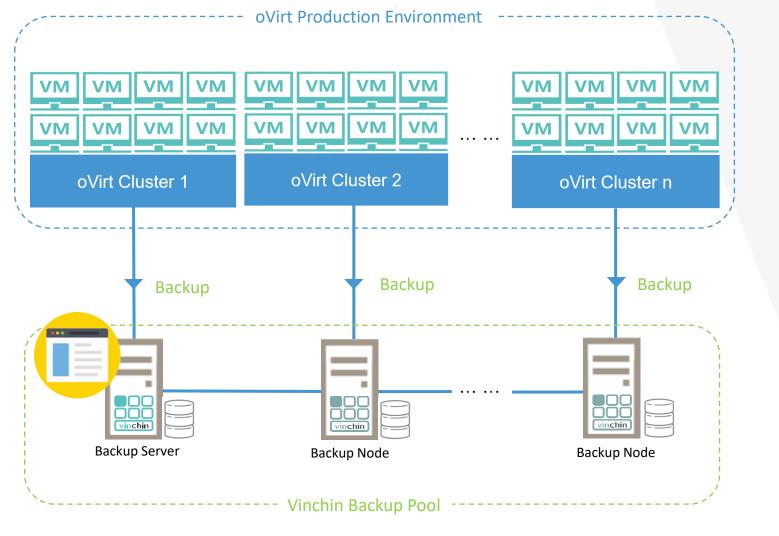
- Backup software is required to install on physical server
- FC SAN, IP-SAN(iSCSI) or NFS is required

Pros:

- No version limitation, support up to oVirt 4.4
- Faster data transfer speed than LAN-based backup



vinchin – Scale-out Backup Architecture



How it works:

- Install Backup Node in physical or oVirt VM
- Set Backup Node/Server IP and oVirt mgmt
 IP in the same network segment
- Backup node will act as a backup server to process and store backup data through oVirt RESTful API
- All Backup Node will be centrally managed by Backup Server web console

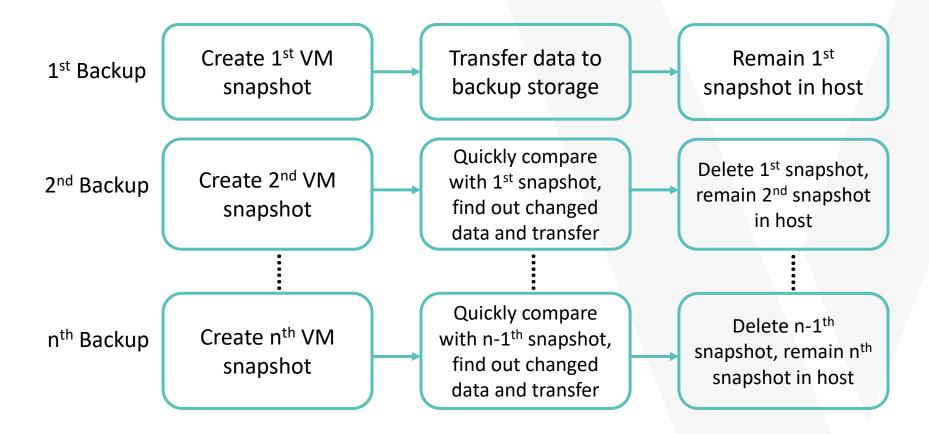
Pros:

- Improve backup efficiency for large oVirt environment
- Backup Node can be extended horizontally without limitation
- Apply to both LAN-based and LAN-Free backup extension

