



Modernizing data protection in the data center





Outline

Overview

Use cases and workloads

Druva differentiators

Case studies

Infrastructure changes are disrupting data protection

Public Cloud Adoption

80%

of enterprises will migrate away and close their on-premises data centers by 2025.

– Gartner

Storage growth & costs

54%

of CIO's believe streamlining storage is best opportunity for cost savings.

– ESG

Security & compliance

40%

of small businesses that manage their own network will be hacked
– 50% will not know.

– Gartner



Use cases and workloads



Transforming data protection has not been fast or easy

Traditional architectures expensive

- SW roll-your own → HCI is still \$\$
- Stranded capacity and data copies \$\$
- Data center constrained
- Vendor lock in
- Supply Chain Issues

Forklift cloud solutions

- Poor fit with cloud
- Cloud is an Expensive Place to Learn ...
- What workloads fit in the cloud and which do not... who is my trusted advisor

Poor time to value

- Complex administration
- HW — procure, build, deploy, patch, update

Security & compliance holes

- Defense-in-depth
- Ransomware immunity
- Regional compliance

SaaS for data protection changes the playing field

The shift to cloud solves existing challenges and enables new capabilities



Scale faster

Scale performance
on-demand



Pay for use

One copy of data – No stranded
capacity or compute



Evolved IT

New roles – less
on-premises infrastructure
– more outcome focused



Security ready

Built-in security, regional
access & compliance

Why customers choose Druva

Simplicity	• Simple by design. No certification / training required • Eliminate hardware, software mgmt., patching, procurement
Scale	• Infinite scale with AWS availability, service tiers and features • Meet or exceed existing SLAs
Security	• Security certifications, built-in – zero trust architecture, envelope encryption • Ransomware protection - Data isolation “air gap”
TCO	• Declining costs - Druva passes on savings to customers • Transparent pricing - no hardware lock-in • 50% lower TCO vs. on-premises

One platform for all your workloads



Key use cases



DC Shutdown

- Replace legacy backup
- Workload migration
- SaaS Simplicity & scale



Enterprise Resiliency & DR

- Enable failover/ failback
- Cyber resiliency
- Business continuity



Cloud Workloads

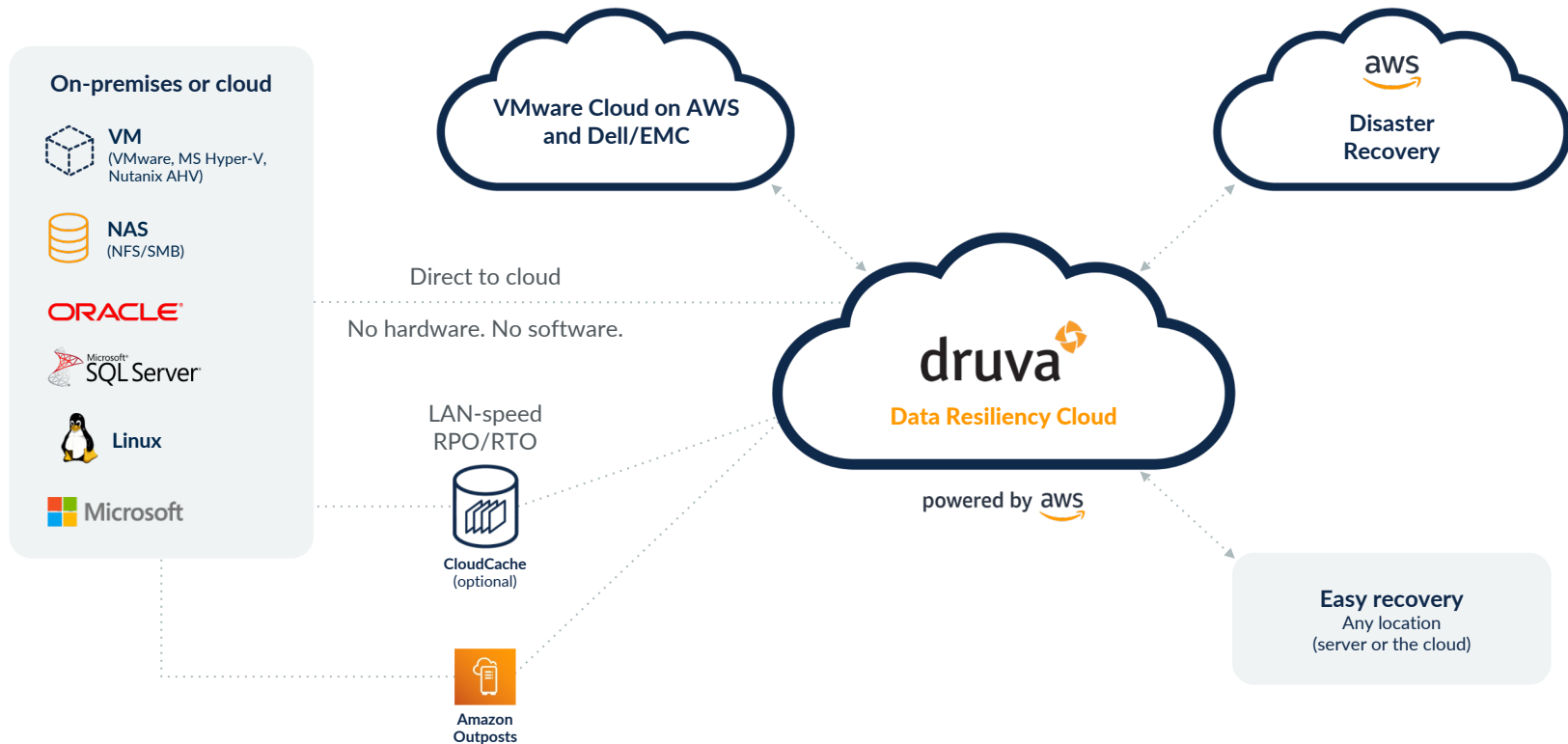
- Backup for applications hosted in cloud – VMC, Oracle, Amazon FSx, Amazon EFS, etc.



