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Computer Assisted Audit Techniques (CAATs)

| le savoir vivant |

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Agenda

- Introduction
- Planning
- CAATs documentation
- Reporting

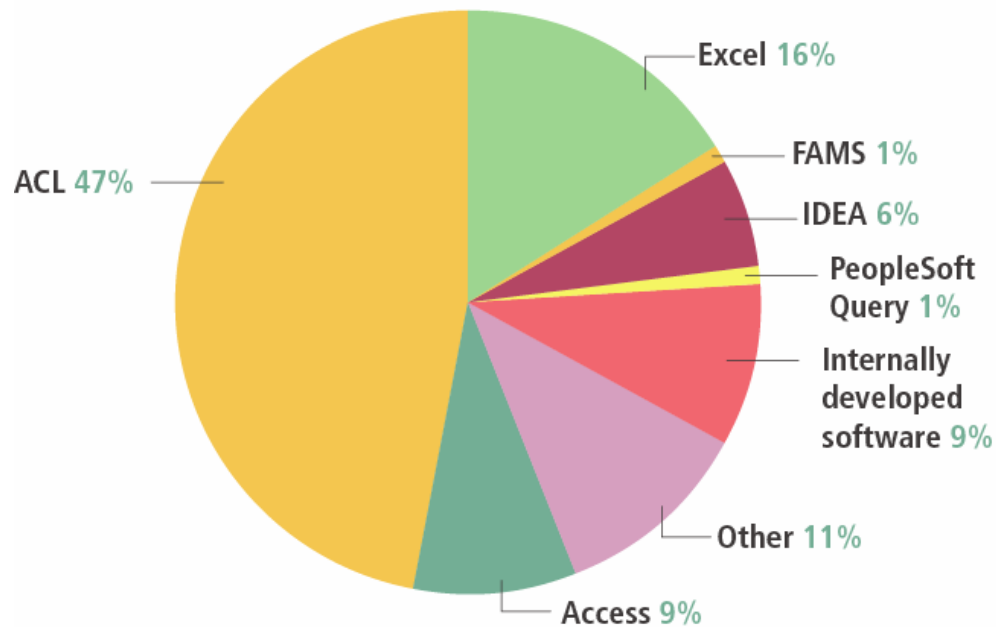
IS Auditing Guideline: G3 Use of Computer Assisted Audit Techniques (CAATs)

Introduction

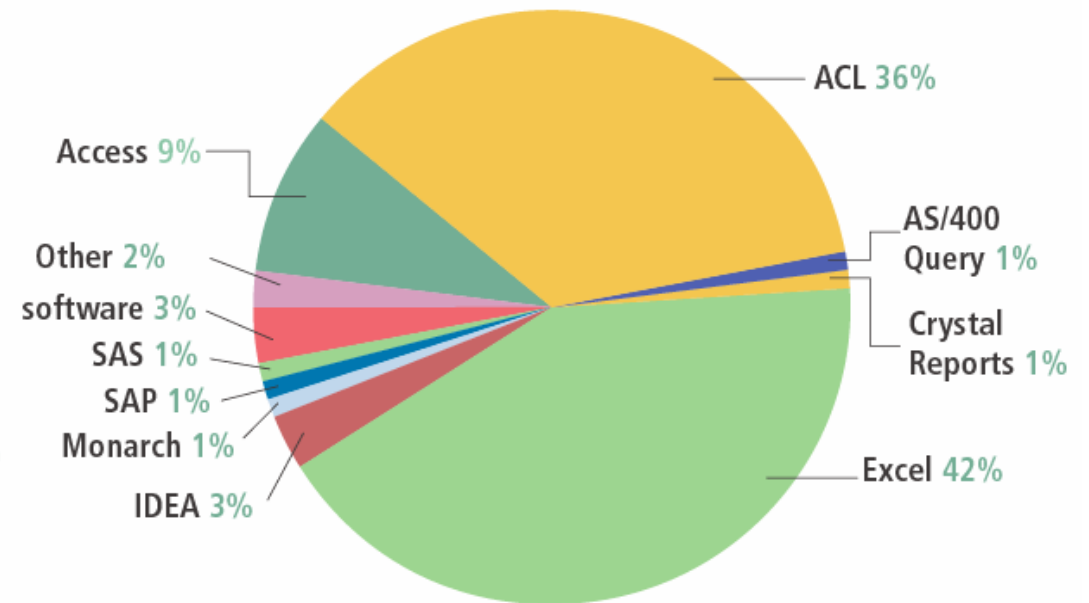
- CAATs stand for: Computer Assisted Audit Techniques
- The tools vary from MS Excel to the dedicated audit software tools like IDEA and ACL
- With CAATs you can perform **substantive testing**, do **sampling** in a efficient and effective way and **selecting transactions/items** for Tests of Controls

Common CAATs Tools

Fraud Detection/Prevention Software



Data Analysis



CAATs Applications

- Tests of details of transactions and balances
- Analytical review procedures
- Compliance tests of IS general controls
- Compliance tests of IS application controls
- Penetration testing
- ...

Benefits of using CAATs

- **Increases Audit Economy and Efficiency**
 - Perform huge volume of transactions → Better coverage and assurance obtained
- **Improves Audit Effectiveness**
 - Join, concatenate and compare different files to quantify findings
 - Statistics, Benford, ...
- **Enhances Image of Auditing**
 - Move focus to areas where risks were noted
 - Back up findings with detail

Decision Factors for Using CAATs

- Computer knowledge, expertise, and experience of the IS Auditor
- Availability of suitable CAATs and IS facilities
- Efficiency and effectiveness of using CAATs over manual techniques
- Time constraints
- Integrity of the information system and IT environment
- Level of audit risk

CAATs Planning Steps (I)

- Set the audit objectives of the CAATs
- Determine the accessibility and availability of the organisation's IS facilities, programs/system and data
- Define the procedures to be undertaken (e.g., statistical sampling, recalculation, confirmation, etc.)
- Define output requirements

CAATs Planning Steps (II)

- Determine resource requirements, i.e., personnel, CAATs, processing environment (organisation's IS facilities or audit IS facilities)
- Obtain access to the organisation's IS facilities, programs/system, and data, including file definitions
- Document CAATs to be used, including objectives, high-level flowcharts, and run instructions

Audit Planning with CAATs

- Arrangements with the Auditee
 - Data retention (e.g., log files)
 - Access to the organisation's IS facilities
- Testing the CAATs
 - Reliance of the CAATs
- Security of Data and CAATs
 - Integrity, reliability and usefulness
 - Confidentiality
 - Identify changes to the CAATs

CAATs Documentation (I)

The step-by-step CAATs process should be sufficiently documented to **provide adequate audit evidence**.

- Planning
 - CAATs objectives
 - CAATs to be used
 - Controls to be exercised
 - Staffing and timing

CAATs Documentation (II)

- Execution
 - CAATs preparation and testing procedures and controls
 - Details of the tests performed by the CAATs
 - Details of inputs (e.g., data used, file layouts), processing (e.g., CAATs high-level flowcharts, logic) and outputs (e.g., log files, reports)
 - Listing of relevant parameters or source code
- Audit Evidence
 - Output produced
 - Description of the audit analysis work performed on the output
 - Audit findings
 - Audit conclusions
 - Audit recommendations

Reporting

- The Audit report should contain a clear description of the CAATs used
- The description of the CAATs used should also be included in the body of the report, where the specific finding relating to the use of the CAATs is discussed.