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MODEL9 GRAVITY

MAKE YOUR MAINFRAME DATA ACTIONABLE

Allow AI/ML, File Transfer and Analytics Applications to Consume Mainframe Data Directly from the Cloud

PRODUCT OVERVIEW

Cloud-based data can be leveraged by AI/ML and analytics applications to improve business decisions. But mainframe data, the enterprise's most mission critical, remains locked away. Model9 Gravity solves this problem: it delivers mainframe data of any format to any cloud, so cloud-based applications are able to consume it.

The data is first transferred to the cloud, then transformed to any open data format required by the application. Performing the transformation in the cloud is much faster and significantly less expensive than on the mainframe.

With Model9 Gravity, clients can now move PetaBytes of data between the mainframe and on-premise object storage or cloud object storage such as Amazon Simple Storage Service (Amazon S3) or Azure Blob Storage. The use cases are limitless, ranging from simply moving a file to an object storage platform inside the walls of your data center to moving large files for integration into a cloud application running on a public cloud.

BENEFITS

- Improve data-driven decision making, by allowing AI/ML & analytics applications to consume mainframe data in the cloud
- Cut costs by reducing expensive mainframe CPU consumption
- Shorten time-to-value by efficiently transferring the data to the cloud, performing the transformation in the cloud instead of on the mainframe, and transforming only the subset of data which the application requires
- Streamline business processes by democratizing the data
- Reduce risk, as the process is performed on a copy of the mainframe data, so original data cannot be damaged. Also, mainframe applications do not need to be modified

OFFERING STRUCTURE

Model9 Gravity is built as a product on top of the Model9 Cloud Data Platform, a set of core functions common to all Model9 products. In addition to Model9 Gravity, Model9 offers additional products on top of the platform, including cyber resiliency and data protection & management.



TECHNOLOGY

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

As depicted below, Model9 uses the ELT approach (extract, load, transform), meaning the data undergoes transformation only after its transfer to the cloud. That process is much faster and significantly less expensive than traditional ETL (extract, transform, load), where any access to data requires transformation on the mainframe.



FEATURES

- Offers lakehouse capabilities including cataloging, audit, rich metadata and standard open data formats
- Offloads data management processing to zIIP engines, thus significantly reducing CPU consumption
- Transforms any mainframe data, in any format, including DB2, VSAM, sequential and partitioned data sets, to standard open formats such as JSON and CSV which comply with cloud-based applications
- Mainframe storage agnostic: Supports any DASD and any tape system
- Cloud agnostic: Runs on any cloud, public or private, including AWS, Azure, GCP, HCP and IBM
- Automatically discovers and migrates historical data to the cloud
- Ensures quick delivery from the mainframe to the cloud, using a set of techniques such as parallel processing, data compression, and load balancing, to maximize ingestion throughput

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ENTERPRISE GRADE

Model9 Gravity utilizes all the latest capabilities provided by the IBM zl6[™] technology to offload processing to the IBM® z Integrated Information Processor (zIIP) as well as to available crypto and compression engines. By utilizing the latest capabilities of the IBM mainframe platform Model9 Gravity ensures minimal MIPS consumption and maximal throughput all while enforcing the highest encryption levels and a full integration into the IBM z/OS security architecture. In addition, Model9 Gravity natively supports IBM Parallel Sysplex to allow for parallel file transfers out of multiple Logical Partitions (LPARs) and to ensure continuous availability of your critical file transfer processes.

SUPPORTED HYBRID MULTI-CLOUD PLATFORMS