Remote office/branch office

- M&A, globalization
- Simple management at scale
- Auditability
- Elimination of third-party expenses
- Data compliance

Druva direct-to-cloud architecture for hybrid workloads



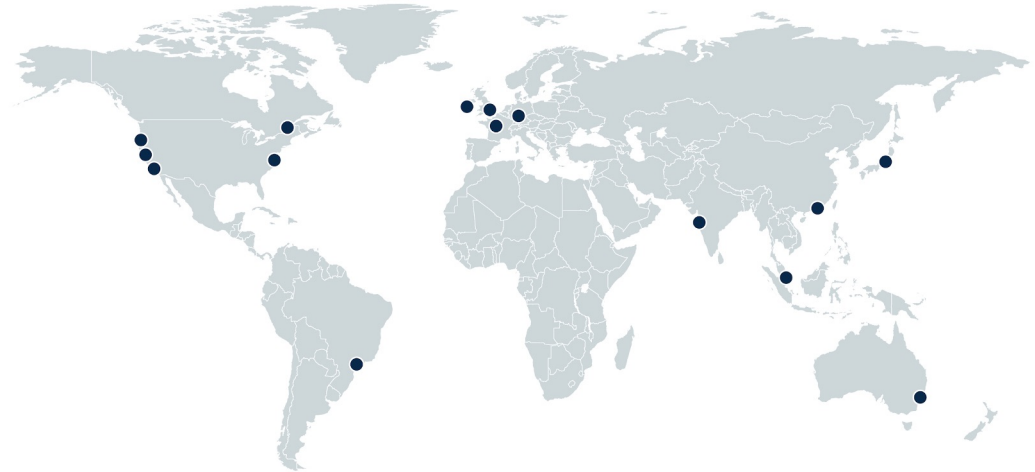
Druva makes data protection simple, scalable, & secure

Global availability

**On-demand scale and
capacity (pay as you go)**

**Extensive regional
storage options**

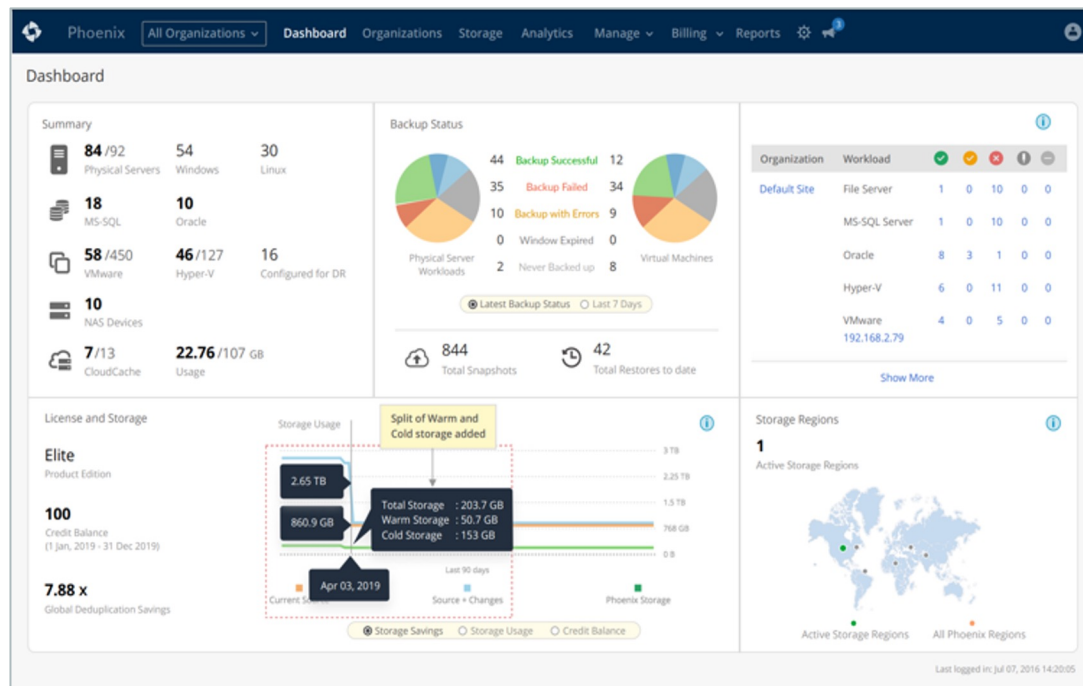
Robust security model



14+ AWS storage regions

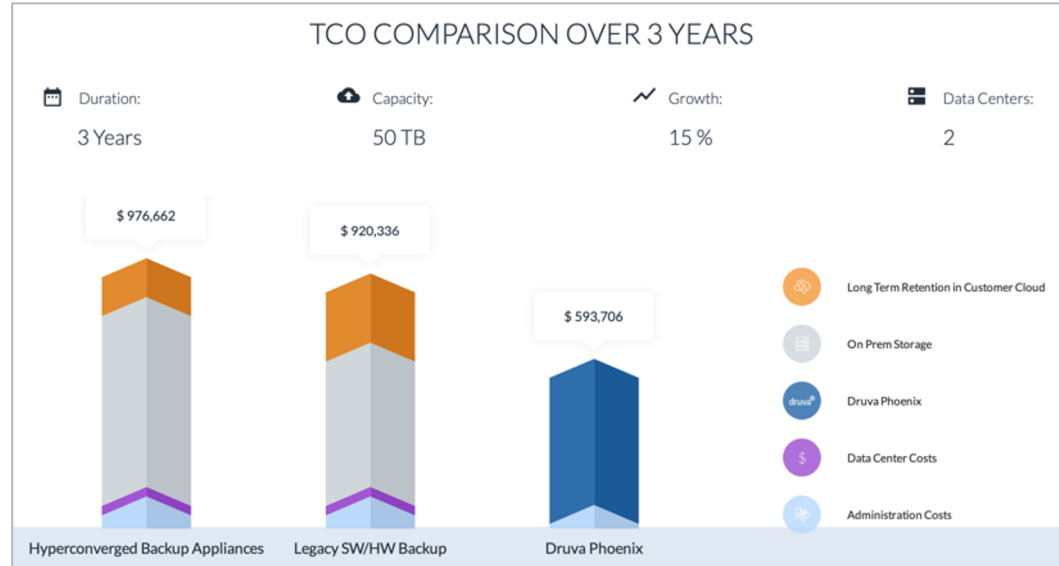
Improve productivity with simplified user experience

