MODEL9 AND VAST DATA

Object Storage Based AI/ML & Analytics, Cyber Resiliency, Data Protection & Data Management for Mainframe

OVERVIEW

Mainframe data is mission critical - but locked in a silo. Model9 delivers a suite of software products which unlock mainframe data and move it to object storage, making the data part of your enterprise's digital transformation journey. VAST Data offers an ideal destination for that data. VAST's Universal Storage is an all-flash file and object storage platform designed to scale to petabytes and give tier-1 performance at a price point equivalent to what customers pay for archive storage. The joint Model9-VAST Data solutions present enterprises with a unified, organization-wide data management platform – making the data accessible and easily leveraged for use by cloud-native AI/ML and analytics applications.

MODEL9 MANAGER
PROVIDE CLOUD NATIVE MAINFRAME DATA PROTECTION AND DATA MANAGEMENT

Model9 Manager is a product that performs backup and recovery, archive and recall and space management directly from the mainframe to VAST's Universal Storage, thus eliminating the need for VTLs. Data transfer is efficient, and VAST provides advantages such as flexibility, reliability, and data sharing. As an all-flash target, VAST rapidly recovers data to reduce recovery time to the absolute minimum.

MODEL9 GRAVITY
MAKE YOUR MAINFRAME DATA ACTIONABLE BY CONNECTING IT WITH CLOUD AI/ML AND ANALYTICS

Model9 Gravity first delivers mainframe data to VAST. The data is then transformed to any open format without utilizing expensive mainframe compute cycles, and without competing for mainframe CPU resources with other processes, so transformation is much faster than on the mainframe. AI/ML and analytics applications can then leverage both current and historical mainframe data to derive better business insights.

MODEL9 SHIELD
PROTECT YOUR MAINFRAME DATA FROM CYBER THREATS

Model9 Shield creates multiple copies of the data on VAST and ensures they are protected. In addition, the data is compressed and encrypted end-to-end. The data can also be air-gapped — which means an additional copy is isolated from the network and is not exposed to malicious attacks. In case of attack, VAST's all-flash performance enables the rapid recovery of large-scale datasets.

OFFERING STRUCTURE

Model9 provides a suite of products on top of the Model9 Cloud Data Platform, a set of core functions common to all Model9 products.

MODEL9 MANAGER	MODEL9 SHIELD	MODEL9 GRAVITY

Model9 Cloud Data Platform

Scale	Security	Availability	Reliability	Data Movement	ELT	Management	Web-based UI

SOLUTION BENEFITS

- Cut costs by reducing expensive mainframe CPU consumption

- Rapidly recover from any disaster or cyber attack via VAST's all-flash performance

- Shorten time-to-value through efficient usage of resources on the mainframe by leveraging VAST's industry-leading data deduplication technology

- Streamline business processes by democratizing the data

- Reduce risk, as mainframe data and applications are not modified

- Improve data-driven decision making by allowing AI/ML & analytics applications to access mainframe data in the cloud

- Secure mainframe data by protecting it from cyber attacks by leveraging VAST's Indestructible Snapshots and encryption-at-rest capabilities

- Keep mainframe data protected and always available, with cloud-based backup, archiving and DR functionalities

- Replace costly proprietary VTLs with affordable object-based data management services provided by VAST

TECHNOLOGICAL FEATURES

- Offloads processing to zIIP engines, thus reducing CPU MIPS

- Transforms any mainframe data, in any format, including DB2, VSAM, sequential and partitioned data sets, to standard open formats such as JSON and CSV

- Improves AI/ML and analytics by including mainframe data in a data lake with capabilities such as SQL interface, cataloging, audit, and rich metadata

- VAST's all-flash performance provides read speeds to meet any data lake or analytics requirements

- Provides cyber resiliency through the creation of virtual air-gapped copies

- Transfers mainframe data (backed up, archived, and full volume dumps) directly to VAST, requiring no additional hardware / software

- Runs side-by-side with existing backup and tape management software, for simplified migration

- Provides tools for lifecycle management, retention, and expiration of data in the cloud

- Easy to use web UI that doesn't require mainframe skills

SOLUTION ARCHITECTURE

Model9's products are made of two components - a zIIP-eligible agent running on z/OS and a management server running in a Docker container on Linux. The agent reads and writes mainframe data from DASD or tape directly to VAST over TCP/IP. A data set import policy provides automatic discovery of VTL data sets and facilitates transferring large amounts of data to the cloud.

Model9 uses the ELT approach (extract, load, transform), meaning the data undergoes transformation only after it leaves the mainframe. That process is faster and less expensive than traditional ETL (extract, transform, load), where any access to data requires its manipulation on the mainframe. Once the data is on VAST, it can be rapidly transformed to open formats for AI, ML, and analytics.