

Certification and the Year 2000

BY LEONARD F. TURI, CCP

As awareness continues to build regarding the Year 2000 millennium "bug," there is great concern about the expertise of IS personnel and the "fix" methodologies and tools being used to repair non-compliant computer systems. The pressure on business and government agencies to respond to the Year 2000 (Y2K) nightmare has been heightened by the demands of government agencies. For example, regulators including the Federal Reserve System, and the Office of Thrift Supervision and the National Credit Union Administration have sent letters to financial institutions instructing them to address the Y2K issue and to follow their "Safety and Soundness Guidelines Concerning the Year 2000 Business Risk, Testing, Contingency Planning and Customer Awareness." In addition, the Securities Exchange Commission (SEC) has proposed a new rule for broker-dealers requiring them to submit two written reports of their Y2K progress. The first report would require a discussion of board of director involvement, testing plans, resource assignments, current progress, evidence of written contingency plans, and management time spent. The second report would require a discussion of the current status of matters in the first report and would also require the opinion of an independent public accountant attesting to the reasonable basis of the firm's assertions. Now more than ever, the IT industry is under extreme time, resource and cost-of-failure pressures as it searches for ways to determine if its solutions are going to work when the "Big 2000" ball drops.

At the highest level, compliance can be defined as a computer system correctly processing 1900 and 2000 century dates. Although the objectives and goals of Y2K remediation efforts can be clearly and simply stated, attaining them is laborious

and perilous. In fact, Y2K remediation is so hazardous and uncertain that triage, risk assessment and contingency planning have come to the forefront in most organizations working on Y2K compliance. It's no wonder that attestation is being expanded into procedures for certifying the compliance level of computer applications, vendor packages and processes, as well as the competency of Y2K remediation teams.

Examining the Y2K remediation lifecycle enables us to understand even more the advantages of using skills-validated personnel such as those certified and/or proficiency tested by ICCP.

INDEPENDENT SKILLS VALIDATION

Squarely involved as a Year 2000 solutions provider is the Institute for Certification of Computing Professionals (ICCP) and its membership. Through its Y2K Connection (1-888-Y2K-ICCP) certification process and proficiency testing, ICCP provides companies with an independent skills validation – it's like an "assurance" policy. Considering that the individual is crucial to the success of any computer application, vendor package or Y2K remediation team, ICCP designations fulfill the need to ascertain that the people assigned to a Year 2000 project have, at least, a minimal skill level. For instance, ICCP's Associate Computing Professional (ACP) and Certified Computing Professional (CCP) designations certify the individual as a computing professional in numerous man-

agement, system development, programming and communication areas. In addition, ICCP's certificate of proficiency exams provide a focused calibration of specific computer language aptitude such as in COBOL and RPG/400. Indeed, ICCP certifications provide the highest standards of professional competence in the computing industry.

Examining the Y2K remediation lifecycle enables us to understand even more the advantages of using skills-validated personnel such as those certified and/or proficiency tested by ICCP. The most generic lifecycle of Y2K remediation consists of the following phases:

- ◆ **Awareness:** making senior management aware of the magnitude and severity of the problem.
- ◆ **Inventory:** finding all of the software components that provide the computer systems infrastructure that supports their enterprise.
- ◆ **Assessment:** determining how many dates the enterprise has in its systems, which ones will affect Year 2000 processing, and how long it will take to make them Y2K compliant.
- ◆ **Planning:** selecting the remediation approach (i.e., date expansion, windowing or encapsulation), assigning resources and establishing schedules.
- ◆ **Repair:** making the computer systems' program dates and files Y2K compliant for internal and external systems.
- ◆ **Validation Testing:** performing unit, system, integration and baseline

testing to ensure that the repaired computer systems operate correctly using 1900 dates.

◆ **Compliance/Certification Testing:**

ensuring that computer systems correctly process both 1900 and 2000 century dates.

This final phase is, of course, the most important, with all other Y2K lifecycle tasks directed at achieving the compliance certification of an organization's application computer systems (e.g., payroll). The entire certification process is typically monitored by the Quality Assurance and Auditing groups. After reviewing all material produced from the Validation testing, these groups will generally follow a formal sign-off procedure, validating that all the required steps were taken and that final compliance certification testing can begin. In general, compliance certification testing consists of the following:

- ◆ test all active programs accessing a current date that is set to some point after the Year 2000.
- ◆ enter different types of transactions using various future dates.
- ◆ process with various system date settings such as leap year, year end, and other industry-specific future dates.
- ◆ include date values that project forward several years at a time.
- ◆ propagate future dates into all test data stores through multiple test iterations.
- ◆ review and sign off by end user.

Upon completion of the certification testing, a signed document, executed by the Information Technology Remediation team, end user, Quality Assurance group and Y2K Auditors, is prepared to signify that a computer application system kernel, chunk or LPAR (Logical Partition) is Year 2000 compliant.

Note: *Since many computer applications are using third-party software, the assurance that these software packages are Year 2000-compliant is of paramount importance. To address the issue of third-party software, the ITAA (Information Technology Association*

of America) provides an agenda to certify third-party software and the process and methods used to develop new or convert existing software.

With such a complex process involved in achieving true Y2K compliance, it makes sense to use competent, knowledgeable personnel. Management needs to be satisfied that those on their Y2K remediation team have high skill levels in systems development, procedural programming, business information systems, data resource management, office information systems, systems security, software engineering, and systems programming. The CCP tests offered through ICCP measure not only these technical qualifications but management and communications skills as well. In addition, ACP and proficiency exams test language-specific skills such as COBOL and RPG. ICCP certified professionals have all the

necessary skills, experience and education to provide expert support throughout the full Y2K remediation lifecycle. 

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ABOUT ICCP

The Institute for Certification of Computing Professionals (ICCP) is acknowledged throughout Information Technology sectors as the most important source of non-vendor certification for competence and professionalism.

With more than 25 years of experience certifying computer professionals, ICCP has established the framework for independent certification. The CCP exams are experience-based. Attaining the CCP certification requires that a candidate pass a core examination and the equivalent of two specialty exams plus have at least two years of professional experience. The specialty areas include Microcomputing and Networks, Software Engineering and Management. As part of membership services, ICCP's planned skills inventory database will allow employers access to the technical and application skills they seek.

For more information, contact ICCP at 1-888-Y2K-ICCP.