



Storage Demand for AI-enabled workflows

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The Company

- ✓ **25+ years of domain expertise** in enterprise storage
- ✓ Pioneered **storage virtualization**
- ✓ **Vendor-agnostic** data services
- ✓ **24x7 global** premier-level support
- ✓ Extensive **partner ecosystem**



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Regional Sales Manager, Nordic & Baltic



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**“The AI revolution is bigger than
the Internet revolution”**

*- Mikko Hyppönen, CTO of
WithSecure*

Requirements for Storage has changed



From TBs to PBs

Older technologies don't scale to the extent that new workloads require.



Data Distribution

Daily data generation is huge. It is generated everywhere and in every format.



Cloud-like

RESTful APIs, automation, orchestration, microservices. Software-defined is everything and the only way to do things at scale.

What is Object Storage

BLOCK



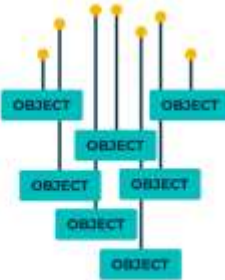
- CLIENT VIA OS
- FIXED SYS ATTRIBUTES
- TRANSACTIONAL DATA
- PERFORMANCE

FILE



- CLIENT VIA OS
- FIXED SYS ATTRIBUTES
- SHARED CHANGING FILE
- ACCESS, SINGLE SITE

OBJECT



- CLIENT IS APP
- CUSTOM METADATA
- SHARED SEMI-STATIC FILE
- SCALABLE, MULTI-SITE

Introduction to DataCore Swarm



Software-Defined

Built-in data protection, self-managing and self-balancing at a massive scale.



Secure Access

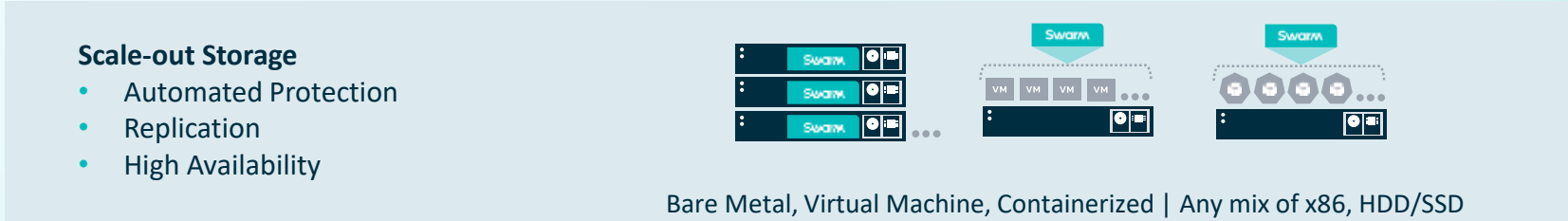
Simplifies data access by utilizing S3/HTTP(S) allowing controlled access to any application, device or end-user.



Simple

Intelligent software, dumb hardware. Spend less time managing your infrastructure. Scale up to hundreds of nodes.

Disaggregated Architecture



Salient Highlights of the Architecture

- **Parallel cluster technology:** Composed of a swarm of independent nodes performing all storage functions (read, write, recover, etc.)
- **Patented bidding algorithm** determines the most efficient node cluster-wide to execute a request while minimizing hotspots with automated load balancing
- **Nodes operate as dedicated, locked-down appliances post-boot,** enhancing security
- **Nodes function independently,** preventing systemic failures due to individual node issues

Complementing Features for AI

Complementing Features for AI



Break the Shackles

New applications are developed for the object storage world. It freed developers to build more scalable workloads.



Data Immutability

Guarantees data remains unchanged over time. Critical for regulatory reasons and ransomware.



Data Integrity

Data integrity is vital to be sure data has not been touched and to avoid checksum collision.



Every Change is Captured

Continuous data protection for objects offers better protection against accidental or malicious attempts to delete data.



Active-Active Replication

Protect data against physical disaster by replicating data between clusters making data highly available.



Simplicity at Scale

Operations and management at scale must be easy to manage. Hands free operations frees valuable time.

Performance at Scale



Performance for Workloads

Performance counts as IOPS and throughput. By leveraging modern object storage you gain IOPS but more importantly throughput.

Required for both small and large objects.



Scale Can Saturate Performance

SAN/NAS may be performant to a certain point after which the performance saturates.

