

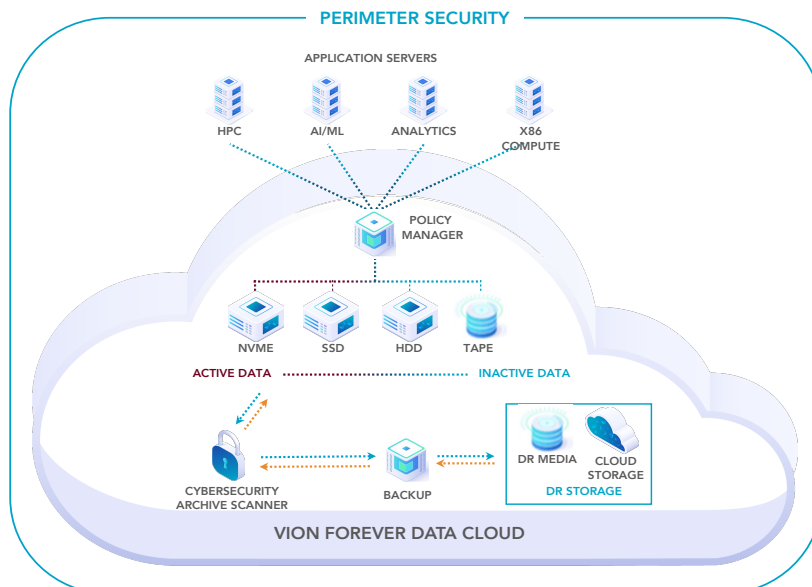
# ViON Forever Data Cloud

The amount of data is growing exponentially, and organizations want to use their data for greater insight...this is no secret. Also, as organizations adopt and leverage more AI, ML and HPC use cases, they are struggling with costs, performance, and complexity of managing data storage.

- Enterprise high performance storage is expensive and not ideal for long term retention.
- **Pervasive data model is evolving to require data retention forever.**
- Siloed storage environments are complicating access to data.
- Public Cloud storage, while suited well for archive use cases, is not well positioned for retrieval of data from both a speed and cost perspective.

Organizations require a data management platform that allows temporarily inactive data to be stored on an appropriate, cost-effective tier until access is required. The inactive data must then be easily and quickly staged onto the correct tier for application use. When the data is no longer applicable, it can then be staged back to a less costly storage tier until future access is required.

## A New Approach: ViON Forever Data Cloud



The **ViON Forever Data Cloud** is a data management solution, that allows access to active and less active or temporarily inactive data quickly and easily. This on-premises private cloud solution bridges the gap between data storage environments seamlessly for end users and applications. Active data resides on the appropriate storage tier available for processing applications according to access requirements. Once data transitions to a temporarily inactive stage, it is moved to less performant and less costly storage tiers. When needed again, the data is staged back to the active storage tier. Our Policy Manager allows for easy searchability and accessibility across all storage tiers, both active and temporarily inactive. Users gain the benefits of as-a-Service pricing in an OpEx financial model but pay nothing for egress or staging of data. There are no hidden costs and no budget surprises as with Public Cloud archive solutions.

## Solution Design and Architecture

ViON's **Forever Data Cloud** solution leverages enterprise class storage products from virtually all OEM providers. Also included are a variety of technologies and vendor partners that deliver very cost-effective storage. Our solution is architected to easily scale from terabytes (TB) to exabytes (EB) as storage capacities and organizational needs grow over time. New storage technologies can be integrated into the framework, enabling organizations to benefit from the latest advances in capabilities. The solution design also enables customization and flexibility to accommodate specific customer requirements.

High Performance	Fast Staging	Slower Staging
All-Flash Arrays NVMe SAN Connectivity High Bandwidth Low Latency	Hybrid Storage NAS Storage SSD HDD High Capacity	Tape Media Advance Robotics Long-Term Storage

Active Data

### High Performance

As organizations leverage more AI and HPC technologies to drive value for customers, performance expectations for active data access become even more critical. But, as performance demands accelerate, so do associated costs. Therefore, it is essential that an effective data access model be designed and deployed. Active storage has to be segmented by requirements and mapped to the optimum storage technology.

As mentioned previously AI and HPC applications are expanding as organizations learn how to harness new capabilities and derive more value from their data. Faster and more precise analysis applications require storage to support more performance. ViON has worked with both market-leading traditional providers as well as emerging disruptive storage vendors to architect the ViON **Forever Data Cloud**.

Environments requiring the highest performance face the biggest challenges with cost. We divide our high-performance category into multiple segments, matching speed demands with cost of platform, optimizing speed and cost.

For a look at two of our ultra high-speed performance partners, please read [Pavilion Storage Datasheet](#) and [DDN Datasheet](#).

