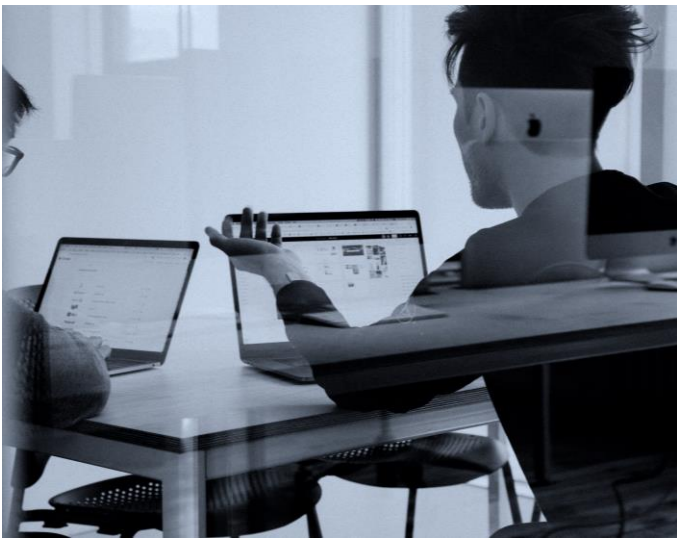


DATA ACCESS WITH
UNRIVALLED
PERFORMANCE!



Boost your hypervisor deployment and protect your data with

ZEBCLIENT

ZEBCLIENT – SECURE CLOUD-BACKUP AND PERFORMANCE FOR HYPERVISOR DEPLOYMENTS

ZebClient adds substantially improved capabilities to hypervisors - both in the handling of the hypervisor software itself and of the data under its management. An important design principle in ZebClient-enabled hypervisors, is the split in the handling of infrastructure and application data respectively:

- **Infrastructure data**, i.e. the hypervisor application software, benefits from **simplified handling, true safeguarding of data and enhanced availability**.
- Application data, i.e. the data handled by the applications running on the hypervisor, is managed in a considerably more **flexible, scalable and cost-efficient** manner, **accessed at ultra-high speed** and is **superbly better protected**.



ZEBCLIENT BASICS

ZebClient optimizes the utilization of modern memory technology to provide sustainable, redundant hyper-speed access to your data. It is a data access point software that operates by localizing cloud data to memory and by disaggregating compute from storage. This allows for a solution that supremely speeds up, simplifies, secures, and protects the information under its control.

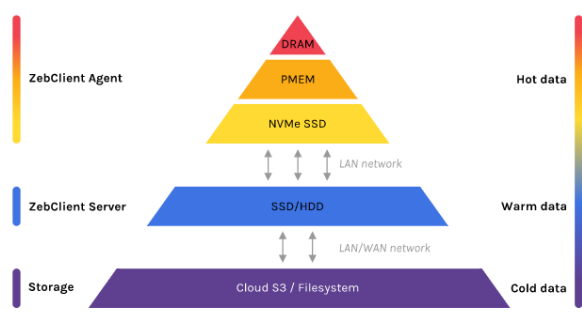


Figure 1: ZebClient memory tiering of hot, warm and cold data based on latest technology memory, traditional SSD/HDD technology and cloud storage.

Core to ZebClient is its innovative persistent memory cache and data placement mechanism. By categorizing data based on recency of usage, ZebClient determines what data that should reside inside ZebClient for fast access and what data that should exclusively be placed in or pulled from a connected external storage. The external storage is acting as a data lake where ZebClient can offload colder data and make it available for external processing. By selecting a cloud storage for backend, durability is added to data.

ZEBCLIENT PROTECTS HYPERVISOR VM APPLICATION DATA

ZebClient uses disaggregated storage to provide data access to applications in VMs. This means that data storage can be secured via durable, scalable, cost-efficient cloud services – eliminating the need for local storage solutions on-prem. When requested by application, ZebClient brings cloud data to memory deployed close to application – securing ultra-high speed data access even to data stored in the cloud.

