

OFFICE OF INSPECTOR GENERAL

Second Follow-up Review of Commission's Preparation for the Year 2000

**Inspection Report
OIG-IR-01-00**



November 23, 1999

**This Inspection was conducted in accordance with the
Quality Standards for Inspections
issued by the
*President's Council on Integrity and Efficiency.***

**This report is available on-line at:
<http://www.usitc.gov/oig>**

Related Reports:

Evaluation of the Commission's Preparation for the Year 2000
Audit Report OIG-AR-03-99 <http://www.usitc.gov/oig/OIG-AR-03-99.pdf>

Follow-up Review of Commission's Preparation for Year 2000
Inspection Report OIG-IR-05-99 <http://www.usitc.gov/oig/OIG-IR-05-99.pdf>

I. INTRODUCTION

The United States International Trade Commission (Commission) provides advice to the President and Congress on tariff and trade matters, conducts investigations relating to the impact of imports on domestic industries, and contributes to the development of U.S. trade policy. The Commission has approximately 400 employees and a fiscal year 1999 budget of approximately \$45 million.

Since 1988, the Commission has automated essential agency functions and implemented an enterprise-wide local area network. Consequently, the Commission relies upon several information systems and its underlying enterprise network to perform its mission. The Commission depends on information systems developed by other Federal agencies to manage its finances, pay its employees, and perform its personnel management functions. The Commission uses information-gathering systems from commercial organizations for news and legal research. The Commission also uses components that contain embedded electronics, found in the building infrastructure, telephone and fax systems, and in the audio-visual systems used in the Commission's hearing rooms.

At 12:01 a.m. on January 1, 2000, many computer systems, electronic devices and components that contain embedded electronics could malfunction or produce incorrect information simply because the date has changed. The year 2000 (Y2K) problem is rooted in the way dates are recorded and computed in many computer systems and other electronic components. For the past few decades, systems have typically used two digits to represent the year, such as "97" representing 1997. With this two-digit format, the year 2000 is indistinguishable from 1900, 2001 from 1901, and so on. As a result of this ambiguity, electronic components and computer hardware, operating system software, application software, application programs, and data that use dates to perform calculations, comparisons, or sorting may fail or generate incorrect results.

On January 1, 2000, the ability of the Commission to accomplish its mission without disruption will be at risk unless the information systems and components on which the Commission depends are Y2K compliant. Minimizing the impact of the Y2K problem on the Commission requires an organized managerial and technological effort. Otherwise, the Commission may have to perform its work using manual methods, processes, and procedures.



II. BACKGROUND

On February 9, 1999 the Office of Inspector General (OIG) submitted *Evaluation of the Commission's Preparation for the Year 2000*, OIG-AR-03-99. That report found that the extent of the Y2K problem on Commission operations was not documented or well understood and concluded that the Commission will likely experience some disruption because of the Y2K problem. That report recommended that the Chairman appoint an official to manage the Commission's Y2K activities, identify all systems, assemble a team to coordinate Commission efforts, develop a Y2K policy action plan, increase awareness of the Y2K problem, and provide technical training.

Additionally, the Commission and the OIG concluded that it would be beneficial to do periodic reviews of the Commission's Year 2000 activities. This report contains the results of the second follow-up review conducted in November 1999.

III. OBJECTIVE

The objective of this inspection was to spot-check the components used by the Commission to assess the degree of Y2K compliance.

IV. METHODOLOGY

OIG contracted with Burke Consortium, Incorporated (BCI) to assist in completing this inspection. BCI requested and received an inventory of the Commission's information systems that was reviewed prior to visiting the Commission. BCI was on-site at the Commission for two days. BCI Inspectors met with the Chief and a Computer Specialist from the Information Systems Division during which the schedule and objectives were reviewed. Random spot-checks of systems with associated points of contacts were then conducted during the remainder of the visit.

V. FINDINGS

The Commission's mission-critical systems are on track for Y2K compliance. Although spot-checks of components used at the Commission uncovered some Y2K, issues identified below.

1. ITC Net

The Office of Information Systems (OIS) Computer Specialist was contacted to obtain the status of this system. The following components were checked and determined to be Y2K compliant:

- ITC_SIX
- ITC5
- Comm1
- Bear1
- Raven
- Beetle
- ITC-Central
- Firewall – Raptor EagleNT (Dell XPS R400)
- Cisco 2501 Digex Router
- Cisco 2513 DOI Router
- Cisco 5000 Switch

The following components were checked and determined not Y2K compliant:

- Dell Poweredge 2100 with Legato Networker v4.4.1. The system is configured with Windows NT 4.0 SP3, which is not Y2K compliant. The Computer Specialist explained that, until very recently, the interrelationships of Windows NT, Banyan Vines, and Legato dictated to which level each software could be installed and configured.
- Cisco 1900. One of a number of routers owned by the Commission was checked and was determined to have firmware flash version 5.34. According to the Cisco Y2K Product Compliance chart on the web site, version 5.35 or higher is required to be compliant (version 5.35 corrects system uptime reporting). Disruption of service is not threatened.

The following components could not be fully checked:

- LUGNUT. Remote users were logged onto the system that prevented powering down the system to check BIOS level. Otherwise, the system is Y2K compliant. The Dell P60 requires BIOS version A08 or higher to be Y2K compliant.
- Cisco 2900 (recorded in inventory as 2400). Attempts to log onto switch to determine firmware flash version were not successful. Depending on model, the following versions are Y2K compliant:
 - Model 2900 – v2.1(9) or later
 - Model 2900XL – v11.2(8) or later
 - Model 2900XL-ATM – v12.0(2) or later

2. GOALS

The OIS Computer Specialist was contacted to obtain the status of this system. The following component was checked and determined to be Y2K compliant:

- Dell GXMT 6166 PC Link - Treasury

3. Trade Database and DataWeb

The OIS Computer Specialist was contacted to obtain the status of this system. The following components were checked and determined to be Y2K compliant:

- Dogbert
- HPOracle
- Development
- DataWeb1
- DataWeb2
- Global PE
- Sandman
- BigIP
- Silverstream
- Development

In addition to conducting inventory spot-checks, the successful Y2K simulation test recently conducted was reviewed. Several discrepancies in the inventory database were uncovered; however, all have been rectified.

4. Electronic Document Imaging System

The OIS Computer Specialist was contacted to obtain the status of this system. The following components were checked and determined to be Y2K compliant:

- ITCSRV
- Flywheel
- Sprocket
- Scan-PC1
- Scan-PC2

In addition to conducting inventory spot-checks, the end-to-end Y2K test that was recently conducted successfully was reviewed. No Y2K problems were experienced; however, the database did not start when rebooting the system after returning the system date to actual date due to software licensing 'feature' (which was resolved through discussions with vendor). This situation only occurred due to test conditions and will not occur during normal operations.

5. PC's and COTS

The OIS Computer Specialist was contacted to obtain the status of this system. The following components were checked and determined to be Y2K compliant. All checked PC's had an older version of the Windows 95 Y2K fix applied. The newest available version of the Windows 95 Y2K fix contains the same fixes as the old version plus a few more updated utilities. The additional updated utilities provided in the newest version would not normally be used (e.g., using xcopy with the /D: switch or using the Time/Date GUI to change February 29, 2000 up or down one date).

- One Optiplex GXMT 5166 in the Office of the Inspector General
- Two Optiplex GXMT 5166 in the Office of Industries, Energy, Chemicals, and Textiles Division
- One Optiplex Gxi in the Office of Industries, Energy, Chemicals, and Textiles Division
- One Optiplex GXMT 5166 in the Office of the General Counsel
One Dimension XPS H266 in the Office of Commissioner Koplan

The Net Wizard system administrator tool was used to perform a global search for WINFILE.EXE on all network-connected PC's. The resulting report was used to determine which PC's had not been updated by checking the recorded WINFILE.EXE creation date. Less than two percent of the Commission's PC's indicated that the Y2K patch had not yet been applied. The report listing was left with the OIS Computer Specialist who was going to ensure the identified PC's were updated.

VI. CONCLUSIONS

1. OIS should update ITC Net's Dell Poweredge 2100 with Legato Networker to Windows NT 4.0 Service Pack 4 with Y2K updates or Service Pack 5 and verify that Networker 4.4.1 still has Patch 23 applied. Application of Patch 23 (comprised of PatchID 4.41-02 and -03) can be verified by checking file creation dates and sizes for two of the updated files:

C:\win32app\nsr\bin\algnelem.exe dated 10/29/97, size 5,120 (PatchID 4.41-02)

C:\win32app\nsr\bin\nsrim.exe dated 11/25/97, size 20,480 (PatchID 4.41-03)

Status as of November 16, 1999: Service Patch 5 has been applied and Patch 23 verified. Action item is closed.

2. OIS should identify firmware flash versions for Cisco 1900 and 2900 routers and compare to the vendor's Y2K Product Compliance chart. Upgrade firmware flash as appropriate. Update the Commission's Y2K Compliance Inventory by adding records and associated data for the multiple switches.

Status as of November 16, 1999: The firmware versions of all 30 Cisco 1900s have been cataloged and upgrades will be scheduled as resources permit. The firmware for the Cisco 2900 cannot be checked remotely. A direct PC connection is required. It will be checked before the end of November. Action item is still open, but has been assigned an appropriate scheduling priority for final resolution.

3. OIS should schedule shutdown of LUGNUT to determine BIOS version. Version A08 is required to be Y2K compliant.

Status as of November 16, 1999: LUGNUT is scheduled to be replaced with a newer PC by end of November. Action item is still open until replacement is completed, tested, and validated to be Y2K compliant.

4. OIS should install Windows 95 Y2K update on PC's identified on Net Wizard report as being not Y2K compliant.

Status as of November 16, 1999: The identified PC's requiring the upgrade are scheduled to receive the upgrade by end of November. Action item is still open.