



Treasury Inspector General for Tax Administration Office of Audit

CUSTOMER ACCOUNT DATA ENGINE 2 PERFORMANCE AND CAPACITY IS SUFFICIENT, BUT ACTIONS ARE NEEDED TO IMPROVE TESTING

Issued on May 16, 2012

Highlights

Highlights of Report Number: 2012-20-051 to the Internal Revenue Service Chief Technology Officer.

IMPACT ON TAXPAYERS

Built on the foundations of the current Customer Account Data Engine (CADE), CADE 2 will allow the IRS to convert the existing weekly individual taxpayer account processing system to daily batch processing. Such an enhancement should improve the service provided to taxpayers by allowing the IRS to more effectively and efficiently update taxpayer accounts, support account settlement and maintenance, and process refunds on a daily basis. The ability of the IRS to accurately execute, monitor, and assess performance and capacity testing directly affects whether, after implementation, CADE 2 will be capable of processing the necessary quantity and types of information within required time frames. The untimely completion of information processing could result in delayed taxpayer refunds and reduced customer service.

WHY TIGTA DID THE AUDIT

The overall objective of this review was to determine whether the IRS is effectively testing the performance and capacity of CADE 2. This audit was included in our Fiscal Year 2011 Annual Audit Plan and addresses the major management challenge of Modernization of the IRS.

WHAT TIGTA FOUND

The IRS has successfully established a testing environment for CADE 2 that is representative of the production environment. This is allowing the IRS to obtain meaningful data from its pre-production tests. However, the IRS did not follow procedures to ensure that performance requirements were completely tested during the Final Integration Test Phase I. As a result, the IRS may not have acquired all the necessary information to make a fully informed decision on the ability of the CADE 2 system to effectively process transactions under expected normal and peak workload conditions, within acceptable response time thresholds.

TIGTA also found that the IRS needs to develop procedures for access to and retention and maintenance of testing artifacts for Final Integration Testing.

WHAT TIGTA RECOMMENDED

TIGTA recommended that the Associate Chief Information Officer, Applications Development, ensure internal controls for testing performance and capacity requirements are formally and effectively implemented to ensure the traceability of these requirements through the performance testing process. This should include the use of integrated automated tools, when warranted by program and project size, to improve the consistency and completeness of testing performance and capacity requirements. In addition, the IRS should develop procedures related to the access to and retention and maintenance of testing artifacts for performance testing.

In their response to the report, IRS management agreed with TIGTA's recommendations. The IRS plans to ensure internal controls for testing performance and capacity requirements are formally and effectively implemented to ensure the traceability of these requirements through the performance testing process. This will include the use of automated tools for testing, where appropriate. The IRS also plans to review and, as warranted, develop procedures related to the access to and retention and maintenance of testing artifacts across all test projects.

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/201220051fr.pdf>

E-mail Address: TIGTACommunications@tigta.treas.gov

Phone Number: 202-622-6500

Website: <http://www.tigta.gov>