

Rocket[®] API

Extend existing applications into new web and mobile experiences

To grow your business and stay competitive, you need to provide customers, partners, and employees easy access to the data and applications they need, when they need them, and how they need them. If your customers can't see their account history, or partners can't get a real-time view of inventory next to their incoming orders, they might give up and go elsewhere. Your challenge is to free that critical information from your host platforms so it can be accessed easily by modern web and mobile applications—while keeping your applications highly available and secure.

Rocket[®] API helps you unlock the valuable information that's stored in your host applications for use virtually anywhere: cloud, mobile, self-service applications, and more. Using Rocket API, you can turn your proven, host-based systems into modern API-enabled platforms utilizing SOAP or RESTful services, making it easy to integrate core business functionality into web or mobile experiences. With its singular approach, Rocket API enables developers to create application APIs from host-based applications—without requiring modifications to the underlying source. Built-in intelligence ensures that codebase changes do not break the connection between your APIs and the applications that call them.

As a result, you can modernize these applications without the time, expense, or risk normally associated with modernization efforts. You can even employ monitoring and management functions to ensure peak performance, prioritize access, or monetize your code assets.

Rocket API fits into any current application infrastructure using a low-code model—eliminating the need to write new application code. It deploys to any local, cloud, or hybrid environment.

Product benefits

- 1 Build host application functionality into web and mobile assets for improved employee productivity and customer satisfaction
- 2 Speed delivery of new competitive capabilities to customers and business users
- 3 Easily deploy, manage, and secure your APIs





Build host application functionality into web and mobile assets for improved employee productivity and customer satisfaction

Logistics, eCommerce, banking, and more are all performed on the web and with mobile devices. Your application users expect this level of functionality from you, and if you don't provide it, they'll go somewhere else.

Rocket API enables you to extract discrete functionality and data from your host systems that was previously difficult or impossible to get, and make those capabilities available to virtually any application. You can provide the transactional data that runs your business—from one source or many—to the people who need it.

For example, a retailer can now combine order information collected from a point-of-sale terminal with data from an inventory management system into a composite API that is used by applications for both store workers and shoppers. This enables salespeople to be more responsive to customers and ensure proper inventory levels, while web and mobile shoppers can enjoy a better online shopping experience and know what's available before ordering.

With Rocket API, you can reuse your tried-and-true host application to provide new value instead of incurring the time, expense, and risk of writing a new solution from scratch.



Speed delivery of new competitive capabilities to customers and business users

Development teams often must give users complex new functionality under tight deadlines. This can be daunting when it involves extracting data and logic from applications that have been in place for many years. Even when the applications are still being actively maintained, many of them have underlying code that isn't correctly documented or well understood by current development staff. Invasive changes can be risky, and additional time is often needed to prepare, develop, and test to minimize any downstream problems. In other cases, all or part of an application may be completely untouchable due to business rules, missing source code, or because it's a proprietary vendor solution.

With Rocket API, you can quickly create new application workflows without changing the existing code in your critical applications. Your developers can now isolate these key system capabilities and workflows, and turn the latter into easily-connectable APIs using a no-code visual interface. These APIs can then be embedded into new user experiences and combined with other capabilities to deliver increased convenience and added functionality—without risk to the underlying systems. The logic behind those newly created APIs can even be adjusted at any point without changes to the end-user experience. Bimodal development—supporting rapid application development for digital innovation priorities and existing application maintenance in parallel—is also easy, since Rocket API integration takes place at the service layer rather than with the application code, enabling a loose coupling between the calling application and the API.

Not every API requirement is workflow-based. Rocket API supports multiple approaches to wrapping applications, data, and logic to meet a wide variety of needs.





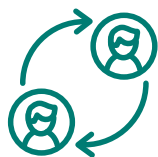
Easily deploy, manage, and secure your APIs

API administration is complex, with multiple moving parts and SLAs to address, as well as concerns about access. If anything goes wrong due to poor performance, unauthorized access, or deployment errors, your application could be at risk.

