



Daffodil
International
University

Internship on Information System Audit

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Section – A (26th Batch)

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Fall - 2024

DECLARATION

I hereby declare that I have taken this internship under the supervision of Mr. Musabbir Hasan Sammak, Lecturer, Department of Software Engineering, Daffodil International University. I also declare that neither this internship nor any part of this has been submitted elsewhere for award of any degree.



Asikuzzaman Tanvir

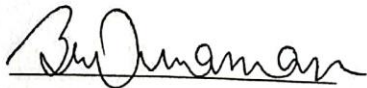
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Batch: 26

Department of Software Engineering

Faculty of Science and Information Technology

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APPROVAL.

This Internship titled on “**Information System Audit**”, submitted by **Asikuzzaman Tanvir (ID: 182-35-2550)** to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Software Engineering and approval as to its style and contents.

BOARD OF EXAMINERS



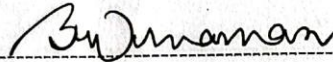
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ACKNOWLEDGEMENT

I want to start by thanking Almighty for the blessings and the courage to finish my B.Sc. in Software Engineering.

I possessed the privilege of education beneath my esteemed supervisor, Mr. Musabbir Hasan Sammak, sir, and I appreciate his support and direction. His extensive understanding enabled me to advance significantly and widen my perspective. His astute observations and unwavering encouragement tremendously inspired me to work in the industry's practical division. I am where I am today thanks to his unending patience, diligent guidance, constant encouragement, enthusiastic support, helpful criticism, and insightful recommendation.

I want to express my sincere gratitude to Dr. Imran Mahmud, Associate Professor and Head of the Software Engineering Department at Daffodil International University, for his generosity and appropriate assistance throughout my internship. I also want to express my appreciation to everyone of the staff, faculty, and staff members for their unwavering assistance.

ABSTRACT

Students and new graduates are increasingly interested in information systems (IS) auditing and consulting. This report details my work as an IS auditor for ACNABIN Chartered Accountants. There are ten partners in this firm. My esteemed director, Mr. A.N.M. Shakawath Hossain, oversaw me while I got my internship done. I finished my internship with this company from February 6, 2022, until August 6, 2022. I will outline all of the work I learned and done while I was an intern in my report.

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1. INTRODUCTION

1.1 Objective:

The purpose of this program is to obtain realistic industry knowledge by using the knowledge gained in related subjects during university coursework. It helps us prepare for the industry and develops our soft skills. It also improves our correspondence and presentation abilities. We collaborate with a number of seasoned professionals in the field during an internship program, from which we can also get advantages.

I've finished my six-month internship as an IT audit intern at ACNABIN Chartered Accountants. All of the work experience I acquired throughout my six-month internship is covered in this report.

1.2 Motivation:

Main motivation for completing this to have a thorough understanding of cybersecurity best practices because the academic program cannot encompass everything and provide industry experience. The opportunity to experience real-world difficulties, such as conducting internal and external audits and consulting for well-known companies, is another reason I chose this internship.

I majored in cybersecurity and finished the "Information System Audit & Assurance Course." For this reason, I have decided to work independently as an internal and external IS auditor at ACNABIN Chartered Accountants.

1.3 Goals for the internship:

1. Performing audits using different paradigms for cybersecurity
2. Cybersecurity Consultation.
3. Completing confirmation in line with the requirements for the framework.
4. Present the final assessment report.
5. Find more about the IT apps and software that are often used in the industry.
6. Create ethical and moral attributes.

2. COMPANY INFORMATION

2.1 Overview of the Company:

In order to ensure the best quality, ACNABIN, one of the biggest accounting companies in Bangladesh. Since starting the procedure in 1985, the legal firm has been regarded capable, reliable legal firms. The value that our partners and clients require is how we at ACNABIN gauge performance. In order to service our esteemed clientele, about 500 specialists with a wide range of expertise and abilities work around the clock in every department.

ACNABIN, a Baker Tilly International-sponsored company, aims to do more than just really show gratitude to comprehend the meeting quick requirements. Attend to client demands and anticipate problems before they arise.

ACNABIN was founded in 1985 with a vision to support clients by offering reliable professional services. Over the years, the firm has grown into one of the leading accounting organizations in Bangladesh, widely recognized for its trustworthiness and professional excellence.

The following internal key values of Baker Tilly drive:

1. To provide good, for instance
2. Deliver sincere, superior services
3. To act morally and to speak honestly

A strong desire to support our clients while also maximizing the potential of our employees.

2.2 Vision:

By becoming a trustworthy corporate consultant, we surpass the conventional auditor relationship.

2.3 Mission:

Highest standards of customer confidentiality are upheld by us. Preserve faith and for sensitive, competitive details. Our success has been based on these ideas.

2.4 Core Services:

- IT Audit
- Audit and Assurance
- Tax and Legal Advice
- Advisory
- Cyber security consultancy
- ISO 27001 implementation.

2.5 Structure of the Organization:

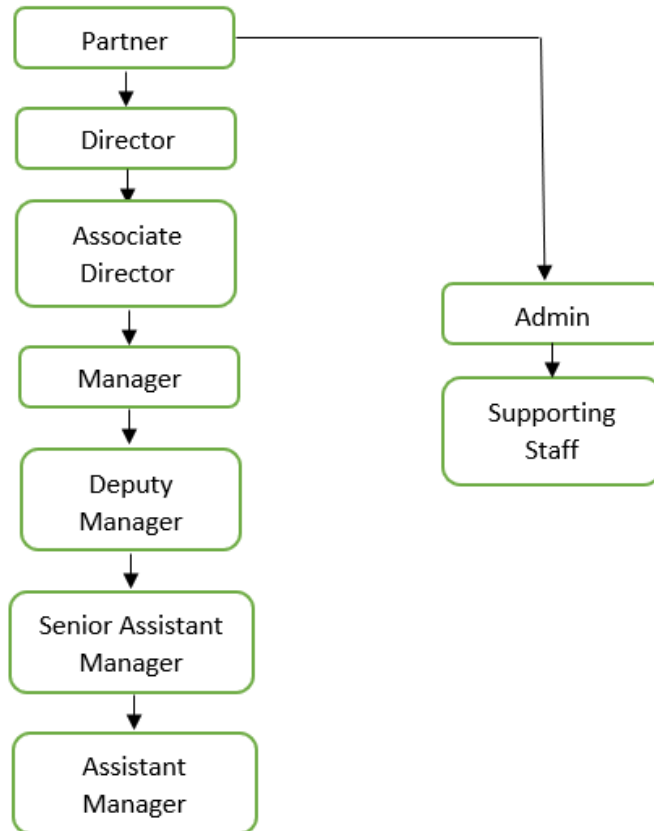


Fig – 1: ACNABIN CA Organogram Chart

3. WORKING METHODS

3.1 Introduction:

This segment will emphasize my work adventures as a cybersecurity consultant from the internship.

Mr. A.N.M. Shakawath Hossain, CISA, CISO, the Director of IT at ACNABIN Chartered Accountants, has been my supervisor over this period.

3.2 Overview:

Financial institutions that aren't banks, producing firms, hospitals, power production companies, and groups of enterprises are among the eight clients I have performed IT audits for during my internship.

3.2.1 IT Audit Types:

Our company does two different kinds of audits. The following are some of the projects I've finished:

1. An Internal audit.
2. An External audit.

3.2.1.1 Internal IT Audit:

An independent, impartial assurance and consulting activity, internal auditing aims to enhance and optimize an organization's operations. By providing a methodical, disciplined strategy to assess and enhance the efficacy of risk management, control, and governance procedures, it aids a company in achieving its goals.

3.2.1.2 External IT Audit:

Independent accountant conducting referred to as external audit. The certification of an entity's financial statements is the most common goal of this kind of audit. All publicly traded companies must have this accreditation, as do several lenders and investors.

An external audit's goals are to ascertain:

- The accounting documents of the customer completeness and accuracy;
- Regardless of the relevant framework was followed in the preparation of the client's accounting records.

