

Enterprise Modernization for **IBM i**



End-to-end Modernization

Whatever the scale of your enterprise or the technology you use, your success depends on delivering software to production faster and more reliably. The modernization of your applications and the continuous delivery of updates go hand in hand.

With 30 years of experience in IBM i modernization, ARCAD Software is the only vendor to combine application modernization and DevOps in a wholly integrated, in-house developed product range.

ARCAD Software brings to market the first end-to-end solution for application modernization on IBM i. Our solutions allow a progressive modernization of the UI, database and source code, secured in a DevSecOps delivery pipeline, using standard industry tools such as Git, Jenkins and Jira. ARCAD technology is cloud-ready and helps accelerate and enable a shift to hybrid or multi-cloud.

Using DevSecOps and Test Automation techniques to secure the process, ARCAD solutions reduce the risk of error and ensure the quality of the delivered application.

Our modernization methodology spans 3 phases : **Analyze, Structure and Transform.**

1



Application Analysis & Audit

Analyze your existing system

2



DevSecOps & Test Automation

Structure your development

3



Application Transformation (SQL, Free Form RPG, Web/Mobile)

Modernize your Database, Source Code & User Interface



Application Analysis

ARCAD-Observer

- Where-used dependency analysis
- Retrieve business rules
- Reveal application architecture
- Generate technical documentation
- Discover data model

ARCAD-CodeChecker

- Identify complexity hotspots
- Detect security vulnerabilities

Understanding and “auditing” the existing system is the 1st step in any modernization project.

ARCAD-Observer generates application structure diagrams automatically, discovers the database relationship model, and produces customizable documentation.

ARCAD-Codechecker checks code quality and security according to customizable rules and metrics.

Definition of code metrics

Sources/objects (multi-platform) cross references files

RPG program calling chain

Workflow Diagram

Data relationship model



DevSecOps & Test Automation

ARCAD for DevSecOps

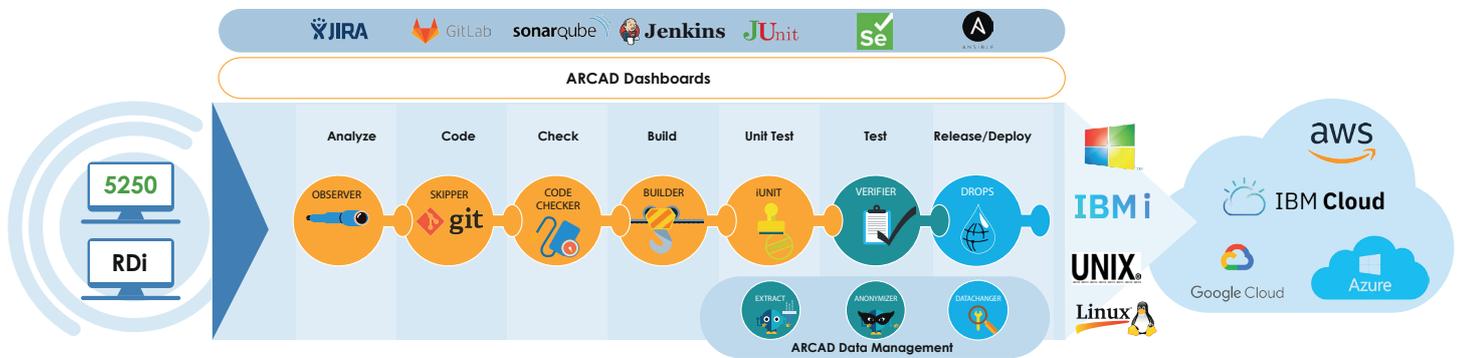
- Version Control
- Continuous Integration/Continuous Delivery (CI/CD)
- DevSecOps
- Continuous Test
- Smart Build
- Unit Test

Choosing integrated solutions for DevSecOps and Test Automation helps accelerate and secure your software change process.

Concurrent versions are particularly important in modernization, to enable you to continue “**business as usual**” on a maintenance branch, while modernizing in parallel. Automating the merge of changes and detecting regressions helps you avoid incidents in production as you modernize. Continuous delivery with automated rollback on error shortens development timescales and secures application reliability in production.

ARCAD for DevSecOps provides integrated IBM i Application Analysis, Dependency Build, Version Control, Test Automation, Deployment & Rollback.

DROPS: ARCAD’s multi-platform Application Release Orchestration solution offering advanced IBM i capability for IBM UrbanCode & HCL Launch



50%
fewer errors

30%
faster time to market

20%
Less downtime in production

30%
Less risk

25%
Reduced IT cost



Application Transformation

ARCAD-Transformer

- Source Code
- Relational Database
- Application architecture (ILE, Webservices)

Profound Logic

- User Interface



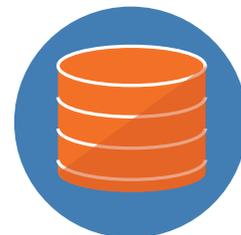
ARCAD API

- Web Services creation

ARCAD solutions address the modernization of each tier in a 3-tier architecture: database, business logic/source code, and user interface.

