

I Want to Replace My Current Solution With CA Workload Automation and Test Tools but I Can't Justify the Time, Effort and Services Costs.
How Can CA help?

CA Conversion Service is a full-suite, cloud-based, no-cost service designed to save organizations 25 percent or more of the total effort and cost associated with a migration. Supported by 30-plus years of CA best practices, the offering covers the entire migration lifecycle—from competitive mainframe testing and workload automation tools to CA's industry-leading capabilities. Available in three service tiers—full-service, assisted and self-service—CA Conversion Service spans beyond typical conversion tools to include planning, change management, validation and deployment phases.

Executive Summary

Challenge

CA mainframe and workload automation solutions are known for superior value in technical innovation, reliability, quality and license costs. But making a technology replacement decision isn't easy, even with a clear business case on annual savings. Due to the commitment, time and effort required for a complex undertaking like a migration, IT leads often stick with the not-broken model because it's a safe bet. Plus, there are often enough in-house skills to change tooling environments.

Opportunity

Existing technology migration solution choices are limited, costly and time-consuming. While vendor-provided conversion tools exist, customers must allocate internal resources to plan and execute an enterprise-wide migration or use service partners, which can be costly. CA Conversion Service is a breakthrough, cloud-based service built on CA experience in over 500 technology replacements. By standardizing most of the manual effort and activities, CA Conversion Service enables a seamless migration to CA Technologies mainframe and workload automation tools.

Benefits

Unlike competitive tools that only address data or artifact conversion, CA Conversion Service can save an estimated 25 percent or more¹ of the total effort and cost associated with a migration. Technology is a small piece of TCO; CA Conversion Service is designed to enable faster time-to-value, with lower risk and minimal organizational disruption to existing operations.

Section 1:

The Challenges in Making the Case for Change

The ever-escalating complexity of IT environments is the number-one challenge for most organizations, even midsize companies. Years of so-called well-intentioned IT decisions have inadvertently ended up as an unmanageable mix of platforms, tools and architectures. Whether you're an infrastructure, operations, applications leader or business stakeholder, you all bear the brunt of this complexity and pay a hefty price—in terms of capex of IT and opex. Consider the additional responsibility of managing multiple vendors as well as the challenge of maintaining skills and personnel to support and operate multiple technologies and tools.

Going forward, IT and financial leaders face a heavy burden to make the right technology choices—solutions that are cost-effective in the long run but innovative and future-proof to address evolving IT skills and innovations demanded by the business. While it's normal and expected to evaluate solutions on the market, there are a number of technical and intangible organizational obstacles that keep organizations from doing the obvious right thing. It all boils down to lowering risk.

Fear: time to migrate and lost opportunities

In many organizations, we find that in cases where IT or finance leaders can prove a successful business case, it's still challenging to get the broad organizational commitment. After all, time and resources are involved in a complete migration, and the project lead's reputation is on the line if things don't go well. Doing nothing and sticking with the suboptimal solution is a natural fear response. While many vendors provide conversion tools, conversion is just one part of the entire migration. Depending on the scale of the conversion, data volumes and location complexities, your operations, app dev teams and administrators must be significantly involved in planning, data preparation, change management, validation and actual deployment. To ensure a successful migration, even with external partners or vendor support, internal commitment and knowledge transfer are key. Which is why you need to carefully consider the time lost and opportunity cost against value-added services of each function—whether planned downtime, productivity loss or even delays of new features.

Flat-budget paradox: find budget to save money

While organizations want to switch to a more cost-effective solution for the long term, they often find that the effort required in upfront services—whether internal resources or external, third-party services—for a full migration, not just conversion, is too high. Essentially, services or migration efforts exceed the annualized savings of switching to CA.

IT leaders and financial stakeholders are often at a loss—with flat and declining budgets, it's difficult to justify additional budget, even if the switch will benefit the organization in the long run. Services or incremental costs are tight and if there is any new budget, IT leaders prefer to invest in new, revenue-generating services. What's more, existing tooling, such as workload automation and test tools, may be part of the existing run-rate or a different budget. Such investment is often called a Tech MOOSE (a term coined by Forrester to denote maintain and operate the organizations systems and equipment).

Lack of skills and reliance on tools vs. process lowers the probability of success

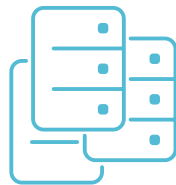
Having the right people and skills to ensure a truly successful migration is the last and related barrier to the time and opportunity cost in making a change to more cost-effective solutions. Many organizations start with a vendor-provided conversion tool but quickly realize that the conversion is only a tiny aspect of the overall migration. Our experience has shown that organizations typically haven't invested in documentation or best practices in this area because competitive migrations aren't a routine occurrence. A lot of tribal knowledge exists about implementation and deployment of certain tools across departments, and many times, important but subtle nuances are lost when expert personnel leave or retire. Additionally, smaller organizations might be so focused on daily firefighting, along with the pressures of delivering new services, that they simply don't have the deep and broad skills and personnel available on staff. Undertaking a full migration without the necessary skills, product expertise coupled with insights about the organization's unique business requirements and infrastructure setup is a recipe for chaos and greatly diminishes the likelihood of success.

