Enterprise Modernization for IBM i

DevOps + Modernization

www.arcadsoftware.com
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 25 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.

The ARCAD Software and Profound Logic partnership 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 DevOps delivery pipeline, using standard industry tools such as Git, Jenkins and JIRA.

Our modernization approach uses DevOps and Test Automation techniques to secure the process, reduce the risk of error and ensure the quality of the delivered application.

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

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1. Application Analysis & Audit
   Analyze your existing system

2. DevOps & Test Automation
   Structure your development

3. Application Transformation (SQL, Free Form RPG, Web/Mobile)
   Modernize your Database, Source Code & User Interface
Application Analysis & Audit

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

ARCAD-CodeChecker
- Identify complexity hotspots

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

ARCAD-Audit eliminates redundant code and detects anomalies like source with date later than object.
ARCAD-Observer generates application structure diagrams automatically, discovers the database relationship model, and produces customizable documentation.
ARCAD-Codechecker checks code quality according to customizable rules and metrics.
DevOps & Test Automation

ARCAD for DevOps
- Version Control
- Continuous Integration/Continuous Delivery (CI/CD)
- DevOps
- Continuous Test
- Smart Build

Choosing integrated solutions for DevOps 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 DevOps provides integrated IBM i Application Analysis, Dependency Build, Version Control, Test Automation, Deployment & Rollback.

DROPS: ARCAD’s Application Release Orchestration solution, positioned in the Gartner Magic Quadrant 2017
Enterprise Modernization

Application Transformation

**ARCAD-Transformer**
- Source Code
- Relational Database
- Application architecture (SOA, ILE, Webservices)

**Profound UI**
- User Interface

*ARCAD* and *Profound Logic* 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* - 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 UI Suite

**Application Interface Layer**

- Application modernization for web and mobile devices
- 5250 Web enablement
- New RPG or PHP development
- DDS conversion
- Mobile application development
Transform your IBM i application with ARCAD Software

SILOS

MOVE TO NEW USER INTERFACES
CONVERT TO UNICODE
EXPAND FIELD SIZE
MOVE TO MODULAR ARCHITECTURE
CONVERT TO RPG FREE
TRANSFORM TO RELATIONAL DATABASE

ARCAD-Transformer

ILE
Modular Architecture

SQL

data centric
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.

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

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

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