Items to be tested

Test Case #	Item to Test	Test Description	Test Date	Responsibility
1	AC-7	Unsuccessful Login Attempts	11/20/2020	Greg Eure
2	AU-2	Audit Events	11/20/2020	Greg Eure
3	CM-10	Software Usage Restrictions	11/21/2020	Greg Eure
4	IA-6	Authenticator Feedback	11/21/2020	Greg Eure
5	SA-2	Allocation of Resources	11/21/2020	Greg Eure
6	SC-5	Denial of Service Protection	11/21/2020	Greg Eure
7	SI-3	Malicious Code Protection	11/21/2020	Greg Eure
8	AC-2	Account Management	11/21/2020	Muhammad Zahid
9	AC-5	Separation of Duties	11/21/2020	Muhammad Zahid
10	AT-3	Role-Based Security Training	11/21/2020	Muhammad Zahid
11	AU-3	Content of Audit Records	11/21/2020	Muhammad Zahid
12	CM-6	Configuration Settings	11/22/2020	Muhammad Zahid
13	AU-8	Time Stamp	11/22/2020	Muhammad Zahid
14	AC-8	System Use Notification	11/22/2020	Muhammad Zahid
15	AC-14	Permitted Actions Without Identification or Authentication	11/22/2020	Estefania Lopez
16	AC-17	Remote Access	11/22/2020	Estefania Lopez
17	AC-22	Publicly Accessible Content	11/22/2020	Estefania Lopez
18	SA-3	System Development Life Cycle	11/25/2020	Estefania Lopez
19	IR-4	Incident Handling	11/23/2020	Estefania Lopez
20	SC-7	Boundary Protection	11/23/2020	Estefania Lopez
21	AC-3	Access Enforcement	11/23/2020	Estefania Lopez
22	PE-15	Water Damage Protection	11/23/2020	Calvin Ton
23	CA-5	Plan of Action and Milestones	11/23/2020	Calvin Ton
24	CP-9	Information System Backup	11/23/2020	Calvin Ton
25	CP-10	Information System Recovery and Reconstitution	11/23/2020	Calvin Ton
26	CM-2	Baseline Configuration	11/24/2020	Calvin Ton
27	MP-2	Media Access	11/24/2020	Calvin Ton
28	PE-8	Visitor Access Records	11/24/2020	Calvin Ton
29	AC-20	Use of External Information Systems	11/24/2020	Junyan Liu
30	AT-4	Security Training Record	11/24/2020	Junyan Liu
31	CM-11	User-Installed Software	11/24/2020	Junyan Liu
32	IR-5	Incident Monitoring	11/24/2020	Junyan Liu
33	PS-7	Third-Party Personnel Security	11/24/2020	Junyan Liu
34	PS-6	Access Agreements	11/24/2020	Junyan Liu
35	PL-4	Rules of Behavior	11/24/2020	Junyan Liu
36	PE-13	Fire Protection	11/25/2020	Muhammad Zahid

Test Approach(s)

Our testing approach was to follow the test case steps exactly, using the methods of INSPECT, TEST, OBSERVATION, and ANALYSIS, incorporate any test data, and then observe and document the results for each testing step. For any test cases where organizational document inspection was required, these were generally not available to be implemented.

Test Regulatory / Mandate Criteria

The system was tested using the 35 NIST 800-53 (Rev. 4) low-impact controls listed above

Test Pass / Fail Criteria

If the output of the command or step taken to test our database is as expected then we consider that a pass, if the output is not what we expected it is a fail.

Test Entry / Exit Criteria

Test case and any application and/or control documentation is available, and all prerequisite conditions are met. The exit criteria was different for every test but generally it was when we had enough data to pass the NIST control testing.

Test Deliverables

For each test we have filled out a form that includes the test case description, tester's name, date tested, prerequisties, steps, expected results, actual results, and whether the test passed, failed, was not executed, or was suspended.

Test Suspension / Resumption Criteria

Component testing will be suspended under the following conditions: critical error(s) found preventing test completion, change of business requirements, or change of environment components or technology including different version. Component testing will resume when the following criteria are met: all issues in suspension criteria have been resolved or mitigated.

Test Environmental / Staffing / Training Needs

In order to perform testing we needed to install a server running Ubuntu, install MySQL and MySQL Workbench, and import the GlobalProj database. Test users need to have a general understanding and proficiency with linux, and the mysql command-line, and limited understanding of MySQL Workbench.