Rocket API helps you maximize the effectiveness of your APIs by providing tools to deploy, manage, and secure them with ease (see diagram). The Rocket Access and Connectivity Hub (shown below), a component of Rocket API, provides a central location for you to deploy your APIs correctly, secure the APIs with role-based access, identify individual users who access your APIs, and monitor overall API use for performance optimization and API monetization. You can even tier gateway access based on SLAs to ensure that your high-priority users always have the access they need.

// Before, we built APIs to our mission-critical IBM i applications manually with Java; with Rocket, it now takes developers less than half the time to do the same job. //

James Owens
CTO, OneMain

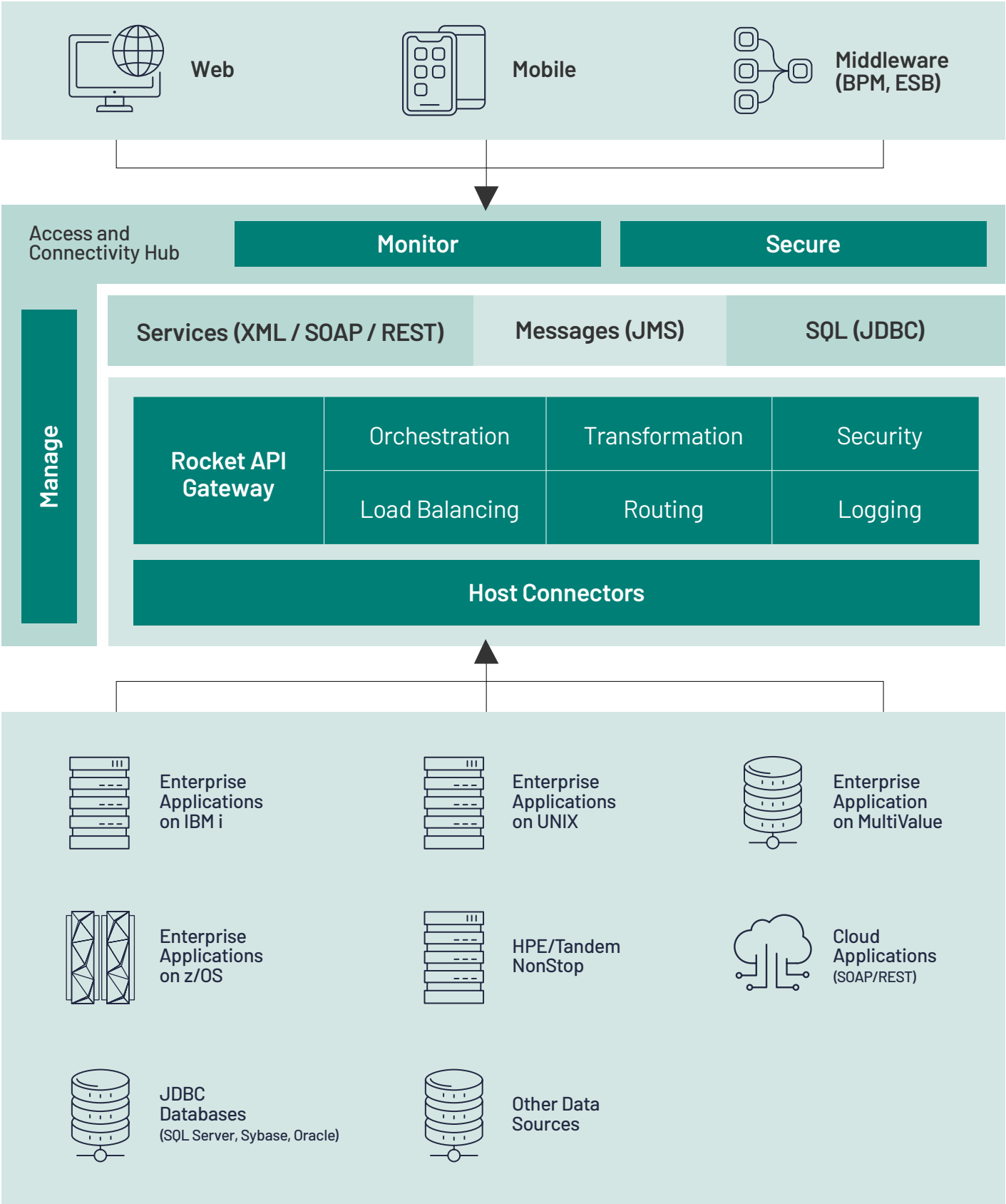


Create compelling customer interactions

Rocket API enables you to combine APIs from enterprise applications, cloud applications, and other sources of data and processes into individual, easily consumed services that can be accessed by web, mobile, or middleware applications. Security, deployment, management, and monitoring capabilities facilitate API administration and performance management.



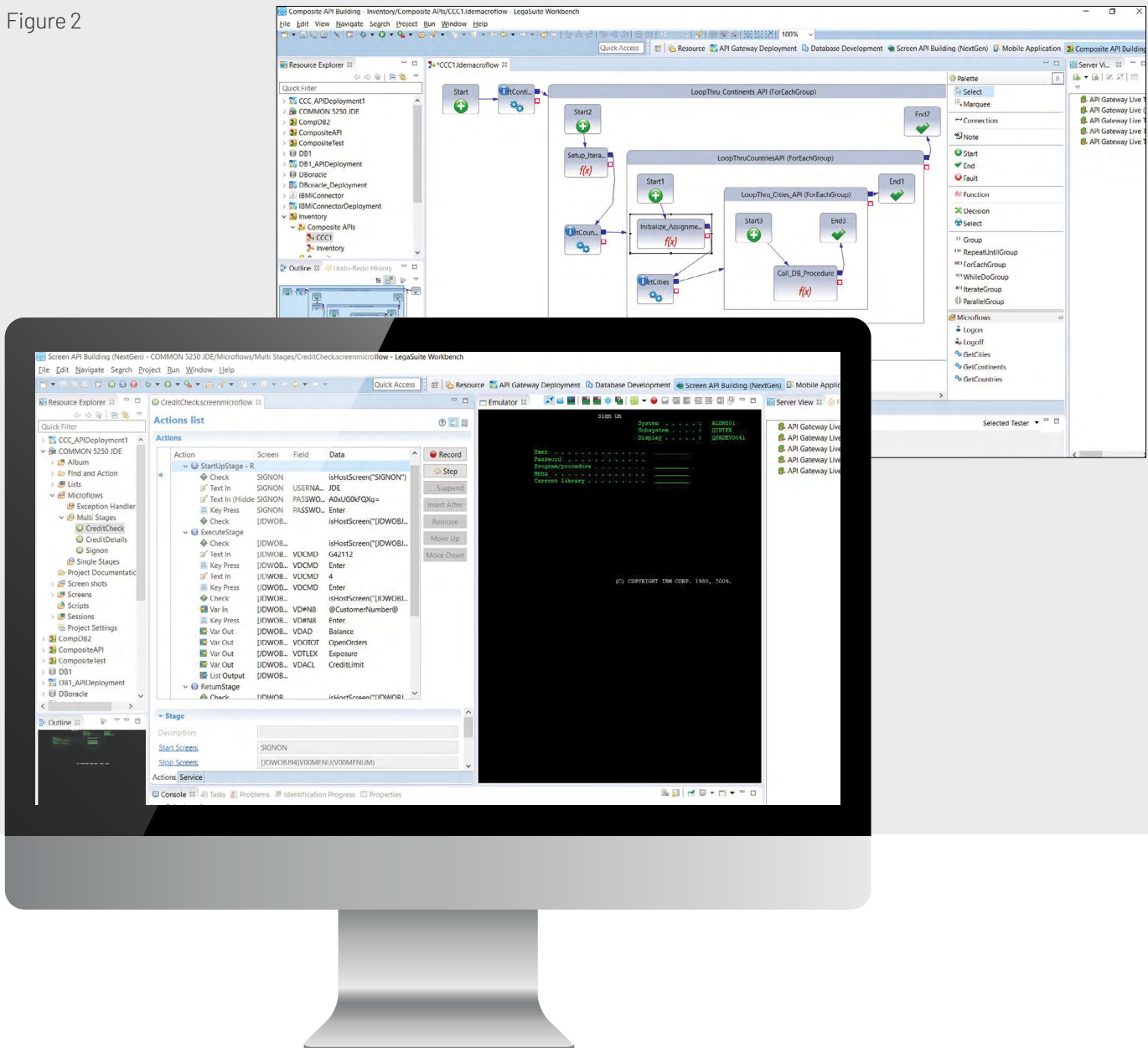
Figure 1: Rocket API Technical Infrastructure



