

# Mainframe Data in Real-Time for Faster Business Insights

To successfully compete, businesses that rely on mainframes need immediate, real-time insights into their customers, the market, and how the business operates. Access to real-time data helps business leaders make faster, more informed decisions. Because enterprise data is distributed across multiple platforms, formats, and locations, many organizations find it difficult to quickly identify new revenue opportunities or respond to threats. Historically, businesses Extract, Transform, and Load (ETL) data into a data warehouse, yet information produced by this costly and time-consuming method is typically outdated as soon as it is available. The sheer volume and variety of today's data call for a more modern approach. Rocket® Data Virtualization (RDV) creates virtual views of data and enables you to access mainframe data in one place without moving, replicating, or transforming it. By bringing analytics closer to data, RDV saves you time and money. You can combine mainframe data in your applications with data from other enterprise sources to gain real-time insights into potential risks, customer needs, and market opportunities without adding load to your general processor and increasing software monthly license charges.

## Turn business insights into revenue opportunities

Without real-time access to mainframe data, you don't have a comprehensive picture of your customers, limiting the opportunity to offer enhanced customer service and real-time target marketing.

Every credit card swipe or online purchase provides real-time customer data. Enriched with sources such as social media, location, and brand preference, firms can anticipate customer preferences. For example, a wealth manager might leverage RDV to provide real-time data (structured and unstructured) to create a client report on unrealized gains/losses to immediately promote a new investment opportunity. RDV lets your organization use mainframe data in real-time transactions without the cost, complexity, and delay associated with ETL or hard-coded connectors. You can integrate mainframe data transactionally with other enterprise data instantly without waiting for new data to be loaded into the data warehouse. Business analysts gain immediate access to the information business leaders want. Because RDV workloads are eligible to process on the IBM® Integrated Information Processor (zIIP), a mainframe specialty engine, it doesn't impact mainframe capacity usage. As a result, data is available when you need it, in the form you need, with reduced cost and complexity.



Transform business insights into revenue opportunities with real-time data



Reduce business risk through faster identification of threats and operational failures



Eliminate the cost and complexity of moving mainframe data



## Reduce business risk through faster identification of threats and operational failures

Companies in the financial services sector face increased pressure from new competitors, regulatory compliance requirements, and cyber-attacks. Technical leaders in this space lack easy access to the mainframe's raw operational data that provides real-time insights into potential security risks, compliance issues, and systems readiness. Mainframes traditionally rely on log-based replication to capture operational data in System Management Facility (SMF) records. The data is collected and written to logs that must be extracted and manipulated into a format for analytics. It can take hours for SMF information to reach the executive responsible for security or compliance. This delay can lead to security breaches, compliance violations and fines, or even system failure. Unlike other products on the market, RDV provides immediate access to mainframe SMF data, intercepting it in flight while it is being collected and written to the record. This capability is possible because RDV resides natively on the mainframe and leverages a new IBM API for in-memory access to SMF data. With RDV, the SMF data is available immediately in a format that can be used for analysis without any mainframe processing costs, so you can address threats before they impact your risk profile or affect operations.

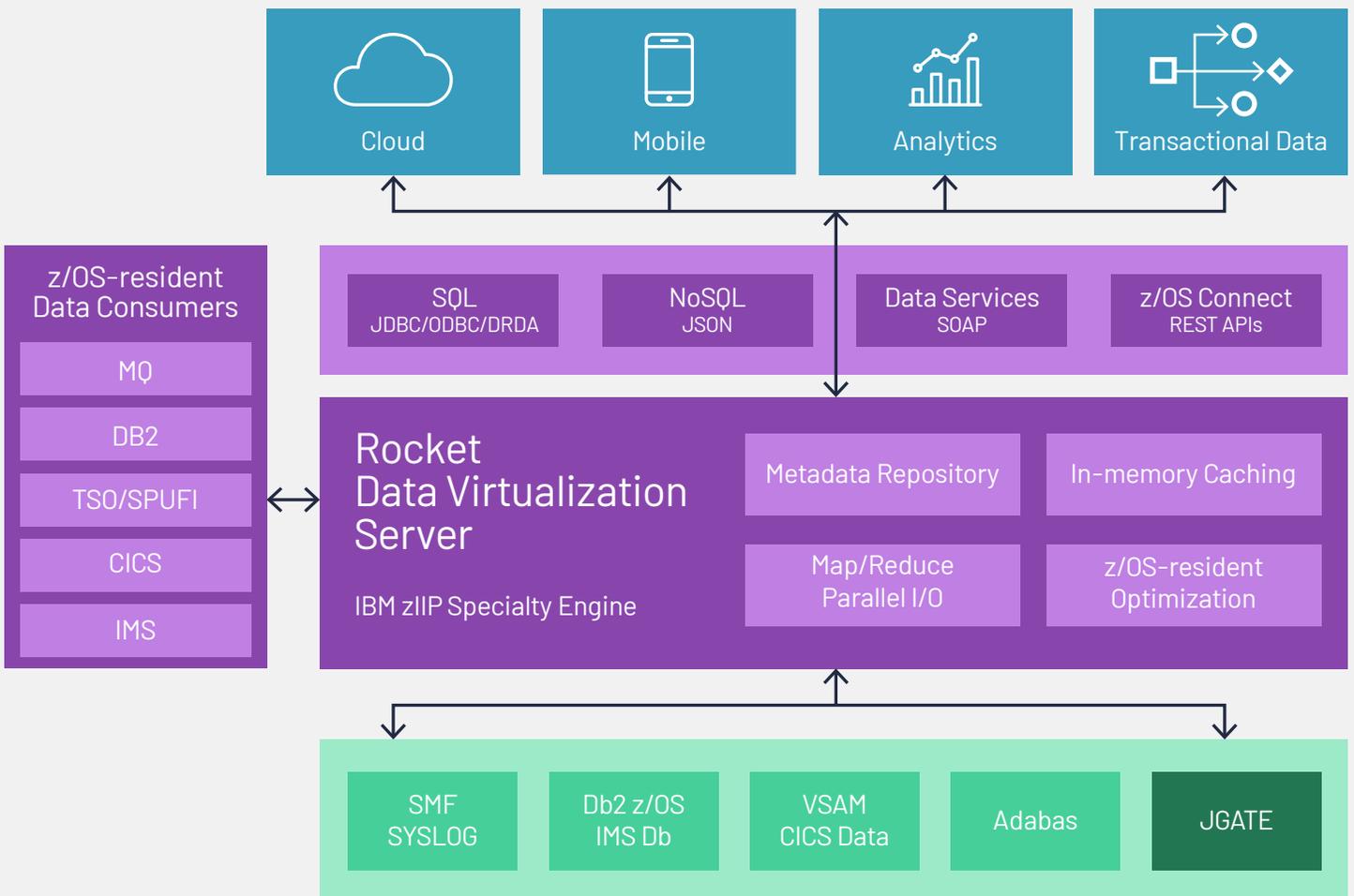
## Eliminate the cost and complexity of moving mainframe data

