

BENEFITS AND VALUES OF ECCOX APT

This document highlights the critical role of Eccox Application for Parallel Testing (Eccox APT) in optimizing IBM Mainframe z/OS application development and testing processes, emphasizing its contribution to substantial return on investment (ROI) in the context of DORA metrics for DevOps.



Technology that delivers results.



AUTOMATION AND ISOLATION FOR MAINFRAME TESTING

Eccox APT offers a single automated test infrastructure provisioning solution in IBM Mainframe z/OS environments. Includes the ability to reprocess tests and create/run isolated scenarios using different databases (Db2®, IMS/DB®, VSAM®, Sequential) and environments (Batch, CICS®, IMS/DC®, MQ® Queues)

AI-ENABLED AUTOMATED ISOLATION TECHNOLOGY ON PARALLEL TEST-RUNS

Maximize your testing with Eccox APT®'s AI-Enabled Isolation Technology. Customize with cloned components and specific datasets for conflict-free testing. Rerun tests with ease for reliable performance and efficient operations.

INTEGRATION WITH AGILE AND DEVOPS PROCESSES

Eccox APT is designed to support the adoption of Agile methodologies and DevOps practices. It facilitates the creation of isolated and fast test environments suitable for multiple parallel projects, providing security and adherence in testing processes and standardization in developing programs and systems.



Eccox APT significantly impacts several vital areas, aligning with DORA metrics for DevOps. Here's a look at how Eccox APT contributes to measurable ROI:

1. Lead time for changes:

- Impact: Reduced Environment Configuration Time
 - Self-service capabilities for on-demand containerization of Eccox APT minimize the time required to set up dedicated testing environments, unlock Continuous Testing on Mainframes, and accelerate value delivery for native z/OS applications and their front-end applications dependents.
- Scalable Parallel Testing:
 - Benefit: Automated scalability allows simultaneous execution of multiple test cases for complete validation.
 - Value: Increases efficiency, identifies problems early and accelerates time to market for agile applications.
- Results:
 - Faster application deployment, reducing time to market for new features.

2. Shorter Software Development Cycles:

- Impact: Automated Test Impact Analysis and Discovery
 - Eccox APT Discovery functionality simplifies and automates test impact analysis, facilitating accurate and isolated test builds across the development cycle.
- Precision and Control:
 - Benefit: Eccox APT® Containers offer granular control and logical test trail isolation for unparalleled accuracy.
 - Value: Minimizes interruptions, bottlenecks, and rework, resulting in faster, more reliable application development.
- Results:
 - Shortened development cycles by identifying and addressing issues early.

3. More Frequent Releases:

- Impact: Parallel Testing and Efficient Environment Management
 - Eccox APT supports parallel testing with isolated environments, allowing teams to work simultaneously on different functionalities and submitting processes (online and batch) for end-to-end execution without data and program version conflicts.
- Regression Tests and Their Significance:
 - Automating isolated testing environments in baselines, especially regression testing, ensures that new features do not break existing ones.
 - Automation significantly speeds up regression testing by creating baselines for dual runs and comparison, reducing the time between integrating new features and their launch.
- Results:
 - Increased release frequency without compromising quality, meeting the demand for fast updates.

4. Faster Application Changes and Updates:

- Impact: Agile Configuration in Environments
 - Eccox APT's containerized approach enables agile, version-controlled configurations of environments, facilitating rapid adaptation to evolving requirements.
- Results:
 - Faster and more responsive application updates according to changing business needs.

Strategic Business Value

Competitive Advantage

Reduces time to market (TTM) for critical projects by 25% to 50%.

- It allows rapid adaptation to market changes, keeping organizations ahead of their competitors. Increased revenue through product launches promptly.

Customer Satisfaction

Improves coverage of test scenarios per version (Release) by 50%-100%, improving the user experience.

- Faster, more reliable releases lead to better user experiences. Better quality of delivered software.

