MICRO FOCUS® | enterprise test server

BUSINESS CHALLENGE

Many organizations rely on mainframe applications to run critical parts of their businesses. As these applications are used to service existing customers and deliver vital competitive advantage, they require frequent updates and enhancements to satisfy changing business requirements. Their mission-critical value makes it imperative to carry out substantial testing before updates are released into production.

Essential pre-production test phases can cause bottlenecks in the release process. The pace of change in each release is often governed by the available mainframe resources. As pre-production testing can only be scheduled according to available capacity, the timely functional delivery of updates to the business can be compromised. Increasing pre-production test capability ensures faster delivery of more functionality to the business with a proportional increase in quality. This can require significant additional investment to increase mainframe capacity to accommodate expanded test phases. Without the flexibility to increase capacity easily and quickly, application change remains a slow process.

PRODUCT OVERVIEW

Micro Focus Enterprise Test Server is a mainframe application execution environment on Windows. Applications running under Enterprise Test Server behave just as they would on the mainframe, making it possible to perform a variety of pre-production testing on low cost commodity hardware. It also exponentially expands the test capacity and enables testing to scale up easily to meet delivery timelines driven by the business.

Enterprise Test Server supports IBM COBOL, Assembler, CICS, IMS-TM, JCL, DB2, IMS-DB, z/OS file formats and standard mainframe utilities. Application source code and appropriate subsets of production data are copied from the mainframe and the source is compiled on Windows. The application is then executed within the Enterprise Test Server environment where it accesses the data subsets locally to maximize performance. If data or application logic

needs to remain on the mainframe, for example called sub-routines without source code, then these can be accessed directly from within Enterprise Test Server using mainframe client access tools.

Developers, test teams, quality assurance engineers, end users, or non mainframe programmers, for example, Java or. NET programmers, who are developing composite applications that use mainframe resources, can access applications running within the Enterprise Test Server environment to conduct their testing and consume little or no mainframe processing power.

KEY BENEFITS

Capacity/Time to market

> Complete testing phases faster and with higher quality as test cycles are not constrained by scarce mainframe processing power

> Scale up test capacity quickly to meet business driven deadlines or significant business change

> Expand the test environment beyond traditional test teams to include business users and developers integrating SOA applications with the mainframe

Cost containment/Reduction

> Scale up test capacity on a low cost commodity platform without the substantial investment in new mainframe MIPS

> Reduce mainframe MIPS consumption as more testing is performed on Enterprise Test Server

Quality

> Identify issues sooner in the development cycle and reduce costly rework

> Improve quality by increasing the testing that can be accomplished in shorter time frames

> Accelerate innovation by providing Java or .NET programmers with a more responsive and accessible environment to perform testing

FEATURE OVERVIEW

Support for a wide variety of mainframe applications

Enterprise Test Server includes a comprehensive set of tools and capabilities to enable mainframe COBOL application to run on Windows including:

> Batch applications with JCL controlling the execution of COBOL programs accessing DB2 and IMS databases or VSAM files

> Online CICS or IMS TM applications accessing DB2 and IMS databases or VSAM files

> Mainframe COBOL applications accessed via

> > 3270 BMS or MFS screens

> > Java or .NET applications using facilities like CICS Transaction Gateway (CTG), EZASOKETS, IMS Connect or MQ Series to connect to back end services

> Mainframe Assembler applications or sub-routines which can be assembled and linked for execution within the Test Server environment

> Composite applications where .NET or Java applications on Linux, UNIX or Windows invoke mainframe COBOL programs.

Close integration into mainframe resources and sub-systems

Enterprise Test Server includes direct mainframe access capabilities, so mainframe code and data can remain on the mainframe and be accessible from within the Enterprise Test Server environment.

Benefits include:

> Seamless but secure access to mainframe application source code and data resources

> Automated source synchronization and compilation between mainframe and LAN development libraries, including access to common host configuration management systems such as CA-Endevor, Panvalet and Serena ChangeMan ZMF

> A wider range of applications that can be tested within the Enterprise Test Server environment as jobs, programs and utilities that cannot be rehosted to Windows can be accessed remotely on the mainframe

SUPPORT FOR DATA ACCESS ON WINDOWS

Enterprise Test Server includes a range of tools and capabilities to enable applications to run against test data on Windows rather than the mainframe. Key capabilities and features include:

> Mainframe compatible file system that supports VSAM file types (KSDS, RRDS and ESDS), as well as Partitioned Datasets (PDSs) and Generation Dataset Groups (GDGs)

> Mainframe compatible DB2 and IMS DB database support

> Data file and database editors to enable developers and QA engineers to define data structures and insert, update or delete data records quickly and easily to support testing on Windows

> Full EBCDIC character set support to ensure compatibility with the mainframe environment

> Mainframe access capabilities to support direct COBOL file access to data files physically hosted on the mainframe.

Enables pre-production testing to be conducted off the mainframe

Once configured, Enterprise Test Server can be used to support many types of testing while completely removing or significantly reducing the requirement to use any mainframe resources:

> Significant portions of Quality Assurance testing including functional regression tests, batch tests and manual testing can be conducted against applications running on Windows

> Most user accept testing (UAT) can be conducted against the applications running within the Test Server environment, with end-users oblivious to the fact that the applications are actually executing on Windows

> .NET or Java programmers can conduct unit testing against mainframe applications running under Test Server rather than the mainframe

> Selected performance and benchmarking activities can be conducted on Windows once base line metrics have been established

TECHNICAL SPECIFICATIONS

Recommended Windows operating system requirements

> Windows 7, Windows Server 2008 and Windows Server 2012

For additional information please visit: www.microfocus.com