Modernize, Build, Test and Deploy IBM i Applications in the Cloud
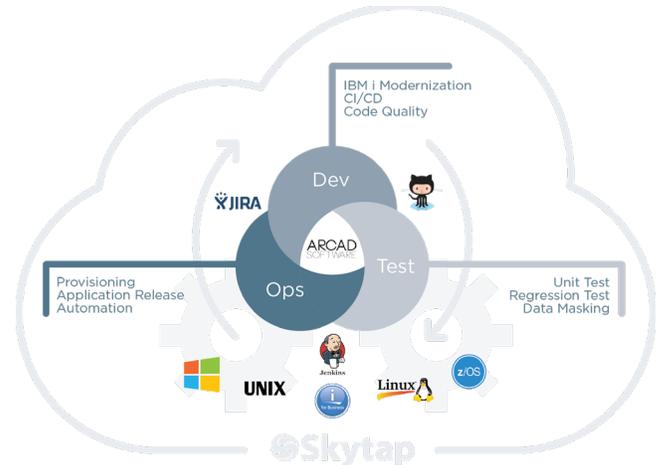
The Challenge for Modern IT Teams

Development on core business applications today demands highly scalable environments and an optimized DevTestOps cycle to build, test and deploy small software increments frequently and securely. IBM i is no exception. Since an estimated 72% of IBM i users run over half of their mission-critical business applications on IBM i,[1] the teams developing these applications are poised to make the greatest gains from DevTestOps automation in the cloud – from agile software delivery to reduced downtime risk.

With a clear path to the cloud, IBM i applications stand to make the greatest gains from DevTestOps automation, including agile software delivery, increased disaster recovery capabilities and reduced downtime.

Modernizing Traditional IBM i Applications

Skytap and ARCAD have partnered to bring RPG source code management and the IBM i application delivery pipeline into the cloud.

Using enterprise-grade, open source tooling with distributed platforms, deep analysis of these traditional apps, and unique repository-based dependency knowledge, ARCAD accelerates the rate by which software changes from Dev to QA to Production. This maximizes the "shift left" of defects for reduced IT cost and risk.

Accelerate Continuous Delivery

IBM i customers are now able to take advantage of a rapid, secure and scalable DevTestOps framework to automate and optimize the development process. This is complemented by a proven methodology and suite of cloud-native tools and services, which can be used to modernize IBM i applications in Skytap Cloud.

Using Skytap's cloud-native features, teams can replicate, template and share complete applications in minutes. Copy within your local region or across Skytap regions, ultimately enabling follow-the-sun deployment.