- Deploy in 15 minutes
- Automatic protection – no-touch updates
- Global policies – granular control
- Built-in analytics & insights



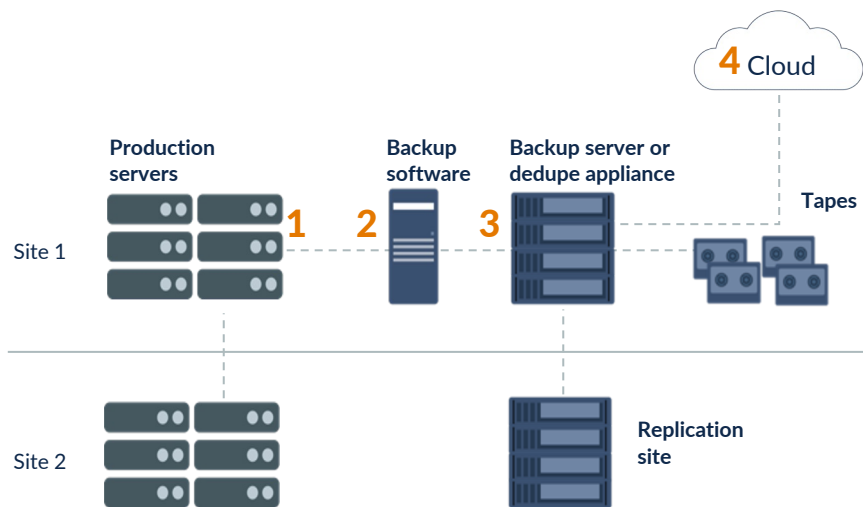
Save costs and reduce TCO by up to 50%

- One license metric: post-dedupe storage consumption
- What drives your TCO?
 - Eliminate HW/SW at multiple sites
 - Extreme storage efficiency
 - Eliminate tape for long-term retention w/ intelligent tiering
 - Administration made easy
- Other benefits
 - Improve security of backup/ archival data
 - Analytics and re-use of backup data

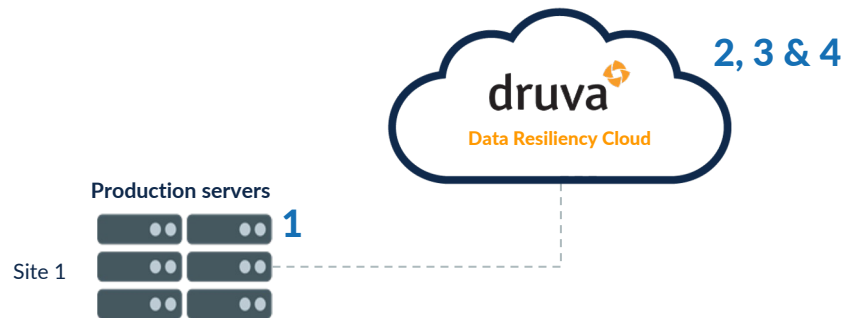


Druva TCO Calculator (tco.druva.com)

On-demand scale that eliminate bottlenecks & costs



1. Too much data at the source
2. Scale limited by local SW/HW
3. Storage efficiency limited to local data center
4. No value-add services in the cloud



No hardware / replication site

1. Global, source deduplications & incr. forever
2. Infinite scale of the cloud
3. Extreme storage savings
4. Value-add services in the cloud

The Druva storage model makes data protection easier

Highly resilient & available

Extreme storage efficiency

Automated tiering for long-term retention

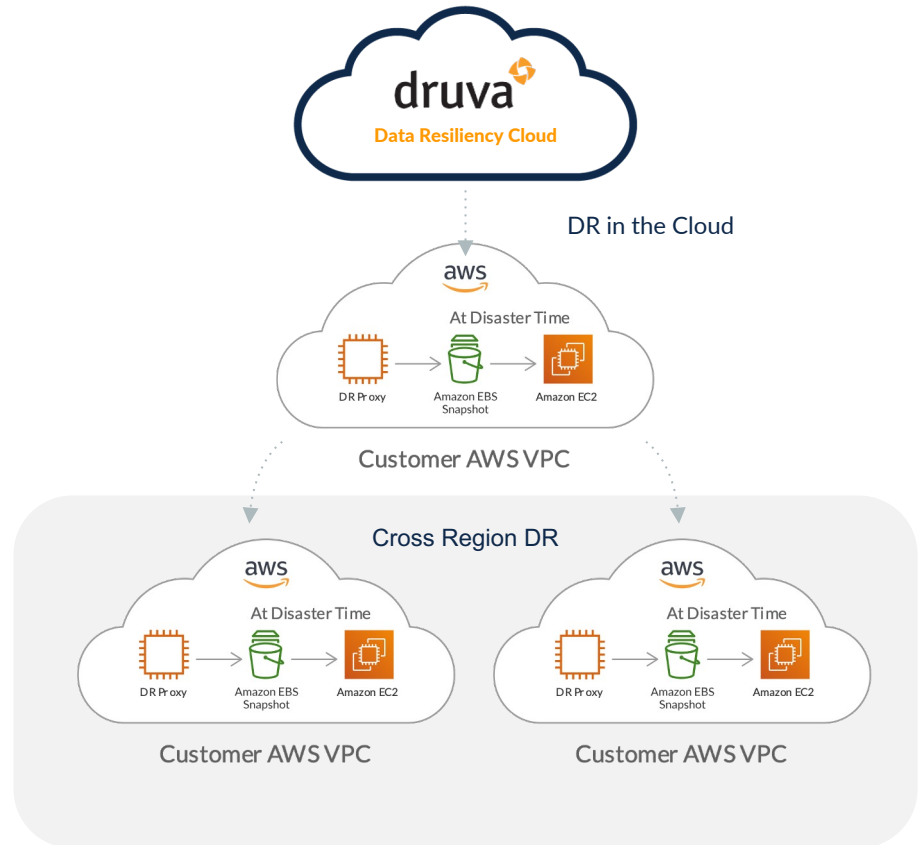
Analytics & insights

Encryption, data isolation & immutability



Cloud DR anywhere powered by Druva

- Easy to use & cost-optimized
 - One portal — data center & cloud workloads
 - No DR infrastructure setup, future-proof
- Automated
 - Data center — Runbook, Failover/failback, pre-flight checks, unlimited testing
- Secure
 - Isolated backups
 - Customer VPC, IAM role base
 - Added security - cross-region, cross-account
 - Available via AWS Private Link
- Fast
 - RTO of minutes (Phoenix)