ZebClient adds the following advantages to application data in hypervisors:

Distributed data access - as data is instantly written to all tiers including the shared warm cluster tier,

High performance data access - serving data to applications at memory speed,

Data durability – as data is always and instantly written to all tiers including to disaggregated and durable cloud storage,

Data Lake - access to unlimited cloud data with strong read-after-write consistency, atomic data operation, and ACID data operations.

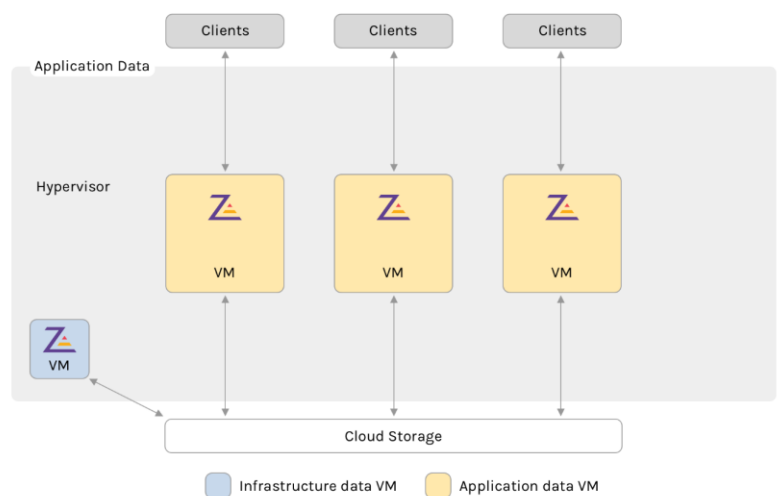


Figure 2: Application data in hypervisor deployment with ZebClient

PROTECTION OF HYPERVISOR INFRASTRUCTURE DATA

As the handling of infrastructure and application data is separate in ZebClient designs, there is an opportunity to deploy optimally small VMs to hold infrastructure data as application data is managed by ZebClient and uses disaggregated cloud storage.

To protect all infrastructure data, changes to VM configurations, OS updates, and point-in-time recovery should always be available.

Deploying ZebClient and splitting Infrastructure and Application data, provides the following benefits to the infrastructure data:

- **Data durability** – as infrastructure data can be automatically backed up via hypervisor snapshot/backup to durable cloud storage,
- **Availability** – securing distributed high performance cluster access locally and globally,
- **Simplified and flexible deployment and operations** – based on the separation of infrastructure and application data and from use of small-sized VMs.

ZEBCLIENT-ENABLED HYPERVISORS SECURES DATA

In summary, ZebClient boosts the benefits of hypervisor deployments in several ways:

- Secures high performance application data access,
- Eliminates the need for application data backups,
- Provides access to unlimited data storage,
- Secures restore of VMs at super-high speeds,
- Provides simplified data management,
- Delivers enhanced availability and protection to application data.

DEPLOYMENT VIA A SIMPLE STEP-BY-STEP PROCESS AND AUTOMATED TOOLS

To simplify deployment on hypervisors, Zebware has developed a suite of support tools to guide the administrator through the setup. The most common scenario will be process of enhancing a hypervisor with pre-existing VMs and applications with ZebClient's unique data capabilities. On a high level, the process is as follows:



1. Determine the scope of ZebClient support.
2. Procure and install ZebClient memory drives (recommended but optional)
3. Setup the ZebClient Control Pane
4. Deploy ZebClient
5. Verify deployment
6. Redirect applications to use ZebClient's file directory or S3 endpoint.
7. Safeguard hypervisor's infrastructure data

To get started, once the scope of ZebClient support has been determined, simply follow the step-by-step instructions: https://gitlab.com/zebware/devops/deployment/-/blob/master/CONTROL_PANE.md