Test Case ID	1	Test Case Description	Unsuccessful login attempts account lockout for 1 day after 3 invalid attempts		
Created By	Greg Eure	Reviewed By	Greg Eure	Version	1

QA Tester's Log   Test case passed

Tester's Name	Greg Eure	Date Tested	November 20, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:
1	Access to MySQL Server O/S via terminal or ssh
2	Account defined on O/S allowing remote login
3	Account defined on MySQL database server
4	Account configured for

S #	Test Data
1	userid = testuser
2	password = pAssw0rD

Test Scenario   Verify that account locks after entering wrong password 3 times

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	[TEST] Go to a command shell on the server where MySQL is installed.	Command shell should open	As expected	Pass
2	[TEST] Enter 'mysql -u testuser -p'	Should be prompted for password	As expected	Pass
3	[TEST] Enter an incorrect password	Access Denied	As expected	Pass
4	[TEST] Enter 'mysql -u testuser -p'	Should be prompted for password	As expected	Pass
5	[TEST] Enter an incorrect password	Access Denied	As expected	Pass
6	[TEST] Enter 'mysql -u testuser -p'	Should be prompted for password	As expected	Pass
7	[TEST] Enter an incorrect password	Access Denied; Account is blocked for 1 day due to 3 consecutive failed logins	As expected	Pass

Test Case ID		2	Test Case Description	Database access attempts cause event to be logged (auditing)		
Created By	Greg Eure		Reviewed By	Greg Eure	Version	1

QA Tester's Log	Test case passed

Tester's Name	Greg Eure	Date Tested	November 20, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:
1	Access to MySQL Server O/S via terminal or ssh
2	Account defined on O/S allowing remote login
3	Account defined on MySQL database server
4	MySQL Server configured according to NIST AU-2

S #	Test Data
1	userid = testuser
2	password = pAssw0rD

Test Scenario	Verify that audit is functioning and logging events

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	[TEST] Go to a command shell on the server where MySQL is installed.	Command shell should open	As expected	Pass
2	[TEST] Enter 'mysql -u testuser -p'	Should be prompted for password	As expected	Pass
3	[TEST] Enter 'use GroupProj;'	Database changed'	As expected	Pass
4	[TEST] Enter 'select * from GroupProj.Angola;'	7 rows in set (0.00 sec)	As expected	Pass

| 5 | [TEST] Enter sudo cat /var/log/mysql/audit.log | `<AUDIT_RECORD`
` NAME="Query"`
` RECORD="69_2020-11-21T01:59:59"`
` TIMESTAMP="2020-11-21T02:12:05Z"`
` COMMAND_CLASS="select"`
` CONNECTION_ID="8"`
` STATUS="0"`
` SQLTEXT="select * from GroupProj.Angola"`
` USER="root[root] @ localhost []"`
` HOST="localhost"`
` OS_USER=""`
` IP=""`
` DB=""`
`/>` | As expected | Pass |

Test Case ID		3	Test Case Description	Software inventory and peer-to-peer file sharing tracking		
Created By	Greg Eure		Reviewed By	Greg Eure	Version	1

QA Tester's Log — Test case passed

Tester's Name	Greg Eure	Date Tested	November 21, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:
1	Access to servers/systems where inventory audit
2	Software Inventory Docucment
3	Peer-to-Peer Tracking Document
4	

S #	Test Data
1	Software Inventory Docucment
2	Peer-to-Peer Tracking Document
3	
4	

Test Scenario — Verify all inventory tracking data is updated and accurate

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	[INSPECT] Compare Software Inventory with systems to be audited	Inventory should contain all software instance license as appropriate	As expected	Pass
2	[INSPECT] Compare Peer-to-Peer Tracking inventory with systems to be audited	Inventory should contain all peer-to-peer technology mappings as appropriate	As expected	Pass

Test Case ID		4	Test Case Description	Systems should not display authenticator feedback		
Created By	Greg Eure		Reviewed By	Greg Eure	Version	1

QA Tester's Log	Test case passed

Tester's Name	Greg Eure	Date Tested	November 21, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:
1	Access to system being tested
2	MySQL and MySQL Workbench installed
3	GroupProj database imported
4	MySQL server running

S #	Test Data
1	userid = testuser
2	password = pAssw0rD
3	
4	

Test Scenario	Verify that password isn't displayed on the screen as it's being typed

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	[TEST] Go to a command shell on the server where MySQL is installed.	Command shell should open	As expected	Pass
2	[TEST] Enter 'mysql -u testuser -p'	Should be prompted for password	As expected	Pass
3	[TEST] Enter password	password should not be displayed on screen when typed in	As expected	Pass
4	[TEST] Open MySQL Workbench	MySQL Workbench should open	As expected	Pass
5	[TEST] Open or create the connection to the local instance on port 3306	Logon dialog will display	As expected	Pass
6	[TEST] Enter user id and password	password should not be displayed on screen when typed in	As expected	Pass