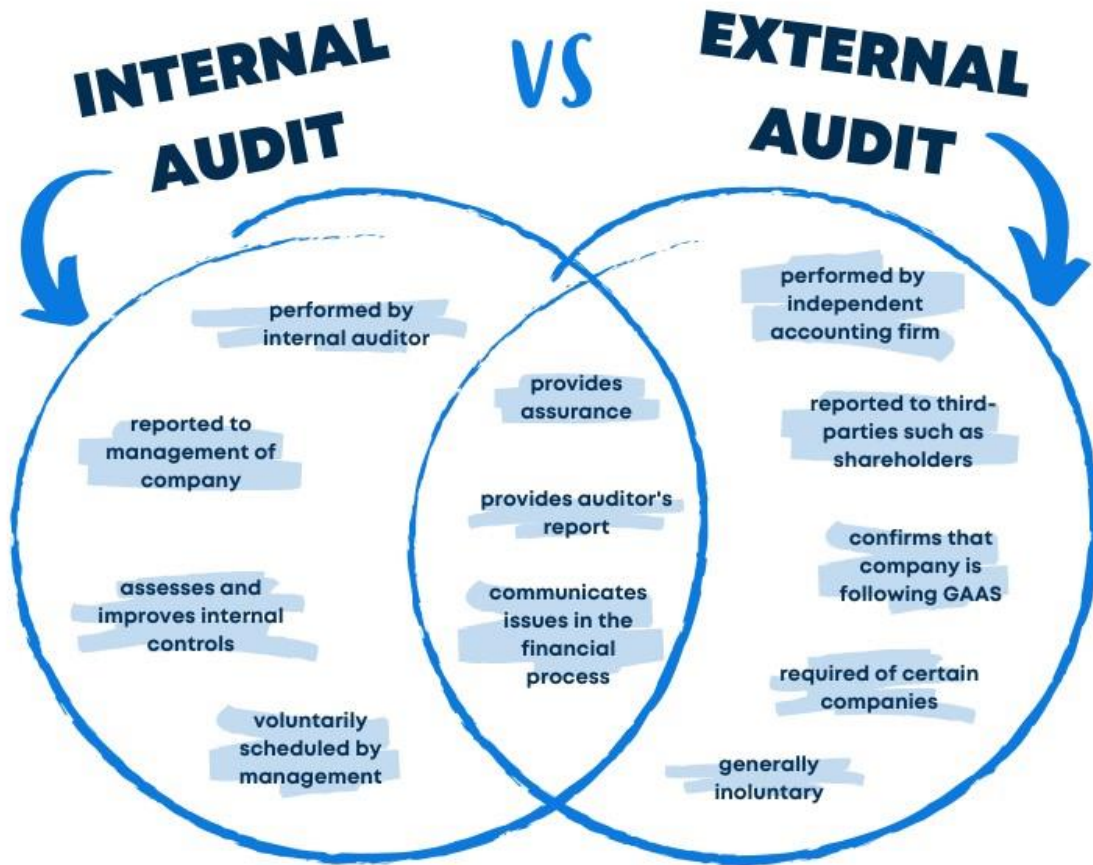


Fig – 2: Difference of Internal & External Audit

3.3 Major Clients:

My major clients in which I have completed both external and internal IT audits are:

1. External IT Audit -
 - Bangladesh Bank (BB)
 - Grameen Phone (GP)
 - Bangladesh Infrastructure Finance Fund Limited (BIFFL)
 - ~~Kushiara~~ Company Limited.(KPCL)
2. Internal IT Audit -
 - Walton Hi-Tech Industries Ltd. PLC
 - Ispahani Islamia Eye Hospital Ltd.

3.4 The Audit Procedure

These days, every business is connected to multiple IT infrastructures. With the use of IT, business procedures are now quite simple.

We request certain documentation pertaining to ICT security compliance during both internal and external IT audits. We evaluate those documents and verify compliance after obtaining them.

I follow these procedures in my work:

1. Plans

Auditor will go over expert letters and prior audits in the client's area. Along with creating important audit programs to adhere to, auditors also investigate pertinent regulations and rulings.

2. Caution

Once the initial meeting is scheduled, the appropriate department or department faculty will be informed by the Internal Audit Manager's workplace.

3. Meeting's commencement

This meeting is attended by every employee taking part in the supervisory and administrative authorities' audit. Additionally, we discuss the audit's goals and motives, just like we do with the audit program. The information gathered during this session may be used to change audit programs.

4. Interactive

This step involves testing and a conversation with the responsible staff members.

5. Prepare a Report

Once the hands-on training is over, we compose a report. The paper addresses a number of topics including the goals and scope of the audit, important principles, conclusions, and suggestions for enhancement or amendment.

6. Board Reaction

A draft audit report will be sent to the audited area's administrative agency for evaluation and input on the suggestions.

7. Final Meeting

The Office of Officers will host this meeting. Examined and discussed are the board's replies and the audit's findings. This is the ideal moment to express questions and get clarifications.

8. Final Audit Report Distribution

CWRU's external accounting company, the audit department, the president, senior management, and the CFO get the final audit report with the executives' answers following the last meeting.

9. Follow-up

A follow-up inquiry will be carried out by the audit management department about four months following the submission regarding the report.

3.4.1 Request for documents:

Following standards are used to place the request for documents:

- Governance and strategy
- Data security
- Risk management
- Training and awareness
- Legal, regulatory and contractual requirements
- Policies and information security management system
- Business continuity and incident management
- Technical IT security controls
- Physical security controls
- Third-party management
- Secure development

3.4.2 Documents Analysis:

ICT Security Policy:

A legitimate and documented ICT security strategy should be in place for any manufacturing firm.

Generally speaking, the following elements:

- Putting together an all-encompassing organizational security plan
- Outlining security measures and user access control regulations
- Identifying compromised assets, including computers, networks, devices, apps, and data
- Reducing the negative effects of any assets that are compromised
- Preserving an organization's information security reputation
- Observing the relevant legal requirements set forth by regulatory agencies and standards.

The ICT organizational structure, which includes the job description, duty segregation, and backup plan:

Organogram Chart:

By making it obvious who is in charge of what, it removes confusion. Employees are aware of who to report specific issues to, who their teammates are, and who their direct supervisor is.

Here I have attached a sample of organogram chart,

Matrix Organization Structure of Multinational Company

This slide is 100% editable. Adapt it to your needs and capture your audience's attention.

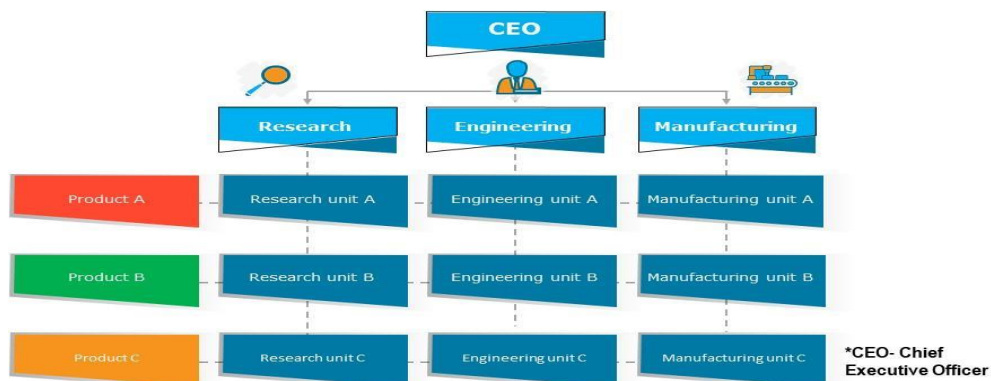


Fig – 3: A global company's organizational chart

Job Description:

An official document that describes the main tasks, obligations, necessary credentials, reporting format, and performance standards for a particular position. It gives managers and staff a comprehensive grasp of the demands of the position.

Method of Conduct:

Performed an audit by sampling job descriptions from multiple departments. Confirmed that all JDs:

- We selected a representative sample of job descriptions from a cross-section of departments to ensure a thorough and unbiased review of the organization's practices.
- We verified the availability and establishment of each JD in sample, confirming that every designated position has a corresponding description that is easily accessible to relevant team members.
- We assessed the accuracy and currency of each job description by conducting focused discussions with both the incumbents in the roles and their direct supervisors.
- We confirmed formal endorsement by checking that each job description has been formally reviewed, agreed upon, and endorsed with a signature and date by both the respective employee and their direct manager.

Sample of an Job Description:

Job No: TBD	Date Created (Updated/Revised): 01-07-2020
Job Title: Sr. Executive, IT	Reporting To: [REDACTED]
Grade: TBD	Location & Department: [REDACTED]

<p>1. Job Purpose: Providing technical support of information technology and ensuring the whole workplace runs smoothly. Responding in a timely manner to service issues and requests. Prepare requirements and distribute all IT products. Maintain and troubleshoot Network, CCTV system, PABX, IT equipment (Workstations, photocopier, printers etc.)</p>	
<p>2. Key Result Areas & Measures of Success:</p>	
KRAs	Measure of Success
<p>A. Monitoring & Troubleshooting:</p> <ul style="list-style-type: none"> ➤ Develop, monitor and maintain computer systems and networks in ways that optimize performance. ➤ Troubleshoot system and network problems, diagnosing and solving hardware or software faults. ➤ Design and implementation of security surveillance system (NVR, IP Camera). ➤ Monitoring & troubleshooting IP camera, NVR. Managing the CCTV department. ➤ Diagnose and troubleshoot technical issues, including computer setup and network configuration. ➤ Provide support to the end users and troubleshoot user queries. 	<p>Timely monitoring and troubleshooting.</p>
<p>B. IT Support & Service:</p> <ul style="list-style-type: none"> ➤ Install and configure software and computer systems. ➤ Installation and troubleshooting of PABX system of KPCL site. ➤ Check computer hardware and network devices regularly to ensure functionality. ➤ Troubleshooting server computer as required. ➤ Arranging video conferencing with other locations (local, foreign). ➤ Provide support relating to network issues, hardware & software, computer applications, LAN component, network printers. ➤ Install and configure appropriate software and functions according to specifications. ➤ Provide orientation and guidance to users on how to operate new software and computer equipment. ➤ Talk employees through a series of actions, either face-to-face or over the phone, to help set up systems or resolve issues. 	<p>Maintaining uptime and prompt service and support.</p>

Segregation of Duties:

An internal control that assigns different employees to different important duties and responsibilities for a crucial procedure. This lowers the possibility of error or fraud by preventing one person from controlling every part of a transaction.

