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DATA CENTER OPTIMIZATION

Agencies Need to Address Challenges and Improve Progress to Achieve Cost Savings Goal

Why GAO Did This Study

In December 2014, FITARA was enacted and included a series of provisions related to improving the performance of data centers, including requiring OMB to establish optimization metrics and agencies to report on progress toward meeting the metrics. OMB's Federal Chief Information Officer subsequently launched DCOI to build on prior data center consolidation and optimization efforts.

GAO was asked to review data center optimization. GAO's objectives were to (1) assess agencies' progress against OMB's data center optimization targets, (2) identify agencies' notable optimization successes and challenges, and (3) evaluate the extent to which agencies are able to effectively measure server utilization. To do so, GAO evaluated the 24 DCOI agencies' progress against OMB's fiscal year 2018 optimization targets, interviewed officials, and assessed agencies' efforts to implement monitoring tools for server utilization.

What GAO Recommends

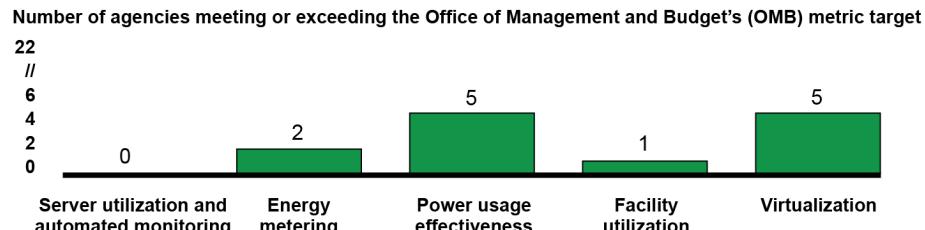
Congress should consider extending the time frame for the data center consolidation and optimization provisions of FITARA to provide agencies with additional time to meet OMB's targets and achieve cost savings. GAO is also recommending that 18 agencies complete their plans to implement data center monitoring tools and that OMB require agencies to complete their plans and report them to OMB. Ten agencies agreed with GAO's recommendations, three agencies partially agreed, and six (including OMB) did not state whether they agreed or disagreed, as discussed in the report.

View [GAO-17-448](#). For more information, contact David A. Powner at (202) 512-9286 or pownerd@gao.gov.

What GAO Found

Of the 24 agencies required to participate in the Office of Management and Budget's (OMB) Data Center Optimization Initiative (DCOI), 22 collectively reported limited progress against OMB's fiscal year 2018 performance targets. Two agencies did not have a basis to report on progress as they do not have agency-owned data centers. For OMB's five optimization targets, five agencies or less reported that they met or exceeded each of the targets (see figure).

Twenty-Two Agencies' Progress against OMB Data Center Optimization Metrics, as of February 2017



Source: GAO analysis of data from OMB's Information Technology Dashboard. | GAO-17-448

Further, as of April 2017, 17 of the 22 agencies were not planning to meet OMB's targets by September 30, 2018. This is concerning because the Federal Information Technology Acquisition Reform Act's (FITARA) data center consolidation and optimization provisions, such as those that require agencies to report on optimization progress and cost savings, expire a day later on October 1, 2018. Extending the time frame of these provisions would increase the likelihood that agencies will meet OMB's optimization targets and realize related cost savings. Additionally, until agencies improve their optimization progress, OMB's \$2.7 billion initiative-wide cost savings goal may not be achievable.

All 24 agencies reported successes in optimizing their data centers—notably, the benefits of key technologies, such as virtualizing systems to improve performance, and increased energy efficiency. However, agencies also reported challenges related to, for example, improving the utilization of their data center facilities and competing for labor resources. It will be important for agencies to take action to address their identified challenges—as GAO previously recommended—in order to improve data center optimization progress.

Of the 24 agencies required by OMB to implement automated monitoring tools to measure server utilization by the end of fiscal year 2018, 4 reported in their data center inventories as of February 2017 that they had fully implemented such tools, 18 reported that they had not, and 2 did not have a basis to report on progress because they do not have agency-owned data centers. Collectively, agencies reported that these tools were used at about 3 percent of their centers. Although federal standards emphasize the need to establish plans to help ensure goals are met, of the 18 agencies, none fully documented plans, 6 agencies had partially documented them, and 12 did not document them. Agencies provided varied reasons for this, including that they were still evaluating available tools. In addition, the lack of a formal requirement from OMB to establish the plans also contributed to agencies not having them. Until these plans are completed, agencies may be challenged in measuring server utilization.