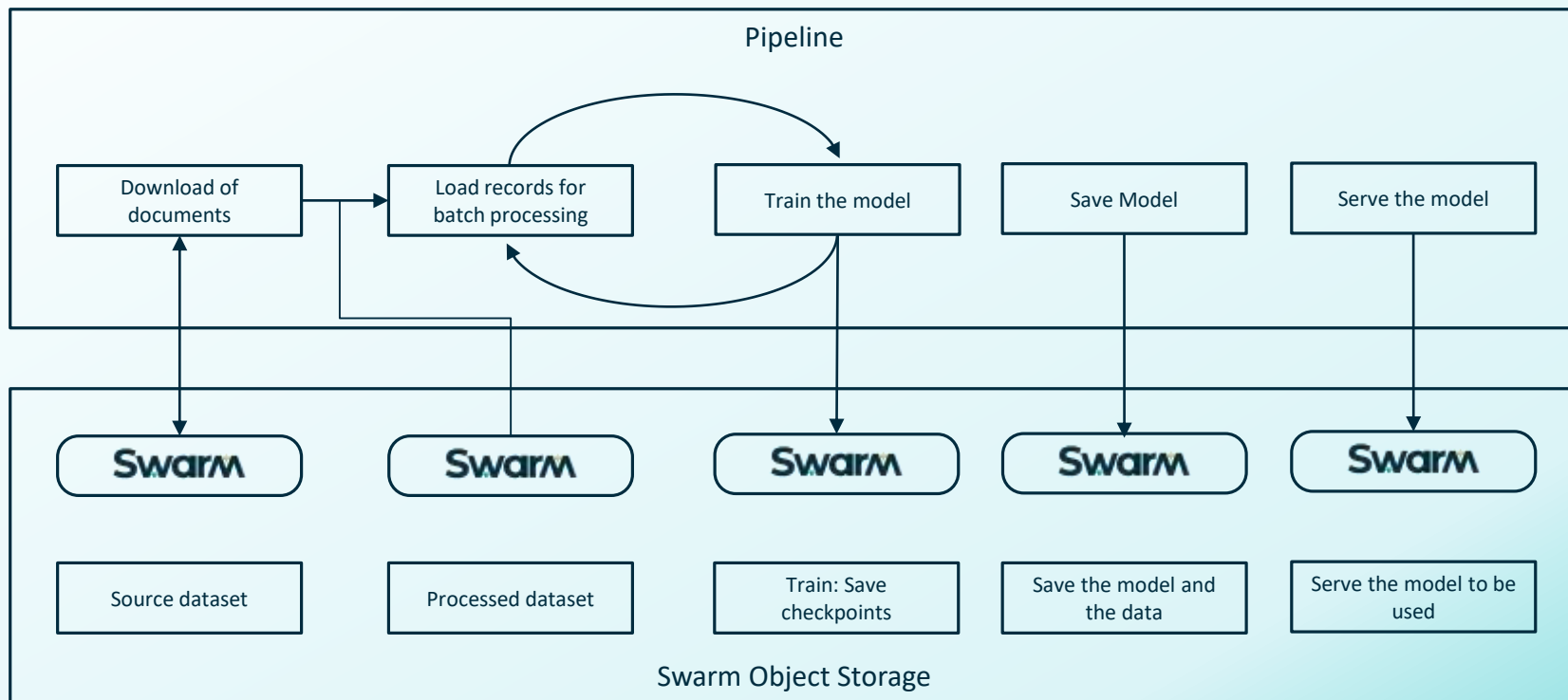
Reliance of third party metadata database saturates the performance.



Economical & Performant

Economics and performance are related.
Scale at an expected cost while achieving more performance.

AI Data Pipeline Workflow

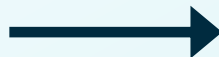


Wrap Up

The amount of data is growing – who knew?

Data consumption around
120 zettabytes

In 2023



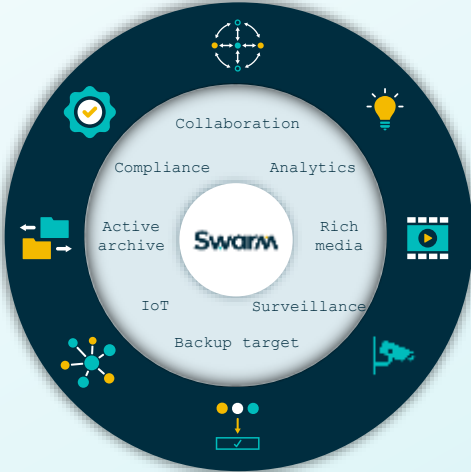
Data consumption around
200-300 zettabytes

In 2030



80-90 % data is unstructured

Unstructured Data is Everywhere



Q&A

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