Test Case ID	5	Test Case Description	Allocation of Resources		
Created By	Greg Eure	Reviewed By	Greg Eure	Version	1

QA Tester's Log — Test case not executed

Tester's Name	Greg Eure	Date Tested	November 21, 2020	Test Case (Pass/Fail/Not	Not Executed

S #	Prerequisites:
1	Access to budget and business planning
2	
3	
4	

S #	Test Data
1	
2	
3	
4	

Test Scenario   Review budget and planning documents to ensure compliance with NIST 800-53 item SA-2

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	[INSPECT] Inspect budget and business planning documents and ensure proper resources for information security are allocated.	Proper information security resources are allocated	There are no business planning documents	Not executed

Test Case ID		6	Test Case Description	Denial of Service Protection		
Created By	Greg Eure		Reviewed By	Greg Eure	Version	1

QA Tester's Log   Test case not executed

Tester's Name	Greg Eure	Date Tested	November 21, 2020	Test Case (Pass/Fail/Not	Not Executed

S #	Prerequisites:		S #	Test Data
1	Access to firewalls and IPS		1	
2	Access to network switches and routers		2	
3	Access to network monitoring systems		3	
4	Database is deployed in a clustered node		4	

Test Scenario

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	[INSPECT] Look at firewall and IPS to ensure all avaiable DDoS configuration is enabled	DDoS configured is enabled	There are no firewall/IPS with DDoS protection	Not executed
2	[INSPECT] Look at switches and routers to ensure appropriate access lists are configured	ACLs are implemented with approprate rules that mitigate internal/external DDoS attacks	There are no switchs/routers with DDoS protection	Not executed
3	[INSPECT] Look at network monitoring to ensure monitoring controls and views are implemented to capture DDoS Alerts, and alerts are being monitored/acknowledged/escalated as appropriate	Monitoring alerts are configured and working for DDoS events	There is no network monitoring available	Not executed
4	[INSPECT] Confirm the database is deployed on clustered database nodes.	Database is deployed in a multi-node configuration	There is no multi-node configuration available	Not executed

Test Case ID		7	Test Case Description	Malicious Code Protection		
Created By	Greg Eure		Reviewed By	Greg Eure	Version	1

QA Tester's Log — Test case passed

Tester's Name	Greg Eure	Date Tested	November 21, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:		S #	Test Data
1	Access to system being tested		1	userid = testuser
2			2	password = pAssw0rD
3			3	
4			4	

Test Scenario — Verify ClamAV is installed and running and quarantines malicious code

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	[TEST] Go to a command shell on the server where MySQL is installed.	Command shell should open	As expected	Pass
2	[TEST] tail /var/log/clamav/clamav.log	Sun Jun 28 19:08:32 2020 -> Portable Executable support enabled. Sun Jun 28 19:08:32 2020 -> ELF support enabled. Sun Jun 28 19:08:32 2020 -> Mail files support enabled. Sun Jun 28 19:08:32 2020 -> OLE2 support enabled. Sun Jun 28 19:08:32 2020 -> PDF support enabled. Sun Jun 28 19:08:32 2020 -> SWF support enabled. Sun Jun 28 19:08:32 2020 -> HTML support enabled. Sun Jun 28 19:08:32 2020 -> XMLDOCS support enabled. Sun Jun 28 19:08:32 2020 -> HWP3 support enabled. Sun Jun 28 19:08:32 2020 -> Self checking every 3600 seconds.	As expected	Pass

3	[TEST] wget www.eicar.org/download/eicar.com	1 file downloaded (eicar.com)	As expected	Pass
4	[TEST] ls -l eicar.com	no such file or directory	As expected	Pass
5	[TEST] sudo ls -l /root/quarantine	total 1 eicar.com	As expected	Pass
6	[TEST] sudo tail /var/log/clamav/clamonacc.log	------------------------------------- ClamInotif: watching '/home' (and all sub-directories) ClamInotif: watching '/var/www' (and all sub-directories) /home/testuser/eicar.com: Win.Test.EICAR_HDB-1 FOUND /home/testuser/eicar.com: moved to '/root/quarantine/eicar.com'	As expected	Pass

Test Case ID		8	Test Case Description	Account Management		
Created By	Muhammad		Reviewed By	Muhammad	Version	1

QA Tester's Log	Test Case Passed

Tester's Name	Muhammad	Date Tested	November 21, 2020	Test Case (Pass/Fail/Not	pass

S #	Prerequisites:
1	Accessed mySql through terminal
2	Created a Role with access to GropProj only
3	Created two users 'ge' and 'el'
4	Was able to log in and only access that database when logged under those users selecting other

S #	Test Data
1	user = ge , pass : MypPassword123
2	user = el , pass : MyPassword 321
3	
4	

