MODEL 9 BACKUP AND RECOVERY FOR z/OS
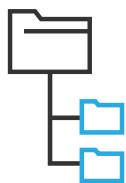
z/OS UNIX SUPPORT

9

Traditional mainframe backup products use proprietary hardware to store backups, run on costly mainframe CPUs and require a high level of expertise to operate. As the amounts of data keep growing and mainframe skills keep walking out the door, companies are looking for ways to manage their backups with greater flexibility and less experienced workforce and reduce operational costs without compromising on data integrity and backup reliability.

Model9 Backup and Recovery for z/OS is a next generation mainframe data management software product that provides backup, recovery, archive, space management, replication, data security, reporting and regulatory compliance using any storage, across the data center and the cloud.

Using patented technology, Model9 performs standard mainframe data management functions while running on zIIP engines instead of CPs, utilizing any open storage system and the cloud instead of tape hardware (such as VTS, VTL, ATL) and consolidating multiple backup and tape management products into a single easy to use solution. This approach modernizes mainframe backups, dramatically reduces costs and complexity and provides a complete replacement of existing tape hardware and software.

z/OS UNIX FILE-LEVEL BACKUP AND RECOVERY

Model9 supports z/OS UNIX file-level incremental backup and restore, which saves backup space and shortens backup window by only backing up changed files in the z/OS UNIX file system, in contrast to backing up the complete filesystem every time a UNIX file is changed. During recovery, only the specifically needed UNIX files are restored directly to the UNIX file system, without having to restore the whole filesystem data set first. Model9 supports all UNIX file types and extended attributes.

HOW IT WORKS

The Model9 Server is used to define, control and manage the entire lifecycle of your backup and recovery processes. The server communicates with an agent that runs on z/OS that uses standard z/OS data interfaces.

The Model9 Agent is a Java application running on z/OS that performs various data management functions for the server by interfacing with standard z/OS data services. Agent processing is zIIP-eligible. The agent securely transfers data over TCP/IP directly to the server.
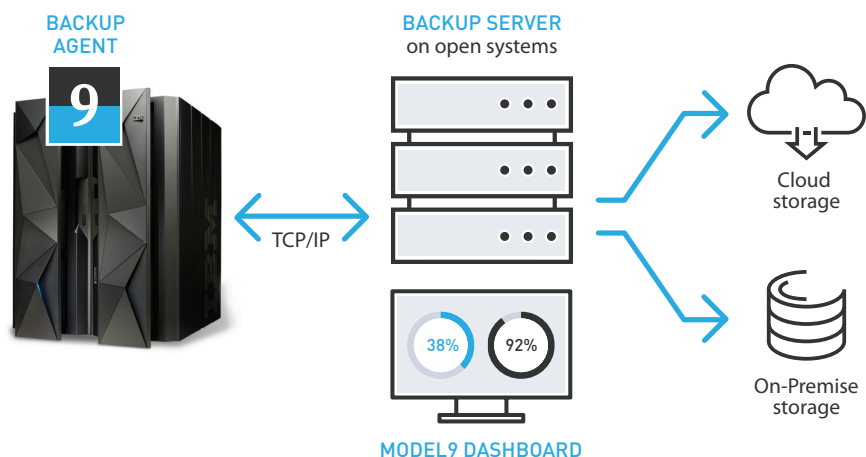
BENEFITS

Reduce costs and save MSUs by offloading backup processing to zIIPs, IFLs and open systems

Gain total flexibility in storage options by using any storage system for your backups: on the mainframe, on open systems or in the cloud

Enhance backup reliability with automatic recovery tests, detailed reports, real-time notifications and built-in encryption

Simplify daily backup operations, allowing less experienced personnel to manage backups with an easy to use web UI and seamless integration to existing operational workflows

The server supports any storage system for storing mainframe backups. Options include directly attached storage, NAS, SAN and cloud storage. All data written to the server storage system is compressed and encrypted. The server storage replaces existing backup and archive storage (such as VTL, VTS, ATL).
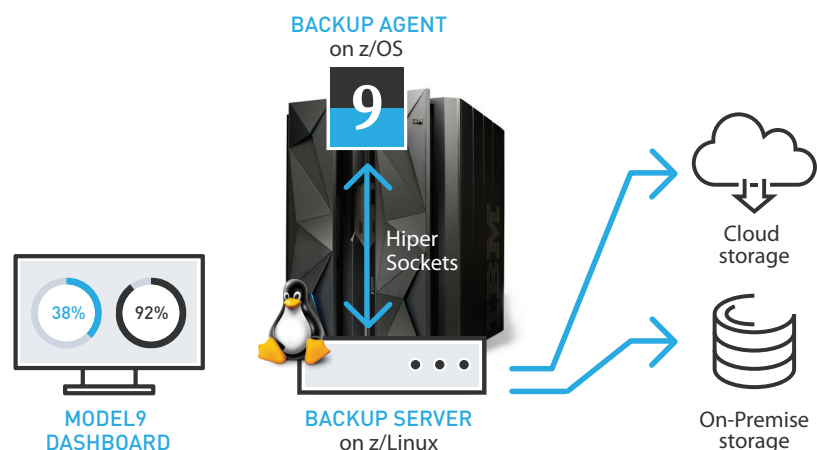
BACKUP AGENT

9

BACKUP SERVER
on open systems

TCP/IP

Cloud storage

On-Premise storage

38% 92%

MODEL9 DASHBOARD

RUNNING THE SERVER ON z/LINUX

When running the server on z/Linux, the server and agent communicate over HiperSockets, data is transferred in memory and never leaves the mainframe host. Using high speed HiperSockets as the communication link enables shortening the backup window.

Since the data does not leave the mainframe host, encryption for data in motion may not be required and may free additional CPU resources. TCP/IP processing in z/OS for sending data over HiperSockets is zIIP-eligible.

Running the server under z/Linux provides the flexibility to use any storage system, including DASD, SAN, NAS and cloud storage.

BACKUP AGENT
on z/OS

9

Hiper Sockets

38% 92%

MODEL9 DASHBOARD

BACKUP SERVER
on z/Linux

Cloud storage

On-Premise storage

SYSTEM REQUIREMENTS

Backup server
The backup server supports running on both distributed systems and on Linux on z.

Distributed systems
Minimum recommended hardware:
• 2 x dual-core CPUs
• 4 GB memory
• 10 GbE network adapter

Supported operating systems
(may run under VM):
• Windows server
• Linux server

Linux on z
Minimum recommended hardware:
• 2 IFLs
• 4 GB memory
• 10 GbE OSA

Supported operating systems
(may run under z/VM):
• Ubuntu server
• Red Hat Enterprise Linux
• SUSE Linux Enterprise Server

Backup agent
Minimum recommended hardware:
• 2 CPs, 1 zIIP
• 4 GB memory
• 10 GbE OSA

Additional supported hardware:
• zEDC Express
• Crypto Express

Operating system prerequisites:
• z/OS V1R13 and up
• Java 8 31-bit