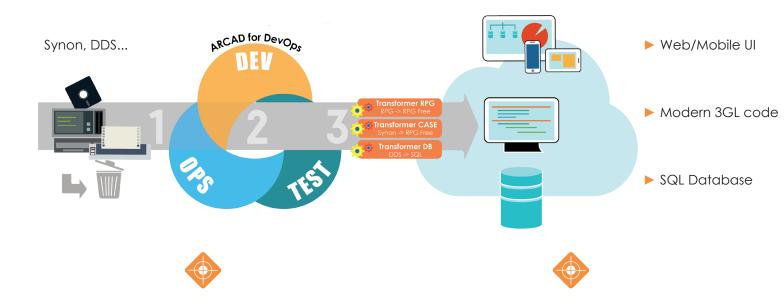
ARCAD Modernization as a Service (MaaS)

Unlock the business value in your Synon (CA 2E) application

Transform 4GL Synon code to modern **Free Form RPG & SQL**, automatically



BUSINESS ISSUE

Application modernization is a primary concern for any organization running IBM i (aka iSeries, System i, AS/400).

IBM i owes its success to a legendary reliability, security and the lowest TCO in the market today. Yet although IBM i itself has evolved into a truly modern system, many applications developed on the platform have not kept pace, still relying on old programming languages, outdated database technology and even 5250 green screen interfaces.

These IBM i applications are often core to the business and difficult to replace. Their custom functionality has been developed over decades and they represent a competitive advantage over and above any standard package.

This is especially true with applications developed in the **Synon (CA 2E) 4GL**. Synon has not evolved for many years, leaving applications «frozen in time», and isolated from the new technologies emerging on IBM i. The generated RPG code is monolithic and impossible to maintain outside the CASE tool. Synon customers have become locked in an outdated technology, and skills are now extremely scarce and expensive. •

MODERNIZATION VS. MIGRATION

Instead of risking a migration to another platform, more IBM i customers are opting to modernize their existing applications.

Industry statistics show that 2/3 of software modernization projects produce better than expected benefits – with less risk, higher chances of delivery on time and to budget, and an incremental approach that adds business value.

Gartner, 21 march 2019: "Considering Leaving Legacy IBM Platforms? Beware, as Cost Savings May Disappoint, While Risking Quality"

The goal of modernization is to make it easier to change and maintain your application in the future and provide the right interface for users. Modernization might include changing any combination of the interface, business logic, and database.

By leveraging your existing custom code, you capitalize on your R&D investment and retain your competitive edge.



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IBM i APPLICATION MODERNIZATION

ARCAD solutions automate any, or all, of the following modernizations:



CA 2E (Synon) Exit – Migrate from Synon to a modern language on IBM i

Transform your existing applications using the latest technologies available on IBM i



UI Modernization – Add modern user interfaces to your IBM i applicationGenerate Web and mobile interfaces for your IBM i applications



Source code modernization – Make RPG easy-to-read for a new generation of developers Convert 100% of your RPGLE code to modern Free Format RPG



Database Modernization – Move to a fully relational database on IBM i Convert your DDS files to DDL (SQL) tables and views

Modernizing IBM i applications brings multiple benefits:

- Maximal maintainability and scalability of your applications
- An open, secure and more efficient database
- A more flexible architecture
- Simplified integration with the other applications in your information system.
- Easy integration of a new generation of developers
- Access to new operational capabilities on IBM i
- Rapid implementation of new requirements
- Closer alignment of applications to your business strategy



WHAT IS ARCAD MODERNIZATION AS A SERVICE (MAAS)?

ARCAD Software offers a complete **transformation «as a service»** to convert **Synon CA 2E code** into modern **Free Form RPG and SQL**, using ARCAD's own modernization tools. Each MaaS project is a "tailor-made" modernization service based on your own specific needs.

Application transformation is secured using ARCAD's solutions for DevOps and Test Automation, at a fixed price.

ARCAD MaaS includes the following technical transformations:

- Conversion from Synon CA 2E to Free Form ILE RPG
- Conversion of DDS database to DDL
- Positioning of long names, complementary to short names
- Delegation of database access to SQL
- Removal of unused reported variables
- Externalization of Synon built-in functions
- Externalization of internal application functions

"A key advantage of ARCAD's MaaS was the continuous regression testing by default."



Hugues Clement, IT Manager at GEODIS



BENEFITS OF ARCAD MODERNIZATION AS A SERVICE (MAAS)

Benefits of ARCAD Modernization as a Service (MaaS) include:

- Automated code transformation > faster results at minimal risk
- Auto-refactoring > reduced code volume (by factor of 3)
- Automated, continuous test > guaranteed non-regression of your application
- Coding best practices applied improved code quality
- Concurrent version control ➤ continuous application availability (no impact on ongoing development)
- CI/CD approach ► accelerated software delivery