Test Scenario	Given two users access to the database

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Accessed SQL through Terminal	Was able to access	As expected	Pass
2	Created a Role	The role got created	As expected	Pass
3	Created users and assigned them the role	User created and role assigned	As expected	Pass
4	Logged in using one account	Was able to log in	As expected	Pass
5	Accessed GroupProj	Access Given	As expected	Pass
6	Tried different database	Access Denied	As expected	Pass

Test Case ID		9	Test Case Description		Separation of Duties		
Created By		Muhammad	Reviewed By		Muhammad	Version	1

QA Tester's Log		Passed

Tester's Name		Muhammad	Date Tested		11/20/2020	Test Case (Pass/Fail/Not		Pass

S #	Prerequisites:
1	Deleted Roles from last test
2	Created New roles
3	Assigned roles
4	Test

S #	Test Data
1	user = ge , pass : MypPassword123
2	user = el , pass : MyPassword 321
3	
4	

Test Scenario   Verify if the duties thar are given are working

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Go to terminal and access SQL under root by mysql-u root -p	SQL should open for root	as expected	Pass
2	Created two roles by 'create role manager;' & 'create role acessonly;'	querry ok and role created	as expected	Pass
3	Assigned them to each user by grant role to -----	querry ok and role assigned	as expected	Pass
4	Granted manager to EL to manage the whole database GroupProj to manager by "Grant select on GroupProj.* to manager and show databases on *.* to manager"	no errors and it added the roles	as expected	Pass
5	Granted readonly to ge to read the whole database GroupProj to manager by "Grant connect any database to readonly and Grant select all user securable to readonly"	no errors and it added the roles	as expected	Pass
6	Tested by logging into mysql -u el -p	prompted for password	as expected	Pass
7	checked the role 'Select current_role();	should show manager role	as expected	Pass
8	Added and deleted a table	should add and delete	as expected	Pass

9	Tested by logging into mysql -u ge -p	prompted for password	as expected	Pass
10	checked the role 'Select current_role();	should show readonly role	as expected	Pass
11	Tried creating a new table	should give an error	as expected	Pass

Test Case ID		10	Test Case Description	Role-Based Security Training		
Created By	Muhammad		Reviewed By	Muhammad	Version	1

QA Tester's Log No test case needed

Tester's Name	Muhammad	Date Tested	No test	Test Case (Pass/Fail/Not	No test case

S #	Prerequisites:
1	Access To the Policies
2	Access to the training material
3	Follow the procedures
4	Use tools provided

S #	Test Data
1	
2	
3	
4	

Test Scenario Make sure users review the securit training

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
	The user needs to make sure that they reveiw the policies regarding the role	Should review the policies so they don't get into issues due to security	As Expected	No executed
	They should review the training material provided on the security of the role	should watch the training videos created for making sure they are secuired with their role	As Expected	No executed
	They should follow the procedures to do their role set by the companies	Don't share the information with other users	As Expected	No executed
	make sure they are using the tools provided for the security	Use Multi Authentication and don't save the password	As Expected	No executed

Test Case ID		11	Test Case Description	Content of Audit records		
Created By	Muhammad		Reviewed By	Muhammad	Version	1

Tester's Name	Muhammad	Date Tested	November 21, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:		S #	Test Data	
1	Should have the sql terminal open		1	user = el , pass : MyPassword 321	
2			2		
3			3		
4			4		

Test Scenario

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
	Go to a command shell on the server where MySQL is installed.	Command shell should open	As expected	Pass
	Enter command 'mysql -u el -p'	Should be prompted for password	As expected	Pass
	Enter command 'set role manager'	should change the role	As expected	Pass
	[TEST] Enter 'use GroupProj;'	Database changed'	As expected	Pass
	Install Audit Log plugin	show install the audit plugin	As expected	Pass
	Restart and should show the audit records	Variable_name +---------------------- | audit_log_buffer_size | audit_log_file | audit_log_flush | audit_log_format | audit_log_handler | audit_log_policy | audit_log_rotate_on_size | audit_log_rotations | audit_log_strategy | audit_log_syslog_facility | audit_log_syslog_ident | audit_log_syslog_priority	As expected	Pass

Test Case ID	12	Test Case Description	Configuration Settings		
Created By	Muhammad	Reviewed By	Muhammad	Version	1

QA Tester's Log	Moving to a secure hardware

Tester's Name	Muhammad	Date Tested	November 2, 2020	Test Case (Pass/Fail/Not	Not executed

S #	Prerequisites:		S #	Test Data
1	Running workbench currently on an External		1	
2			2	
3			3	
4			4	

Test Scenario	Moving to a secure hardware

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
	Moving it to a more secure os like mac or windows computer	Make sure proper security measures are added like microsoft authentication	Not implementing	Not executed