The Rocket API Builder (top) helps developers map data and fields found in green screens, then transform them into Rocket API logic that can be extended to web and mobile devices. Even host applications that do not have a green-screen interface can be extended to web and mobile.

Once you've created individual APIs, you can combine them into composite services for increased efficiency (bottom). Even better, you can adjust the logic behind established APIs at any point—without any change to the user experience.

Figure 2

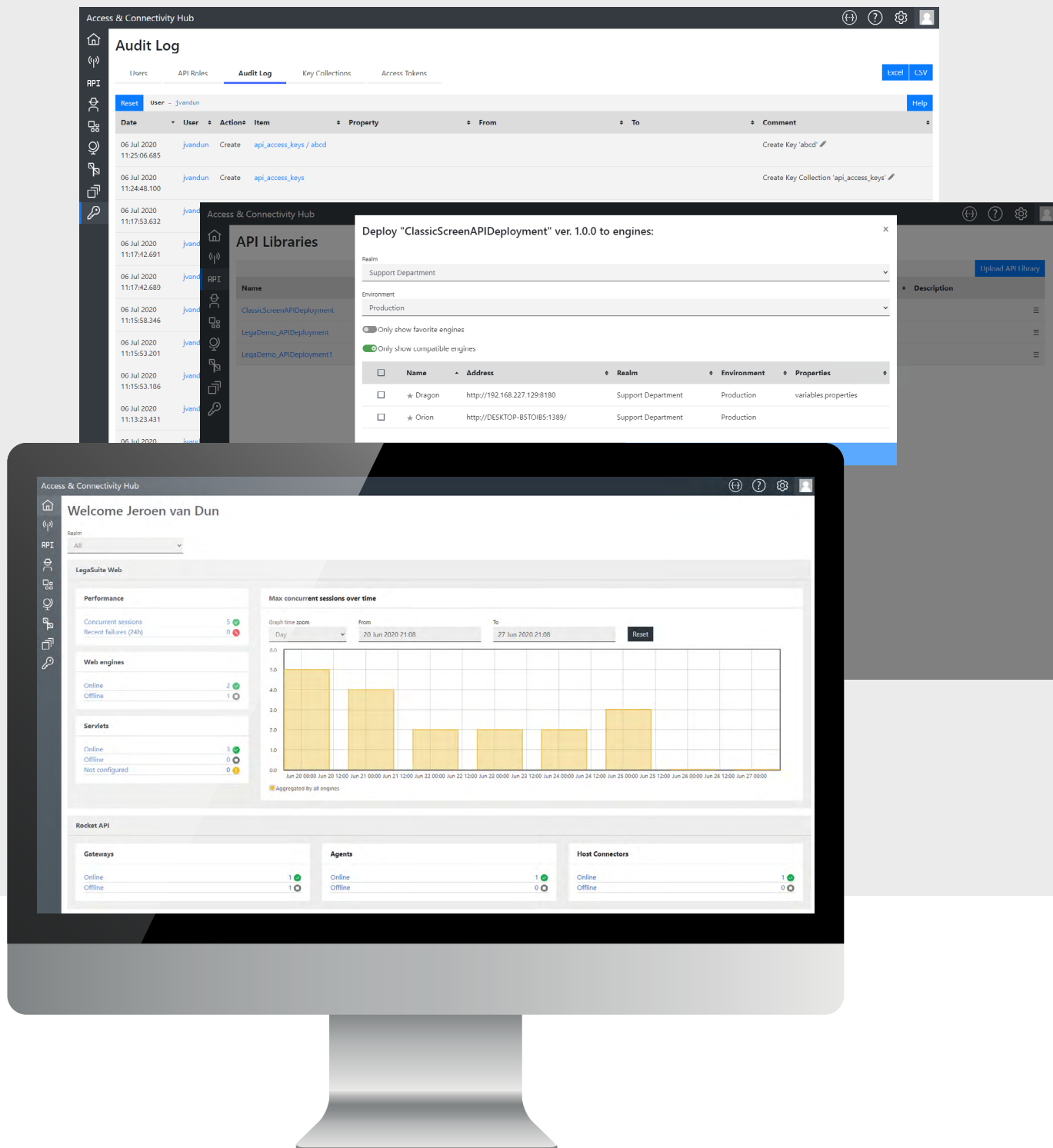


The Rocket API Builder is an easy-to-navigate work environment that provides complete control over the API building process. The Rocket API System Orchestration Tools give you complete control over building composite APIs.



The Rocket Access and Connectivity Hub provides a central location for you to ensure that your APIs are deployed correctly, secure APIs with role-based access, identify individual users who access your APIs, and monitor overall use.

Figure 3: The Rocket Access and Connectivity Hub



Technical specifications and system requirements

Screen Protocols

- IBM® i
 - 5250
- IBM Z®
 - 3270
- ICL Mainframe
 - 7561-IRSI
 - ICL-Forms
 - DFP
- MultiValue
 - VT100
 - ADDS Viewpoint
- Unix/Linux, Open VMS, DEC VAX
 - VT (vt52, vt100, vt220, vt320, vt420)
 - Wyse (Wyse50/Wyse60)
 - Prism