### Fast Staging

This storage tier incorporates traditional File (NFS, SMB) and Object (S3) storage solutions. Data stored in this tier can be used for both primary, everyday storage, and currently active applications. This tier can also be used for temporarily inactive data that can then be rapidly staged to an active tier for high performance use. Finally, the fast-staging tier can be an interim staging ground for data movement to slower staging storage such as tape solutions.

Take a look at one of our partners included in our fast-staging tier in the [Scality Datasheet](#).

## Slower Staging

Inactive data resides within this storage tier. Typically, tape media has been used to retain data for disaster recovery or compliance purposes. Tape is a reliable, secure and cost-effective media type to store data for long periods of time.

The data stored in this tier is not accessed regularly by users or applications, but it is vital as organizations are reaching back to their historical content to gather additional insights from the data. Data can reside in this tier for weeks, months or even years, and staged to either of the other storage tiers as needed.

Learn more: [Quantum Scalar Datasheet](#).

## Policy Manager

The **ViON Forever Data Cloud** provides an integrated Policy Manager allowing organizations to manage their data across tiers, whether the data is in the active or inactive state. Inactive data can be easily and quickly staged to the active tier as needed and then moved back to the inactive storage tier after the processing jobs have completed.

The Policy Manager provides automated, policy-based tiering of data to simplify the data lifecycle management. While tiering the data, the Policy Manager maintains the location of all data and allows users to search for data across their entire storage environment.

The Policy Manager can be integrated with Public Cloud provider storage, as well enabling hybrid and multi-cloud solution design.

For more information on ViON's Policy Manager solutions, please review the following datasheets: [Quantum Xcellis Datasheet](#) and [Quantum StorNext Datasheet](#).

## Designed for Cyber Security

ViON's Forever Data Cloud was developed with the goal of delivering data accessibility with the highest level of cyber security. Working with industry-leading OEMS, ViON provides secure access to data no matter where it resides within the ViON Forever Data Cloud.

Cyemptive Perimeter Fortress (CPF)	CPF Defense-in-Depth (CPF-DiD)	Cyemptive Web Fortress (CWF)	Cyemptive Archive Scanner (CAS)
Installed at the perimeter to replace existing firewalls  Protects boundaries and secures access to systems and networks  Provides protection from North-South attack vectors  <b>Cyemptive VPN Fortress (CVF)</b> add-on provides secure VPN access	Installed within the datacenter to protect public clouds, high performance computing (HPC) environments and sensitive systems  Prevents infiltration/exfiltration of malicious entities  Provide protection from East-West attack vectors	Boosts web security for applications and protects against threats without human intervention  Utilizes load balancing to ensure interruption free requests between users and web servers	Detects anomalies in the data prior to backup and when recovering files. This appliance and process ensures safe file backup, vaulting, and recovery with secure auditing and alerting if any anomalies are discovered.

For more information on our cyber security features, take a look at the following: [Cyemptive Enterprise Scanner](#), [Cyemptive Web Fortress](#) and [Cyemptive Perimeter Fortress and Zero Trust Access](#).

## ViON Forever Data Cloud Quick Facts

- Data profiles are rapidly changing such that most data will be retained forever
- The Data Model now translates into active state data and temporarily inactive data
- AI use cases today and tomorrow will leverage all organizational data to derive value
- **The new data model demands:**
  - High speed storage and high-speed performance processing deployed in cost effective segments
  - Lower cost storage segments to house temporarily inactive data
  - Variable speed staging of data between active/temporarily inactive storage, optimized for speed and cost
  - Broad and simple access across all organizational data regardless of state data for fast and effective search
  - Ability to rapidly and cost effectively stage data between tiers
  - Industry-leading cybersecurity to protect data and defeat intrusions wherever the data resides
  - Cloud consumption economics with predictable, cost optimized characteristics
  - Policy driven centralized management of the total solution
  - Deployable in segments according to business priority

## ViON Forever Data Cloud Delivers:

### COST EFFICIENCY

- Data resides on cost-optimized storage, reducing reliance on costly primary storage
- Quickly and easily move data between storage systems for active workloads
- Optimize IT infrastructure without added cost or complexity

### SIMPLICITY

- Data is searchable and accessible, regardless of storage tier
- Compatible with NVMe, SSD, HDD, Tape or Cloud systems

### RELIABILITY

- Leverage the flexibility of any storage type whether the data is active or inactive
- Diversity of storage ensures access and eliminates risk of data loss or cyber attack

### SCALABILITY

- Manage data from TB to EB across multiple storage tiers without adding complexity
- Seamlessly add new storage capacity or technologies for future growth and new use cases

---

### About ViON

ViON Corporation is a solution provider with over 40 years' experience designing and delivering enterprise data center solutions for government agencies and commercial businesses. The company provides a large portfolio of IT solutions, including infrastructure, multi-cloud and artificial intelligence (AI) solutions. Focused on supporting the customer's IT modernization requirements. ViON delivers an outstanding customer experience. A veteran-owned company based in Herndon, Virginia, the company has field offices throughout the U.S. [vion.com](http://vion.com)