Test Case ID		13	Test Case Description		Time Stamp		
Created By	Muhammad		Reviewed By	Muhammad		Version	1

Tester's Name	Muhammad	Date Tested	November 22, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:		S #	Test Data
1	Get working SQL Workbench		1	
2	Get a table to show time stamp		2	
3			3	
4			4	

Test Scenario   Show time stamp

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Created a table group mem	Should have group mem info	as expected	Pass
2	created groupmemtitle and tied it with groupmem	title tied with groupmem	as expected	Pass
3	CREATE TABLE groupmemtitle(id INT PRIMARY KEY AUTO_INCREMENT, title varchar (300), content TEXT, publishdate DATETIME, expiredate DATETIME, updated TIMESTAMP default NOW() ON UPDATE NOW(), groupmem_id INT, FOREIGN KEY (groupmem_id) REFERENCES groupmem (id) ON DELETE NO ACTION) ENGINE = INNODB;	query went fine	as expected	Pass
4	Added data to the table	Timestamp should change	as expected	Pass

Test Case ID		14	Test Case Description		System Use Notification		
Created By	Muhammad		Reviewed By		Muhammad	Version	1

QA Tester's Log Notifications of database

Tester's Name	Muhammad	Date Tested		November 22, 2020	Test Case (Pass/Fail/Not	Not executed

S #	Prerequisites:		S #	Test Data
1			1	
2			2	
3			3	
4			4	

Test Scenario Find System notification

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Click Scripting	should show the scripting option	as expected	Pass
	Click scripting shell	should open the shell	as expected	Pass
	Go to Notification	should bring all the notification	as expected	Pass
	You will find all the notification	found the notification	as expected	Pass
	Add a Snipet for notification	will show system notification	as expected	Pass

Test Case ID		15	Test Case Description	Permitted Actions Without Identification or Authentication		
Created By	Estefania		Reviewed By	Estefania	Version	1

QA Tester's Log Access without authentication or identification

Tester's Name	Estefania	Date Tested	November 22, 2020	Test Case (Pass/Fail/Not	pass

S #	Prerequisites:
1	Open sql terminal
2	create user with no authentication
3	
4	

S #	Test Data
1	/usr/local/mysql/bin/mysql -u root -p
2	create user 'noAuth';
3	
4	

Test Scenario Try to access databse witout Authentication

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Try to access the database	No database will show, you need authentication to access db	as expected	Not executed

Test Case ID		16	Test Case Description	Remote Access		
Created By	Estefania		Reviewed By	Estefania	Version	1

　Remote Access

Tester's Name	Estefania	Date Tested	November 22, 2020	Test Case (Pass/Fail/Not	not executed

S #	Prerequisites:
1	open sql terminal
2	
3	
4	

S #	Test Data
1	/usr/local/mysql/bin/mysql -u root -p
2	
3	
4	

Test Scenario　Access databse remotely

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	try to access the database remotely	since we did not add a remote access feature, we should not be able to connect to the db remotely	as expected	not executed

Test Case ID		17	Test Case Description	Publicly Accessible Content		
Created By	Estefania		Reviewed By	Estefania	Version	1

QA Tester's Log Access Public Content

Tester's Name	Estefania	Date Tested	November 22, 2020	Test Case (Pass/Fail/Not	pass

S #	Prerequisites:
1	open sql terminal
2	Connect to GroupProj database
3	
4	

S #	Test Data
1	/usr/local/mysql/bin/mysql -u root -p
2	use GroupProj;
3	
4	

Test Scenario Access public content

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Access data from any table (select * from Brazil limit 5;)	5 rows in set (0.01 sec) -public data from Brazil table	as expected	pass

Test Case ID	18	Test Case Description	System Development Life Cycle		
Created By	Estefania	Reviewed By	Estefania	Version	1

QA Tester's Log   System Development Life Cycle

Tester's Name	Estefania	Date Tested	November 25, 2020	Test Case (Pass/Fail/Not	Not executed

S #	Prerequisites:
1	define roles and responsibliies on database
2	
3	
4	

S #	Test Data
1	create role database_administrator; create role end_user; create role client; create role testing;
2	
3	
4	

Test Scenario   Assess System Development Life Cycle

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	inspect our system development life cycle	Some implementation of security roles and resposibilities	As expected	Not executed

	19	**Test Case Description**		Incident Handling		
Created By	Estefania	**Reviewed By**		Estefania	**Version**	1

QA Tester's Log   Incident Handling

Tester's Name	Estefania	**Date Tested**	November 23, 2020	**Test Case (Pass/Fail/Not**	not executed

