

Computer Assisted Audit Techniques for Segregation of Duties

Charles Broom, CISA, CISSP

IS Assurance Manager

BDO



Learning Objectives

By the end of this class you should be able to:

- Explain the concepts surrounding segregation of duties
- Explain the limitations of testing segregation of duties in a computer system
- Explain how to utilize CAATs to perform segregation of duties testing



Agenda

What is segregation of duties?

What are the limitations of testing segregation of duties in a computer system?

Why use CAATs for testing segregation of duties?

Preparation for using CAATs

Steps in using CAATs (Scripting)

Questions



What is Segregation of Duties?

Segregation of duties (SoD) is the concept of having multiple personnel involved in a given task

Set of controls to prevent or detect misstatement due to fraud or error.

Examples:



SoD Example 1 - Procurement

- Alice adds new vendor to the system
- Bob places order from vendor
- Carol receives the inventory
- Dean pays the invoice

SoD Example 2 - Sales

- Ed sets up new customer in system
- Frank approves credit limit and terms
- Gina enters sales order
- Heidi ships order to customer
- Isaac sends invoice to customer
- James issues credit memos
- Kenny applies cash receipt
- Lisa performs bank reconciliation



What is Segregation of Duties? (cont.)

SoD is NOT the concept of ensuring personnel have access to only perform those functions for which they have authorization



What is Segregation of Duties? (cont.)

Key areas that should be segregated:

- Authorization
- Recording
- Custody*
- Reconciliation



What is Segregation of Duties? (cont.)

Role of computer systems in enforcing SoD controls

- Preventative controls
- Permissions-based
- Easy to implement
- Difficult to circumvent



Limitations to testing SoD via computer system access

The data used for testing will only reflect the access at the moment the report is run. It is only useful for a snapshot view.

Not all functions that should be segregated will always be contained in the system.

Why use CAATs to test SoD?

Scalability

Automation

Recursion

In order to understand recursion, one must first understand recursion.

Preparation - what do you need before you start?

Identify the pairs of duties you want to test

Examples:

- Initiate Journal Entry & Post Journal Entry
- Receipt of Inventory & Maintain Inventory Records
- Prepare Payroll Checks & Edit Employee Master File
- Credit Memos & Post Cash Receipts
- Invoice Customer & Post Cash Receipts



Preparation (cont.)

Identify unique duties in the test population

From Examples above:

- Initiate Journal Entry
- Post Journal Entry
- Receipt of Inventory
- Maintain Inventory Records
- Prepare Payroll Checks
- Edit Employee Master File
- Credit Memos
- Post Cash Receipts
- Invoice Customer



Steps in using CAATs

Extract

Data Analysis

- Append
- Duplicate Detection
- Summarization
- Output



DEMO

Questions





Bonus - Best Practices

Use of Template
Commenting
Variable Naming