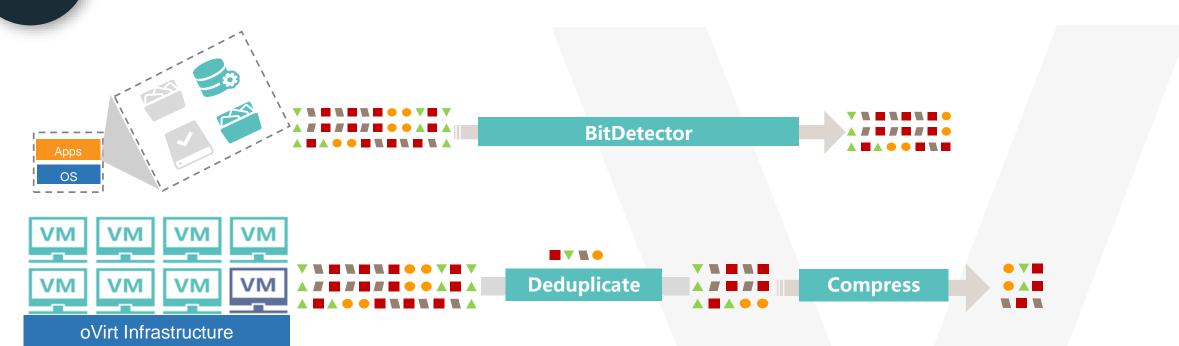
vinchin – oVirt Incremental Backup Strategy

SpeedKit[®]

- Quickly track changed block
- Improve incremental backup speed
- Alternative to oVirt CBT, no version limitation, support up to oVirt 4.4



vinchin – Save Backup Storage Space





BitDetector[®]:

Detect partition table and file system info in VM OS, Exclude swap files, partition gap, unallocated space and extract true data to back up

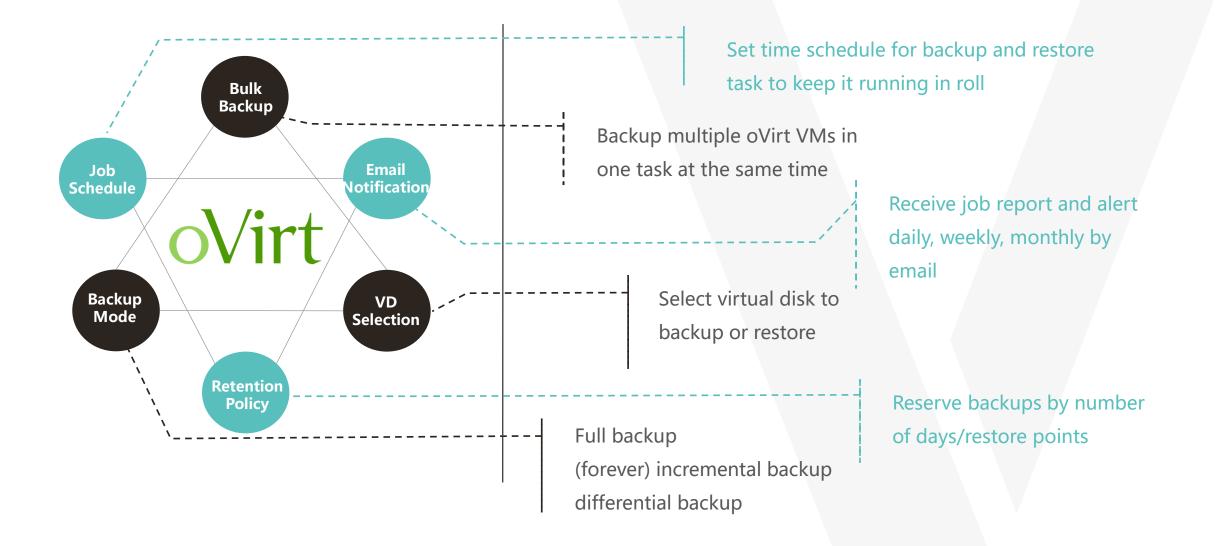
Deduplication & Compression:

Deduplicate and compress backup data before written to backup storage

Pros:

Backup data size can be reduced by more than 50%

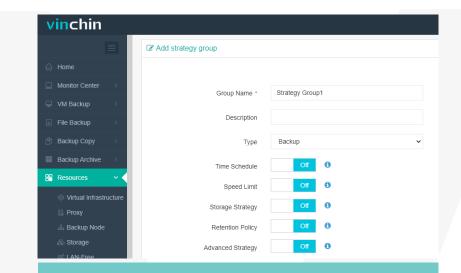
vinchin – Automate Backup Process



vinchin – Other Highlighted Features

vinchin				
	Password *			
		Password of target host/VM Manager Server.		
☆ Home	Name			
🖵 Monitor Center 🧹		Type a name for this newly added virtual infrastructure.		
🖵 VM Backup <	Engine Backup	On Enable to backup RHV/oVirt engine		
File Backup	Root Permission			
🖹 Backup Copy 🧹		Test Connection		
Backup Archive <	Password	rest connection		
8 Resources V	Daily Start Time	23:00:00		
Virtual Infrastructure	Restore Points	30 ^ ~		
🗟 Proxy	Backup Node	localhost.localdomain(192.168.65.77)		
📥 Backup Node	Backup Houe	10011100.10021100100111)		
🚲 Storage	Backup Storage	Local Disk1(Local Disk, Capacity :199.9GB, Fre 🗸		
ି LAN-Free				
💮 Strategy		Cancel OK		

Daily back up oVirt engine metadata



Pre-configure strategy template



Multithreaded transmission for backup, restore and migration

vinchin – oVirt VM Recovery Capability

Full Recovery

• Recover entire VM to oVirt production host

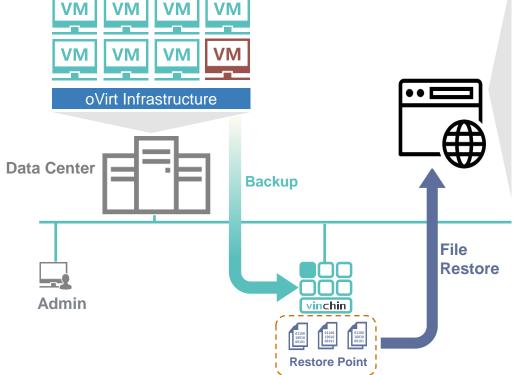
File Level Recovery

 Recover file or folder from oVirt VM backups

Instant Recovery

• Recover any size oVirt VM in a few minutes

vinchin – File Level Recovery



	Job Details					
 ∂ Home	Summary		Granular Recovery File Lis	st		
Monitor Center < <	Job Status :	Running	All files > / > bin		Search	by name
VM Backup/Restore	Virtual Machine: Restore Point :	CentOS7_test 2020-07-10 11:40:32	Filename	Size	Modified time	Operation
Virtual Machines	Operation :		Mail	383.59KB	2014-06-10 05:30:50	±
Virtual Machines	Operation .	Options ✓	x	2.16MB	2014-06-10 09:30:33	±
A Restore	Instructions:		Xorg	2.16MB	2014-06-10 09:30:33	*
 Restore Instant Recovery 	 Click 'Options' and click 'Start Job list. 	b', all the available files will be showing in the right sid	de Xvnc	2.22MB	2014-06-10 14:15:06	*
Granular Recovery	2.Find the target file and you are ab	ple to download it.	1 III	40.48KB	2014-06-10 09:04:46	*
Backup Data			a2p	105.3KB	2014-06-18 01:39:19	*
			abrt-action-analyze-ba	10.97KB	2014-06-19 05:22:10	*
Backup Copy <	C Run Log		abrt-action-analyze-c	10.95KB	2014-06-19 05:22:10	±
Resources <	start granular recovery job done		10 abrt-action-analyze-cc	1.31KB	2014-06-19 05:22:04	*
🖗 System 🧹		19:11:4	43 abrt-action-analyze-core	6.66KB	2014-06-19 05:22:04	*
	✓ obtain timepoint set vm info			10.95KB	2014-06-19 05:22:10	*
		19:11:4	abrt-action-analyze-pyt	10.95KB	2014-06-19 05:22:10	*
	start Guest Handler	2020-07-3 19:11:3	abrt-action-analyze-ym	2.15KB	2014-06-19 05:22:04	*
	load vm granular recovery job info		abrt-action-analyze-vul	1.32KB	2014-06-19 05:22:04	±.
	Your vin granular roostory job all	19:11:		10.98KB	2014-06-19 05:22:10	*

- File/folder/disk are recoverable
- Recoverable from any time point
- Recoverable without business interruption
- Recoverable from Windows, linux, centos, Ubuntu.etc.

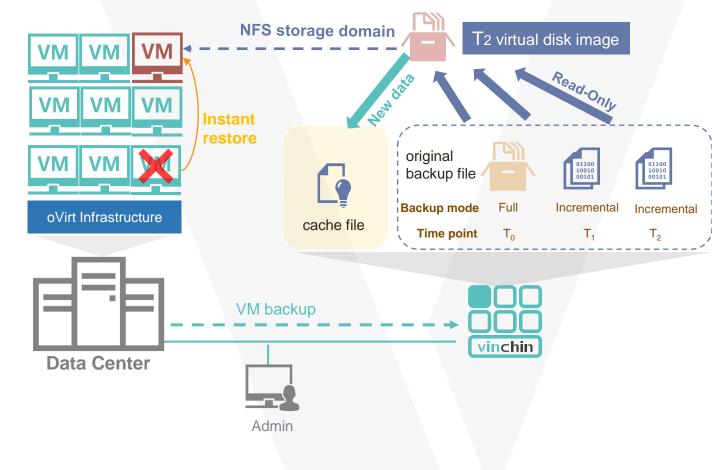
vinchin - Instant Recovery & Migration

How Instant Recovery works:

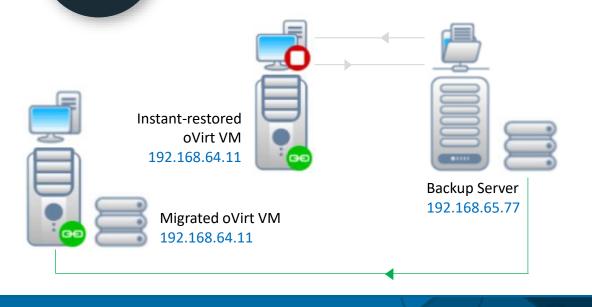
- Create NFS storage domain on oVirt host
- Create VM on NFS storage domain
- Obtain VM disk list through oVirt RESTfull API
- Create cache file on backup server
- Boot up Vinchin instant recovery engine
- Power on instant recovered oVirt VM
- original backup file is read-only
- new data be written to cache file

Pros:

- No limitation on VM size, any VM is recoverable in a matter of minutes
- A fast way to verify backup data availability



vinchin Instant Recovery & Migration



$\equiv~{ m oV}$ irt open virtualization manager

æ	Dashboard		Compute » Virtual Machines					
			Vms: test		🗙 🏠 🗸 🔍 🔍 New Edit Remo	ove 🕨 Run	✓	Shutdown ~
	Compute	>						
🚮 Network					Name	Comment	Host	IP Addresses
	Network	>			A_centos_2020_08_28_09_28_07_Instant_test		ovirt6412node	192.168.76.82 fe8
Storag			-		centos7-test			
	Storage >	>	-		ISCSI_TEST			
					test		ovirt6412node	192.168.76.85 fe8
¢ 4	Administration >		-	۵	test_2020_08_26_15_11_33_InstantMinnie			
		>	-		test_2020_08_26_15_11_33_InstantMinnie_Migration			
			-		test_2020_08_26_15_11_33Minnie			
	Events	ents						

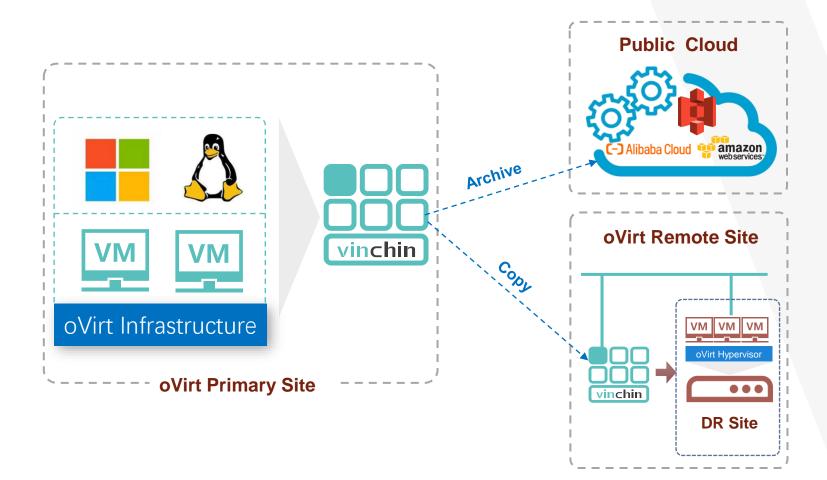
How Migration works:

- Create another new VM on oVirt host
- Migrate data in original backup file and cache file to new VM
- Tell oVirt engine to power off the instant restored VM
- Compare data in cache file and extract changed/new data
- Migrate changed/new data to new VM once again
- Power on the new VM after migration done

Requirement:

oVirt VM Migration is based on a running instant restore task

vinchin Multi-Protect oVirt VMs-



Enhanced Backup Rule for DR:

- Keep one backup file in primary site
- Copy one backup file to remote site
- Archive one backup file to the cloud

GFS Backup Scheme for long retention:

- A daily incremental backup as "Son"
- A weekly full backup as "Father"
- A monthly archive as "Grandfather"

Pros:

- Long term reserve oVirt VM backups
- Multi-sites disaster recovery
- Multiple protection for oVirt VMs

vinchin- Demo Time -----

100

vinchin	
Vinchin Backup & Recovery	
Username Password	
■ Remember password Download Backup Plug-in Login ⊕	
Forgot password? You can contact the administrator to reset your password	
Copyright © 2020 Vinchin build: 5.0.8.10231	





不只是熊猫这么简单! ChengDu,Not Just Panda!







- Provide data protection solution since 2015, base in Chengdu
- The very first virtual machine backup vendor in China
- R&D team leaders have over 10 years experience
- Technical partner of the world's leading virtualization vendors
- Owns complete intellectual property rights
- Won the first patent for instant recovery technology in China















vinchin – Compatibility & Partner





vinchin – Customers









vinchin – Case Study 1





Customer Overview

Hybrid Datacenter is a Brazilian company founded in 2013, it provides a series of professional IT services including VPS services, onsite/offsite backup solutions and cloud services to Brazilian clients.

Requirements

A total of 220+ oVirt VMs run as a variety of critical servers such as webserver, file servers, OA systems, Mail server and most important VPS services. They urgently need a trustable backup solution for the backup and recovery of these 220 oVirt VMs.

Environment

oVirt

Solution

Abandon legacy backup mode, switch to oVirt + Vinchin agentless backup mode for all VMs by installing backup plugin in 12 oVirt hosts within 30 mins. Saves Hybrid Datacenter 100X of time on deployment comparing with legacy backup.

vinchin – Case Study 2





Customer Overview

expleo Consulting GmbH is an Austrian IT service company providing high-valueadded electronic data processing services and have long-standing experience in consulting, system administration and virtual server hosting.

Requirements

The expleo has 3 datacenters locate in Austria, Czech and Slovak. With the growth of business volume, the traditional database backup mode continuously increases manpower and time investment of expleo. They need an efficient backup solution for their oVirt.

Environment

oVirt

Solution

expleo's data center runs SAP hosting servers on oVirt virtual platform. expleo deployed Vinchin as a replacement to legacy database backup. With the quiesce function of Vinchin expleo has transactional consistent snapshots of HANA, MaxDB, DB2 and Oracle databases. Such consistent snapshots are fully supported by SAP and therefore very comfortable to use.

THANK YOU! www.vinchin.com

support@vinchin.com | sales@vinchin.com