Workload Coverage



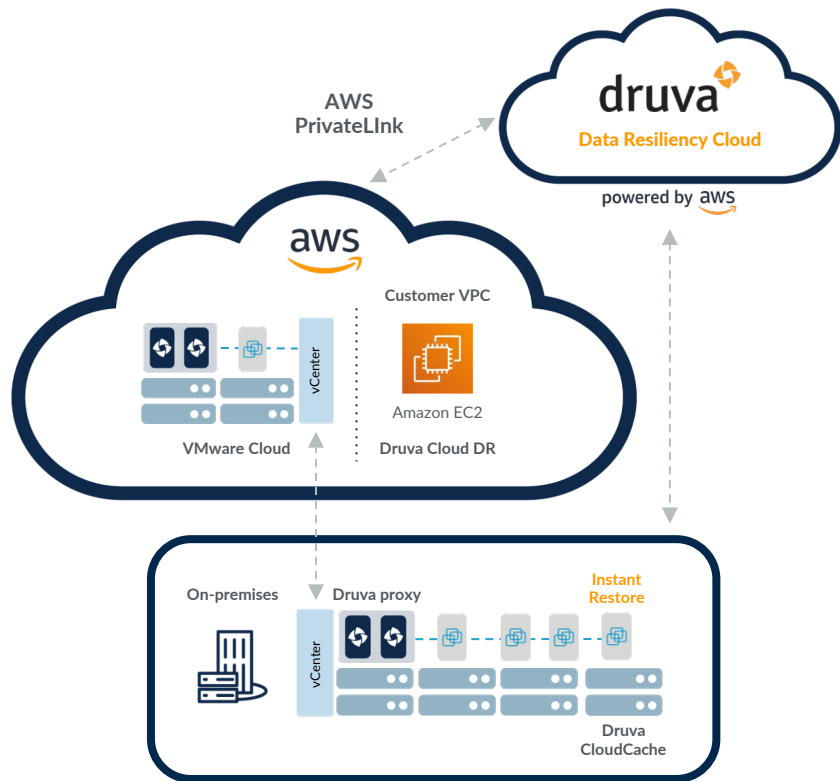
VMware Hybrid Cloud data protection with Druva

Features

- Automated protection vSphere /VMware Cloud
- Source-side, global dedupe + forever incr.
- Instant Restore on-premises
- Orchestrated failover/failback of VMs in minutes
- Fast & secure DR with AWS PrivateLink

Benefits

- Simple & scalable backup & DR with ransomware protection
- Fast & flexible restores with workload mobility across on-premises and cloud
- Modern data protection experience & lower TCO
- Simplifies compliance with integrated long-term retention



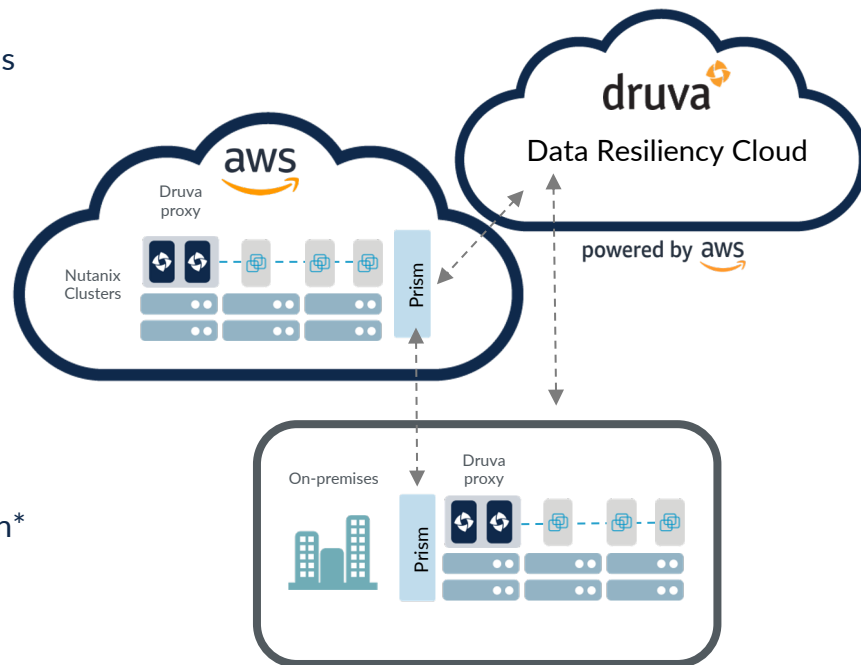
Cloud backup for Nutanix AHV and Clusters on AWS

Features

- Source-side, global deduplication + forever incrementals
- VM discovery, image and block-level backups
- Application consistent backups (VSS & NGT)
- Flexible & fast restore options (Full, virtual disk)
- Automated tiering to cold storage

Benefits

- Simple & scalable backup with ransomware protection
- Fast & flexible restore - on-premise or cloud
- Modern data protection experience and a lower TCO
- Simplify compliance with integrated long-term retention*



* LTR, CloudCache, and FLR are post-GA (1H 2022)