S #	**Prerequisites:**
1	open mysql Workbech
2	
3	
4	

S #	**Test Data**
1	
2	
3	
4	

Test Scenario   Accessing some Incident handling sources (ex. Server logs)

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	click server on the toolbar	report/log options show	as expeceted	not excuted
2	click server status	administrative server status including CPU load, InnoDB buffer usage, traffic, key efficiency, connections and many more	as expeceted	not excuted
3	click server logs	server logs are available to show incidents on server	as expeceted	not excuted
4	click option files	server confiugrations are available to change, including general, advanced and	as expeceted	not excuted

Test Case ID		20	Test Case Description		Boundary Protection		
Created By	Estefania		Reviewed By		Estefania	Version	1

QA Tester's Log   Chech Boundary Protection

Tester's Name	Estefania	Date Tested	November 23, 2020	Test Case (Pass/Fail/Not	not executed

S #	Prerequisites:
1	open sql workbench
2	
3	
4	

S #	Test Data
1	
2	
3	
4	

Test Scenario   Check Boundary Protection

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	click server in toolbar	several server view options	as expected	not executed
2	click option files	server configurations	as expected	not executed
	click security	boundary security configurations	as expected	not executed

Test Case ID		21	Test Case Description	Access Enforcement		
Created By	Estefania		Reviewed By	Estefania	Version	1

QA Tester's Log   Access Enforcement

Tester's Name	Estefania	Date Tested	November 23, 2020	Test Case (Pass/Fail/Not	pass

S #	Prerequisites:
1	open sql terminal
2	
3	
4	

S #	Test Data
1	/usr/local/mysql/bin/mysql -u root -p
2	
3	
4	

Test Scenario   Access database as authorized user

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	login as root user	access to groupProj database	as expected	pass
2	switch to GroupProj database	Database changed	as expected	pass
	select City from Austria;	list of city in Austria table	as expected	pass
	edit table - delete from Austria where City = "Wels";	Query OK, 1 row affected (0.01 sec)	as expected	pass

Test Case ID		22	Test Case Description	Water Damage Protection		
Created By	Calvin Ton		Reviewed By	Calvin Ton	Version	1

QA Tester's Log   Test case not executed

Tester's Name	Calvin Ton	Date Tested	November 23rd, 2020	Test Case (Pass/Fail/Not	Not Executed

S #	Prerequisites:
1	Access Server Room/Data Center
2	
3	
4	

S #	Test Data
1	
2	
3	
4	

Test Scenario   Verify that server room is protected from water

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Inspect area and make sure isolation values are employed to shut off water supply	Shut off water valves in server rooms, data centers, and mainframe computer rooms	No server room, datacenter, or mainframe computer room to protect from water	Not Executed

Test Case ID		23	Test Case Description	Plan of Action and Milestones		
Created By	Calvin Ton		Reviewed By	Calvin Ton	Version	1

QA Tester's Log Test Case not executed

Tester's Name	Calvin Ton	Date Tested	Novemeber 24th, 2020	Test Case (Pass/Fail/Not	Not Executed

S #	Prerequisites:
1	Access to Word Document
2	
3	
4	

S #	Test Data
1	
2	
3	
4	

Test Scenario Verify that ogranization has plan of action and milestones to accomplish

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Develop plan of action and milestones for information system to document the organization's planned remedial action to correct weaknesses or deficiencies	Proper plans of actions along with milestone for future	No plan of action or milestones were created	Not executed

Test Case ID		24	Test Case Description	Information System Back up		
Created By	Calvin		Reviewed By	Calvin	Version	1

Test case passed

Tester's Name	Calvin	Date Tested	November 23rd, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:
1	Download MySQL Workbnech
2	Be able to Log into Root
3	
4	

S #	Test Data
1	Log into root of LocalHost
2	
3	
4	

Test Scenario   Verify that data is backed up and stored in a secure location

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Type mysql-workbench into linux terminal	MySQL Workbench opens	As expected	Pass
2	Create a Schema and Create the tables	Schema created along with tables imported with data	As expected	Pass
3	Click"Server" Tab	Drop down menu opens	As expected	Pass
4	Click "Data Export"	Brings user to Data Export page to back up data	As expected	Pass
5	Select Schema and tables to Back up	Schema is Checked and all tables in Schema are "checkmarked"	As expected	Pass
6	Click "Start Export"	Data Exports into a dump folder	As expected	Pass

Test Case ID		25	Test Case Description	Information System REcovery and Reconstitution		
Created By	Calvin		Reviewed By	Calvin	Version	1

QA Tester's Log Test Case Passed

Tester's Name	Calvin	Date Tested	November 23rd, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:		S #	Test Data
1	Access to Files		1	Log into root of LocalHost
2	Access to working MySQL Workbnech		2	
3			3	
4			4	