 - ADDS Viewpoint
 - Qume QVT
 - Televideo TVI
- HP/Tandem NonStop
 - 6530

Host Platforms

- Power Systems
 - IBM i
 - Linux on Power
 - AIX
- IBM Z
 - z/OS
- MultiValue
- HPE/Tandem NonStop
 - NonStop OS
- ICL Mainframe
 - VME

Data Access Support

- JDBC/ODBC DBMSs
- IBM i data access
 - Db2
 - JTOpen
 - Native OS/400 functionality

Rocket API Builder

- Operating System
 - Windows 10, Windows 8
- Hard Disk Space
 - 5 GB (minimum)
- Memory
 - 8 GB (minimum)
- Software
 - The Workbench includes Eclipse 4.6.3 and Java 8

Rocket API Gateways and API Gateway Host Connectors:

Unix/Linux

- Operating System
 - AIX: Version 6.1
 - HP-UX IA (Intel): Version 11.31
 - HP-UX RISC: Version 11.23
 - Linux on x86 architecture
 - Red Hat Enterprise Linux, Version 6 or higher
- Other Requirements
 - Java 64-bit, version 8

IBM i

- Operating System
 - V6R1M0 (minimum), V7R1, V7R2, V7R3:
we recommend keeping current with IBM support level
 - Physical and virtual/PaaS server environments supported - see Virtualization and Cloud below
- Software
 - IBM Java 8
- Other Requirements
 - TCP/IP Services

Windows

- Windows Version Operating System
 - Microsoft Windows Server 2016
 - Microsoft Windows Server 2012 R2
- Memory
 - 2GB RAM (minimum), 4 GB or more recommended
- Hard Disk Space
 - 2GB (minimum)
- Software
 - Java 64-bit, version 8

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