

THE ROLE OF SOFTWARE CONFIGURATION MANAGEMENT IN SARBANES-OXLEY COMPLIANCE

SOX Impact on Software Application Development and Deployment

Section 404 of the Sarbanes-Oxley Act (SOX) stipulates that the public accounting firm that prepares or issues the audit report for a publicly traded company must attest to the effectiveness of the internal control structure and procedures of the issuer for financial reporting. By extension, controls and procedures must be in place to manage the development and deployment of any software application that impacts the accuracy of the company's financial statements. This has resulted in a renewed scrutiny of IT's Software Configuration Management (SCM) processes. SCM is the process of managing the development, change, distribution and installation of software applications throughout the entire software life cycle. A comprehensive full life cycle SCM solution assists companies in meeting the control objectives of SOX Section 404 such as:

- Controls against unauthorized software changes
- Auditable processes
- Separation of duties
- Detailed audit trails of changes and deployments

Prior to Sarbanes-Oxley, many IT organizations were satisfied with an SCM solution that provided only source version management, choosing to rely on manual processes and in house macros to manage the most critical part of the SCM process; namely executable build management, release packaging, and release distribution. This is proving to be woefully inadequate and has resulted in companies failing to meet SOX audit requirements.

Sarbanes-Oxley compliance is driving the need for a full life cycle SCM solutions that provide:

- Source version management
- Executable build management
- Release packaging and distribution management
- Electronic change approvals
- Referential integrity between source code, executable objects and releases
- Guaranteed reproducibility of executable objects and releases
- Change impact analysis
- Enforcement of division of responsibilities

An SCM solution that is object-centric versus source-centric is required in order to effectively satisfy all of the above requirements. Refer to Beyond Source Code Control, Object Driven Software Configuration Management at

www.emperex.com/nonstop/aboutscm/configurationmanagementwhitepaper.pdf

There are a number of comprehensive SCM solutions available for widely-used platforms such as mainframes, Windows, UNIX and Linux. These solutions include Rationale ClearCase, Merant PVCS, and Computer Automation Endeavour. These SCM solutions however are less suited to specialized and proprietary platforms such as Hewlett Packard's NonStop™ server. Such unique platforms require specialized knowledge and expertise to develop effective SCM

solutions. IT organizations looking for a comprehensive SCM solution for the NonStop™ server frequently turn to PrimeCode from Emperex Corporation. (www.emperex.com) PrimeCode is the only NonStop™ resident SCM solution that can effectively provide companies with a Sarbanes-Oxley compliant automated SCM process that manages the proprietary HP NonStop file system.