Saving an application environment as a template preserves a copy of the environment in a read-only state, and contains some or all of the environment VMs, networks and settings so you can quickly recreate the environment from a known state at a later time.
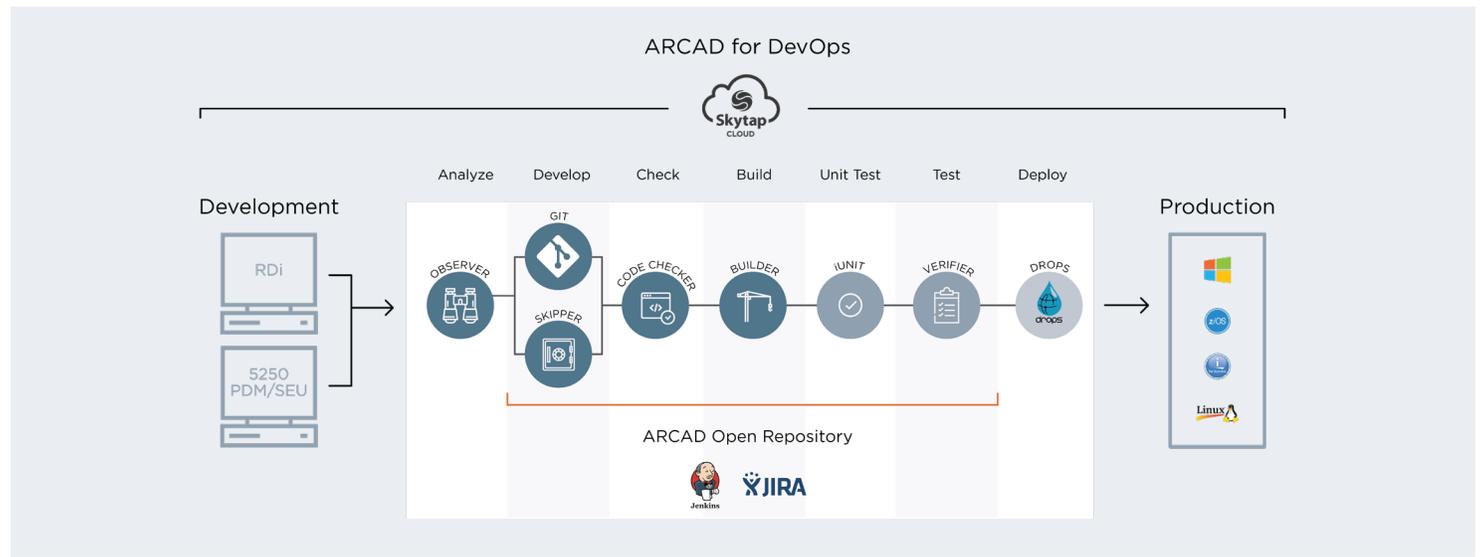
The ability to copy and template environments allows for quick deployment of complete applications, with no configuration required by IT. This allows teams to work at the pace of their own innovation.

DevTestOps: Complete CI/CT/CD Cycle for IBM i Orchestrated by Jenkins

Continuous Integration (CI): 100% build automation with ARCAD-Builder "smart" dependency build for IBM i.

Continuous Test (CT): data-oriented regression testing for IBM i with ARCAD-Verifier for maximum "shift left" of defects. Optional test Data Masking/Anonymization for data protection (GDPR) compliance.

Continuous Delivery (CD): Rapid provisioning of IBM i environments with automated tear-down & rollback-on-error using DROPS. One single solution to deploy to any environment – hybrid, cloud or on-premise – across any target platform IBM i, UNIX, Linux, Windows or z/OS.

ARCAD for DevOps

Application Modernization: Integrating legacy applications with cloud-native tools

ARCAD Transformer – Transform IBM i source code databases into modern languages

- Convert RPG or Synon CA 2E -> modern Free Form RPG
- Convert DDS -> DDL (SQL)
- Convert to Unicode
- Expand field size

ARCAD iNow – Generate modern GUI interfaces

- Transform 5250 green screen -> Web/mobile apps

ARCAD API – Migrate to a flexible, n-tier architecture

- Create web services/microservices from legacy IBM i application code

About Skytap

Founded in 2006, hundreds of enterprises globally now rely on Skytap to migrate and modernize their core business applications.

Customer benefits realized by Skytap:

- Disruption-free migration in less than 50 days
- Reduces provisioning time for test environments from 12 weeks to less than 20 minutes
- Provisions virtual, shareable environments in less than 15 minutes
- Reduces build and release time by 70%
- Reduces bug reproduction time by over 50%

About ARCAD Software

ARCAD Software group is leading international vendor of DevOps and Modernization solutions, supporting multiple platforms including IBM i, UNIX, Linux, Windows and z/OS.

Since 1992, ARCAD has built on its specialist IBM i expertise to develop an integrated and multi-platform solution range for Application Lifecycle Management, Enterprise Modernization, Release Management, DevOps, Test Automation and Data Masking.

Ready to modernize?

Get started with zero risk. Find out more at **arcadsoftware.com/skytap** or **skytap.com**.

Alternatively, email us at **contactus@skytap.com** to discuss your requirements with ARCAD's dedicated IBM i cloud experts today.