PRODUCT CATALOG

Modernize and Innovate Your MultiValue Application to Stay Ahead
Modernize and innovate without replatforming

Your organization has invested in your business-critical MultiValue-based applications over the course of years. And ensuring those applications can adapt and grow alongside your organization means more return on those investments for years to come. Rocket Software offers the largest range of modernization solutions for the MultiValue (MV) Application Platform that help you avoid risky, costly replatforming initiatives. Analysts like IDC, Gartner and Forrester agree that modernization strategies continue to move to the top of the list for most CIOs. Experts recognize that improving and growing existing technologies is the most reliable route to a better outcome.

Let Rocket be the engine in your modernization journey and help you develop and implement strategies that take full advantage of your Rocket MultiValue Application Platform.

Modernizing your MV-based application with Rocket means you can:

✔ Increase productivity with development tools and modern programming languages that are easy to use, efficient, and address the skills gap while optimizing the performance of your business application

✔ Simplify integration and monetize your data with lightweight, zero-install client applications with Open APIs

✔ Decrease time-to-market by implementing continuous integration, continuous delivery (CI/CD) including cloud, on-premises or hybrid cloud deployment and containerization

We offer solutions and strategies to ensure you continue to reap the benefits of your investment in MultiValue.
Get even more value from MultiValue

By offering modern solutions, we’re helping you bring new life to your Rocket MV-based applications. Without making major changes to the underlying technology, you can preserve your business and proprietary logic and maximize your investment in MV.

Rocket helps you meet various challenges so you can increase productivity and spur modernization through:

- Increasing business opportunities and monetizing data by joining and thriving in the API economy
- Attracting new development talent to support retiring developers
- Deploying new releases faster on-premises, in a hybrid environment, and in the cloud to meet customer needs
- Implementing performance-monitoring tools to ensure your MV application platform is running at its peak
- Ensuring your app is available 24/7 without disrupting customers
- Updating some internal green-screen UIs for improved productivity and staff retention
- Extending your MV app to any device
Increase business opportunities and monetize data by joining and thriving in the API economy

Rocket MultiValue application servers have allowed you to take part in the API economy for years. But if your MV app pre-dates the internet, don’t worry! Rocket MV offers many options for developing and using APIs to:

- Build integrations to other systems
- Quickly add features to your MV app
- Work with a new partner to take advantage of business opportunities
- Get new applications and features to market faster

By exposing years of MV business logic and data via APIs, you can leverage newer, feature-rich applications for a competitive edge. And if you choose the Rocket® MultiValue Integration Server (MVIS) to enable new APIs, you’ll also benefit from automatic Swagger definitions, which are easy to understand, test and consume, and open business opportunities with partners and third-party vendors.

Rocket MVIS also generates services without having to write code, giving you low-code/no-code application development capabilities.

Attract and keep development talent

Give your developers a modern, powerful editor to code in BASIC—without the need to know BASIC—that runs everywhere! With thousands of available extensions, Rocket® MV Basic for Visual Studio Code offers both greater productivity and flexible customization with proven extensibility.

We also provide native Python language support. In addition to being a top language that new developers learn in school, Python has the added benefit of allowing your BASIC developers to leverage the Python open-source library. Hundreds of thousands of solutions at your fingertips let you quickly add new features to improve your application (i.e. using a Python module to quickly enable sending SMS text messages from your MV app). You can also access MV data and existing business rules that are stored in a Rocket MV Application Platform environment. The release of Rocket UniObjects for Python (UOPY) completes our Python full-stack offering. UOPY with Rocket U2 Python means developers can use Python on the server and client tiers.

Paired with MVIS, automatic Swagger definitions make another great tool for new developers unfamiliar with MultiValue.
Modern administration, deployment and monitoring capabilities

If you’re trying to leverage cloud capabilities, Rocket MVIS helps you go from on-premises to hybrid cloud and allows you to expand gradually. When you use Rocket MVIS, you make your apps cloud-ready and cloud-aware. You could empower your MV app to use Amazon S3 or Azure Blob Storage to store unstructured data, and much more. This means your applications can consume cloud services, letting your apps take advantage of an infrastructure that can grow and shrink according to demand.

