

Highlights of [GAO-11-634](#), a report to the Committee on Homeland Security and Governmental Affairs, U.S. Senate

Why GAO Did This Study

The federal government invests billions in information technology (IT) each year to help agencies accomplish their missions. Federal law, particularly the Clinger-Cohen Act of 1996, has defined the role of Chief Information Officer (CIO) as the focal point for IT management within agencies. Given the longstanding challenges the government faces in managing IT and the continued importance of the CIO, GAO was asked to (1) determine the current roles and responsibilities of CIOs, (2) determine what potential modifications to the Clinger-Cohen Act and related laws could be made to enhance CIOs' authority and effectiveness, and (3) identify key lessons learned by CIOs in managing IT. To do this, GAO administered a questionnaire to 30 CIOs, compared responses to legislative requirements and the results of a 2004 GAO study, interviewed current CIOs, convened a panel of former agency CIOs, and spoke with the Office of Management and Budget's (OMB) Federal CIO.

What GAO Recommends

GAO is recommending that OMB update its guidance to establish measures of accountability for ensuring that CIOs' responsibilities are fully implemented and encourage agencies to establish internal processes for documenting lessons learned. In commenting on a draft of this report, OMB officials generally agreed with GAO's findings and stated that OMB had taken actions that they believed addressed the recommendations.

View [GAO-11-634](#) or key components. For more information, contact Valerie C. Melvin at (202) 512-6304 or melvinv@gao.gov.

FEDERAL CHIEF INFORMATION OFFICERS

Opportunities Exist to Improve Role in Information Technology Management

What GAO Found

CIOs do not consistently have responsibility for 13 major areas of IT and information management as defined by law or deemed as critical to effective IT management, but they have continued to focus more attention on IT management-related areas. Specifically, most CIOs are responsible for seven key IT management areas: capital planning and investment management; enterprise architecture; information security; IT strategic planning, "e-government" initiatives; systems acquisition, development, and integration; and IT workforce planning. By contrast, CIOs are less frequently responsible for information management duties such as records management and privacy requirements, which they commonly share with other offices or organizations within the agency. In this regard, CIOs report spending over two-thirds of their time on IT management responsibilities, and less than one-third of their time on information management responsibilities. CIOs also report devoting time to other responsibilities such as addressing infrastructure issues and identifying emerging technologies. Further, many CIOs serve in positions in addition to their role as CIO, such as human capital officer. In addition, tenure at the CIO position has remained at about 2 years. Finally, just over half of the CIOs reported directly to the head of their respective agencies, which is required by law. The CIOs and others have stressed that a variety of reporting relationships in an agency can be effective, but that CIOs need to have access to the agency head and form productive working relationships with senior executives across the agency in order to carry out their mission.

Federal law provides CIOs with adequate authority to manage IT for their agencies; however, some limitations exist that impede their ability to exercise this authority. Current and former CIOs, as well as the Federal CIO, did not identify legislative changes needed to enhance CIOs' authority and generally felt that existing law provides sufficient authority. Nevertheless, CIOs do face limitations in exercising their influence in certain IT management areas. Specifically, CIOs do not always have sufficient control over IT investments, and they often have limited influence over the IT workforce, such as in hiring and firing decisions and the performance of component-level CIOs. More consistent implementation of CIOs' authority could enhance their effectiveness in these areas. OMB has taken steps to increase CIOs' effectiveness, but it has not established measures of accountability to ensure that responsibilities are fully implemented.

CIOs identified a number of best practices and lessons learned for more effectively managing IT at agencies, and the Federal CIO Council has established a website to share this information among agencies. Agencies have begun to share information in the areas of vendor communication and contract management; the consolidation of multiple systems into an enterprise solution through the use of cloud services; and program manager development. However, CIOs have not implemented structured agency processes for sharing lessons learned. Doing so could help CIOs share ideas across their agencies and with their successors for improving work processes and increasing cost effectiveness.