

Migrate to a New Testing Tools Solution for IBM® z/OS® Quickly and Easily with a Best- Practice-Led Migration Methodology.

Having a migration methodology is critical for maximizing your ROI when converting from third-party testing tools for IBM z/OS. CA Technologies methodology and R&D-supported migration tools provide exactly what you need to execute your migration quickly and easily. CA Technologies considers our migration process a key part of the overall solution and develops, enhances and supports it as part of our testing tools product solutions.

Executive Summary

Challenge

Migrating mainframe testing tools solutions to a new technology should be a seamless and effortless transition. Most customers have extremely complex implementations, spanning a multitude of processes, and require those systems to be responsive 24/7. Moving to a new solution requires a quick, easy and seamless approach to ensuring value immediately.

Opportunity

CA Technologies has extensive experience in consolidating customer mainframe testing tools across industry verticals and technical environments. Based on this experience, we've developed and incorporated a set of best practices into our migration methodology for testing tools. Part of these best practices is recognized migration tools designed to reduce overall project effort. The use of these migration tools can result in a 90 percent or better conversion factor within the automated migration process.

In addition, the tools generate a set of detailed reports to assist in the validation stage. What separates these migration tools from others is that they address the automation of the validation stage. Improvements can be made to the customer data and then retested in a build process. Numerous builds can be executed; the process is cyclical, thus reducing the overall validation effort.

Benefits

Our solution helps you to address the challenges of risk mitigation in an on-demand, real-time world. Great technology is just a starting point. Tools, process and dedicated testing tools specialists are needed to accomplish a migration that meets and exceeds your expectations.

Our world-class team of testing tools specialists has the expertise to analyze your needs and challenges. It has a proven track record of successful migrations and expertise in testing tools solutions.

The CA Services organization can manage and execute the entire migration process for you or provide assistance on an advisory level—or a combination of either approach at various stages of the project, based on your needs. All of this helps us execute on our commitment to you: a plan for successful completion.

Section 1:

Moving to a New Solution

When reviewing your options for testing tools software, there's a lot to consider. Upfront cost is only one of the elements. Looking into the future to determine how a new solution will save you time, money and effort is key to making the right decision.

Once you've decided to move to a new solution, there is always concern about how long it will take and how much downtime you will incur, along with the inevitable review and cleanout of old, antiquated processes that no longer serve your business needs.

With testing tools solutions from CA, fully integrated conversion tools are imbedded into the process, assuring a successful migration.

Migrating quickly and easily

Once you're ready for your project and have an initial consultation with our trained professionals, you'll want to know more about how it all works.

Prior to executing a migration, CA performs an assessment to identify the legacy solution environment and business requirements. The analysis identifies features and functions that are used, as well as any architectural differences. Determining how these features and requirements translate to the target solution before beginning the migration is crucial.

The migration program is tailored to meet current solution needs and solicits details on items such as batch job steps, PROCs and other specifics about the testing tools solutions running in your shop today. CA considers its migration program a key part of the overall solution. The migration tools are developed, enhanced and supported by CA Technologies in a similar fashion to other CA products.

Using CA Technologies-supported tools and methodologies, a controlled migration is achieved more quickly and in a more cost-efficient manner.

One of the timesaving features of the CA migration tools is reducing the need to manually track changes to the legacy environment. CA recommends a periodic extract of the legacy solution, to include any changes made to it during the migration process. This reduces the length of the freeze period before the final migration and cut over, thus reducing the overall migration time.

“On average, customers who switched to application testing and quality tools from CA experienced savings of \$2.1M.”¹

¹ The savings shown above are over a 5-year contract period and are estimations derived from analyses of CA Technologies customer contracts. These values are not a guarantee of achievable results and will vary depending upon your current infrastructure, people and processes, as well as the appropriate, effective implementation, adoption and use of the CA Technologies solution.

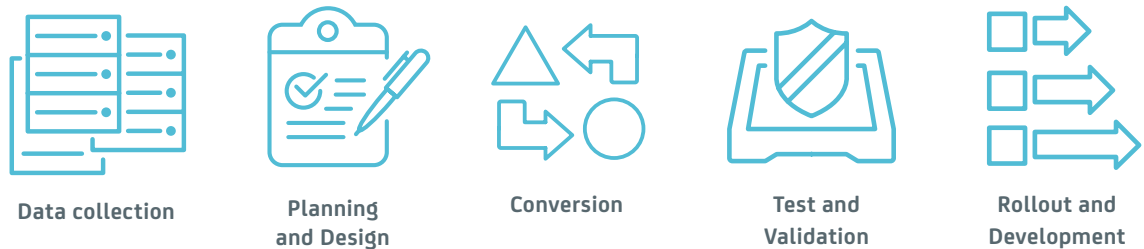
Section 2:

Introducing CA Conversion Service

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

Figure 1.

Five phases of
CA Conversion
Service



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
- Environmental data artifacts
- Custom data artifacts
- Inactive 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.

“ When selecting a vendor, check the quality of the tools, the stability, and most importantly, the customer response to issues. Our short list was CA and IBM ... CA won hands down.” ²

—George Rieker, Endeavor Administrator, SunTrust Investment Services, Inc.