In the mainframe world, using ETL to move data is a well-established and useful practice for aggregating large volumes of data for broad analysis. Increasingly, organizations realize that there is simply too much data and not enough time to move it into an enterprise data warehouse. The delay associated with moving mainframe data continues to grow. Plus, ETL-related data movement typically consumes nearly 20 percent of total mainframe processing capacity—a necessary investment for broad analysis that is not time-sensitive. Many data scientists recognize that using ETL to access mainframe data is no longer efficient or responsive enough to meet the real-time requirements of the lines of business. RDV offers a cost-efficient option for providing mainframe data in the right format at the right time. It is an alternative to ETL in some critical cases, particularly those that need to provide real-time views of mainframe data transactionally to your applications or users' screens. Because RDV runs almost exclusively on zIIP, it doesn't consume mainframe General Purpose Processor capacity (on which monthly license charges are based). It can significantly reduce mainframe costs for many use cases compared to ETL.<sup>1</sup>

RDV simplifies the process of combining mainframe IMS, physical sequential, Db2®, Adabas, and VSAM data to create virtual views inside your application with other data outside the mainframe. It enables organizations to gain faster insights into customer buying preferences, service issues, and real-time threats of security breaches.

Up to 99 percent of RDV processing runs on the zIIP mainframe specialty engine, bypassing the mainframe General Purpose Processor, significantly reducing mainframe TCO.

<sup>1</sup> See Figure 1 on next page



**Figure 1:** Rocket Data Virtualization architecture showing data consumers, data providers, and the z/OS®-based data virtualization server

## Customer Story

A large national insurance carrier in North America wanted to easily integrate and share enterprise data to make its analysts more self-sufficient while accommodating their IT staff, who have little mainframe expertise. They required a solution that could eliminate the need for their developers to be aware of where the data (IMS, VSAM, Db2, etc.) was originally sourced, the underlying subsystem that supported it, or the mainframe format of the data (relational, non-relational, sequential, etc.). To streamline the process, the firm implemented a solution that included RDV, which reduced IT infrastructure complexity and overhead while eliminating the programming associated with bulk data movement. Analysts could work independently to deliver more comprehensive, timely customer and operational information coupled with market data to maximize growth opportunities for client investment portfolios to executives, customer service, and others.

# Tech Specs

## SERVER SPECIFICATIONS

### Hardware Requirements

- zEnterprise 114 (z114), IBM zEnterprise 196 (z196), or a more recent IBM mainframe model

### Software Requirements

- IBM z/OS v1.13 or later
- Adabas, v4.2.3 or later
- IBM DB2 v9.1 or later
- IBM IMS v8.1 or later CLIENT DRIVERS
- Java Database Connectivity (JDBC) Java Virtual Machine 1.8 or higher
- Open Database Connectivity (ODBC) Runs on the following operating systems:  
Windows; AIX, HP-UX; Linux; Red Hat Enterprise Linux; SUSE Linux

## STUDIO

- Windows 11 (64-bit) or Windows 10 (32-bit and 64-bit)
- Hard disk space: Minimum of 2 GB is recommended for a full install
- A full install includes the Studio product installer (approximately 1 GB) and bundled Eclipse 2020-06 and OpenJDK 11a software  
System memory: Minimum of 4 GB is recommended

# About Rocket Software

Rocket Software partners with the largest Fortune 1000 organizations to solve their most complex IT challenges across Applications, Data and Infrastructure. Rocket Software brings customers from where they are in their modernization journey to where they want to be by architecting innovative solutions that deliver next-generation experiences. Over 10 million global IT and business professionals trust Rocket Software to deliver solutions that improve responsiveness to change and optimize workloads. Rocket Software enables organizations to modernize in place with a hybrid cloud strategy to protect investment, decrease risk and reduce time to value. Rocket Software is a privately held U.S. corporation headquartered in the Boston area with centers of excellence strategically located throughout North America, Europe, Asia and Australia. Rocket Software is a portfolio company of Bain Capital Private Equity. Follow Rocket Software on [LinkedIn](#) and [Twitter](#).



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