Test Scenario   Verify that data is recovered and is useable

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Type mysql-workbench into linux terminal	MySQL Workbench opens	As expected	Pass
2	Create Schema ready for data import and refresh tab	Created Schema appears on left tab	As expected	Pass
3	Click "Server" and then "Data Import"	Drop down menu opens and "Data Import" option available. Data Import page opens.	As expected	Pass
4	Select elipses after the "Import from Dump Project Folder" and select the correct backup dump folder	File application opens and all dump folder options available	As expected	Pass
5	Select Imported Schema and make sure all tables are selected	Checkmarks are next to Schema and Tables	As expected	Pass
6	Click "Start Import"	Data Imported into MySQL Workbench as well as mysql in terminal	As expected	Pass

Test Case ID		26	Test Case Description	Baseline Configuration		
Created By	Calvin		Reviewed By	Calvin	Version	1

QA Tester's Log   Test case attempted

Tester's Name	Calvin	Date Tested	November 24th, 2020	Test Case (Pass/Fail/Not	Not Executed

S #	Prerequisites:
1	Access to Documentation
2	
3	
4	

S #	Test Data
1	
2	
3	
4	

Test Scenario   Verify that organization has a baseline documentation

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Open a Google Document or Word Document	Google Doc opens/Word Document Opens	As expected	Pass
2	Document a base setup for the organization's system/data	Document Should be filled with base where companh sets up devices and data	There was nothing to document as a baseline	Not Executed

Test Case ID		27	Test Case Description	Media Access		
Created By	Calvin		Reviewed By	Calvin	Version	1

    Test Case Passed

Tester's Name	Calvin	Date Tested	November 24th, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:
1	Access to Sotraage device i.e Flash Drive
2	
3	
4	

S #	Test Data
1	
2	
3	
4	

Test Scenario   Verify that external storage device stores data and is secured

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Click "Server" and then click "Data Export"	Takes user to Data export page	As expected	Pass
2	Select dump folder to store data in and click "Start export"	Data should export into a dump folder in the selected directory	As expected	Pass
3	Insert Flash Drive/External Hard Drive into Device	Device should recognize Flash Drive/External Hard drive	As expeced	Pass
4	Copy dump folder over to Flash Drive storage	Dump folder should appear in Flash Drive directory	As expected	Pass
5	Lock so=torage device with a password	Storage should not be able to be accessible unless password is provided	As expected	Pass

Test Case ID	28	Test Case Description	Visitor Access Records		
Created By	Calvin	Reviewed By	Calvin	Version	1

QA Tester's Log   Test case not executed

Tester's Name	Calvin	Date Tested	November 24th, 2020	Test Case (Pass/Fail/Not	Not Executed

S #	Prerequisites:		S #	Test Data
1	Access to documentation software		1	
2			2	
3			3	
4			4	

Test Scenario   Verify that visitors and users are being documented when accessing building or data

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Document when users or visitors access data within database	Record is recorded	No documentation created as everything done remotely	Not expected

Test Case ID		29	Test Case Description	Use of external information systems		
Created By	Junyan		Reviewed By	Junyan	Version	1

QA Tester's Log	Test Case Passed

Tester's Name	Junyan	Date Tested	November 24th, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:
1	Use command line to log into mysql
2	
3	
4	

S #	Test Data
1	~$ mysql -u GlobalProj_admin -p
2	
3	
4	

Test Scenario	Verify acccess the information system from external information without authorized password will be denied

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Try to access the dtabase as an external information system	Access denied due to no authorized password	as expected	Not executed

Test Case ID	30	Test Case Description	Security Training Records		
Created By	Junyan	Reviewed By	Junyan	Version	1

QA Tester's Log No test case needed

Tester's Name	Junyan	Date Tested	No test	Test Case (Pass/Fail/Not	No test case

S #	Prerequisites:		S #	Test Data
1	Access to the training documents		1	
2	Follow the procedures		2	
3			3	
4			4	

Test Scenario make sure all the training records are documented and monitored

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
	Organization documents and monitors users' security training activities including basic security awareness training and specific security training	Training records are documented and monitored	As Expected	No executed
	Organization retains the training records for a time period based on the security policy	Training records are retained in a specific period	As Expected	No executed

Test Case ID		31	Test Case Description	User Installed Software		
Created By	Junyan		Reviewed By	Junyan	Version	1

QA Tester's Log — Test case passed

Tester's Name	Junyan	Date Tested	November 24th, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:
1	Software Installation auditing tools
2	Software installation policies
3	
4	

S #	Test Data
1	Software installation policies
2	
3	
4	

Test Scenario User has the ability to install software with necessary privilege; unauthorized installation will trigger system alert

