



Treasury Inspector General for Tax Administration Office of Audit

VIRTUAL SERVER TECHNOLOGY HAS BEEN SUCCESSFULLY IMPLEMENTED, BUT ADDITIONAL ACTIONS ARE NEEDED TO FURTHER REDUCE THE NUMBER OF SERVERS AND INCREASE SAVINGS

Issued on March 30, 2012

Highlights

Highlights of Report Number: 2012-20-029 to the Internal Revenue Service Chief Technology Officer.

IMPACT ON TAXPAYERS

The IRS implemented server virtualization technology to reduce the number of Wintel servers needed for tax administration and lower operational costs to the taxpayers. As of the end of Fiscal Year 2011, the IRS estimated that server virtualization had saved approximately \$10.2 million in equipment costs, and it expects to save approximately \$1.3 million annually in decreased electrical costs beginning in Fiscal Year 2013. The number of Wintel servers could be further reduced for increased efficiency and cost savings of approximately \$7.73 million.

WHY TIGTA DID THE AUDIT

This review was included in our Fiscal Year 2011 Annual Audit Plan and addresses the major management challenge of Modernization. The overall objective of this review was to evaluate the effectiveness and efficiency of the IRS's efforts to consolidate and virtualize its servers. In addition, the Federal Data Center Consolidation Initiative was passed in February 2010, mandating a reduction in the number of Federal data centers.

WHAT TIGTA FOUND

The IRS successfully implemented server virtualization technology to improve server efficiency and realize cost savings. The Server Consolidation and Virtualization Project focused on establishing a virtual server infrastructure and moving approximately 2,500 physical Wintel servers at 13 data center locations to the virtual environment. As of the end of Fiscal Year 2011, the IRS had approximately 1,800 virtual servers operating on 234 physical host servers in the virtual environment, resulting in the previously stated decrease in equipment and electrical costs.

The IRS does not have a plan for virtualizing Wintel servers at its field offices outside of the 13 data center locations. The IRS estimates there are approximately 650 Wintel servers in its field locations that can be decommissioned and added to the virtual server environment. By virtualizing these servers, the IRS estimates it could realize additional savings of approximately \$7.73 million (\$7.26 million in equipment savings and \$0.47 million in electrical savings over five years). Aside from the cost savings, these actions also help the IRS to meet Federal Data Center Consolidation Initiative goals.

WHAT TIGTA RECOMMENDED

TIGTA recommended that the Chief Technology Officer 1) develop and implement a process to identify servers currently located in field offices that can be virtualized and 2) create and implement a plan to virtualize those servers.

In their response to the report, IRS management concurred with both recommendations. The IRS plans to 1) develop and implement a process to identify servers located in field offices that can be virtualized and 2) create and implement a plan to virtualize those servers.

READ THE FULL REPORT

To view the report, including the scope, methodology, and full IRS response, go to:

<http://www.treas.gov/tigta/auditreports/2012reports/201220029fr.pdf>.