Operational Efficiency

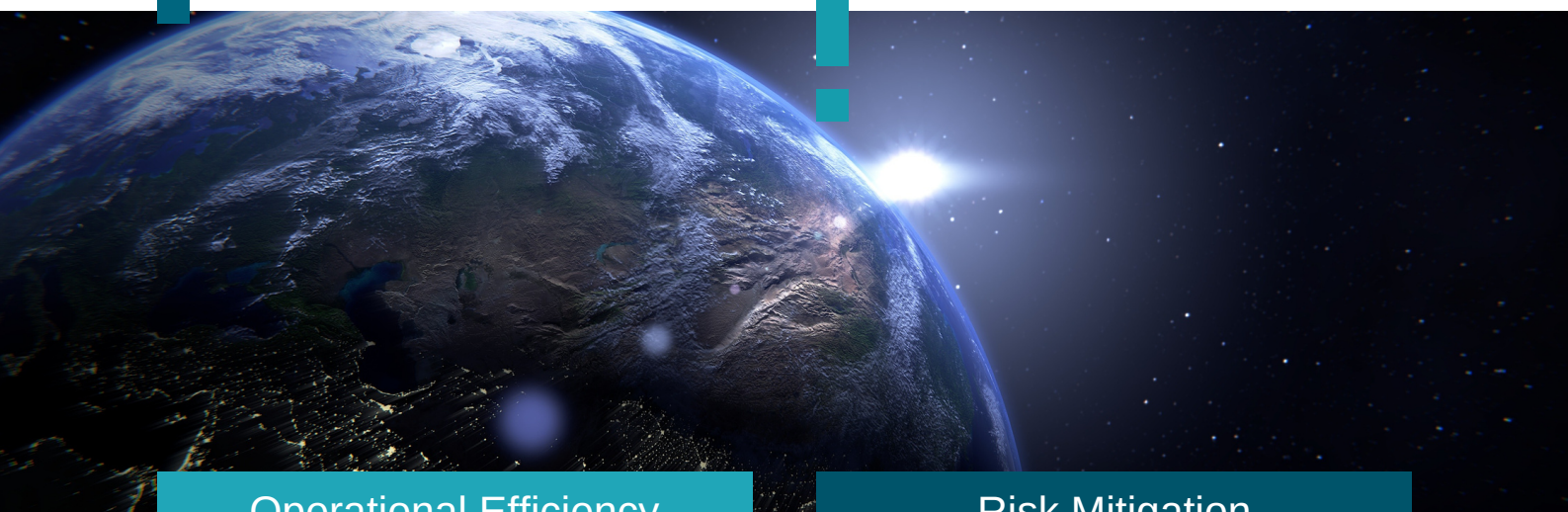
Reduces test environment setup efforts by 80-90% and reprocessing a test environment by 99%.

- Simplified testing processes enable scenario reuse, complete isolation, and scalable parallelism, leading to better management of resources, time, and personnel. Deliver more with less, faster.

Risk Mitigation

Speed up the setup of multiple test environments in minutes/hours instead of weeks/months, ideal for regression testing and Dual run configurations.

- Minimizes the chances of failure and accelerates service restoration, improving business continuity.



Automation of Repetitive Tasks:

- Impact: Automated Management for Recreating/Updating Test Environments
 - Eccox APT automates preparation processes by cloning programs and data and their dependencies to build isolated environments, reducing manual effort in handling components and data, improving the consistency of containerization of all test elements necessary to execute the test processes of a test.
 - This approach accelerates cyclical and release testing processes involving repetitive steps, managing version configurations, what has been changed, and the database, replacing time-consuming and complex manual tasks with automation for each change.
- Result: Increased efficiency and productivity by redirecting resources manual tasks to more strategic testing efforts.

Simplified Workflow:

- Impact: Integration with CI/CD Pipelines
 - Eccox APT is a standalone product and integrates seamlessly into any CI/CD pipeline through APIs, simplifying the entire workflow from development to deployment.
- Result: Improved efficiency, reduced manual transfers, and faster delivery through automated and continuous processes.

Continuous Test:

- Impact: Continuous Monitoring and Feedback
 - Eccox APT automation processes exponentially expand the number of test cases deployed per release, enabling broader combinations and checks against changes and business logic functions accessing and updating databases in isolation for complete parallelism and repeatability. This significantly raises quality and trust levels.
 - Eccox APT automates test environments and provides fast feedback cycles on test executions, contributing to early defect detection.
- Result: Improved software quality with fewer defects in production, reducing post-launch rework.

OVERALL BUSINESS IMPACT AND ROI

COST SAVINGS:

Reduced manual effort and optimized resource allocation lead to direct savings. As a result, there are significant savings in working hours, elimination of waiting periods, reduction of conflicts, rework, and excessive impacts on business delivery times.

INCREASED PRODUCTIVITY:

Eccox APT improves productivity throughout the entire cycle. Including teams, from support teams and basic software for configuration and maintenance to developers and QA involved in the activities and repetitive steps of the testing operation through automation and efficient use of resources.

In conclusion, the ROI of Eccox APT is evident through a combination of cost savings, increased productivity, improved software quality, and a competitive advantage. The impact on DORA DevOps metrics demonstrates the value of Eccox APT in optimizing testing operations and contributing to a more efficient and effective DevOps culture within a Mainframe organization.

SOFTWARE QUALITY IMPROVEMENT:

Continuous, comprehensive testing and early defect detection contribute to higher software quality, reducing the cost of addressing post-release defects. We can redirect these resources toward more productive testing efforts, achieving more while reducing overall testing costs and deadlines for the entire organization.

COMPETITIVE ADVANTAGE:

Faster time to market and frequent launches provide a competitive advantage in responding to market demands.



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