



# Computer Assisted Audit Techniques for Segregation of Duties

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# 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