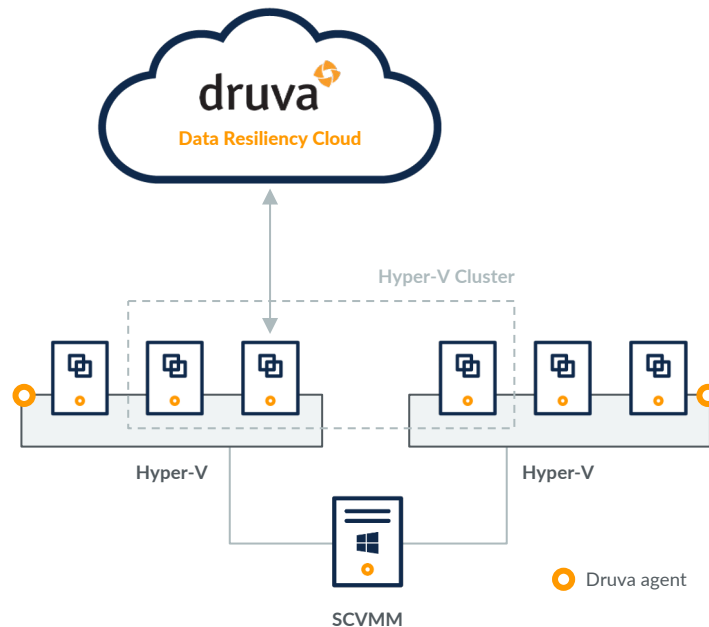
Simple & efficient cloud backup of Microsoft Hyper-V

Features

- Source-side, global deduplication + forever incrementals
- Image and block-level backups (VSS & RCT integration)
- Flexible & fast restore options (Full, virtual disk, file)
- Automated tiering to cold storage

Benefits

- Most efficient Hyper-V protection - no H/W or S/W
- Meet SLAs and lower TCO of backups by up to 50%
- Easy to use (auto-discovery and backup, application consistent backups)
- Simplify compliance with integrated long-term retention



Support for 3 configurations -
SCVMM, clusters, and stand-alone hosts

Radically simple & cost-effective file & NAS backups and long-term retention

Features

- Global deduplication & ever-incremental
- Druva Smart Scan – smarter incr. NAS backup
- Dell PowerProtect (Isilon) integration (incr./stub-aware))
- Back up directly to cold storage for compliance
- Automated tier for long-term retention

Benefits

- Lowers the TCO of long-term retention by 50% with Druva archive storage tier
- Secures offsite backups with air-gap and actively protects against ransomware
- Efficiently protects and recover any file / NAS data across platforms (on-premises / cloud)



Druva for database workloads

Features

- Database-aware backup for Oracle and MS-SQL
- Granular recovery – point-in-time restores
- Ever incremental & source-side, global deduplication
- Local cache option for RPO/RTOs

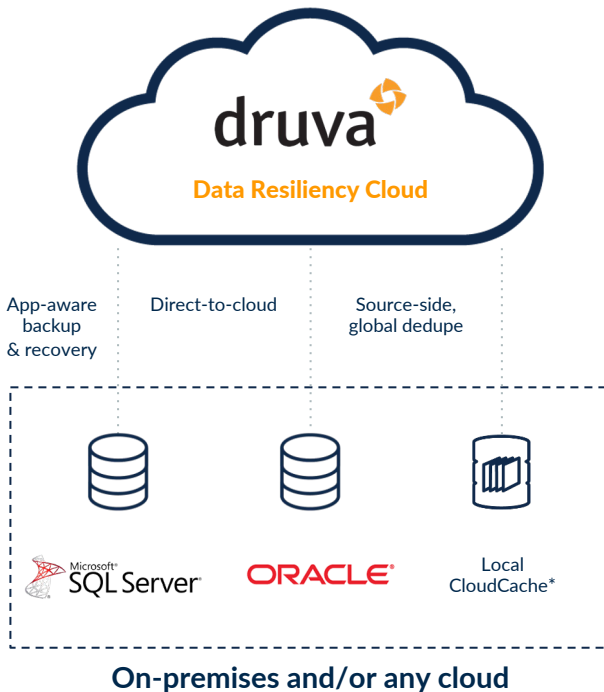
Benefits

- High-performance, low-impact
- Bandwidth & storage efficient
- Meet or exceed on-premises solutions

“800GB SQL restore 1.5x than on-premises”



“Druva and Veritas are night and day [Oracle]”



* Optional CloudCache feature: a SW appliance / local cache for demanding RPOs / RTOs

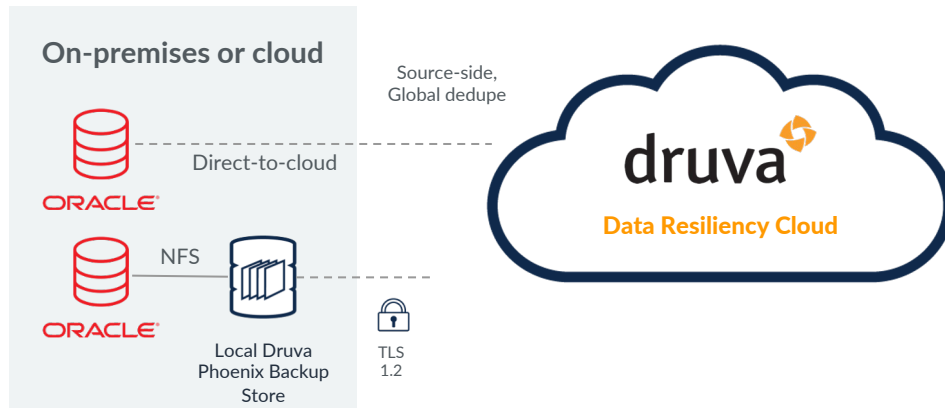
Scalable, on-demand data protection for Oracle databases

Key Features

- RMAN integrated - local & direct-to-cloud
- Incr. forever w/incr. merge + source dedupe
- Flexible & granular, point-in-time recovery
- Auto-tiering to cold storage for retention
- Automatic db discovery & 1-step full restore

Key Benefits

- Management simplicity- less infrastructure
- High-performance, low-impact backups
- Flexible recovery - DBAs, backup, & dev-test
- Lower TCO vs. traditional approaches
- Ransomware protection