² IT Central Station, CA Endeavor SCM Review, Dec 14, 2016

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 environment. 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 practices and strategies for how the conversion and migration will take place. For example, for most midsize to large enterprises, a big-bang, enterprise-wide rollout across all applications would be too risky. Instead, CA experts or online guidance will help you map out business requirements and establish conversion rules. 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: start small, minimal impact to business, no impact to end users, spans less than two to four weeks
- Low-impact: 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 and 50 percent of internal apps and a few, non-critical customer-facing applications
- High impact: high impact to business affecting high-visibility apps touches many 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. Actual customer data is converted to the CA environment, leveraging the client data and JCL libraries and prior testing tools management definitions.

The conversion build cycle will follow the best practices established in the design phase, starting 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 complete, 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

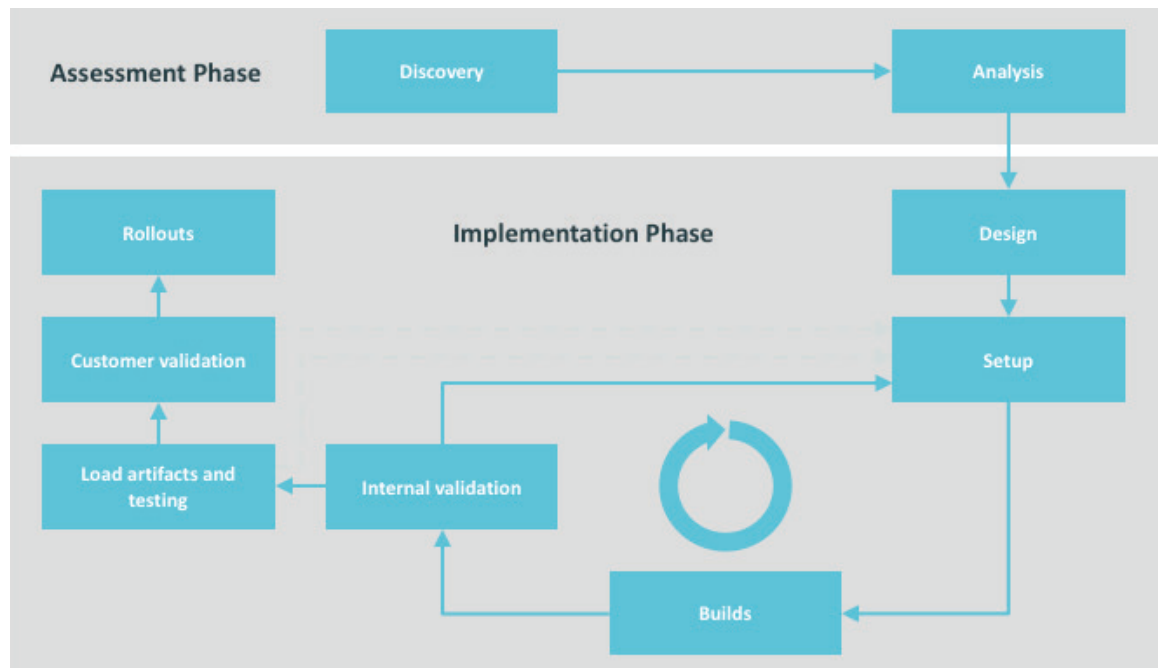
This phase follows the best-practice phases set up in the design, and go-lives are planned accordingly. The rollout is essentially a transition into full production upon conclusion of user-acceptance testing.

In addition, CA Conversion Service and CA experts will 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.

Figure 2.
CA Conversion Service –
Assessment and
Implementation



CA Conversion Service tiers

CA Conversion Service is available in three 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 testing, 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 and online guidance. A team of CA experts can be available to provide guidance during the conversion process.

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 z/OS testing tools from CA, 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 cost 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 it can also more seamlessly and quickly realize the annual cost savings of the replacement solution. Plus, there are additional intangible benefits, such as 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 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, the 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 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, while mission-essential to operations, is also perceived as the highest line item 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 \$1.4 million operating expense (OPEX) savings after a multiproduct software rationalization and switch to CA products.

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 mainframe and testing tools management solutions, CA offers a much more predictable cost model versus other vendors, who charge by users, tasks or 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 definitely beats other vendors in terms of cost-benefit. The tools are easy to use and support is right on point.” ⁴

—Angelica Casali, IT Specialist, Morgan Stanley

⁴ TechValidate, CA Mainframe Management Solutions case study, Feb 2017, TVID 9B8-EC9-055.

Section 4:

Next Steps

So, if the economic case is so compelling, why aren't you making the switch to CA solutions in mainframe? Find out the benefits your peers are realizing by making the mainframe part of their digital transformation strategies.

To learn more about CA mainframe rationalization and migration services, visit ca.com/mainframe.



Connect with CA Technologies at ca.com



CA Technologies (NASDAQ: CA) provides IT management solutions that help customers manage and secure complex IT environments to support agile business services. Organizations leverage CA Technologies software and SaaS solutions to accelerate innovation, transform infrastructure and secure data and identities, from the data center to the cloud. CA Technologies is committed to ensuring our customers achieve their desired outcomes and expected business value through the use of our technology. To learn more about our customer success programs, visit ca.com/customer-success. For more information about CA Technologies go to ca.com.