Section 2:

Introducing CA Conversion Service

CA Conversion Service is a full-suite, cloud-based service based on 30-plus years of CA best practices which cover the entire migration lifecycle, involving the replacement and migration of competitive mainframe testing and workload automation tools to CA's industry leading capabilities. Available in three service tiers—full-service, assisted and self-service—spans beyond typical conversion to include five phases: requirements, data preparation, planning and design, conversion and build, test and validation, and finally, rollout.

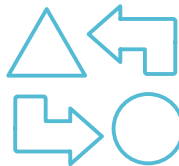
Five phases of CA Conversion Service



Data collection



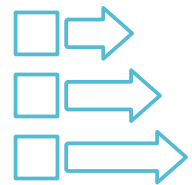
Planning and Design



Conversion



Test and validation



Rollout and Deployment

Data collection and assessment

Data assessment, the first step in any technology migration or replacement, involves critical activities such as gathering and identifying the customer's data and information, and the business requirements of the successor solution. CA experts can guide you in thoroughly assessing and collecting:

- Source artifacts, including legacy data sources in production, configuration data and scripts, such as scheduling or test scripts
- Environmental data artifacts, including aspects of the conversion approach, application types, OS and platforms
- Custom data artifacts, including capturing schedules, customer-specific processes and data access instructions that are unique to every IT environment. This would also include usage of plugins, custom integrations or APIs that govern access to custom data sources, applications or dev environments.
- Inactive artifacts to be removed from the legacy solution. The migration process can be configured to either ignore erroneous artifacts or include remediated artifacts.

With help from CA experts or online guidance, the CA Conversion Service client will run reports or utilities to collect the data above. Once the client uploads all the relevant data via a data collection deliverable, this phase is considered complete.

Planning and design

This phase identifies how your customer data is being generated and used, and how to clearly understand the business requirements in the target CA tooling environment. In the case of workload automation or test tools, the basic first step is to determine if any requirements in the target solution have architectural differences, and identify how to address them up front.

Another important aspect in this phase is to establish best practice and strategies of how the conversion and migration will actually take place. For example, for most midsize to large enterprises, a big-bang, enterprise-wide rollout would be too risky across all applications. Instead, CA experts or online guidance will help you map out business requirements and establish conversions rules based on application or workload type. For example, a typical best-practice rollout would look like the five stages below, with the primary scope driven by business impact, number and type of users.

- Pilot project—start small, minimal impact to business, no impact to end users, spans less than two to four weeks
- Low-impact project—low impact to business, only touches non-critical apps, limited scope to IT users
- Medium impact—moderate impact to business, touches moderate number of end users including 50 percent of internal apps and few, non-critical, customer-facing applications
- High impact—high impact to business affecting high-visibility apps; touches a large number of end users and external customers
- Critical—high criticality to business with largest number of end users

A similar best practice or approach can be tailored by business requirements such as location, system grouping, application types or departmental rollouts.

Planning and design phase activities	Planning and design phase deliverables
<ul style="list-style-type: none"> ▪ Team formation ▪ Migration requirements analysis ▪ Solutions design requirements ▪ Design approach selection, i.e., best practices and phases ▪ Artifact inventory analysis 	<ul style="list-style-type: none"> ▪ Documented migration requirements, capabilities and migration use cases ▪ Solution requirements document ▪ Documented project plan for migration and solution deployment

Conversion and build phase

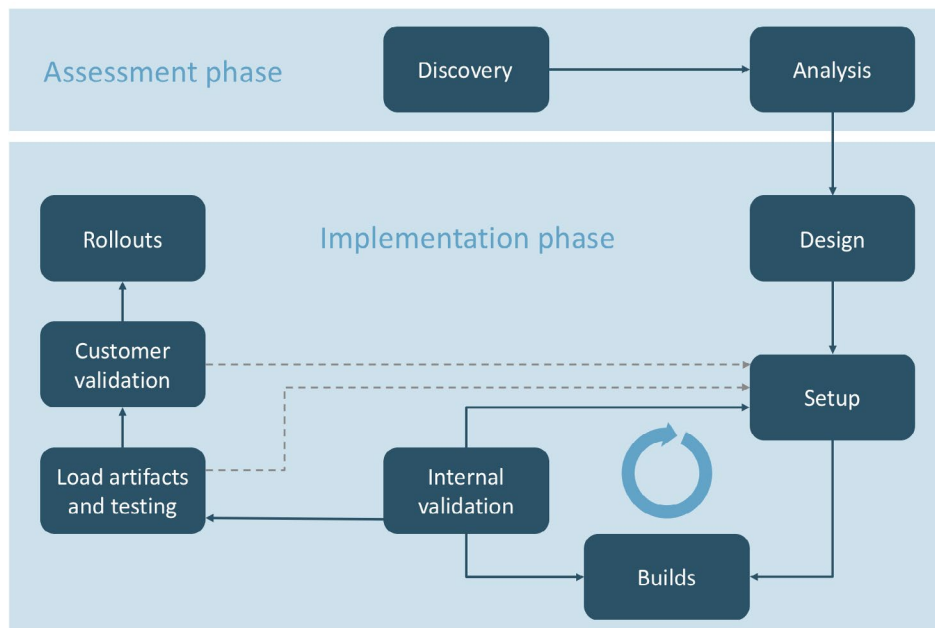
This is when the actual conversion takes place. In the case of workload automation, actual customer data is converted to the CA Workload Automation environment, leveraging the client data and JCL libraries and prior scheduling definitions. In the case of test tools, it involves converting JCL and procedure libraries and control cards to CA testing tools.

The conversion build cycle will follow the best practices established in the design phase; starting first with the pilot data and applications and testing each before proceeding to the next set of applications or domains.

Testing and validation

After conversion is completed, it's important to analyze and compare results of the loaded artifacts and data between the source and target CA environment. The number of validations and tests will depend on the complexity and organizational requirements. Many enterprises will have multiple levels of internal tests and validation before end-user rollout or readiness testing.

During customer validation cycles, the results of the comparisons are analyzed and adjustments can be made as necessary.



Rollout and deployment

This phase follows the best-practice phases set up in the design, and go-lives are planned accordingly. The rollout is essentially a transition into full production upon conclusion of user-acceptance testing. In addition, CA Conversion Service and CA experts will also guide you through the following steps before proceeding to deployment.

- Prepare for rollout, including freezing any changes in source environment
- Take one last snapshot of the source environment
- Cease any source activity (live transactions in production or internal monitoring)

Next, it's time to go live into production. After that, the final step is to monitor performance and ensure everything is working. Post deployment, your organization can access the CA Conversion Service online assistant, receive guidance for post-mortem analysis and monitor for additional changes and improvements to fine-tune performance.

CA Conversion Service tiers

CA Conversion Services is available at no cost in three service tiers:

Full service. CA experts or partners deploy the automated, cloud-based service and perform the entire migration for your organization. After the initial assessment and data capture are complete, disruptions and distractions to internal teams are kept to a minimum.

Assisted. In many cases, you'll want to manage certain phases yourself, such as deployment and test, and leave the more time-consuming and analytical steps of assessment, requirements and design to the CA team of experts. In other cases, your team might have a few personnel on hand to participate in the entire migration—this is a great model for training novice team members or simply conducting a knowledge transfer for similar migrations in the future.

Self-service. In this model, you take complete control of the entire migration lifecycle in self-service mode using the cloud-based CA Conversion Service.

Section 3:

Rest Easy, With Lower Cost and Risk

For IT operations and financial leaders who want to significantly reduce the cost and risk of adopting CA Workload Automation and test tools, CA Conversion Service is the ideal, sustainable choice. Unlike competitive tools that address only one step, CA Conversion Service can save an estimated 25 percent or more of time and cost² across the entire migration—making it much easier to justify ROI of adopting CA solutions.

Fastest time to realized value. Often, the biggest factor in undertaking a full migration isn't money; it's time. With the cloud-based CA Conversion Service, organizations can not only reduce the upfront migration costs but more seamlessly and quickly realize the annual cost savings of the replacement solution. Plus, there are additional intangible benefits—like working with a single, focused vendor like CA to eliminate the effort and administrative burden of working with multiple providers.

Lower risk and increase your rate of success. With guided cloud service built on 30-plus years of industry best practices, CA Conversion Service delivers a consistent migration experience across departments, geographies and applications. Organizations can eliminate the disruption of application development and ops teams because CA Conversion Service manages the entire migration, enabling everyone to focus on their core functions of delivering new services and IT uptime.

Choosing the CA Technologies Mission-Essential Advantage

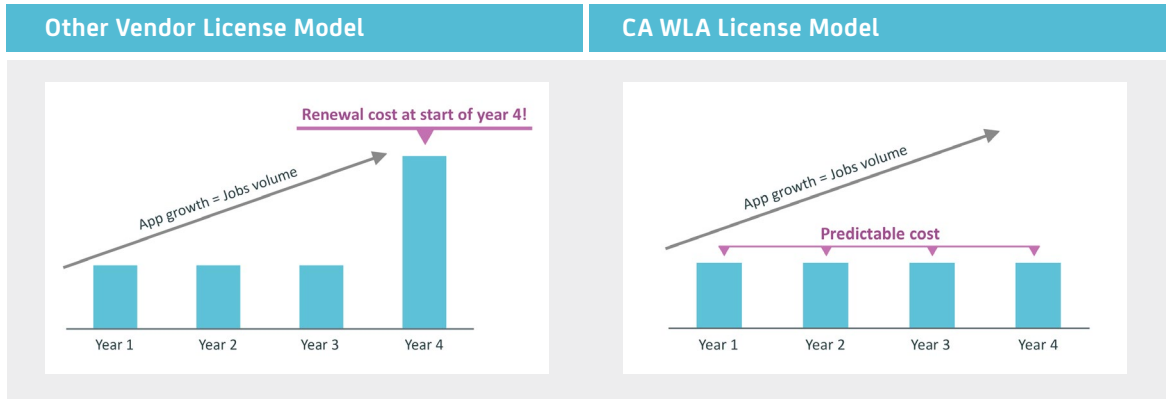
The mainframe you used to know has been replaced by something far more powerful. CA is innovating on software for the latest mainframe, the IBM z13™—the world's fastest commercial computer with massive pipes for handling data and 10 terabytes of memory. Going beyond the mainframe's heavy-duty transaction processing legacy, CA is investing in mainframe to make it the enterprise innovation backbone for all mission-essential workloads that span analytics, mobility, cloud and the Internet of Things. CA customers value our continued investment and relentless focus on customer engagement and value—

whether it's a 3:00 a.m. response to a support ticket or rapid delivery of a new capability after idea submission. We also remain deeply committed to customers' cost and vendor lifecycle management. Mainframe and workload automation, while mission-essential to operations, are also the highest line items in the IT budget. Given such cost pressure, coupled with the superior value of CA solutions, hundreds of customers have replaced competitors' products with CA solutions. Through our structured rationalization program—Core Systems Consulting—CA experts make a compelling case to consolidate to fewer vendors and remove product redundancies. In fact, customers experienced an average \$1.4M opex savings after a multiproduct software rationalization and switch to CA products.⁶

Your peers tell us that even with comparable technical capabilities, what spurs them to work with CA is our transparency and predictability over the entire span of the relationship. Indeed, in our highly complex industry with different architecture and pricing models, an apples-to-apples vendor comparison can be daunting. Add to that new clauses, renewal constraints or vendor bundling, and your procurement department or CFO could be facing an unwanted and surprising increase in license costs and TCO.

When it comes to workload automation products, CA offers a much more predictable cost model versus other vendors, who charge by job or task volume and tend to bundle additional options when it's time to renew—again locking your organization into a product as well as years of high license costs.

CA Technologies knows mainframe and workload automation. We're the number one ISV in mainframe software,^{3,4} and deployed in 59 of the Fortune 100.⁵



So, if the economic case is so compelling, why aren't you making the switch to CA solutions in mainframe and workload automation?

Find out the benefits your peers are realizing by making the mainframe part of their digital transformation strategies.

Learn more about CA mainframe rationalization and migration services. Visit ca.com/mainframe.



Connect with CA Technologies at ca.com



CA Technologies (NASDAQ: CA) creates software that fuels transformation for companies and enables them to seize the opportunities of the application economy. Software is at the heart of every business, in every industry. From planning to development to management and security, CA is working with companies worldwide to change the way we live, transact and communicate—across mobile, private and public cloud, distributed and mainframe environments. Learn more at ca.com.

1 Internal CA strategy and product management business case based on comparison of historical average FTE costs and capex cost spanning 400+ migrations and replacements versus cloud-based migration

2 Ibid

3 David J. Cappuccio, Millind Govekar, Daniel B. Stang, Dale Vecchio, Federico De Silva, Cameron Haight, Terrence Cosgrove, Thomas E. Murphy, Vivek Bhalla, Colin Fletcher, Robert Naegle, Felix Gaehdgens, Gary Spivak, Katherine Lord, Gartner, "Vendor Rating: CA Technologies," Oct 11, 2016

4 CA Technologies Global Market Analysis

5 Information based on Fortune 500 published June, 2015, compared to CA mainframe customers that have licensed one CA product as of January 2016

6 CA Technologies Executive Brief, "Optimizing Your Mainframe Investments to Unleash Value," Mar 2016

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