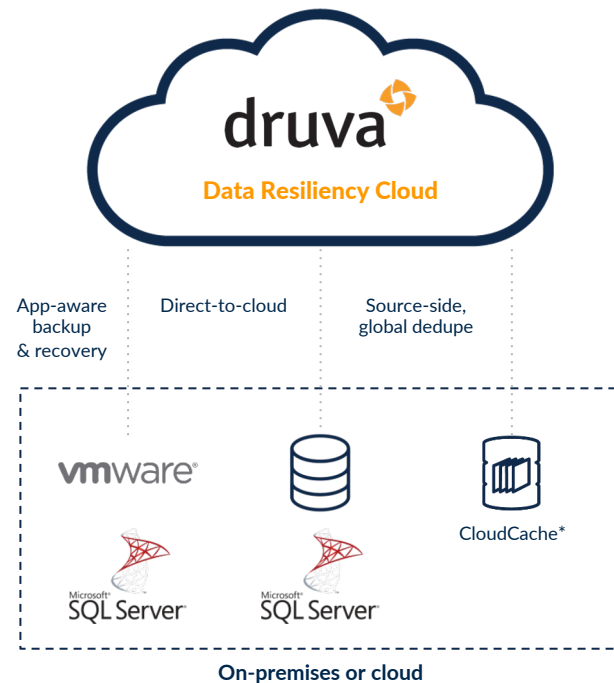
Simple and reliable on-demand data protection for SQL databases

Key features

- Direct-to cloud backup & app-aware
- Ever incremental and source-based deduplication
- Fast & flexible point-in-time recovery - locally or cloud

Key benefits

- Management simplicity - less infrastructure
- High-performance, low-impact backups
- Easy recovery of VM-based applications & databases
- Meet demanding RTOs with recovery from CloudCache*
- Reduce the TCO of SQL data protection



* Optional CloudCache feature: a SW appliance / local cache for demanding RPOs / RTOs



Druva differentiators



Data protection needs are evolving with accelerated cloud migration

	SW Roll your own DC	HCI Next Gen Legacy	Druva
Data availability	Isolated	Constrained	Globally available data
Constraints	Data center	Same	Cloud, scale-out, globally
License flexibility	Lock-in	Same	Pay as you go
Data copies	Multiple	Same	One copy – global dedupe
Capacity	Stranded	Scale-out, but stranded	On-demand capacity
Administration	Complex	Less complex	Start in 15 min, easy admin
Cloud ready	No	No	Native cloud everything

Unique global, source-side deduplication

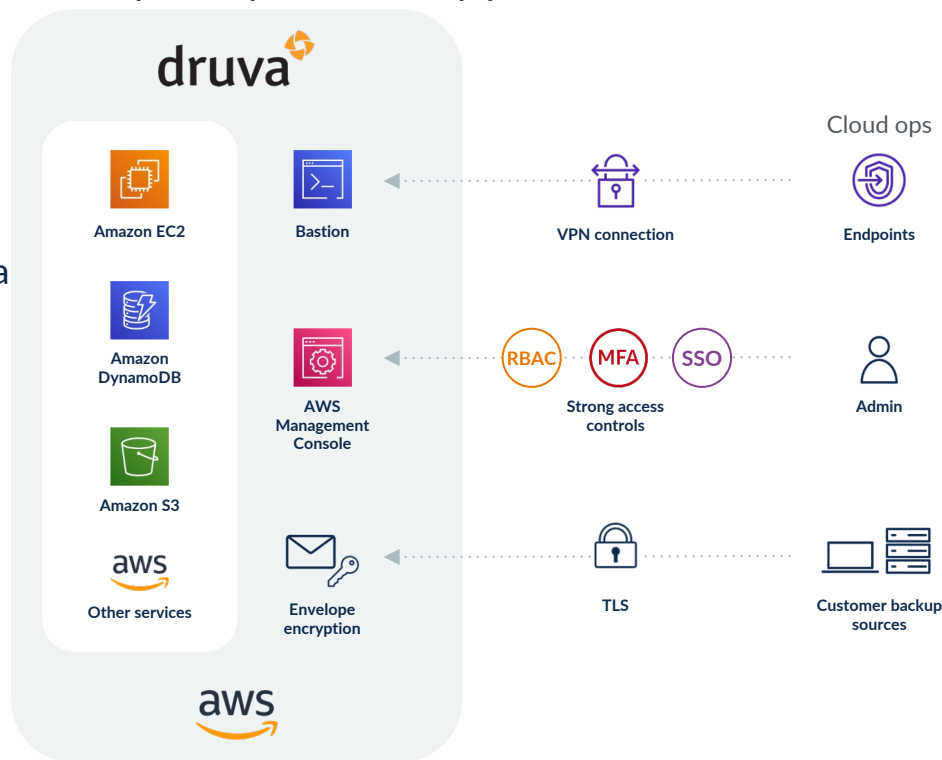
- Increase savings with global, deduplication & compression
 - Dedupe across all workloads and data sources
 - Deduplication across warm & cold storage tiers
- Only move changed blocks – every time (source dedupe + incr. forever)
- Scale on-demand
 - No more under/over-provisioning
 - Eliminate hardware bottlenecks with cloud-based metadata



Secure and immutable data protection with Druva

Moving to Druva SaaS-based data protection can improve your security posture

- Druva maintains a Zero Trust architecture model
 - No SSH access to production nodes
- You control the key to your data – not Druva
 - Multi-layered access controls
 - Industry standard envelope encryption
- Immutable & encrypted data storage
 - Druva data sharding adds security
- Backup data is isolated from your network
 - Built-in ransomware protection
- Druva runs on AWS infrastructure for strong network security



