

Test Cases Report - 65 Test Cases

Total Test Cases	65
Categories	Usability, Performance, Integration, Security, Functional, Boundary, Error
Priority Levels	Medium, High, Critical, Low
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Test Case 1: Successful Customer Onboarding with Full Entitlements

Test ID	TC_001
Module	Customer Onboarding > Entitlement Assignment
Category	Functional
Priority	Critical
Test Type	Positive
Risk Level	Critical
Estimated Time	8 minutes
Description	Verify that a new customer can be onboarded and assigned all available governmental payment product entitlements.
Objective	Validate core onboarding and entitlement assignment workflow.
Preconditions	Admin user logged in; All products and sub-products configured
Test Steps	Navigate to onboarding form; Fill in all required fields; Select all product and sub-product entitlements; Submit onboarding form.
Expected Result	Customer is created with all entitlements assigned; confirmation message displayed.
Validation Criteria	Customer created; Entitlements assigned; No errors
Dependencies	Product catalog loaded
Notes	Covers main onboarding happy path.

Test Case 2: Onboarding Fails for Missing Mandatory Fields

Test ID	TC_002
Module	Customer Onboarding > Field Validation
Category	Functional
Priority	High
Test Type	Negative
Risk Level	High

Estimated Time	4 minutes
Description	Check that onboarding is blocked if mandatory fields are not filled.
Objective	Validate enforcement of mandatory fields.
Preconditions	Admin user logged in
Test Steps	Navigate to onboarding form; Leave one or more mandatory fields blank; Attempt to submit
Expected Result	Onboarding is prevented; error messages shown for missing fields.
Validation Criteria	Mandatory fields enforced; Error messages displayed
Notes	Covers negative onboarding scenario.

Test Case 3: Role-Based Access Control for Entitlement Management

Test ID	TC_003
Module	Security > Authorization
Category	Security
Priority	Critical
Test Type	Negative
Risk Level	Critical
Estimated Time	3 minutes
Description	Verify that only users with the correct role (admin) can assign or modify entitlements.
Objective	Ensure robust access control for sensitive operations.
Preconditions	Non-admin user logged in
Test Steps	Navigate to entitlement management; Attempt to modify entitlements
Expected Result	Access denied; operation not permitted.
Validation Criteria	No unauthorized access; Proper error message
Dependencies	User roles configured
Notes	Prevents privilege escalation.

Test Case 4: Auto-Rejection of Stale Transactions After 45 Days

Test ID	TC_004
Module	Transaction Handling > Workflow Automation
Category	Functional
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	6 minutes

Description	Ensure transactions not approved or released within 45 days are automatically rejected.
Objective	Validate automated workflow for transaction expiry.
Preconditions	Transaction created and pending for >45 days
Test Steps	Trigger auto-rejection job; Check transaction status
Expected Result	Transaction is auto-rejected; audit trail updated.
Validation Criteria	Transaction status updated; Audit trail entry
Dependencies	Scheduler configured
Notes	Critical for compliance.

Test Case 5: Entitlement Visibility Based on Country (Egypt)

Test ID	TC_005
Module	UI/UX > Conditional Logic
Category	Functional
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	5 minutes
Description	Verify that Egypt-specific entitlement options are displayed only for customers with Egypt as their country.
Objective	Test conditional UI rendering based on localization.
Preconditions	Admin user logged in
Test Steps	Select Egypt as country in onboarding; Check entitlement options
Expected Result	Egypt-specific fields/options visible; others hidden.
Validation Criteria	Correct fields visible; No irrelevant options
Dependencies	Country list loaded
Notes	Covers localization logic.

Test Case 6: SWIFT Compliance Validation for Free Format Fields

Test ID	TC_006
Module	Data Validation > SWIFT Compliance
Category	Functional
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	4 minutes
Description	Ensure free format fields only accept SWIFT-compliant characters.

Objective	Validate field-level compliance enforcement.
Preconditions	Admin user logged in
Test Steps	Enter non-SWIFT characters in free format field; Attempt to submit
Expected Result	Submission blocked; error message for invalid characters.
Validation Criteria	Invalid input rejected; Clear error message
Dependencies	SWIFT rules implemented
Notes	Covers compliance requirement.