You can also seamlessly move cloud-aware apps on and off premises, providing the ability to optimize location, cost, capabilities, and risk. Since all MVIS instances share the same configuration files, cloud deployment is easy. MVIS can run in a container and offers deployment automation with orchestration technology such as Kubernetes. Your application also becomes more valuable since it can now leverage services offered by cloud providers such as Amazon’s CloudWatch Application Insights for visibility into application health, or Azure’s Application Insights performance stats.

Does your app still have green screens?

Rocket® LegaSuite® Web is the ideal solution for modernizing your green-screen application experience without changing existing business logic or data. If you want to integrate multiple green-screen workflows without changing existing business logic, pair LegaSuite with Rocket® API to get even more value from your data and applications.

Rocket® wIntegrate®, a terminal emulation and graphical user-interface development product, lets you integrate and transform character-based MV applications quickly and cost-effectively so that you can revitalize existing applications with GUIs.

Modernize and extend your MV-based applications to mobile devices

There are many ways to extend your app to mobile devices with Rocket MVIS, which helps you quickly and easily expose MultiValue data and logic as RESTful services and enables integration with modern web applications and services. For example, you could use MVIS and the Flutter framework (an open-source solution from Google) to modernize your existing MV app with a native Android/iOS mobile solution.
Rocket MV BASIC for Visual Studio Code
FOR APPLICATION DEVELOPERS, DEVELOPMENT MANAGERS, DB ADMINISTRATORS

MV BASIC for VS Code will be released in stages starting with the Editing experience in Q1 2021.

One Stop Development

✓ A powerful, modern editor that runs everywhere
✓ Strong community support and thousands of extensions for productivity
✓ Flexible customization and strong extensibility
✓ Language-independent, cloud-friendly and browser-based development

STAGE 1:
BASIC program editor

STAGE 2:
Compile and build program

STAGE 3:
Powerful debugging

STAGE 4:
Integrated terminal

STAGE 3:
Version control

STAGE 4:
Scalability

PRODUCT OVERVIEW

Increase business opportunities and monetize data by joining and thriving in the API economy

Attract and keep development talent

Modern administration, deployment and monitoring capabilities

Does your app still have green screens?

Modernize and extend your MV-based applications to mobile devices
Rocket API
FOR APPLICATION DEVELOPERS, DEVELOPMENT MANAGERS, ADMINISTRATORS

Build new web and mobile apps on top of your MultiValue solutions to provide intuitive, contextual navigation that improves staff productivity and efficiency, and reduces employee training and turnover.

✓ Produce more effective workflows and enable greater productivity by combining actions from multiple screens
✓ Create new capabilities for an improved user experience by extracting and combining specific information from each green screen
✓ Improve developer productivity by making it simple to share code, saving time and money
✓ Provide a valuable source of connectivity for others who need access to your business systems

Rocket LegaSuite Web
FOR APPLICATION DEVELOPERS, DEVELOPMENT MANAGERS, ADMINISTRATORS

Rocket® LegaSuite® Web helps you create fresh, modern interfaces for your applications, and extend application interfaces to web browsers, smartphones, and tablets.

Extending MV Modernization with Rocket API and LS web

✓ Write once and run on any OS, platform, or device
✓ Transform green screens to web UIs 1:1
✓ Dynamically generate web UI fields
✓ Improve navigation and look-and-feel
✓ Simplify training and deployment
Rocket MultiValue Integration Server
FOR APPLICATION DEVELOPERS, DEVELOPMENT MANAGERS, ADMINISTRATORS

Our new Rocket MultiValue Integration Server (MVIS) lets you expose your MV data and logic as RESTful services and enable integration with modern web applications and services. Using MVIS, you can build on your existing investment and augment your environment with the latest technology, which can live side-by-side with your existing MV application.

- Get new applications and features to market faster
- Elastically scale your deployments up and down to respond to demand—expected with modern CI/CD and DevOps environments—for optimized user experiences and 24x7x365 availability
- Minimize costs with flexible and efficient deployment options; use MVIS in conjunction with Kubernetes and Docker to automate deployments on your favorite cloud providers as well as on-premises
- Operate both on the cloud and on-premises
- Take advantage of robust monitoring capabilities for insights on the operation of your MV REST services

MultiValue Integration Server (MVIS)

- Web Application
- Mobile Application
- B2B Application
- Orchestration (Kubernetes, ECS)
- RESTful/Swagger
  - Low-Code/No-Code
- API and DB
  - Logging/Monitoring
- MVIS
- Web Admin
  - Console
- Horizontal Scaling
  - and Failover
- MV Application Server
  - (UniVerse, UniData)
- SB/XA Services

Increase business opportunities and monetize data by joining and thriving in the API economy
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Rocket UniObjects for Python (UOPY)
FOR APPLICATION DEVELOPERS, DEVELOPMENT MANAGERS, DB ADMINISTRATORS

Rocket® UniObjects for Python (UOPY) is a client-side Python API for accessing a UniData or UniVerse database over the network.

- Provides remote access to MV servers in Python
- Offers full stack development in Python: from web server (UOPY) to database back-end (u2py)
- Gives you the ability to leverage the Python ecosystem with many third-party libraries
- Enables rapid application development
- Delivers an open and extensible UniObjects client
- Helps you attract new development talent

Rocket u2py
FOR APPLICATION DEVELOPERS, DEVELOPMENT MANAGERS, DB ADMINISTRATORS

Rocket® u2py is a server-side C extension that’s closely integrated with the database server and the Python version for extending server-side BASIC applications, and stand-alone server-side pure Python applications.

- Enables rapid application development
- Helps with hiring/retaining new development talent

Full Stack Python
Full stack development in Python: from web server (UOPY) to database back-end (u2py)

Multivalue
MV Servers (UniVerse, UniData)
**PYTHON**

ROCKET ENABLING SOLUTION
Rocket UniVerse 11.3.1 and up with u2py and/or UOPY; UniData 8.2 and up with u2py and/or UOPY; D3 10.3.1 and up with Python enabled.

USE CASE
Python empowers the next generation of MV software engineers to develop UI-rich Python applications by easily integrating to an existing MV data structure. Python, the language that this generation already knows, allows them to easily work with flexible MV data structures, all without learning any new development language! This ability for MV to connect with the open source world of Python unlocks opportunities such as embedding native Python objects into existing MultiValue applications, or exposing MultiValue applications to a Python application.

BENEFITS
- Enables rapid application development.
- Helps with hiring/retaining new development talent.

EMPLOYEE ROLE
- Application Developers
- Development Managers
- DB Administrators

**FLUENTD**

ROCKET ENABLING SOLUTION
Rocket UniVerse 11.3.2 and up with MVIS; UniData 8.2 and up with MVIS; D3 10.2 and up with MVS Toolkit.

USE CASE
Access to historical & trending analysis, root-cause analysis using FluentD integration. This open-source data collector for building the unified logging layer can work with Nagios for alerts; MongoDB and Hadoop for big data; Splunk, Elastic Search for log management; and Datadog and Graphite for monitoring.

BENEFITS
Root Cause Analysis results in significant improvements to quality and reliability by focusing the team’s attention on the most likely functions that could contribute to these problems, and the most likely causes contributing to poor performance, quality or reliability.

EMPLOYEE ROLE
- Application Developers
- Development Managers
- DB Administrators
- IT Ops
AWS (AMAZON) AND AZURE (MICROSOFT)

ROCKET ENABLING SOLUTION
Rocket UniVerse 11.3.2 and up with MVIS; UniData 8.2 and up with MVIS; D3 10.2 and up with MVS Toolkit.

USE CASE
Build, deploy, and manage your MV apps on a secure, reliable network.

BENEFITS
• Boosts cost efficiency.
• Provides flexible pay options.
• Promotes collaboration.
• Increases mobility.
• Aids disaster recovery.

EMPLOYEE ROLE
• IT Ops
• DB Administrators
• Development Managers

SWAGGER

ROCKET ENABLING SOLUTION
Rocket UniVerse 11.3.2 and up with MVIS; UniData 8.2 and up with MVIS; D3 10.2 and up with MVS Toolkit.

USE CASE
Swagger provides an easy-to-understand specification for documenting and designing REST APIs. Swagger definitions are automatically created when you write your API or import from U2 RESTful.

BENEFITS
Swagger is a set of open-source tools built around the OpenAPI specification that can help you design, build, document, and consume REST APIs.
• This low code/no-code approach makes API creation and usage easy.
• Can be developed by non-MV developers.
• Attracts an entry-level talent pool that doesn’t have to know MV architecture.

EMPLOYEE ROLE
• Application Developers
• Development Managers
• Administrators
**KUBERNETES**

**ROCKET ENABLING SOLUTION**

Rocket UniVerse 11.3.2 and up with MVIS; UniData 8.2 and up with MVIS; D3 10.2 and up with MVS Toolkit.

**USE CASE**

Kubernetes, an open-source system, is used for automating deployment, scaling, and management of containerized applications.

**BENEFITS**

The deployment automation Kubernetes offers is all about DevOps, cloud readiness and CI/CD trends and being able to:

- Automatically manage applications
- Reduce cost of ownership
- Speed time to market
- Offer continuous delivery of features
- Improve productivity
- Attract new development talent
- Future-proof your app

**EMPLOYEE ROLE**

- Application Developers
- Development Managers
- DB Administrators
- IT Ops

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**NODE.JS**

**ROCKET ENABLING SOLUTION**

MVIS

**USE CASE**

NODE.js is a JavaScript runtime designed for network applications you can use to extend your MV app to the web and mobile devices using RESTful web services.

**BENEFITS**

Node.js, common for web application development, is often coupled with RESTful APIs, for a robust technology stack:

- Better efficiency and overall developer productivity
- Code sharing and reuse
- Speed and performance
- Easy knowledge sharing within a team
- A huge number of free tools
- Fast-processing and event-based model
- Seamless JSON support

**EMPLOYEE ROLE**

- Application Developers
- Development Managers
- Administrators
**React**

**Rocket Enabling Solution**
Rocket UniVerse 11.3.2 and up with MVIS; UniData 8.2 and up with MVIS; D3 10.2 and up with MVS Toolkit.

**Use Case**
React, a JavaScript library for building user interfaces, helps you extend your MV app to web and mobile devices using RESTful web services.

**Benefits**
The virtual Document Object Model (DOM) in React makes the user experience better and a developer's work faster. It offers:
- Permission to reuse React components to significantly save development time
- One-direction data flow in ReactJS provides stable code
- An open-source Facebook library with constant development that is open to the community
- React Hooks for improved state management

**Employee Role**
- Application Developers
- Development Managers
- Administrators

**APIs**

**Rocket Enabling Solution**
Rocket UniVerse 11.3.2 and up, UniData 8.2 and up with MVIS; D3 10.2 and up with MVS Toolkit.

**Use Case**
Easily create a library of APIs for partners to consume.

**Benefits**
Expands integration points since you can create a library of APIs for application access allowing you to:
- Eliminate barriers to customers and partners using your system
- Promote innovation in how your partners and customers integrate with your system
- Gain and use customer insights
- Streamline operations by creating and maintaining long-term, profitable business relationships

**Employee Role**
- Application Developers
- Development Managers
- Administrators
**FLUTTER**

**ROCKET ENABLING SOLUTION**

Rocket UniVerse 11.3.2 and up, UniData 8.2 and up with MVIS; D3 10.2 and up with MVS Toolkit.

**USE CASE**

Extend your MV app to web and mobile devices using RESTful web services.

**BENEFITS**

- Same UI and business logic in all platforms.
- Reduced code development time.
- Speed up time-to-market.
- Similar to native app performance.
- Custom, animated UI of any complexity available.
- Own rendering engine.
- Simple platform-specific logic implementation.
- The potential to go beyond mobile.

**EMPLOYEE ROLE**

- Application Developers
- Development Managers
- Administrators

**OPENSSL**

**ROCKET ENABLING SOLUTION**

Rocket UniVerse 11.3.2 and up, UniData 8.2 and up with MVIS; D3 10.1 and up with MVS Toolkit.

**BENEFITS**

Business websites need SSL to:

- Safeguard business data
- Secure customer information
- Inspire trust and boost conversions
- Improve overall SEO

**USE CASE**

For encryption, data in transit stays private and data is only revealed to communicating parties.

For verification, data integrity is checked (verified untampered) and identities verified via certificates from trusted authorities.

**EMPLOYEE ROLE**

- Application Developers
- Development Managers
- IT Administrators
- IT Operations Managers
- Chief Information Security Officers (CISOs)
How one Rocket partner keeps their application modern

When you buy furniture, your salesperson is probably using a retail application built on a Rocket MultiValue Application Platform from STORIS, Inc. While the STORIS solution has its roots in the business logic embedded in Rocket® UniData®, STORIS has continued to embrace modern languages and paradigms. For example, STORIS’ latest offering is a fully browser-based and responsively designed single-page application leveraging Node.js microservices. This application and its microservices are completely cloud deployed using Microsoft Azure’s Managed Kubernetes service. Although designed from the ground up, this new application continues to depend on the UniData MultiValue Application Server while gaining modern features by employing the new Rocket MVIS for both STORIS’ cloud-based and on-premises customers.

Plan your upgrade now!

We want you to get the most value out of your support and maintenance investments and be able to take advantage of vital modernization options. We can help extend the ROI of your proven applications by giving you the best experience, performance, and service. Upgrading your MV application platform and being on a GA release is a best practice.
Rocket MV Application Platform upgrade best practices

Avoid security vulnerabilities: Stay current with the latest security patches and security best practices that are developed within the MV application platform code. Security is our number one focus—especially in recent years—and we are constantly providing security features and updates to protect your critical business data from unauthorized access and malicious attacks.

Upgrade annually for improved confidence going forward: The closer the version numbers are to each other, the easier it is to upgrade since the number of changes between sequential version is smaller. Another benefit of staying current is the additional testing we run on the more popular upgrade paths.

Avoid compliance issues due to product lifecycle impacts: We gradually transition past product versions through the various lifecycle stages. Don’t be stuck on a release that is—or is likely to become—End of Support (EOS) where technical support is no longer equipped to reproduce your problem, or End of Limited Support (EOLS) where new or additional licenses are no longer available.

Help drive new feature development: Being on a GA release allows you to participate in alpha/beta programs and give us feedback. There is no better time to give input to our product team than when we’re in the design and development stages of a new feature or product.

Take advantage of the best new features: The best ideas from customers are integrated and only available in the latest versions of the MV products. Enhancements designed to give you a competitive advantage, and updated experiences, are always our top priority. If you’ve delayed upgrading for three or more years, there are many new and exciting product features waiting to help you manage, secure, share, scale, and harness the power of your data.
Next steps

No matter where you are on your modernization journey, we can help. In addition to keeping your app on a GA version of your Rocket MV Application Platform, you can also look to us for free trial software and experts who can provide demos and answer questions.

ASK AN EXPERT

Rocket Software empowers organizations to create legendary impact in the world through innovation in legacy technologies. With deep expertise in MultiValue, Rocket solutions power tens of thousands of global businesses, solving real problems and making real-world impact.