Makes it challenging to make mistakes or engage in fraudulent activity and hide them without cooperation.

Method of Conduct:

Firstly, we conduct walkthrough meetings with IT management, team leads, and key control owners. Then we obtain and review existing IT policies and procedures related to access control.

Testing and Evidence Collection:

- Step 1: Firstly, we obtain a current user access report from each in-scope system
- Step 2: Map system-level permissions (e.g., roles, responsibilities) to the functional duties they enable.
- Step 3: We trace the request from initiation to approval to final implementation.
- Step 4: For each user account, we identify the individual user it is assigned to.
- Step 5: Then we corroborate that the user who performed the action is different from the user who requested and approved it.
- Step 6: After that we compare the actual access rights and activities from the system.
- Step 7: Finally, we clearly list all confirmed SoD conflicts, their risk rating, and root cause

Sample of a Segregation of Duties:

	Control Group	System Analyst	Application Programmer	Help desk & Support Manager	End User	Data Entry	Computer Operator	Database Administrator or Network Administrator	System Administrator or Security Administrator	Systems Programmer	Quality Assurance
Control Group		X	X	X		X	X	X	X		X
System Analyst	X			X	X		X		X		X
Application Programmer	X			X	X	X	X	X	X	X	X
Help desk & Support Manager	X	X	X		X	X		X	X		X
End User		X	X	X			X	X	X		X
Data Entry	X		X	X			X	X	X	X	
Computer Operator	X	X	X		X	X		X	X	X	X
Database Administrator	X		X	X	X	X		X	X		X
Network Administrator	X		X	X	X	X	X				
System Administrator	X		X	X		X	X	X			X
Security Administrator		X	X			X	X				X
System Programmer	X		X	X	X	X	X	X	X	X	
Quality Assurance		X	X		X						X

X – Combination of these functions may create a potential control weakness.

Incident/Problem management log:

An incident management log is essential because it transforms random, reactive firefighting into a structured, proactive, and strategic process. It turns operational data into valuable business intelligence, ensuring a company learns from its mistakes and continuously improves its stability, security, and service quality.

Method of Conduct:

Step 1: We collect the incident records from the IT Service Management or the help desk.

Step 2: Then we assess the population for completeness and accuracy.

Step 3: We select a sample of recorded incidents (high, medium, low priority) and trace each one through its entire lifecycle.

Step 4: For major or security incidents, we identify the individuals assigned to key roles.

Step 5: Then, we compare the actual incident handling process and timelines against the defined SLAs and procedures.

Step 6: Finally, we analysis the root cause analysis of incidents.

Sample of an Incident Management Log:

Incident ID	Log Time	Status	Medium	Caller	Classification	Category	Symptom	Description
421996	3/1/2022 9:09	Closed	Mal		Business Applications	Application Management	System	Dear Concern: Please check the below issue. Best Regard
422037	3/1/2022 10:55	Closed	Mal		Business Applications	Application Management	System	Dear Concern, Good Day!! Pls take care Access issue
422044	3/1/2022 11:09	Closed	Mal		Business Applications	Application Management	System	Dear Concern, I would like to request you solve this pr
422052	3/1/2022 11:31	Closed	Mal		Business Applications	Application Management	System	**URGENT** Dear Concern, Good Day! Facing ERS Thi
422055	3/1/2022 11:37	Closed	Mal		Business Applications	Application Management	System	Dear Concern, Attached ERS MSSCOM have already on
422056	3/1/2022 11:37	Closed	Mal		Business Applications	Application Management	System	Dear Concern: We are getting complain from Retailer.
422065	3/1/2022 12:03	Closed	Mal		Business Applications	Application Management	System	Dear Concern, Good Day!!! As per Complant, Janata B
422069	3/1/2022 12:12	Closed	Mal		Business Applications	Application Management	System	Campaign not showing stamp; API timed out
422090	3/1/2022 12:49	Closed	Mal		Business Applications	Application Management	System	Subject: Dear Concerns: Please be informed that after
422093	3/1/2022 12:55	Closed	Mal		Business Applications	Application Management	System	Dear Concern This is to inform you that we are going to
422094	3/1/2022 12:59	Closed	Mal		Business Applications	Application Management	System	Dear Concern: We are getting complain from Distribut
422125	3/1/2022 14:19	Closed	Mal		Business Applications	Application Management	System	Getting error during Password reset in Test DNS please
422138	3/1/2022 14:42	Closed	Mal		Business Applications	Application Management	System	Urgent Dear concern, Good day, SE ERS Transaction
422139	3/1/2022 14:43	Closed	Mal		Business Applications	Application Management	System	Dear Concern, Good Day ! Please be inform that 4 Des
422180	3/1/2022 16:47	Closed	Mal		Business Applications	Application Management	System	Dear Concern Please remove the IME Number from the
422189	3/1/2022 17:17	Closed	Mal		Business Applications	Application Management	System	UrgentDear concern, Good day, SE ERS Transaction
422201	3/1/2022 17:36	Closed	Mal		Business Applications	Application Management	System	Dear Concerns: Please be informed that the SE ERS S
422233	3/1/2022 19:38	Closed	Mal		Business Applications	Application Management	System	Dear Concern, Please be inform that below mentioned
422243	3/1/2022 20:36	Closed	Mal		Business Applications	Application Management	System	Sensitivity: Internal From: Mohammad Jahid Hassan Bu
422254	3/1/2022 21:20	Closed	Mal		Business Applications	Application Management	System	Dear Concern, Six SEs of Newly onboarded DH can no
422265	3/1/2022 22:08	Closed	Mal		Business Applications	Application Management	System	Dear Concern, Please be informed that we have activ
422312	3/1/2022 23:03	Closed	Mal		Business Applications	Application Management	System	Dear Concern, Our valued retailer is unable to log in t
422454	3/2/2022 8:39	Closed	Mal		Business Applications	Application Management	System	Hi Billing Team, We have found gap in CCN vs RTX cont
422463	3/2/2022 9:26	Closed	Mal		Business Applications	Application Management	System	Dear Billing Team, Is there any update for the below iss
422476	3/2/2022 9:35	Closed	Mal		Business Applications	Application Management	System	RE: Gap found in CCN vs RTX control on 20220301

Risk Assessment:

An organization's CIA standard may be breached by several threats used by the company or organization to assess risk on a regular basis.

Three classifications ought to be utilized to identify and rank risks:

1. Elevated
2. Moderate
3. Minimal.

- Office
- Cost Centre
- Type
- Brand Name
- Product Model
- Product Serial
- User Name
- Department
- Location
- Supplier
- Invoice
- Owner
- Custodian
- Asset ID
- Asset Classification.

An example of a list of IT-based products:

SL	TAG	Asset	Asset Description	Asset Type	Machine Type (Physical/VM)	Device Type (Network/Storage)	Host Name	Sub Asset Type
1		Switch (Networking) (FA)	Switch (Networking) (FA)	SWITCH				SWITCH
2		Switch (Networking) (FA)	Switch (Networking) (FA)	SWITCH				SWITCH
3		Installation, Testing, Commissioning (FA)	Installation, Testing, Commissioning (FA)	SERVER				SERVER
4		Website Development & Domain Registration Purpose (FA)	Website Development & Domain Registration Purpose (FA)	SOFTWARE				SOFTWARE
5		Network Switch (FA)	Network Switch (FA)	SWITCH				SWITCH
6		Switch (FA)-10299	Switch (FA)-10299	SWITCH				SWITCH
7		Rack Mount Server Xeon E5-2650 v4 (FA)	Rack Mount Server Xeon E5-2650 v4 (FA)	SERVER				SERVER
8		NETWORKING SWITCH ORACLE ES1-24 (FA)	NETWORKING SWITCH ORACLE ES1-24 (FA)	SWITCH				SWITCH
9		NETWORKING SWITCH ORACLE ES1-24 (FA)	NETWORKING SWITCH ORACLE ES1-24 (FA)	SWITCH				SWITCH
10		NETWORKING SWITCH ORACLE BROCODE 6505 (FA)	NETWORKING SWITCH ORACLE BROCODE 6505 (FA)	SWITCH				SWITCH
11		NETWORKING SWITCH ORACLE BROCODE 6505 (FA)	NETWORKING SWITCH ORACLE BROCODE 6505 (FA)	SWITCH				SWITCH
12		STORAGE ORACLE FS1 SERIES (FA)	STORAGE ORACLE FS1 SERIES (FA)	SERVER				SERVER
13		STORAGE ORACLE FS1 SERIES (FA)	STORAGE ORACLE FS1 SERIES (FA)	SERVER				SERVER
14		SERVER ORACLE SERVER X6-2 (FA)	SERVER ORACLE SERVER X6-2 (FA)	SERVER				SERVER
15		NETWORKING SWITCH ORACLE ES1-24 (FA)	NETWORKING SWITCH ORACLE ES1-24 (FA)	SWITCH				SWITCH
16		NETWORKING SWITCH ORACLE ES1-24 (FA)	NETWORKING SWITCH ORACLE ES1-24 (FA)	SWITCH				SWITCH
17		NETWORKING SWITCH ORACLE BROCODE 300 (FA)	NETWORKING SWITCH ORACLE BROCODE 300 (FA)	SWITCH				SWITCH
18		NETWORKING SWITCH ORACLE BROCODE 300 (FA)	NETWORKING SWITCH ORACLE BROCODE 300 (FA)	SWITCH				SWITCH
19		SERVER ORACLE SPARC T7-2 (FA)	SERVER ORACLE SPARC T7-2 (FA)	SERVER				SERVER
20		SOFTWARE ORACLE DATABASE (FA)	SOFTWARE ORACLE DATABASE (FA)	SOFTWARE				SOFTWARE
21		SOFTWARE ORACLE DATABASE (FA)	SOFTWARE ORACLE DATABASE (FA)	SOFTWARE				SOFTWARE
22		SOFTWARE ORACLE DATABASE (FA)	SOFTWARE ORACLE DATABASE (FA)	SOFTWARE				SOFTWARE
23		SOFTWARE ORACLE DATABASE (FA)	SOFTWARE ORACLE DATABASE (FA)	SOFTWARE				SOFTWARE
24		SOFTWARE ORACLE DATABASE (FA)	SOFTWARE ORACLE DATABASE (FA)	SOFTWARE				SOFTWARE
25		SOFTWARE ORACLE DATABASE (FA)	SOFTWARE ORACLE DATABASE (FA)	SOFTWARE				SOFTWARE
26		SOFTWARE ORACLE DATABASE (FA)	SOFTWARE ORACLE DATABASE (FA)	SOFTWARE				SOFTWARE
27		SOFTWARE ORACLE DATABASE (FA)	SOFTWARE ORACLE DATABASE (FA)	SOFTWARE				SOFTWARE
28		SOFTWARE ORACLE DATABASE (FA)	SOFTWARE ORACLE DATABASE (FA)	SOFTWARE				SOFTWARE
29		SOFTWARE ORACLE DATABASE (FA)	SOFTWARE ORACLE DATABASE (FA)	SOFTWARE				SOFTWARE
30		Catalyst 2960-X 24 Switch With Standard Accessories (FA)	Catalyst 2960-X 24 Switch With Standard Accessories (FA)	SWITCH				SWITCH
31		Catalyst 2960-X 24 Switch With Standard Accessories (FA)	Catalyst 2960-X 24 Switch With Standard Accessories (FA)	SWITCH				SWITCH
32		Oracle Storage (FA)	Oracle Storage (FA)	SERVER COMPUTER				SERVER COMPUTER
33		Cisco Software WSA S380 License Kit For Server (FA)	Cisco Software WSA S380 License Kit For Server (FA)	SERVER				SERVER
34		Cisco Catalyst 3850 24 Port Switch With Standard Accessori	Cisco Catalyst 3850 24 Port Switch With Standard Accessori	SWITCH				SWITCH
35		Cisco ISR 4451 Router With Standard Accessories (FA)	Cisco ISR 4451 Router With Standard Accessories (FA)	SWITCH				SWITCH

Software List:

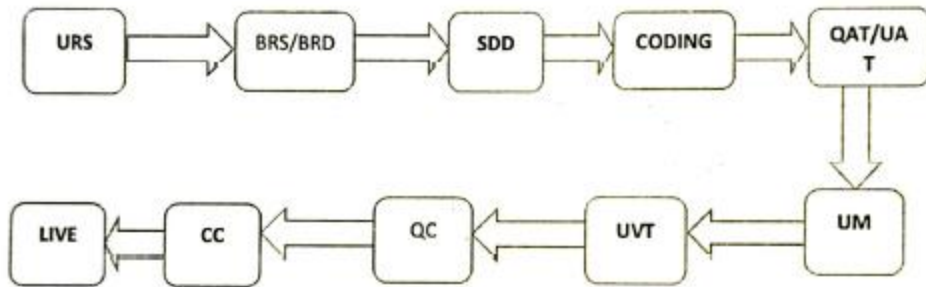
A list of software that requires management approval should be kept by the company. This covers both purchased and in-house applications.

SL	TAG	Asset	Confidentiality Rating	Availability Rating	Asset Description	Asset Type	Sub Asset Type	DB (if Applicable)	OS Type	Host Name	Service Custodian	Infrastructure Custodian	Asset Owner	Asset Location
1			HIGH	HIGH	Java, groovy & grails framework	Software	Application		Linux			Incharge of Infrastructure (Server Sub Section)	Incharge of WSMS	
2			VERY HIGH	VERY HIGH	Java, groovy	Software	Application		Linux			Incharge of	Incharge of	
3			VERY HIGH	VERY HIGH	Java, groovy	Software	Application		Linux			Incharge of	Incharge of	
4			VERY HIGH	VERY HIGH	Oracle	Software	Application		Solaris			Incharge of		
5			VERY HIGH	VERY HIGH	php	Software	Application		Linux			Incharge of	Incharge of	
6			HIGH	HIGH	php	Software	Application		Linux			Incharge of	Incharge of	
7			HIGH	HIGH	php	Software	Application		Linux			Incharge of	Incharge of	
8			VERY HIGH	HIGH	php	Software	Application		Linux			Incharge of	IT Department	
9			HIGH	HIGH	php	Software	Application		Linux			Incharge of	Incharge of	
10			HIGH	HIGH	php	Website	Application		CentOS Linux			Incharge of	Incharge of	
11			HIGH	HIGH	php	Website	Application		CentOS Linux			Incharge of	Incharge of	
12			HIGH	HIGH	php	Website	Application		CentOS Linux			Incharge of	Incharge of	
13			VERY HIGH	VERY HIGH	MS Exchange	Software	Application		Windows			Incharge of	IT Department	

Change procedure:

It's crucial to keep records of the specific changes that must be made to the production environment. To prevent violating CIA standards, any system modifications must be made using an authorized procedure. Changes must also be documented in an audit log.

One of our clients maintains the following change procedure:



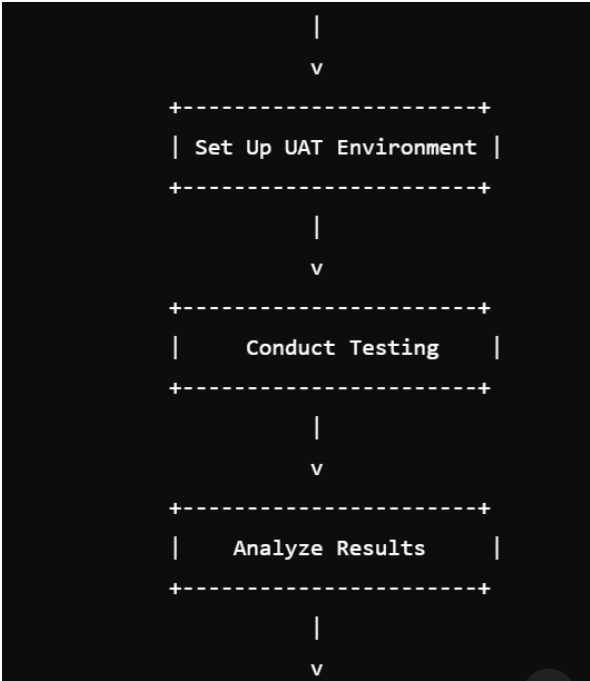
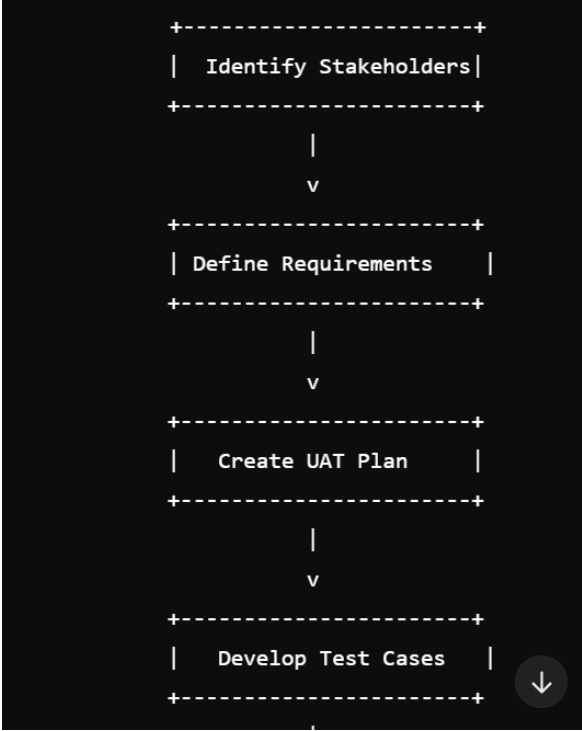
URS: User Requirement Specification
 BRS: Business Requirement Specification
 SDD: Software Design Document
 QAT: Quality Assurance & Testing
 UM: User Manual
 UVT: User Verification Test
 QC: Quality Control
 CC: Configuration Controller

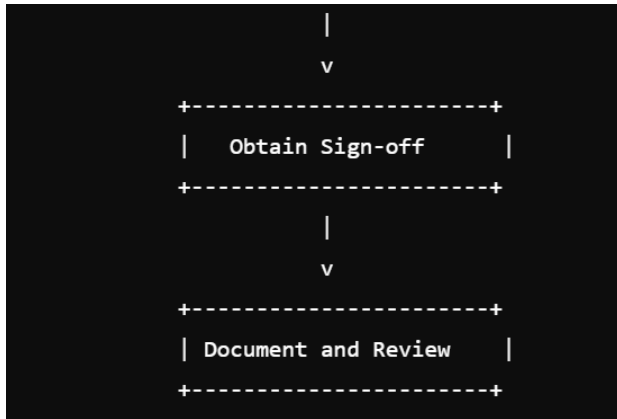
Fig – 4: Change procedure

Test of User Acceptance Test (UAT) for modifications:

The end user needs to perform a User Acceptance Test (UAT) following the required system modifications.

UAT process Flowchart:





UAT Report:

User Acceptance Testing (UAT) Report

1. UAT Report Summary

- **Product Name:** Off-us Integration on [REDACTED]
- **Feature Name:** [REDACTED]
- **UAT Report Date:** [REDACTED]
- **Product Manager:** [REDACTED]
- **Project Manager:** [REDACTED]
- **Developer:** Tarek [REDACTED]

2. Objectives

- **Purpose:** To ensure that the [REDACTED] feature meets the specified quality standards and functions correctly according to the requirements.
- **Scope:** Testing covers functional features of [REDACTED]

3. Test Environment

- **Environment:** UAT Environment (similar to production)
- **Android Version Tested:** [REDACTED]
- **Tester:** [REDACTED]

4. Test Scenarios and Results

Test Scenario SL#	Feature Name	Test Scenario Description	Status from [REDACTED]	Remarks for [REDACTED]
TSP0001	Stock Management Integration	Stock Management for Merchant	Passed	Done
TSP0002	Sales Tracker Integration	Tracking sells from Stock	Passed	Done
TSP0003	Topup Integration	Top Up business for Merchant	Passed	Done
TSP0004	POS Integration	POS Service	Passed	Done
TSP0005	Customer/Supplier Integration	Stock Supplier Integration	Passed	Done
TSP0006	Menu Design	Menu Design	Failed	In Progress
TSP0007	Due Tracker Design	Due Tracker design	Failed	In Progress

Software licensing:

It is necessary to preserve and provide the auditors with the original licenses for programs like Microsoft Office, Database, Anti-Virus, and OS.

We verified the validity of the licenses in this area.

Sample of Licenses:

The screenshot displays the Symantec Endpoint Protection Manager dashboard. The interface is divided into several sections:

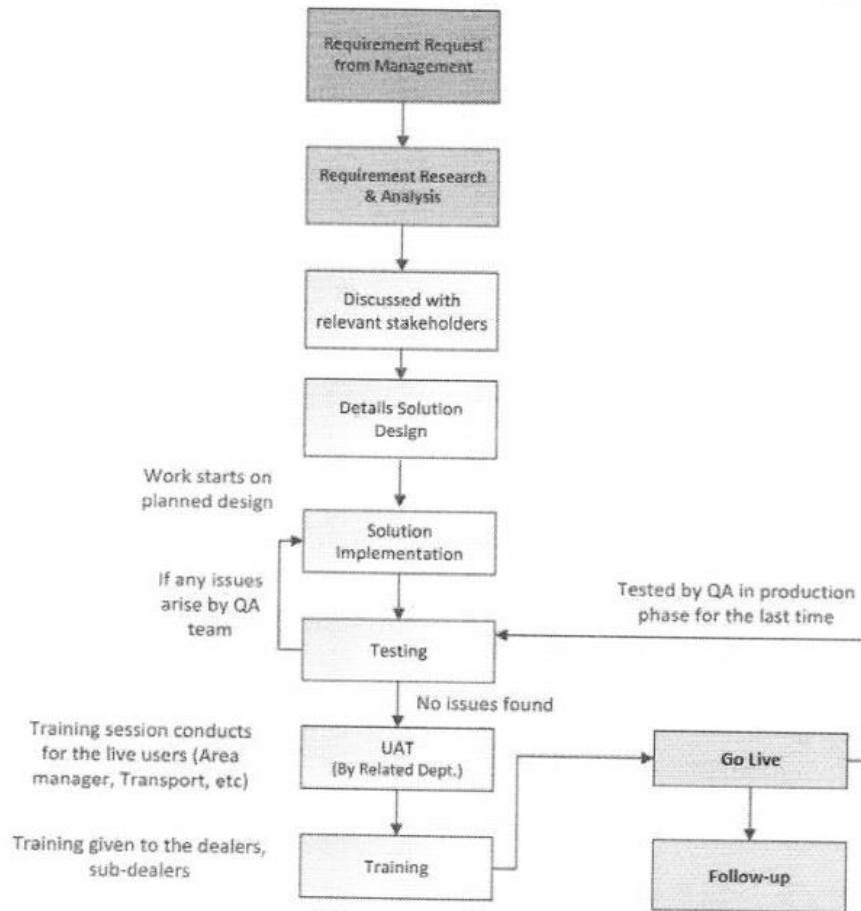
- Security Status:** Shows a green checkmark and the word "Good". It includes links for "Preferences", "View Details", and "View Notifications". A notification indicates "3 New".
- License Status:** Features a "Licensing Details" link.
- Symantec Security Response:** Includes links for "Security Response", "Latest Security News", and "Virus Definitions and Security Updates".
- Endpoint Status:** Shows a donut chart and a section for "Endpoint Protection" which is currently blacked out. Below it, it states "Computers needing a restart: 10" with a "View Details" link. A note mentions "Endpoints can be counted in more than one category".
- Windows Definitions:** Lists "Latest from Symantec: 12/17/22 r3" and "Latest on Manager: 12/17/22 r3".
- Activity Summary:** Contains a table for "Virus and Risks" and "Exploits".
- Favorite Reports:** Lists reports such as "Risk Distribution by Protection Technology", "Top Targets Attacked", "Symantec Endpoint Protection Weekly Status", and "Memory Exploit Mitigation Detections".

Last hour	Exploits	
	Viruses	Spyware and Risks
Cleaned / Blocked	0	0
Deleted	0	0
Quarantined	0	0
Suspicious	0	0
Newly Infected	0	0
Still Infected	0	0

Procedure for operation:

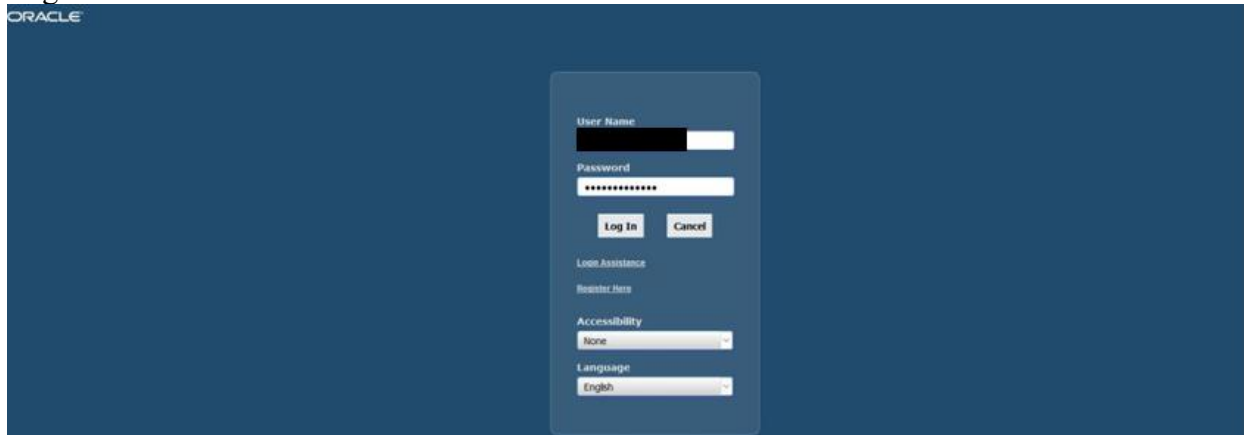
In this area, we examine how client operate their systems in a standard way.

Flowchart of an operating procedure:

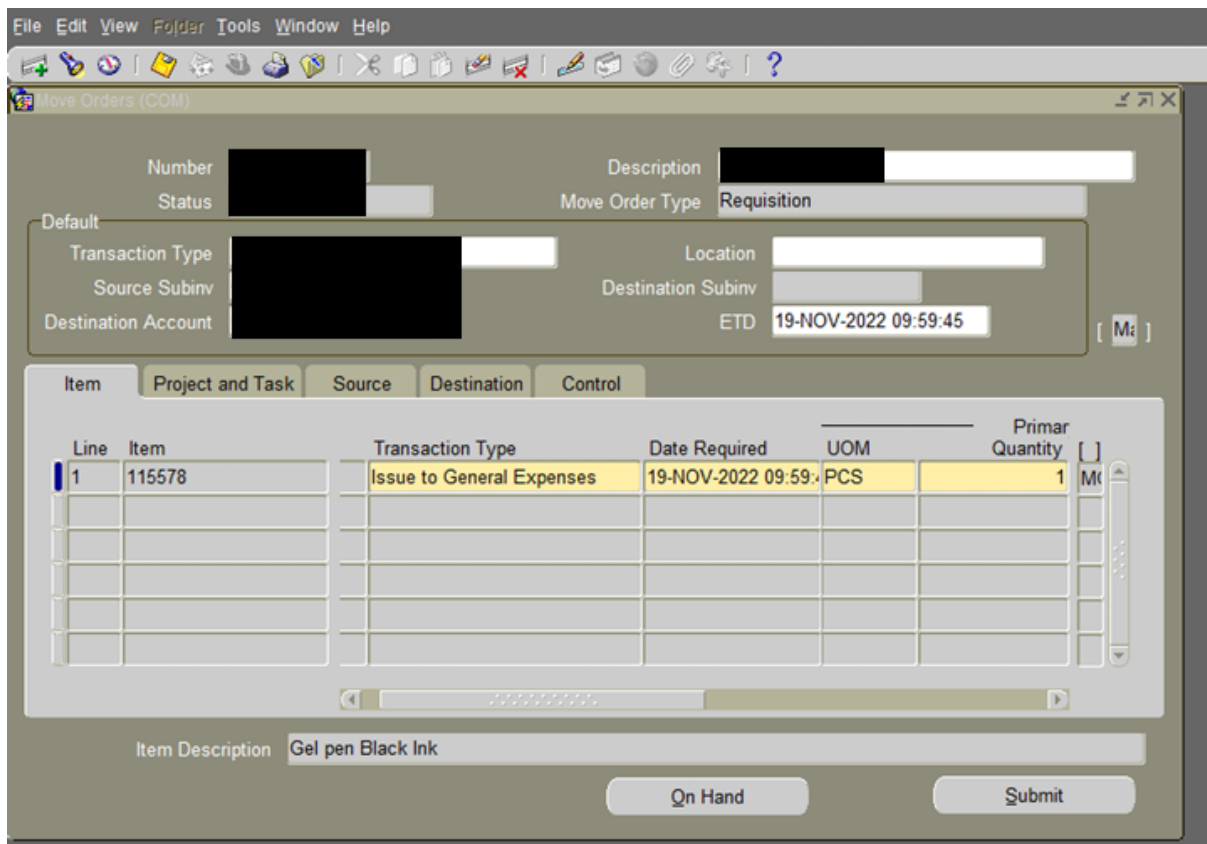
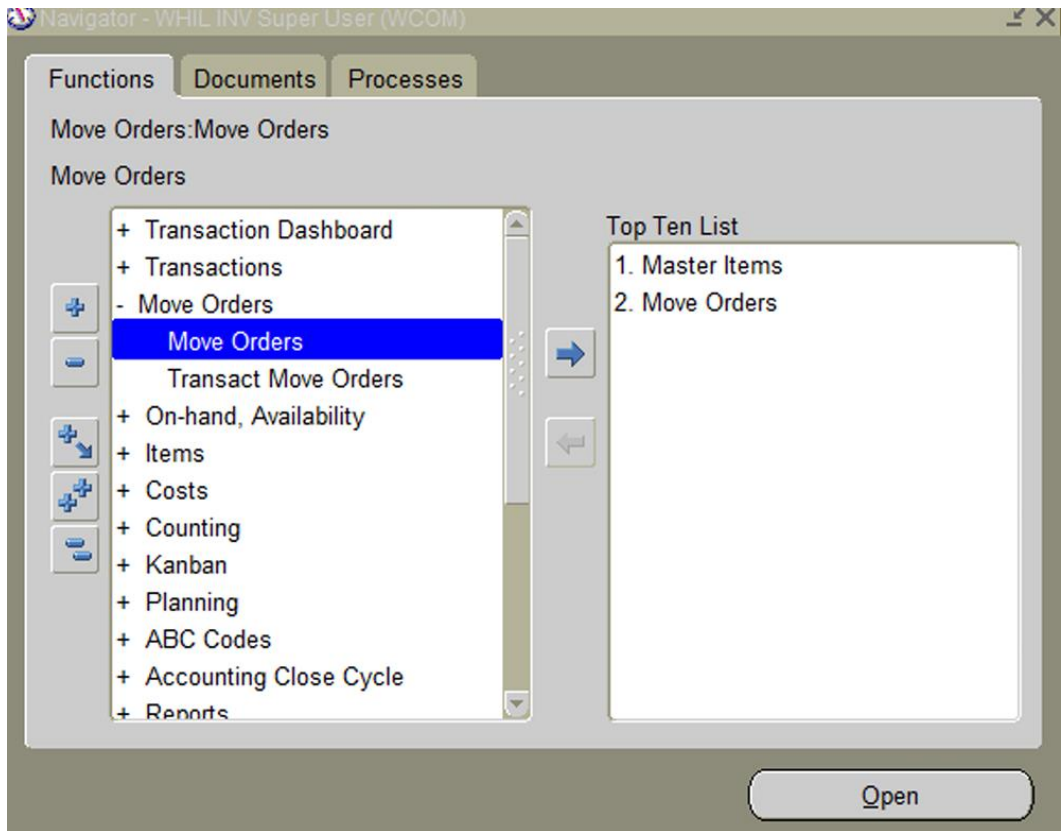


Operating procedure for a system:

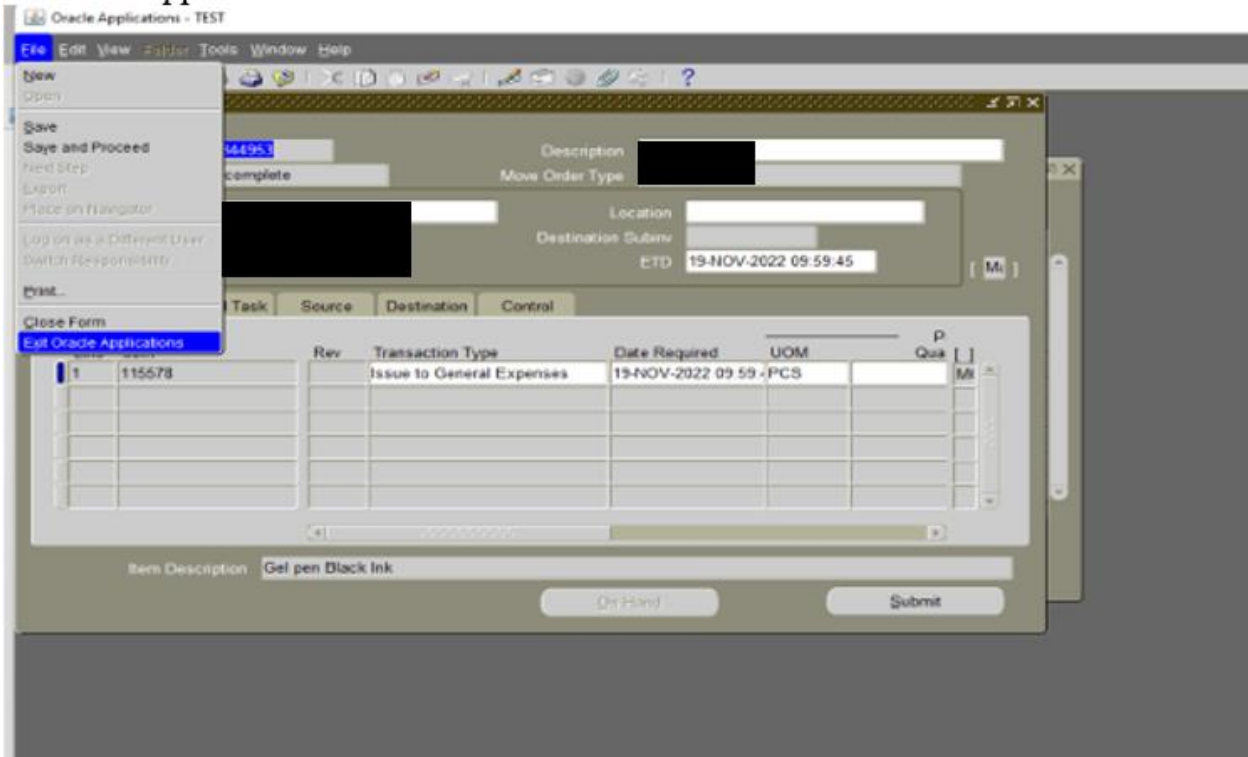
Login:



Make a Move Order:



Exit from application:



Policy for secure disposal:

Every business or organization that owns ICT assets needs to have a secure disposal policy.

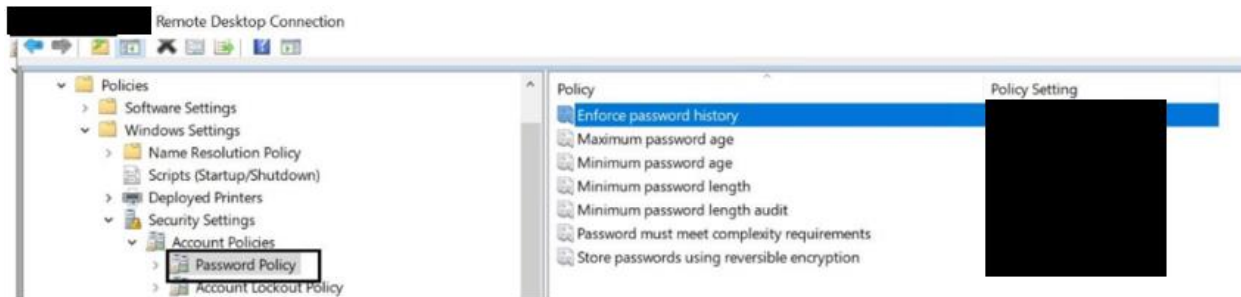
Policy for password control:

To prevent data breaches, any business or organization should adhere to the following password guidelines:

- If the user chooses, the maximum length can be at least 64 characters, with a minimum of 8.
- Do not allow above 100 unsuccessful authentication attempts in a row on one account.
- Allow "paste" to be used while entering a password.
- Complexity requirements don't exist.
- MFA should be enforced.

In this area, we checked the password control, which is implemented in the system.

Here is a sample of password control, which we actually check:



Document for network design:

This document should include the specific organization's security features and standards. It displays the connectivity of the entire network via servers, routers, firewalls, databases, cloud, and end-user PCs.

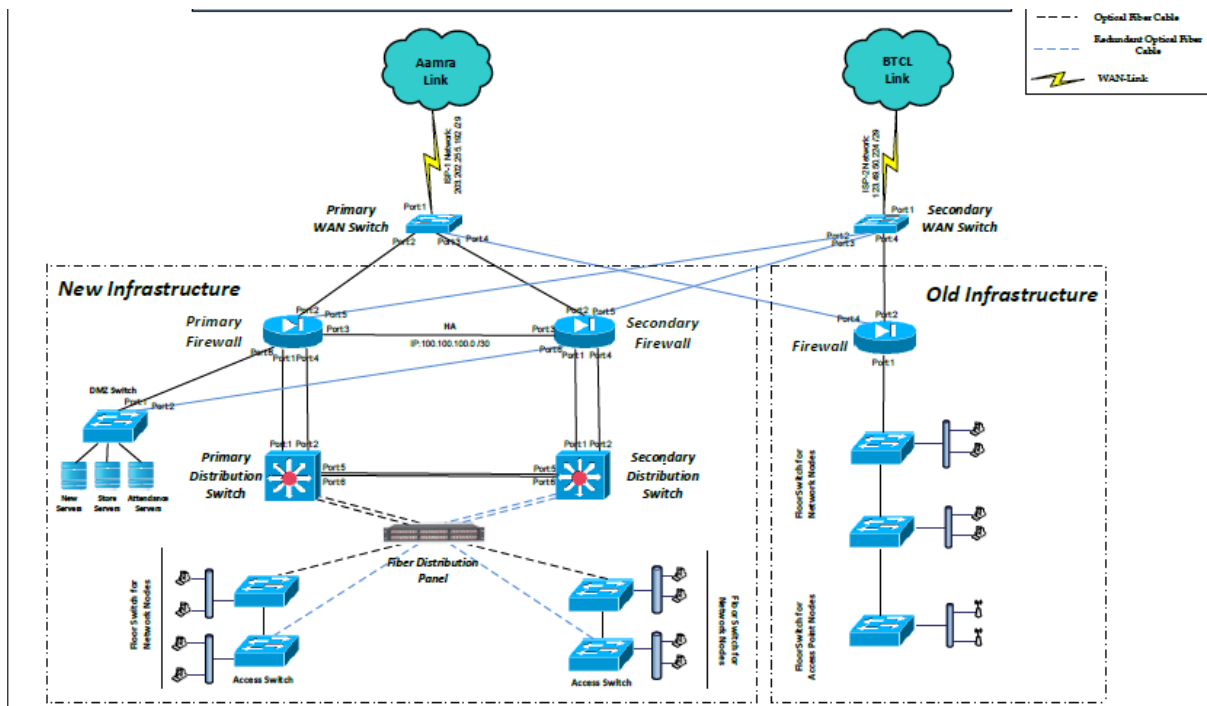


Fig 6: Network Design Document

Policy for internet and email use:

Following regions we examine in the policy,

- Prohibition of using the company's use.
- Do not email proprietary or confidential information.
- Instructions on how to use attachments.
- A mandate that workers only utilize authorized email providers.
- Mail archiving policy. An instruction manual for auto responders.

Plan for Business Continuity:

Among the components of a business continuity strategy are:

- Organizational threat analysis
- Finding the admin contact is simple.
- A map showing the whereabouts of employees in case of an emergency
- A page with sponsorship data for your information and club support
- Cooperation from every department within your club
- Comments from all members of your club purchase

Identifying the key duties needed to keep everything running is the next step. How many employees, as well as what equipment and data, are necessary to run your business?

Business continuity plan should include a list of management along with their contact details. At home, these folks ought to have each other's contact details. Disaster recovery planning and data backups are part of this.

Many persons must be involved in the creation of a BCP. It takes more than one person to create a BCP.

Backup and restore log:

A backup and restore system is non-negotiable for any modern business. It is a fundamental pillar of risk management, protecting a company from operational failure, financial loss, legal liability, and reputational harm. It is not an IT cost but a crucial investment in the company's resilience and long-term survival.

A business or organization needs to maintain a data backup at a disaster recovery location. In order for the backup files to be correctly restored in the event that one of them is corrupted, the client must restore their data.

Type of Backup:

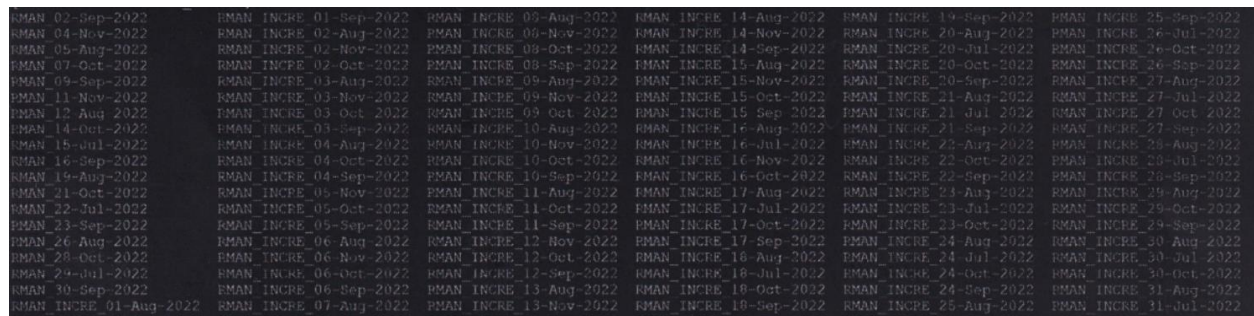
- Full Backup: Produces a whole copy of every piece of chosen data.
- Incremental Backup: Only the data that has changed since the last backup, whether complete or incremental, is backed up.
- Differential Backup: Creates a backup of every piece of data that has changed since the last complete backup.

Regarding any backup client, choose a backup solution that fits the company's needs (e.g., native tools like Windows Server Backup, or enterprise-grade software like Veeam, Commvault, Rubrik). Then they set the frequency and timing of backups (e.g., full backup on Saturday, incremental backups nightly) for the specific files, folders, systems, or volumes to be included in each job. The backup software runs automatically according to the schedule.

In this area, we check which system they are using to take the backup and the time period, that how frequency they take each of system or server backup and the restoration of those backup.

Here are some log of backup and restore:

Backup Log:



EMAN INCRE 01-Sep-2022	EMAN INCRE 01-Sep-2022	EMAN INCRE 09-Aug-2022	EMAN INCRE 14-Aug-2022	EMAN INCRE 19-Sep-2022	EMAN INCRE 25-Sep-2022
EMAN INCRE 02-Aug-2022	EMAN INCRE 02-Aug-2022	EMAN INCRE 09-Nov-2022	EMAN INCRE 14-Nov-2022	EMAN INCRE 20-Aug-2022	EMAN INCRE 26-Jul-2022
EMAN INCRE 05-Aug-2022	EMAN INCRE 02-Nov-2022	EMAN INCRE 08-Oct-2022	EMAN INCRE 14-Sep-2022	EMAN INCRE 20-Jul-2022	EMAN INCRE 26-Oct-2022
EMAN INCRE 07-Oct-2022	EMAN INCRE 02-Oct-2022	EMAN INCRE 08-Sep-2022	EMAN INCRE 15-Aug-2022	EMAN INCRE 20-Oct-2022	EMAN INCRE 26-Sep-2022
EMAN INCRE 09-Sep-2022	EMAN INCRE 04-Aug-2022	EMAN INCRE 09-Aug-2022	EMAN INCRE 15-Nov-2022	EMAN INCRE 20-Sep-2022	EMAN INCRE 27-Aug-2022
EMAN INCRE 11-Nov-2022	EMAN INCRE 03-Nov-2022	EMAN INCRE 09-Nov-2022	EMAN INCRE 15-Oct-2022	EMAN INCRE 21-Aug-2022	EMAN INCRE 27-Jul-2022
EMAN INCRE 12-Aug-2022	EMAN INCRE 03-Oct-2022	EMAN INCRE 09-Oct-2022	EMAN INCRE 15-Sep-2022	EMAN INCRE 21-Jul-2022	EMAN INCRE 27-Oct-2022
EMAN INCRE 14-Oct-2022	EMAN INCRE 03-Sep-2022	EMAN INCRE 10-Aug-2022	EMAN INCRE 16-Aug-2022	EMAN INCRE 21-Sep-2022	EMAN INCRE 27-Sep-2022
EMAN INCRE 15-Jul-2022	EMAN INCRE 04-Aug-2022	EMAN INCRE 10-Nov-2022	EMAN INCRE 16-Jul-2022	EMAN INCRE 23-Aug-2022	EMAN INCRE 28-Aug-2022
EMAN INCRE 16-Sep-2022	EMAN INCRE 04-Oct-2022	EMAN INCRE 10-Oct-2022	EMAN INCRE 16-Nov-2022	EMAN INCRE 23-Oct-2022	EMAN INCRE 28-Jul-2022
EMAN INCRE 19-Aug-2022	EMAN INCRE 04-Sep-2022	EMAN INCRE 10-Sep-2022	EMAN INCRE 16-Oct-2022	EMAN INCRE 23-Sep-2022	EMAN INCRE 28-Sep-2022
EMAN INCRE 21-Oct-2022	EMAN INCRE 05-Nov-2022	EMAN INCRE 11-Aug-2022	EMAN INCRE 17-Aug-2022	EMAN INCRE 24-Aug-2022	EMAN INCRE 29-Aug-2022
EMAN INCRE 22-Jul-2022	EMAN INCRE 05-Oct-2022	EMAN INCRE 11-Oct-2022	EMAN INCRE 17-Jul-2022	EMAN INCRE 24-Jul-2022	EMAN INCRE 29-Oct-2022
EMAN INCRE 23-Sep-2022	EMAN INCRE 05-Sep-2022	EMAN INCRE 11-Sep-2022	EMAN INCRE 17-Oct-2022	EMAN INCRE 24-Oct-2022	EMAN INCRE 29-Sep-2022
EMAN INCRE 26-Aug-2022	EMAN INCRE 06-Aug-2022	EMAN INCRE 12-Nov-2022	EMAN INCRE 17-Sep-2022	EMAN INCRE 24-Aug-2022	EMAN INCRE 30-Aug-2022
EMAN INCRE 28-Oct-2022	EMAN INCRE 06-Nov-2022	EMAN INCRE 12-Oct-2022	EMAN INCRE 18-Aug-2022	EMAN INCRE 24-Jul-2022	EMAN INCRE 30-Jul-2022
EMAN INCRE 29-Jul-2022	EMAN INCRE 06-Oct-2022	EMAN INCRE 12-Sep-2022	EMAN INCRE 18-Jul-2022	EMAN INCRE 24-Oct-2022	EMAN INCRE 30-Oct-2022
EMAN INCRE 30-Sep-2022	EMAN INCRE 06-Sep-2022	EMAN INCRE 13-Aug-2022	EMAN INCRE 18-Oct-2022	EMAN INCRE 24-Sep-2022	EMAN INCRE 31-Aug-2022
EMAN INCRE 01-Aug-2022	EMAN INCRE 07-Aug-2022	EMAN INCRE 13-Nov-2022	EMAN INCRE 19-Sep-2022	EMAN INCRE 25-Aug-2022	EMAN INCRE 31-Jul-2022

Restore Log:

```
g restore at 08-SEP-22 14:22:35
ed channel: ORA_DISK_3
ORA_DISK_3: SID=31 device type=DISK

ORA_DISK_3: starting datafile backup set restore
ORA_DISK_3: restoring datafile to \\10. pradata\ORCL\system01.dbf
ORA_DISK_3: restoring datafile to \\10. pradata\ORCL\sysaux01.dbf
ORA_DISK_3: restoring datafile to \\10. pradata\ORCL\undotbs01.dbf
ORA_DISK_3: restoring datafile to \\10. pradata\ORCL\users01.dbf
ORA_DISK_3: restoring datafile to \\10. pradata\ORCL\accounts01.dbf
ORA_DISK_3: restore complete, elapsed time: 00:05:12
```

SLAs with connectivity providers, software vendors, and other vendors:

The acronym SLA represents Service Level Agreement. For every purchase or service, a SLA needs to be recorded for both parties. SLA is the agreement between the parties for the acquired service under all phrases.

According to Naomi Karten's work on service level agreements, they are a crucial instrument for managing expectations generally as well as for communication and dispute resolution.

Standard SLA content -

Six key elements should,

1. An outline of the agreement -

This section contains information about each SLA, including effective and expiration dates, a brief description of the parties involved, and other facts.

2. Objectives and goals -

Goals and objectives are the next topic we must discuss. Here, the agreement's goals are described, along with the potential for mutual agreement.

3. The Stakeholder -

The parties to the contract are defined in this section.

4. Regular evaluation -

For specific SLA, periodic reviews should be indicated, together with the dates of implementation and expiration as well as the criteria related to the review period.

5. Service agreement -

The service contract is arguably the most important component of the service level agreement. It has a lot of crucial elements that service providers are in charge of:

- The needs of the client, including information on payments
- The concept of the service. Here, we go over how to notify stakeholders of service changes and log them.

6. Management of services -

Service management is covered in the last section of the service level agreement. Both service requests and availability are covered in this section.

Procedures and Policy for User Creation and Deletion:

An access control policy should take into account the following contents:

1. Overview
2. Access control is a business necessity.
3. Removal of Access Rights
4. User Access Rights Review
5. Access Control for Systems and Applications
6. Restrictions on Information Access
7. Safe Log-On Practices
8. Password Management for Users
9. Use of Passwords
10. Time-out for the session

Documents pertaining to software design and development:

Software requirement specifications diagrams are among the documents that must be present when designing software.

3.4.5 Report on Auditing:

Draft and review every document:

1. Heading of the observation
2. Rating of Risk
3. Cause of
3. Possible Danger
4. Suggestion
5. Reaction of Management

I've included an example IT audit report here:

Finding 2: User Acceptance Test (UAT) is not performed properly

Observation

The ICT policy lacks a formal requirement for conducting and documenting User Acceptance Testing (UAT) for new systems or updates. UAT is critical for ensuring that systems meet business requirements and user expectations before deployment.

During our audit period, we observed that ██████████ should follow Section 10.4 "IT Change Management" of the ██████████ ICT security policy version (1.1.0), ██████████ did not perform User Acceptance Test (UAT) for the ██████████

Risk Rating:

Risk:

- Without UAT, systems may go live with functionality issues or fail to meet user requirements.
- May lead to operational inefficiencies and increased support costs.
- It may reduce productivity, potentially impacting customer experience and business performance.

Recommendation:

Implement a formal UAT process, requiring UAT reports to be completed, reviewed, and signed off before any system moves to production.

Management Response:

4. CONCLUSION

ICT security has consistently been the most talked-about topic in our digital age, from both a security and business standpoint. ICT infrastructure is being implemented by all kinds of businesses, organizations, and financial institutions to facilitate and expedite their daily transactions. Every minute, a vast amount of data is stored. Since the majority of these data are very secret, they must be secured. I can guarantee security compliances from a business standpoint in my line of work as an IT auditor. My experience as an IT Audit intern at ACNABIN Chartered Accountants has been extremely beneficial to me both personally and professionally. I appreciate my company providing me with this chance. This will help me advance in my career.

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- [6] *ISO/IEC 27001 and related standards*. (2022). ISO. <https://www.iso.org/isoiec-27001-information-security.html>

LETTER OF COMPLETION OF MY INTERNSHIP



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24 August 2025

TO WHOM IT MAY CONCERN

This is to certify that Mr. Asikuzzaman Tanvir, son of Ashrafuzzaman Khokon, a BSC final year student, ID-182352550, Software Engineering Department, Daffodil International University has successfully completed 06 (six) months Internship program in this organization from 06 February 2022 to 06 August 2022.

I wish him every success in life.

Md. Abdus Samad
General Manager
Administration
<samad@acnabin-bd.com>



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