Test Case 7: Dropdown Field Accepts Only Defined Values

Test ID	TC_007
Module	UI/UX > Field Controls
Category	Functional
Priority	Medium
Test Type	Positive
Risk Level	Low
Estimated Time	2 minutes
Description	Ensure dropdown fields only allow selection of predefined values.
Objective	Prevent invalid data entry via dropdowns.
Preconditions	Admin user logged in
Test Steps	Open dropdown field; Attempt to enter custom value; Select value from list
Expected Result	Only predefined values selectable; no custom input allowed.
Validation Criteria	No custom input; Only allowed values
Notes	UI validation.

Test Case 8: Checkbox Default State for Entitlements

Test ID	TC_008
Module	UI/UX > Entitlement Controls
Category	Usability
Priority	Low
Test Type	Positive
Risk Level	Low
Estimated Time	2 minutes
Description	Check that entitlement checkboxes have the correct default state based on configuration.
Objective	Validate default UI state for entitlements.
Preconditions	Admin user logged in

Test Steps	Navigate to entitlement screen; Observe checkbox states
Expected Result	Checkboxes reflect default entitlement settings.
Validation Criteria	Correct default states
Dependencies	Default states configured
Notes	UI/UX check.

Test Case 9: Alphanumeric Field Rejects Spaces

Test ID	TC_009
Module	Data Validation > Field Types
Category	Functional
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	3 minutes
Description	Verify that alphanumeric (AN) fields do not accept spaces.
Objective	Enforce field type constraints.
Preconditions	Admin user logged in
Test Steps	Enter value with spaces in AN field; Attempt to submit
Expected Result	Submission blocked; error message for invalid format.
Validation Criteria	Spaces rejected; Error message shown
Notes	Field validation.

Test Case 10: Numeric Field Accepts Only Numbers

Test ID	TC_010
Module	Data Validation > Field Types
Category	Functional
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	3 minutes
Description	Ensure numeric fields accept only numbers.
Objective	Prevent invalid data entry in numeric fields.
Preconditions	Admin user logged in
Test Steps	Enter alphabetic value in NUM field; Attempt to submit
Expected Result	Submission blocked; error message for non-numeric input.

Validation Criteria	Only numbers accepted; Error message shown
Notes	Field validation.

Test Case 11: Amount Field Precision Enforcement

Test ID	TC_011
Module	Data Validation > Field Types
Category	Functional
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	3 minutes
Description	Verify that amount fields enforce two decimal places.
Objective	Ensure currency precision compliance.
Preconditions	Admin user logged in
Test Steps	Enter value with three decimals in AMT field; Attempt to submit
Expected Result	Submission blocked; error message for invalid precision.
Validation Criteria	Only two decimals allowed; Error message shown
Notes	Currency precision enforcement.

Test Case 12: Fixed Length Field Enforcement

Test ID	TC_012
Module	Data Validation > Field Types
Category	Functional
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	3 minutes
Description	Check that fixed length fields reject values exceeding the specified length.
Objective	Enforce field length constraints.
Preconditions	Admin user logged in
Test Steps	Enter value exceeding fixed length; Attempt to submit
Expected Result	Submission blocked; error message for length violation.
Validation Criteria	Length enforced; Error message shown
Notes	Field validation.

Test Case 13: Auto-Fill Field Populates Correctly

Test ID	TC_013
Module	UI/UX > Field Controls
Category	Functional
Priority	Low
Test Type	Positive
Risk Level	Low
Estimated Time	2 minutes
Description	Verify that auto-fill fields populate based on the value of another field.
Objective	Ensure auto-fill logic is functional.
Preconditions	Admin user logged in
Test Steps	Enter value in source field; Observe auto-fill field
Expected Result	Auto-fill field is populated correctly.
Validation Criteria	Correct value auto-filled
Dependencies	Auto-fill mapping configured
Notes	Covers AF type.

Test Case 14: Beneficiary Addition in Customer Portal

Test ID	TC_014
Module	Customer Portal > Beneficiary Management
Category	Functional
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	4 minutes
Description	Test that customer users can add beneficiaries via the customer portal.
Objective	Validate beneficiary management functionality.
Preconditions	Customer user logged in
Test Steps	Navigate to beneficiary management; Add new beneficiary; Submit
Expected Result	Beneficiary added and visible in list.
Validation Criteria	Beneficiary added; Visible in UI
Notes	Portal parity requirement.

