

MODEL9 AND PURE STORAGE

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. Pure Storage FlashBlade is an ideal destination for that data. One of its main advantages as an all-flash array is top-class performance - a major consideration when examining data management solutions.



MODEL9 MANAGER PROVIDE CLOUD NATIVE MAINFRAME DATA PROTECTION AND DATA MANAGEMENT

Model9 Manager is a product that performs backup, archiving, space management, and disaster recovery directly from the mainframe to FlashBlade, thus eliminating the need for VTLs. Data transfer is efficient, and using FlashBlade provides advantages such as flexibility, reliability, and data sharing. Due to FlashBlade's top-class performance, any type of data restore is carried out ultra-rapidly.



MODEL9 SHIELD PROTECT YOUR MAINFRAME DATA FROM CYBER THREATS

Model9 Shield creates multiple copies of the data on FlashBlade 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, data can be restored ultra-rapidly due to FlashBlade's top-class performance.



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

Model9 Gravity first delivers mainframe data to FlashBlade. The data is then transformed to any open format without utilizing expensive mainframe compute cycles, and without competing on 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.

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

- ◆ Shorten time to full data protection, and AI-, ML- & analytics-based insights, through efficient usage of resources
- ◆ Ensure ultra-rapid data recovery from FlashBlade in the event of a disaster or cyber attack
- ◆ Reduce mainframe MIPS costs
- ◆ Streamline business processes by democratizing the data
- ◆ Simplify procedures and reduce risk, as the solution does not require changes to mainframe applications
- ◆ Maintain data custody with a private cloud powered by FlashBlade
- ◆ Improve data-driven decision making by allowing AI/ML & analytics applications to access mainframe data from FlashBlade
- ◆ Secure mainframe data by protecting it from cyber attacks
- ◆ Keep mainframe data protected and always available, with FlashBlade-based backup, archiving and DR functionalities
- ◆ Replace costly proprietary VTLs with modern cloud-based open technologies

TECHNOLOGICAL FEATURES

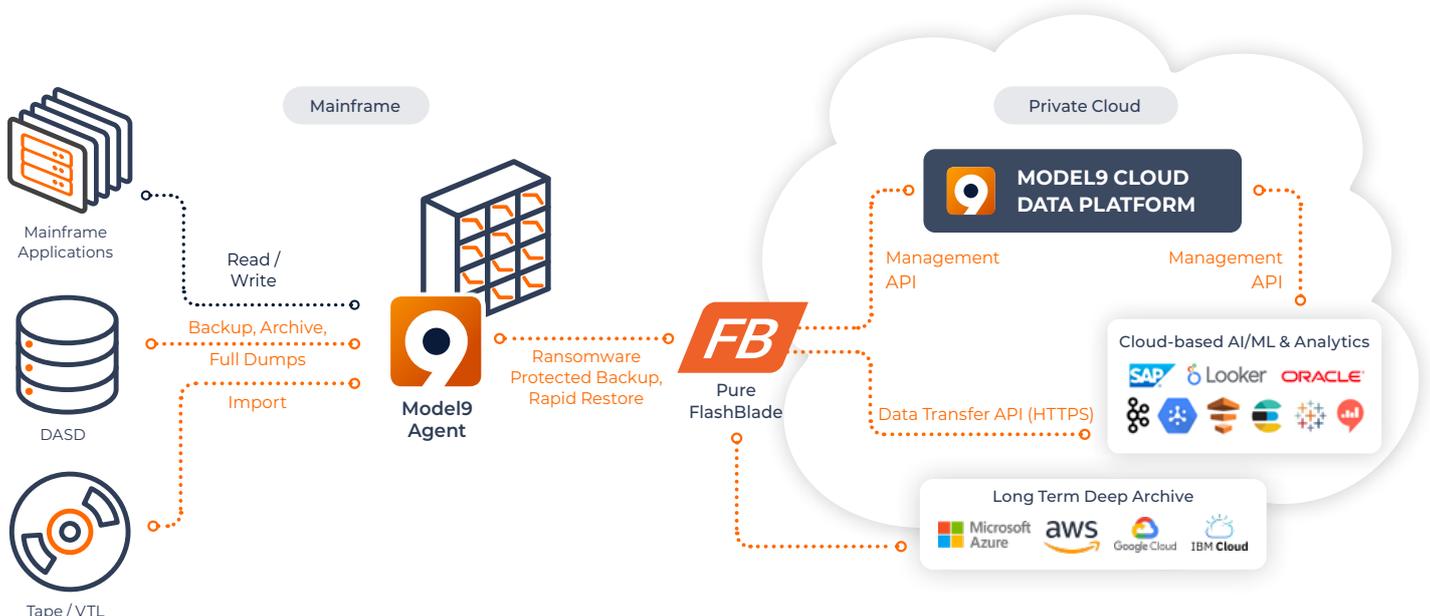
- ◆ Offloads processing to zIIP engines, thus reducing CPU MIPS
- ◆ Transforms any mainframe data, in any format, including DB2, VSAM, sequential and partitioned data sets, to standard open formats such as JSON and CSV
- ◆ Mainframe hardware agnostic, i.e., supports any mainframe data source
- ◆ Improves AI/ML and analytics by including mainframe data in a data lake with capabilities such as SQL interface, cataloging, audit, and rich metadata
- ◆ Provides cyber resiliency through the creation of immutable & encrypted backups and virtual air-gapped 3rd copies
- ◆ Transfers mainframe data (backed up, archived, and full volume dumps) directly to FlashBlade, requiring no additional hardware / software
- ◆ Automates replication and retrieval from FlashBlade to public cloud for long-term archive, while keeping current backup data on FlashBlade
- ◆ Provides tools for lifecycle management, retention, and expiration of data in the cloud

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 Unix. The agent reads and writes mainframe data from DASD or tape directly to FlashBlade 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 FlashBlade, it can be rapidly transformed to open formats for AI, ML, and analytics.

As depicted below, FlashBlade can be installed in a private cloud and automate replication to the public cloud.



FOR MORE INFORMATION: contact@model9.io www.model9.io