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Establish governing the installation of software by users	Users have the ability to install software with necessary privileges	As expected	Pass
2	Enforce software installation policies through alarming system	alerts should be sent out for unauthorized installations	As expected	Pass

Test Case ID		32	Test Case Description	Incident Monitoring		
Created By	Junyan		Reviewed By	Junyan	Version	1

QA Tester's Log	Test Case Passed

Tester's Name	Junyan	Date Tested	November 24th, 2020	Test Case (Pass/Fail/Not	not executed

S #	Prerequisites:
1	open MySQL Workbench
2	
3	
4	

S #	Test Data
1	Servers Log
2	Performance reports
3	Users info
4	Privilege info

Test Scenario	Use MySQL workbench to monitor system incidents

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	click Server on the toolbar	Server logs, Performance reports and other options are available	as expeeced	not excuted
2	click Server logs	Error log files are available to show server errors	as expeeced	not excuted
3	click Performance reports	Performance reports including memory usage,database schema statistics, wait event times are showing up	as expeeced	not excuted
4	click Users and Privileges	pysical access like Users and privileges info is available	as expeeced	not excuted

Test Case ID		33	Test Case Description	Third-Party Personnel Security		
Created By	Junyan		Reviewed By	Junyan	Version	1

QA Tester's Log	Test Case Passed

Tester's Name	Junyan	Date Tested	November 24th, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:
1	personnel security policies and procedures
2	personnel security requirements
3	
4	

S #	Test Data
1	create role client;
2	create user 'GlobalProj_client'@'localhost' identified by 'pA$sw0rD';
3	grant client to 'GlobalProj_client'@'localhost';
4	grant select on GlobalProj.* to client;

Test Scenario	Third party with authorized role has the ability to log in to the system

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	create role client; create user 'GlobalProj_client'@'localhost' identified by 'pA$sw0rD';	client role is created with password	as expeceted	pass
2	grant client to 'GlobalProj_client'@'localhost'; grant select on GlobalProj.* to client;	grant client role the access to the database	as expeceted	pass
3	third party uses the user name and password to log into the database	Third party logs into the database successfully	as expeceted	pass

Test Case ID		34	Test Case Description		Access Agreements		
Created By	Junyan		Reviewed By		Junyan	Version	1

QA Tester's Log	Test Case Passed

Tester's Name	Junyan	Date Tested	November 24th, 2020	Test Case (Pass/Fail/Not	Pass

S #	Prerequisites:
1	Access Agreements
2	use command line to create database user
3	
4	

S #	Test Data
1	create role end_user;
2	create user 'GlobalProj_user'@'localhost' identified by 'pA$sw0rD';
3	grant end_user to 'GlobalProj_user'@'localhost';
4	grant select, insert, update on GlobalProj.* to end_user;

Test Scenario   User who signed the access agreements has the authorized role and is able to log into the system

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	create role end_user; create user 'GlobalProj_user'@'localhost' identified by 'pA$sw0rD';	user role is created with password	as expeceted	pass
2	grant end_user to 'GlobalProj_user'@'localhost'; grant select, insert, update on GlobalProj.* to end_user;	grant user role the access to the database	as expeceted	pass
3	user uses the user name and password to log into the database	user logs into the database successfully	as expeceted	pass

Test Case ID		35	Test Case Description	Rules of Behavior		
Created By	Junyan		Reviewed By	Junyan	Version	1

QA Tester's Log   Test Case Passed

Tester's Name	Junyan	Date Tested	November 24th, 2020	Test Case (Pass/Fail/Not	Not executed

S #	Prerequisites:
1	Open MySQL workbench
2	
3	
4	

S #	Test Data
1	User Resource Use
2	User behavior statistic data
3	
4	

Test Scenario   Use MySQL workbench to monitor user behaviors

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	click Server on the toolbar	Performance reports option is available	as expeceted	not excuted
2	click Performance reports	User Resource Use option is available	as expeceted	not excuted
3	click User Resource Use	User behaviors statistic data are available	as expeceted	not excuted

Test Case ID		36	Test Case Description		Fire Protection		
Created By	Muhammad		Reviewed By	Muhammad		Version	1

QA Tester's Log | Test case not executed

Tester's Name	Muhammad	Date Tested	11/25/2020	Test Case (Pass/Fail/Not	Not Executed

S #	Prerequisites:		S #	Test Data
1	Access Server Room/Data Center		1	
2			2	
3			3	
4			4	

Test Scenario | Verify that server room is protected from water

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Doesn't Apply to us but if it did we will implement fire hazard detection devices to catch up on incident if anything occur	Have fire alarms and smoke alarms in server rooms, data centers, and mainframe computer rooms connected to	No server room, datacenter, or mainframe computer room to protect from Fire	Not Executed