Test Case 15: Beneficiary Addition in Admin Portal

Test ID	TC_015
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Module	Admin Portal > Beneficiary Management
Category	Functional
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	4 minutes
Description	Test that admin users can add beneficiaries via the admin portal.
Objective	Validate admin beneficiary management.
Preconditions	Admin user logged in
Test Steps	Navigate to beneficiary management; Add new beneficiary; Submit
Expected Result	Beneficiary added and visible in list.
Validation Criteria	Beneficiary added; Visible in UI
Notes	Portal parity requirement.

Test Case 16: Entitlement Change Audit Trail

Test ID	TC_016
Module	Audit Logging > Entitlement Management
Category	Functional
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	3 minutes
Description	Ensure all entitlement changes are logged with user, timestamp, and details.
Objective	Validate audit trail for entitlement changes.
Preconditions	Admin user logged in; Customer exists
Test Steps	Modify entitlement; Check audit logs
Expected Result	Audit log entry created for change.
Validation Criteria	Log entry present; Correct details
Dependencies	Audit logging enabled
Notes	Compliance requirement.

Test Case 17: Unauthorized API Access Attempt

Test ID	TC_017
Module	API > Security
Category	Security

Priority	Critical
Test Type	Negative
Risk Level	Critical
Estimated Time	2 minutes
Description	Ensure API endpoints reject requests with invalid or missing authentication tokens.
Objective	Validate API authentication enforcement.
Preconditions	
Test Steps	Send API request with invalid token; Observe response
Expected Result	401 Unauthorized error returned.
Validation Criteria	Unauthorized access blocked
Notes	API security.

Test Case 18: API Returns Correct Entitlement Data

Test ID	TC_018
Module	API > Entitlement Data
Category	Integration
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	3 minutes
Description	Verify that API returns accurate entitlement data for a customer.
Objective	Validate API data integrity.
Preconditions	Customer with entitlements exists
Test Steps	Call entitlement API with valid token; Check response data
Expected Result	API returns correct entitlement structure.
Validation Criteria	Correct data structure; All entitlements present
Dependencies	API up; Customer exists
Notes	API data validation.

Test Case 19: API Handles Invalid Customer ID Gracefully

Test ID	TC_019
Module	API > Error Handling
Category	Integration
Priority	Medium
Test Type	Negative

Risk Level	Medium
Estimated Time	2 minutes
Description	Ensure API returns appropriate error for invalid customer ID.
Objective	Validate API error handling.
Preconditions	
Test Steps	Call entitlement API with invalid customer ID; Observe response
Expected Result	404 Not Found or relevant error returned.
Validation Criteria	Proper error code; No sensitive info leaked
Notes	API error handling.

Test Case 20: File Upload Accepts Only Allowed Formats

Test ID	TC_020
Module	File Upload > Validation
Category	Security
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	3 minutes
Description	Check that file upload only accepts allowed formats (e.g., CSV, XLSX).
Objective	Prevent unsupported file types.
Preconditions	Admin user logged in
Test Steps	Attempt to upload .exe file; Observe error
Expected Result	Upload blocked; error message for unsupported format.
Validation Criteria	Only allowed formats accepted
Notes	File upload security.

Test Case 21: File Upload with Large File Size

Test ID	TC_021
Module	File Upload > Boundary Testing
Category	Boundary
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	4 minutes
Description	Verify system accepts files up to the maximum allowed size.

Objective	Test file size boundary.
Preconditions	Admin user logged in
Test Steps	Upload file at size limit; Observe result
Expected Result	File uploaded successfully.
Validation Criteria	Upload success at boundary
Dependencies	File size limits configured
Notes	Boundary test.

Test Case 22: File Upload Exceeds Maximum Size

Test ID	TC_022
Module	File Upload > Boundary Testing
Category	Boundary
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	3 minutes
Description	Ensure system rejects files larger than the allowed limit.
Objective	Enforce file size constraints.
Preconditions	Admin user logged in
Test Steps	Upload file exceeding size limit; Observe error
Expected Result	Upload blocked; error message for file size.
Validation Criteria	Oversized files rejected
Dependencies	File size limits configured
Notes	Boundary test.

Test Case 23: File Upload Virus Scan

Test ID	TC_023
Module	File Upload > Security
Category	Security
Priority	Critical
Test Type	Negative
Risk Level	Critical
Estimated Time	5 minutes
Description	Check that file upload process scans files for viruses and blocks infected files.
Objective	Validate file upload security.

Preconditions	Admin user logged in
Test Steps	Upload file with EICAR string; Observe result
Expected Result	Upload blocked; virus warning displayed.
Validation Criteria	Virus detected; Upload blocked
Dependencies	Virus scan enabled
Notes	Malware defense.

Test Case 24: Performance: Onboarding 100 Customers Concurrently

Test ID	TC_024
Module	Performance > Load Testing
Category	Performance
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	15 minutes
Description	Test system performance and stability under concurrent onboarding requests.
Objective	Assess onboarding scalability.
Preconditions	
Test Steps	Initiate 100 onboarding requests simultaneously; Monitor system response
Expected Result	All requests processed successfully; no crashes.
Validation Criteria	No errors; Acceptable response time
Dependencies	Load testing tools
Notes	Performance test.

Test Case 25: Performance: Entitlement Assignment Latency

Test ID	TC_025
Module	Performance > Response Time
Category	Performance
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	2 minutes
Description	Measure time taken to assign an entitlement to a customer.
Objective	Ensure entitlement assignment is performant.

Preconditions	Admin user logged in
Test Steps	Assign entitlement; Record response time
Expected Result	Response time within acceptable limits (<2s).
Validation Criteria	Response time <2s
Notes	Performance SLA.

Test Case 26: Integration: Add New Payment Type Post Go-Live

Test ID	TC_026
Module	Product Management > Extensibility
Category	Integration
Priority	Critical
Test Type	Positive
Risk Level	Critical
Estimated Time	7 minutes
Description	Test the system's ability to add a new payment type after go-live without code changes.
Objective	Validate product extensibility.
Preconditions	Admin user logged in
Test Steps	Access product management; Add new payment type; Assign to customer
Expected Result	New payment type added and assignable.
Validation Criteria	Type added; Assignable to customers
Dependencies	Metadata-driven config enabled
Notes	Future-proofing requirement.

Test Case 27: Integration: Entitlement Sync Between Portals

Test ID	TC_027
Module	Integration > Portal Parity
Category	Integration
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	5 minutes
Description	Ensure entitlements assigned in admin portal are reflected in customer portal.
Objective	Validate data sync between portals.
Preconditions	Admin and customer portals accessible
Test Steps	Assign entitlement in admin portal; Log in to customer portal; Check entitlements

Expected Result	Entitlement visible in customer portal.
Validation Criteria	Data sync; No delay
Notes	Portal parity.

Test Case 28: Usability: Tooltip and Help Text for Entitlement Fields

Test ID	TC_028
Module	UI/UX > Usability
Category	Usability
Priority	Low
Test Type	Positive
Risk Level	Low
Estimated Time	1 minute
Description	Check that tooltips and help texts are available and clear for entitlement fields.
Objective	Improve user understanding.
Preconditions	Admin user logged in
Test Steps	Hover over entitlement field; Read tooltip/help text
Expected Result	Tooltip/help text is shown and clear.
Validation Criteria	Tooltip present; Text is clear
Notes	Usability check.

Test Case 29: Boundary: Maximum Number of Entitlements per Customer

Test ID	TC_029
Module	Entitlement Management > Boundary
Category	Boundary
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	4 minutes
Description	Test system behavior when assigning the maximum number of entitlements to a customer.
Objective	Check upper limit handling.
Preconditions	Admin user logged in
Test Steps	Assign entitlements up to limit; Attempt to add one more
Expected Result	System blocks additional entitlement; error shown.

Validation Criteria	Limit enforced
Dependencies	Entitlement limit configured
Notes	Boundary test.

Test Case 30: Boundary: Minimum Required Entitlement Assignment

Test ID	TC_030
Module	Entitlement Management > Boundary
Category	Boundary
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	3 minutes
Description	Verify that at least one entitlement must be assigned to complete onboarding.
Objective	Prevent incomplete onboarding.
Preconditions	Admin user logged in
Test Steps	Attempt onboarding with no entitlements; Submit
Expected Result	Submission blocked; error for missing entitlements.
Validation Criteria	At least one required
Notes	Boundary test.

Test Case 31: Error Handling: Database Connection Failure

Test ID	TC_031
Module	Database > Error Handling
Category	Error
Priority	Critical
Test Type	Negative
Risk Level	Critical
Estimated Time	5 minutes
Description	Ensure system handles DB connection loss gracefully during entitlement assignment.
Objective	Prevent data loss and provide user feedback.
Preconditions	Admin user logged in
Test Steps	Disconnect DB; Attempt entitlement assignment
Expected Result	Operation fails gracefully; error message shown.
Validation Criteria	No crash; User informed

Dependencies	DB access
Notes	Error handling.

Test Case 32: Backup and Recovery: Restore After Data Loss

Test ID	TC_032
Module	Backup/Recovery > Disaster Recovery
Category	Functional
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	10 minutes
Description	Test system's ability to recover entitlement and customer data from backup.
Objective	Validate backup and recovery process.
Preconditions	Backup available
Test Steps	Delete entitlement data; Restore from backup; Verify data present
Expected Result	Data restored; system operational.
Validation Criteria	Data integrity; System operational
Dependencies	Backup configured
Notes	Disaster recovery.

Test Case 33: Configuration Management: Update Entitlement Parameters

Test ID	TC_033
Module	Configuration > Parameter Management
Category	Functional
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	3 minutes
Description	Ensure admin can update entitlement parameters (e.g., limits, options) and changes take effect.
Objective	Validate configuration management.
Preconditions	Admin user logged in
Test Steps	Change entitlement parameter; Save; Verify updated in UI
Expected Result	Parameter updated and reflected in system.
Validation Criteria	Parameter updated; UI reflects change

Notes	Config management.
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Test Case 34: Security: SQL Injection Attempt on Free Format Field

Test ID	TC_034
Module	Security > Input Validation
Category	Security
Priority	Critical
Test Type	Negative
Risk Level	Critical
Estimated Time	4 minutes
Description	Test system's resilience to SQL injection via free format fields.
Objective	Prevent SQL injection vulnerabilities.
Preconditions	Admin user logged in
Test Steps	Enter SQL payload in free format field; Submit
Expected Result	Input sanitized; no injection possible.
Validation Criteria	No SQL injection; Input sanitized
Notes	Security test.

Test Case 35: Security: XSS Attempt in Free Format Field

Test ID	TC_035
Module	Security > Input Validation
Category	Security
Priority	Critical
Test Type	Negative
Risk Level	Critical
Estimated Time	4 minutes
Description	Test system's resilience to cross-site scripting via free format fields.
Objective	Prevent XSS vulnerabilities.
Preconditions	Admin user logged in
Test Steps	Enter <script>alert(1)</script> in free format field; Submit
Expected Result	Input sanitized; script not executed.
Validation Criteria	No XSS; Input sanitized
Notes	Security test.

Test Case 36: Security: Session Timeout Enforcement

Test ID	TC_036
Module	Security > Session Management
Category	Security
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	6 minutes
Description	Verify user is logged out after inactivity period.
Objective	Enforce session timeout policy.
Preconditions	User logged in
Test Steps	Remain idle past timeout; Attempt action
Expected Result	User is logged out; must re-authenticate.
Validation Criteria	Auto logout; No actions allowed
Dependencies	Session timeout configured
Notes	Session management.

Test Case 37: Security: Password Policy Enforcement

Test ID	TC_037
Module	Security > Authentication
Category	Security
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	3 minutes
Description	Ensure password meets complexity requirements.
Objective	Prevent weak passwords.
Preconditions	Admin user creating new user
Test Steps	Enter weak password; Attempt to save
Expected Result	Weak password rejected; error message shown.
Validation Criteria	Weak passwords rejected
Dependencies	Password policy configured
Notes	Authentication security.

Test Case 38: Security: Brute Force Login Protection

Test ID	TC_038
Module	Security > Authentication
Category	Security
Priority	Critical
Test Type	Negative
Risk Level	Critical
Estimated Time	4 minutes
Description	Verify account is locked after repeated failed login attempts.
Objective	Prevent brute force attacks.
Preconditions	User account exists
Test Steps	Enter wrong password repeatedly; Observe result
Expected Result	Account locked after threshold; user notified.
Validation Criteria	Lockout enforced; Notification sent
Dependencies	Lockout policy configured
Notes	Brute force defense.

Test Case 39: Cross-Browser: Chrome Compatibility

Test ID	TC_039
Module	UI/UX > Cross-Browser
Category	Usability
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	6 minutes
Description	Check that onboarding and entitlement management work in Chrome.
Objective	Validate cross-browser compatibility.
Preconditions	Chrome browser installed
Test Steps	Open app in Chrome; Perform onboarding
Expected Result	All features work as expected.
Validation Criteria	No UI issues; All functions work
Notes	Browser compatibility.

Test Case 40: Cross-Browser: Firefox Compatibility

Test ID	TC_040
Module	UI/UX > Cross-Browser

Category	Usability
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	6 minutes
Description	Check that onboarding and entitlement management work in Firefox.
Objective	Validate cross-browser compatibility.
Preconditions	Firefox browser installed
Test Steps	Open app in Firefox; Perform onboarding
Expected Result	All features work as expected.
Validation Criteria	No UI issues; All functions work
Notes	Browser compatibility.

Test Case 41: Cross-Browser: Edge Compatibility

Test ID	TC_041
Module	UI/UX > Cross-Browser
Category	Usability
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	6 minutes
Description	Check that onboarding and entitlement management work in Edge.
Objective	Validate cross-browser compatibility.
Preconditions	Edge browser installed
Test Steps	Open app in Edge; Perform onboarding
Expected Result	All features work as expected.
Validation Criteria	No UI issues; All functions work
Notes	Browser compatibility.

Test Case 42: Cross-Browser: Safari Compatibility

Test ID	TC_042
Module	UI/UX > Cross-Browser
Category	Usability
Priority	Medium
Test Type	Positive

Risk Level	Medium
Estimated Time	6 minutes
Description	Check that onboarding and entitlement management work in Safari.
Objective	Validate cross-browser compatibility.
Preconditions	Safari browser installed
Test Steps	Open app in Safari; Perform onboarding
Expected Result	All features work as expected.
Validation Criteria	No UI issues; All functions work
Notes	Browser compatibility.

Test Case 43: Entitlement Assignment for Custom Role

Test ID	TC_043
Module	Entitlement Management > Role-Based Assignment
Category	Functional
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	3 minutes
Description	Test that custom roles can be assigned entitlements as per defined rules.
Objective	Validate role-based entitlement assignment.
Preconditions	Custom role created
Test Steps	Assign entitlement to custom role; Verify assignment
Expected Result	Entitlement assigned to custom role.
Validation Criteria	Assignment successful
Dependencies	Role creation enabled
Notes	Role-based test.

Test Case 44: Entitlement Removal and Revocation

Test ID	TC_044
Module	Entitlement Management > Revocation
Category	Functional
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	3 minutes

Description	Ensure entitlements can be revoked and removed from customers.
Objective	Validate entitlement removal process.
Preconditions	Customer with entitlement exists
Test Steps	Remove entitlement; Verify removal
Expected Result	Entitlement removed; customer access revoked.
Validation Criteria	Entitlement removed; Access revoked
Notes	Revocation test.

Test Case 45: Error Handling: Invalid Date Format

Test ID	TC_045
Module	Data Validation > Field Types
Category	Error
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	2 minutes
Description	Ensure system rejects dates not in DD-MM-YYYY format.
Objective	Enforce date format validation.
Preconditions	Admin user logged in
Test Steps	Enter date in MM/DD/YYYY; Submit
Expected Result	Submission blocked; error message for format.
Validation Criteria	Only DD-MM-YYYY accepted
Notes	Date format validation.

Test Case 46: Error Handling: Invalid Time Format

Test ID	TC_046
Module	Data Validation > Field Types
Category	Error
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	2 minutes
Description	Ensure system rejects times not in HH:MM:SS format.
Objective	Enforce time format validation.
Preconditions	Admin user logged in

Test Steps	Enter time in 12-hour format; Submit
Expected Result	Submission blocked; error message for format.
Validation Criteria	Only HH:MM:SS accepted
Notes	Time format validation.

Test Case 47: Integration: Entitlement Change Notification

Test ID	TC_047
Module	Notifications > Entitlement Management
Category	Integration
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	3 minutes
Description	Ensure users receive notifications when their entitlements are changed.
Objective	Validate notification workflow.
Preconditions	Notification system enabled
Test Steps	Modify entitlement; Check user notifications
Expected Result	User receives notification of change.
Validation Criteria	Notification sent; Correct content
Dependencies	Notification service
Notes	Notification workflow.

Test Case 48: Usability: Error Message Clarity

Test ID	TC_048
Module	UI/UX > Error Handling
Category	Usability
Priority	Low
Test Type	Negative
Risk Level	Low
Estimated Time	2 minutes
Description	Check that error messages are clear and actionable.
Objective	Improve user experience during errors.
Preconditions	Admin user logged in
Test Steps	Enter invalid data; Submit; Read error message
Expected Result	Error message is clear and instructive.

Validation Criteria	Clear, actionable message
Notes	UX improvement.

Test Case 49: Integration: External Payment Gateway Connectivity

Test ID	TC_049
Module	Integration > Payment Processing
Category	Integration
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	5 minutes
Description	Test connectivity and data exchange with external payment gateway.
Objective	Validate third-party integration.
Preconditions	Payment gateway credentials configured
Test Steps	Initiate payment; Observe response from gateway
Expected Result	Payment processed; status updated.
Validation Criteria	Connectivity; Correct status update
Dependencies	Gateway available
Notes	Third-party integration.

Test Case 50: Database: Duplicate Customer Prevention

Test ID	TC_050
Module	Database > Data Integrity
Category	Functional
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	3 minutes
Description	Ensure system prevents creation of duplicate customer records.
Objective	Maintain data integrity.
Preconditions	Customer with same identifier exists
Test Steps	Attempt to onboard customer with duplicate ID; Submit
Expected Result	Duplicate prevented; error shown.
Validation Criteria	No duplicates; Error shown

Notes	Data integrity.
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Test Case 51: Database: Referential Integrity on Entitlement Deletion

Test ID	TC_051
Module	Database > Data Integrity
Category	Functional
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	3 minutes
Description	Ensure system prevents deletion of entitlements referenced by active transactions.
Objective	Maintain referential integrity.
Preconditions	Entitlement linked to transaction
Test Steps	Attempt to delete entitlement; Observe result
Expected Result	Deletion blocked; error shown.
Validation Criteria	Referential integrity enforced
Notes	Data integrity.

Test Case 52: Configuration: Disable Product/Sub-Product

Test ID	TC_052
Module	Configuration > Product Management
Category	Functional
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	3 minutes
Description	Test that disabling a product or sub-product prevents further assignment.
Objective	Validate configuration enforcement.
Preconditions	Product/sub-product exists
Test Steps	Disable product/sub-product; Attempt assignment
Expected Result	Assignment blocked; product not available.
Validation Criteria	Disabled products hidden
Notes	Config enforcement.

Test Case 53: Backup: Scheduled Backup Job Execution

Test ID	TC_053
Module	Backup/Recovery > Backup Scheduling
Category	Functional
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	10 minutes
Description	Ensure scheduled backup jobs execute at configured intervals.
Objective	Validate backup scheduling.
Preconditions	Backup schedule configured
Test Steps	Wait for scheduled time; Check backup logs
Expected Result	Backup job runs; logs updated.
Validation Criteria	Job runs; Log entry present
Notes	Backup process.

Test Case 54: Regulatory: SWIFT Field Export for Audit

Test ID	TC_054
Module	Compliance > Reporting
Category	Functional
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	5 minutes
Description	Test that SWIFT-compliant fields can be exported for regulatory audit.
Objective	Validate regulatory compliance.
Preconditions	Audit export enabled
Test Steps	Export SWIFT fields; