

IBM i Modernization Engine for Lifecycle Integration

Automate modernization and streamline new
IBM i application development



Highlights

Shift IBM i application
development to the cloud

Automate the conversion
of fixed-format RPG code
to modern free-form RPG

Reduce the learning curve
for new developers with
modern tooling

Secure deployment
of IBM i applications
and infrastructure

In today's IBM i ecosystem, clients are being challenged to use hybrid cloud implementations to adopt DevOps and CI/CD processes, and to incorporate new IoT and AI technologies. These challenges have made the modernization of business-critical applications a mandatory step into the future for IBM i clients. Modernized applications offer the best of both worlds by combining the proven business logic, power, reliability and security of IBM i with emerging new technologies.

IBM i Modernization Engine for Lifecycle Integration, or "Merlin" for short, is an application development and modernization environment for IBM i users. It is a set of tools, running in Red Hat® OpenShift® containers, that guide and assist software developers in the modernization of IBM i applications. It allows applications to realize the value of hybrid cloud and multi-platform CI/CD implementation, while RESTful interface connections and enterprise messaging technologies allow developers to add new business value to IBM i applications.



Shift IBM i application development to the cloud

With Merlin, you can spin up a cloud-based IBM i development environment in seconds, readily equipped with industry-standard tools like Git and Jenkins. Merlin speeds up the onboarding of new developers on IBM i with modern tools and an integrated development environment (IDE) that is similar to Microsoft Visual Studio within a container environment. Merlin also gives you the ability to achieve an enterprise-wide CI/CD pipeline, spanning across all development platforms for IBM i, Linux®, and Windows, both on-premises and across your hybrid cloud.

Automate the conversion of fixed-format RPG code to free-form RPG

Free-form RPG looks and feels like many modern open source programming languages that developers are more accustomed to working with. For this reason, most programmers resist developing with fixed-format RPG anymore. Merlin automates the conversion of fixed-format RPG code to modern free-form RPG, on-the-fly, as an integral part of your DevOps process, making RPG easy to understand for a new generation of developers. In doing so, the platform brings both experienced IBM i professionals and new developers together under a shared language and industry-standard set of tools.

Reduce the learning curve for new developers with modern tooling

New developers are most familiar with industry-standard tools and open-source technologies. Reduce the learning curve and get your new developers productive quickly by taking advantage of Git and Jenkins, both of which are readily equipped with Merlin. The IDE within Merlin is similar to Microsoft Visual Studio, with an interface and capabilities that most developers will find familiar.

Most new developers don't want to work with fixed-format RPG code. Automate the conversion of fixed-format RPG to newer free-form RPG that is easier to work with and understand for developers, as it is styled just like common open-source programming languages such as PHP, Python and Node.js.

Secure deployment of IBM i applications and infrastructure

Merlin accelerates the provisioning of test and production environments using next-generation deployment technology that is compatible with IBM i apps and infrastructure. Additionally, Merlin allows you to modulate consumption with the rapid spin-up, provisioning and tear down of development environments on demand. You also build security into your CI/CD pipeline by writing code securely as you go, instead of patching it and checking it for security vulnerabilities later before deploying it into production. This way, you avoid security issues from popping up later on because the initial code wasn't written securely.

Conclusion

Powered by ARCAD technology for IBM i, the Merlin platform helps software developers realize the value of hybrid cloud and multi-platform DevOps implementation. Merlin allows you to automate and optimize an intelligent build while accelerating your CI/CD cycle. The tool also exposes native IBM i functions as RESTful interfaces and manages your enterprise message technologies. With a browser-based IDE and Red Hat CodeReady workspaces, your new developers can start to bridge the talent gap by taking advantage of modern tooling and a familiar environment.

For more information

To learn more about IBM i Modernization Engine for Lifecycle Integration, please contact your IBM representative or IBM Business Partner, or visit ibm.com/products/ibm-i-merlin environment.

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