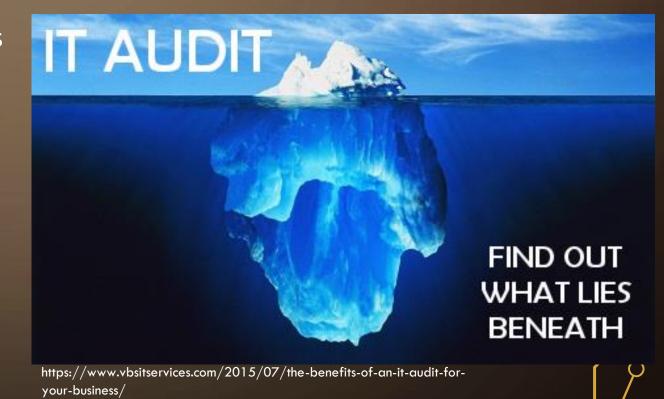


OVERVIEW OF THE AUDIT PROCESS

OBJECTIVES

- The different types of internal controls
- How you should choose what to audit
- How to conduct the basic stages of an audit
 - Planning
 - Fieldwork and documentation
 - Issue discovery and issue validation
 - Solution development
 - Report drafting and issuance
 - Issue tracking



INTERNAL CONTROLS

- The real mission of the internal audit department is to help improve the state of internal controls at the company.
- Internal controls are mechanisms that ensure the proper functioning of processes within the company.
- Security professionals develop and implement internal controls
- Auditors looks for the existence of risks and ensure that there are controls in place to mitigate those risks

Types Implementations

Preventive Administrative

Detective Technical

Reactive Physical

Deterrent

Compensating

Directive

Recovery

DETERMINING WHAT TO AUDIT

- One of the most important tasks of the internal audit department is determining what to audit.
- Your audit plan must focus your auditors on the areas with the most risk and on areas where you can add the most value.
- You must be efficient and effective in how you use your limited resources by spending your IT audit hours looking at the areas of most importance. This should not be done by arbitrarily pulling potential audits out of the air; instead, it should be a logical and methodical process that ensures that all potential audits have been considered.

CREATING THE AUDIT UNIVERSE

- One of the first steps in ensuring an effective planning process is to create your IT audit universe (in other words, the population of potential IT audits).
- First, determine what IT functions are centralized, and place each of the centralized functions on your list of potential IT audit

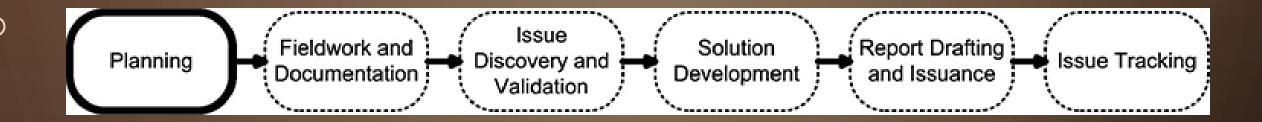
Unix and Linux server administration	Central help desk
Windows server administration	Database management
Wireless network security	Telephony and voice over IP
Internal router and switch management	Mobile services
Firewall/DMZ management	IT security policy
	Mainframe operations

RANKING THE AUDIT UNIVERSE

- Once you've created your IT audit universe, you must develop a methodology for ranking those potential audits to determine your plan for the year (or quarter, month, and so on).
- Why do we do this?

Potential audit	Audit ranking	Total points	Known issues	Inherent risk	Benefit	Mgmt input
UNIX server administration	1	32	8	7	8	9
Corporate firewalls	2	29	7	8	6	8
Site 1 data center	3	26	7	6	7	6
Accounts receivable system	4	20	4	5	6	5
Central help desk	5	15	4	6	3	2

THE STAGES OF AN AUDIT



- 1. Planning
- 2. Fieldwork and documentation
- 3. Issue discovery and validation
- 4. Solution development
- 5. Report drafting and issuance
- 6. Issue tracking

PLANNING

- The goal of the planning process is to determine the objectives and scope of the audit. You need to determine just what it is you're trying to accomplish with the review. As part of this process, you should develop a series of steps to be executed in order to accomplish the audit's objectives.
 - Hand-off from the audit manager
 - Preliminary survey
 - Customer requests
 - Standard checklists
 - Research

FIELDWORK AND DOCUMENTATION

• The bulk of the audit occurs during this phase, when the audit steps created during the preceding stage are executed by the audit team. Now the team is acquiring data and performing interviews that will help team members analyze the potential risks and determine which risks have not been mitigated appropriately.

ISSUE DISCOVERY AND VALIDATION

• While executing fieldwork, auditors will develop a list of potential concerns. This is obviously one of the more important phases of the audit, and the auditor must take care to scrub the list of potential issues to ensure that all issues are valid and relevant. In the spirit of collaboration, auditors should discuss potential issues with the customers as soon as possible.

SOLUTION DEVELOPMENT

• After you have identified the potential issues in the area you're auditing and have validated the facts and risks, you can work with your customers to develop an action plan for addressing each issue.

• This is something so many auditors forget or ignore.

REPORT DRAFTING AND ISSUANCE

- Once you've discovered the issues in the environment being audited, validated them with the customers, and developed solutions for addressing them, you can draft the audit report. The audit report is the vehicle by which you document the results of the audit. It serves two main functions:
 - For you and the audit customers, it serves as a record of the audit, its results, and the resulting action plans.
 - For senior management and the audit committee, it serves as a "report card" on the area that was audited.

ESSENTIAL ELEMENTS OF AN AUDIT REPORT

• How do we craft an audit report?

Statement of the audit scope

Executive summary

• List of issues, along with action plans for resolving them. Timelines for remediation.

ESSENTIAL ELEMENTS OF AN AUDIT REPORT

<u>ltem</u>	<u>Title</u>	<u>Description</u>	<u>Rank</u>	<u>Implemented</u>	<u>Owner</u>	<u>Timeline</u>	<u>Recommendations</u>
1.1	System Configuration Standards	System configuration standards and server hardening procedures are not documented and are not applied consistently throughout the enterprise.	High	Yes	Tony Stark	2 mo	Develop institutional system configuration standards and procedures, and set up policy to ensure standards and procedures are consistently followed by all IT units where applicable
1.2	Change Management	Lack of a consistent change management process	Low	No	Bruce Banner	6 mo	Consult with management to set up a change advisory board (CAB), and develop consistent change management procedures which can be implemented by the CAB and followed by the organization to ensure a consistent and reviewable change management process
1.3	Physical Security	Lack of a physical security policy and procedures for organizational hardware equipment	Medium	No	Carol Danvers	3 mo	Work with senior management and facilities management to develop and implment a physical security policy, standards, and procedures for organizational IT hardware and equipment

ISSUE TRACKING

• It is common for auditors to feel like the audit is "done" once the audit report has been issued. However, issuing an audit report adds no value to the company unless it results in action being taken. The audit is not truly complete until the issues raised in the audit are resolved, either by being fixed (the preferred resolution) or by being accepted by the appropriate level of management.

SUMMARY

- Internal controls, stated in the simplest terms, are mechanisms that ensure the proper functioning of processes within a company. Controls can be preventive, detective, or reactive and have administrative, technical, and physical implementations.
- Your audit plan must focus your auditors on the areas that have the most risk and where you can add the most value. A comprehensive audit universe and effective ranking model are important elements to achieving this goal.
- An audit has six key stages: planning, fieldwork and documentation, issue discovery and validation, solution development, report drafting and issuance, and issue tracking.
- Some basic sources that should be referenced as part of each audit's planning process include hand-off from the audit manager, preliminary survey, customer requests, standard checklists, and research.
- During fieldwork and documentation, wherever possible, the auditors should look for ways to validate independently the information given to them and the effectiveness of the control environment.
- If you work with your customers throughout the audit to validate issues and come to agreement on the risks those issues represent, the conclusion of the audit will go much more smoothly and quickly.
- The essential elements of an audit report are the statement of the audit scope, list of issues along with action plans for resolving them, and the executive summary.
- The audit is not truly complete until the issues raised in the audit are resolved.