Modern Database: ARCAD-Transformer DB

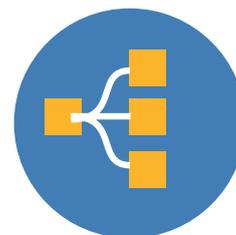
Database Layer ARCAD-Transformer DB - SQL



- Convert from DDS to DDL (SQL)
- Check data integrity
- Identify data corruption
- Field Renaming

Modern Code: ARCAD-Transformer RPG

Business Logic Layer ARCAD-Transformer RPG - Field - Unicode - ILE



- Convert from RPGLE to Free Form RPG
- Support MVC development
- Generate modular code
- Migrate from CASE tools e.g. CA 2E Synon

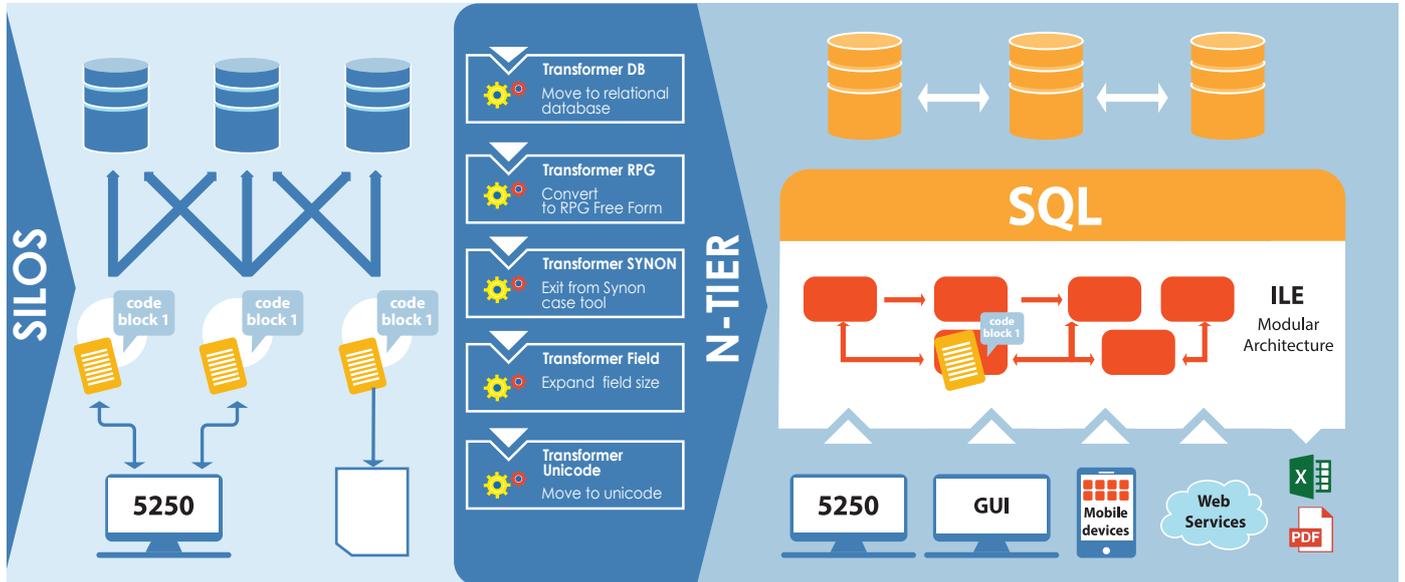
Modern Interfaces: Profound Logic

Application Interface Layer Profound UI Suite (Visual Designer, RPG OA Handler, Rich UI Conversion) Mobile Development - Genie Web Enablement - JumpStart Code Generator

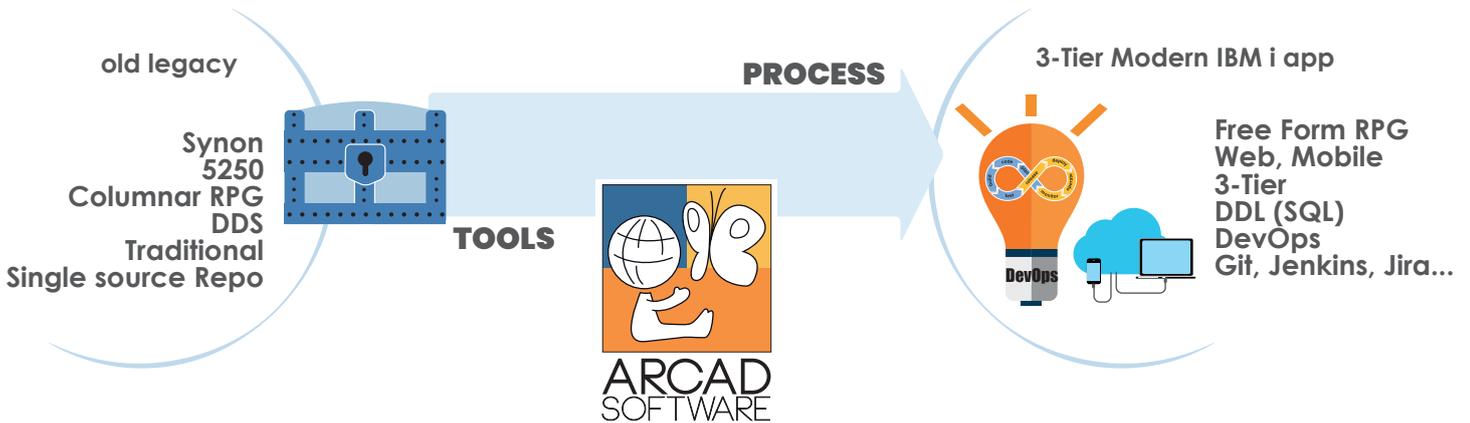


- Application modernization for web and mobile devices
- 5250 Web enablement
- New RPG or PHP development
- Mobile application development

Transform your IBM i application with ARCAD Software



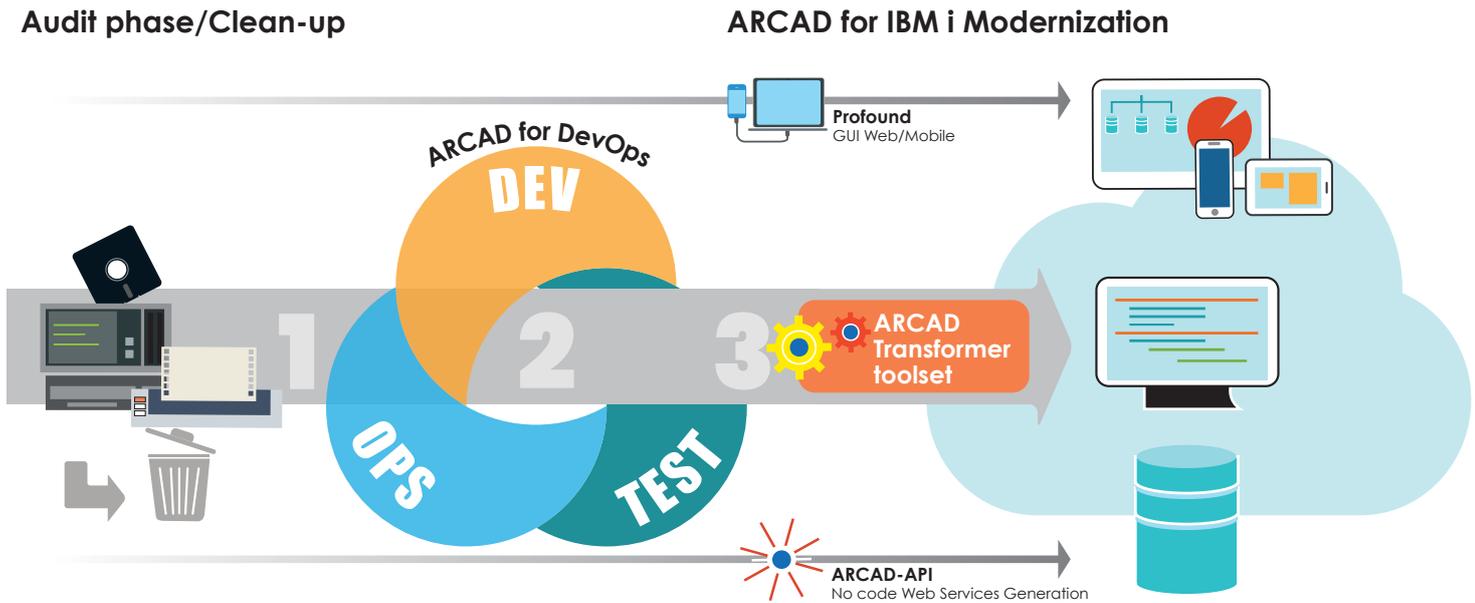
Modernization as a Service (MaaS)



ARCAD professional services, as well as our specialized partners, offer Modernization as a Service (MaaS) for guaranteed results at lower cost and zero risk:

- Reach your modernization goals faster and with less effort for your in-house team
- Secure the success of your project with an automated, tooled approach
- Transform application UI, source code, and database in a continuous delivery pipeline
- Develop in parallel on your modernization and ongoing maintenance branches
- Guarantee the non-regression of your application with ARCAD-Verifier test automation
- Maintain continuous application availability for end-users.

ARCAD for IBM i Modernization



ARCAD for IBM i Modernization: automated transformation solutions (database, source code), Web services and web/mobile GUI

IBM i Modernization Benefits

- Improved user interface
- Open, secure and higher-performance database
- Easier maintenance of applications
- More flexible architecture
- Faster implementation of new business requirements
- Simpler integration with other applications...
- Easier onboarding of a new generation of developers to maintain modern code
- Cloud-ready

› Leverage your existing R&D investment

› Retain your competitive edge



Reduce costs



Minimize risks



Future-proof
Technology



Improve User
Satisfaction



Through enterprise modernization, IBM i organizations can leverage their competitive advantage and R&D investment on a uniquely reliable platform strategically positioned for mobile and cloud technologies into the future.”

Philippe Magne, ARCAD Software CEO



www.arcadsoftware.com