

# FULL-STACK IT PORTFOLIO INSIGHT WITH SERVICENOW + SOFTWARE AG

## CONTEXT

A large transportation agency had an aging, complex IT portfolio of 350+ applications, supported by thousands of redundant, end-of-life technology components and infrastructure. The environment was mostly on-premise, with a mix of commercial-of-the-shelf (COTS) and custom applications maintained by various contractors and employees.

## CLIENT CHALLENGE

The agency aimed to modernize the technology landscape with a cloud-first strategy, paired with modern, agility-principled Enterprise Architecture. As part of this effort, they needed to rationalize the massive technology portfolio landscape and prioritize the most important changes, but faced key challenges:

- Application / technology landscape is too complex - years of “one-off” applications by multiple vendors resulted in many applications that were out of date, unable to integrate, or difficult to maintain.
- Many of these applications and underlying components needed security patches, some years overdue - increasing security breach / data privacy risk.
- Tech debt built up over time, and the IT portfolio had redundant, ineffective, or unused technologies.
- Slow “speed to market” - in this case, delivery of new features, upgrades, and improvements on web technologies for constituents and partners.

## SNAPSHOT



Application / IT Portfolio Rationalization



Transportation Industry



servicenow

**ARIS** ENTERPRISE  
ARCHITECTURE  
BY SOFTWARE AG

## PAIN POINTS

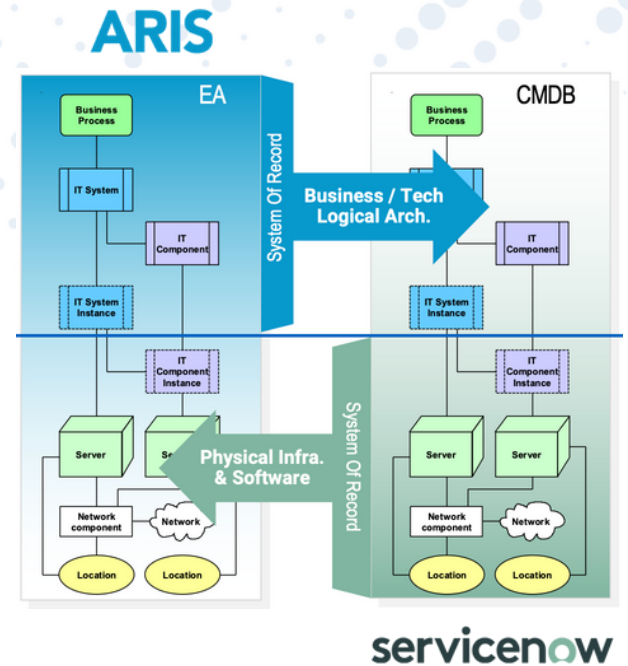
- Complicated and redundant technology setup
- Increased security risk
- High technical debt / maintenance costs
- Slow delivery of new features and updates

## RESULTS

- Key security risks were exposed and prioritized for component patching / mitigation
- Full-stack view resulted in an accurate, realistic IT Portfolio roadmap - including tech components & risks
- EA repository contains up-to-date ServiceNow data to help build faster solutions and control long-term tech debt

## WHAT WE DID

For the analysis and rationalization of full-stack IT Portfolio, a “logical” view was needed to match up with actual “physical” deployed applications and technology components. As the first phase of an ARIS-ServiceNow sync, we leveraged the ServiceNow CMDB, sending physical app/tech components to the Software AG ARIS Business & Technology platform for a full-picture view of the IT landscape (See our [ARIS Platform case study](#), but other EA tools could also be used, e.g., [Alfabet-ServiceNow case study](#))



Combined with IT and business SMEs interviews and data collection, this data allowed full-stack analysis with dashboards to help answer questions such as:

- “Which applications are helpful to get our jobs done?”, and “Are they easily usable?”
- “Which applications are a security risk because of “End-of-Life” component support?”
- “How many applications are redundant?”
- “What is the cost of maintenance of our applications and required tech components?”
- “How rapidly can we design and deliver new technology solutions?”

As part of the analysis, a TIME (Tolerate, Invest, Migrate, Eliminate) chart was produced to show applications’ technical condition vs. business value, helping to provide a “snapshot view” and high-level insight to help determine future state roadmap.

## RESULTS & BENEFITS

- **Immediate** - We identified critical security risks, enabling IT to focus on patching the most important components in production.
- **Immediate** - Our full-stack IT Portfolio analysis provided a detailed roadmap, looking beyond the surface-level applications.
- **Long term** - The newly established Agile Enterprise Architecture group now had a reliable repository of business, application and IT architecture to kick-start future solutions design and reduce future technical debt.