Druva and AWS compliance certifications for your data center workloads



(SaaS) Application Services

druva

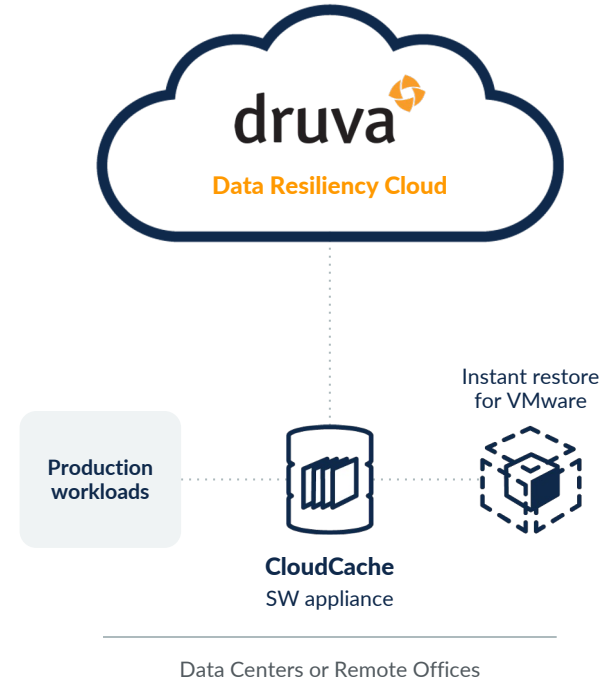


(PaaS) Distributed Database Services
(IaaS) Infrastructure: Compute + Storage

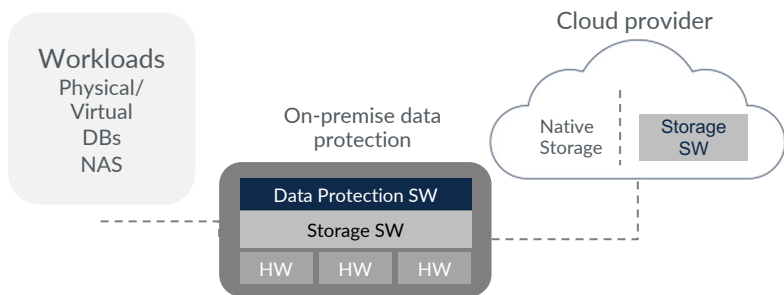
powered by aws

Manage cloud SLAs better with Druva CloudCache

- Meet RTO/RPOs without the costs & complexity of traditional infrastructure
- For VMware, Hyper-V, SQL, file servers (win/linux), and NAS workloads in remote offices or data centers
 - Keep hot snapshots up to 30 days
- Enables local LAN speed backup/restore with commodity hardware
 - VM recovery at 600 GB/hr.
 - Instant Restore for VMware (5-10 VMs in < 5min)
- Supports bandwidth management / throttling - off peak hours sync to cloud (ideal for ROBO)

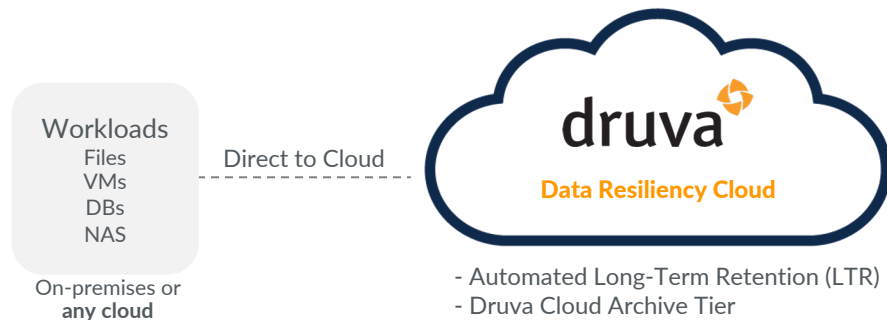


Remove costs & complexity from long-term data retention



Cloud-out challenges

- 2x storage mgmt. – on-prem & cloud
- Time-based archiving vs. intelligent
- Some savings vs. radical cost savings

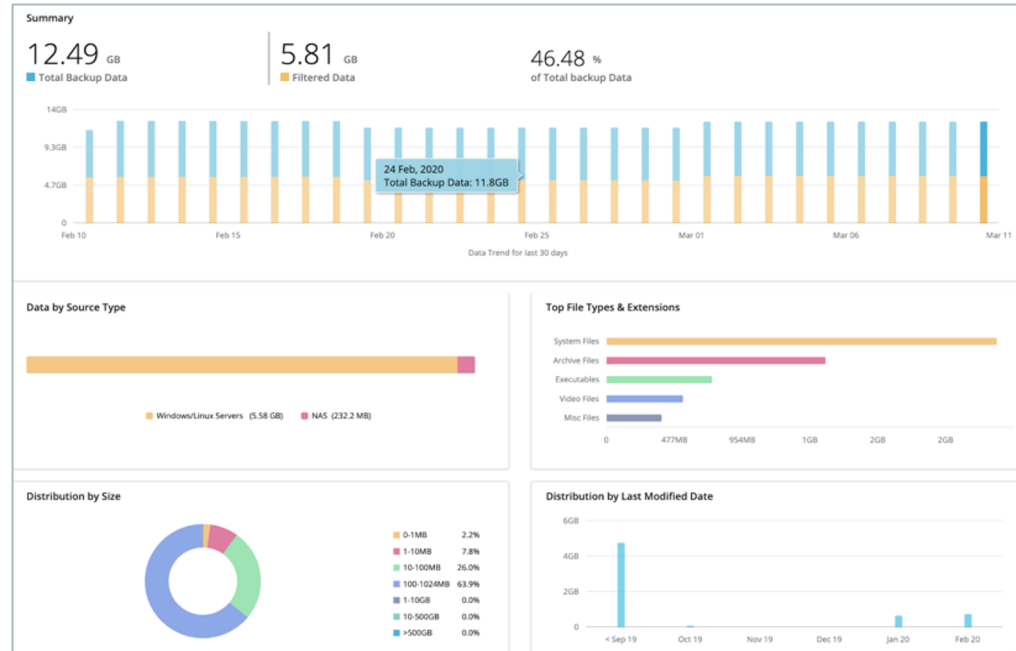


Druva cloud difference

- Eliminate on-prem & cloud storage mgmt.
- Intelligent storage tiering moves inactive blocks
- Druva archive storage tier for 50% lower costs (backs up data directly to cold storage)
- Radical costs savings with dedupe across storage tiers

Manage storage efficiency and cost with storage insights & recommendations

- Backup storage is a black box
- Optimize your costs & performance*
 - Visualize consumption patterns of files
 - Get alerts & recommendations
 - Take action to exclude data types for file servers and NAS



Druva eliminates tactical fires & helps to transform role of backup administrator

- Typical daily activities
 - **CLEANER:** RPO / RTO reports
 - **MORE** successes / **LESS** failures
 - ~~Storage / capacity management~~
 - **Respond:** New requests faster
 - **LESS** Troubleshooting
- Weekly
 - ~~Security patching~~
 - ~~Storage capacity planning~~
 - **MORE** Recovery testing
- Quarterly
 - ~~SW / HW patching~~
 - ~~SW / HW refresh cycle~~
 - **EASIER** Risk / compliance reports
 - ~~Remote offices, acquisitions, new HW~~
 - ~~Stranded capacity & high costs~~



"This has allowed us to save over 30 hours per month on backups, which is huge compared to the troublesome systems we had before, like NetBackup."

— Gavin Bell, Global IT Project Manager

Druva APIs enable productive ecosystem integrations



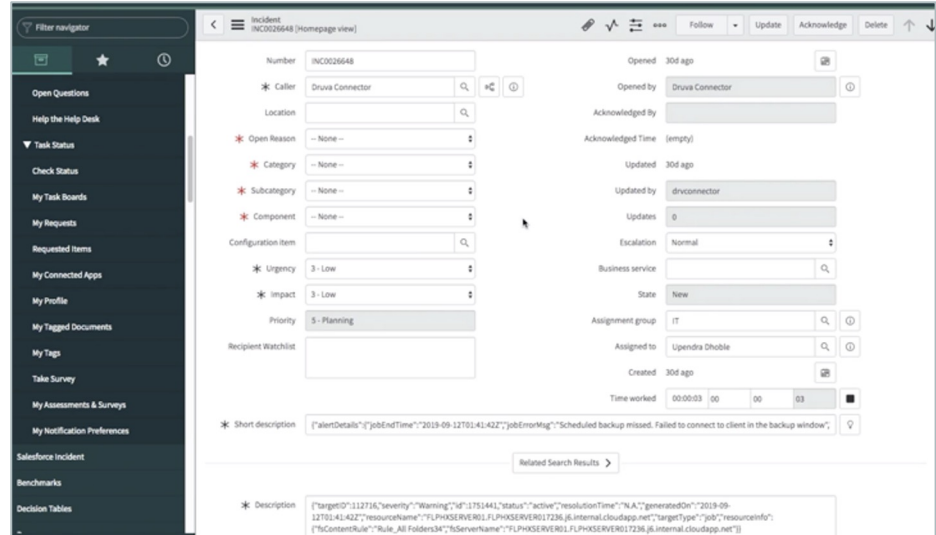
Druva Platform,
Snowball Edge, Outposts



Protect VMware
on-premises or on AWS



Multi-vendor backup
reporting & monitoring



IT help desk automation for backup & recovery



Why customers choose Druva

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Scale	• Infinite scale with AWS availability, service tiers and features • Meet or exceed existing SLAs
Security	• Security certifications, built-in – zero trust architecture, envelope encryption • Ransomware protection - Data isolation “air gap”
TCO	• Declining costs - Druva passes on savings to customers • Transparent pricing - no hardware lock-in • 50% lower TCO vs. on-premises



Case studies





"With Druva the majority of our backups are running twice as fast as compared to the on-premises legacy solution we had."

— Annette W., Backup administrator

Cloud outperforms on-premises backup

Challenges

- DC Consolidation – lower infrastructure pains / costs
- Cloud-native DR
- Improve operational efficiency
 - VMware, SQL, Oracle, Physical, AWS workloads
- Solve long-term retention/archiving

Results

- Eliminated on-premises infrastructure
 - Switched from Dell EMC Avamar/DD/DD Cloud Tier
 - Why? High cost (boxes across multiple DCs), maintenance, & performance
- Centralized & simplified – both operations & support
- Faster backup & restore vs. on-premise
 - e.g., 800GB SQL restore – Druva faster than Avamar on-premises
- Cloud-based DR
- Lower TCO



"Druva's DR-as-a-Service (DRaaS) enabled us to rapidly migrate about 52 production workloads into AWS during the COVID-19 pandemic. It drastically simplified the process of making the jump from on-premises to cloud."

— Marc Almodovar, manager of network & sys. engineering

Katz Media replaces legacy backup & gets globally available cloud-based DR

Challenges

- Complexity & lack of scale (multiple providers - Veritas, Dell EMC Data Domain, Veeam)
- Performance issues - mission-critical workloads at risk
- Escalating costs - over-provisioning & support/ maint.

Solutions

- Druva Phoenix, Cloud Ranger
- Druva DRaaS - Globally available DR - 1-click automated recovery for on-premises & cloud-based workloads

Results

- 52 workloads migrated to AWS in 3 months **(5X faster)**
- Improved IT productivity
 - **50% less time managing backup**
 - Speed of migration allowed IT to get dev. envir. in AWS
- **Migrated DR to the AWS cloud**

[Read the case study](#)

Premiere Networks saves cost and 80% of IT admin time with Druva

Customer goals

- Reduce management overheads
- Accelerate their cloud journey
- Better business continuity plan
- Save administrative time and cost

Results

- 2x Performance
- Lower 5-year TCO
- 80% reduction in management time

"Druva's built-in global deduplication, allows us to use less storage than we did with Avamar; reduce 5-yr TCO projection and eliminate h/w and s/w costs."

— IT Director Ruben Oganessian

Try out Druva today!

Attend a Demo

Discover cloud
data protection

druva.com/get-demo/

Try Druva Free Trial

Enjoy the
experience

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Evaluate TCO savings

See your
savings

[TCO Tool](#)



Thank you

