

HyperSDK

Backup & Disaster Recovery

Scheduled backups, incremental exports with Changed Block Tracking, and one-click recovery workflows. Protect your VMs with enterprise-grade backup automation.

Scheduled Backups — Incremental CBT — Recovery Workflows — RPO/RTO Planning

Backup Scheduler UI

Visual cron builder with VM selection and retention policies.



Visual Cron Builder

Drag-and-drop schedule creation. Pick days, hours, and intervals without writing cron expressions. Preview next 10 run times.



VM Selection

Select individual VMs, groups, or "all VMs" for backup. Tag-based selection lets you back up by role (web, db, app).



Retention Policies

Keep last N backups, or retain by age (7 days, 30 days, 1 year). Automatic cleanup frees storage without manual intervention.



Notifications

Alert on backup success, failure, or when retention cleanup runs. Webhook and email notifications with detailed reports.

Schedule	VMs	Format	Retention	Next Run	Status
Daily 02:00	All production (12)	qcow2	7 days	Tomorrow 02:00	Active
Weekly Sun 04:00	Database VMs (3)	OVA	4 weeks	Sunday 04:00	Active

Monthly
1st 06:00

All VMs (25)

OVF

12
months

Apr 1
06:00

Active

Scheduled Exports

Automated VM exports in OVF, OVA, and VMDK formats on your schedule.



Daily Backups

Nightly exports of critical VMs. Run during maintenance windows to minimize impact on production workloads.



Weekly Backups

Full exports on weekends for archival. Larger VMs that cannot tolerate nightly export overhead.



Custom Schedules

Any cron expression: every 6 hours, every Tuesday and Thursday, last Friday of the month — whatever your compliance requires.

Export Formats

Format	Use Case	Includes Metadata	Portable
OVF	Multi-file export for vSphere import	Yes	Yes
OVA	Single-file archive for portability	Yes	Yes
VMDK	Raw disk for VMware environments	No	Yes

qcow2

Native KVM format, thin
provisioned

No

KVM
only

Incremental Backups

Changed Block Tracking (CBT) delivers 95% faster backups with 90% storage savings.

95%

Faster than full backup

90%

Storage savings

< 1 min

Typical incremental time



Changed Block Tracking

CBT identifies which disk blocks changed since the last backup. Only changed blocks are exported, dramatically reducing time and storage.



90% Storage Savings

A 100 GB VM with 5% daily change rate uses only 5 GB per incremental backup instead of 100 GB for a full export.



95% Faster

Incremental backups complete in seconds instead of minutes. Nightly backup windows shrink from hours to minutes across the fleet.



Chain Management

Automatic chain consolidation prevents long incremental chains. Periodic synthetic full backups maintain restore performance.

Full Backup (Day 1)



Incremental (Day 2)



Incremental (Day 3)



Synthetic Full (Day 7)

Recovery **Workflow**

Restore from backup with format conversion and automated deployment.

1

Select Backup

Browse backup history by VM, date, and type. Preview backup metadata including OS, size, and snapshot chain depth.

2

Format Conversion (Optional)

Convert backup format if needed: OVA to qcow2, VMDK to qcow2, or any supported format pair. Runs automatically.

3

Configure & Deploy

Review VM configuration (CPU, memory, network) and deploy via virt-install. Original settings are pre-filled from backup metadata.

4

Verify & Validate

Boot the restored VM and verify connectivity, services, and data integrity. Automated health checks confirm successful recovery.

< 5 min

Recovery time (10 GB VM)

100%

Data integrity verified

1 click

To start restore

RPO/RTO Planning

Design backup strategies that meet your recovery objectives.



RPO (Recovery Point Objective)

How much data can you afford to lose? With hourly incremental backups, your RPO is 1 hour. Daily backups give you a 24-hour RPO.



RTO (Recovery Time Objective)

How fast must you recover? HyperSDK restores a 10 GB VM in under 5 minutes. Format conversion adds 2-3 minutes.

RPO/RTO Matrix

Tier	RPO	RTO	Backup Strategy	Cost
Critical (Databases)	1 hour	5 min	Hourly incremental + local copy	High
Important (App Servers)	4 hours	15 min	4-hourly incremental	Medium
Standard (Dev/Test)	24 hours	30 min	Daily full backup	Low
Archive (Legacy)	7 days	1 hour	Weekly full to cold storage	Minimal

Protect Your VMs Today

Set up automated backups with incremental CBT, define retention policies, and know your recovery time. HyperSDK makes disaster recovery a solved problem.

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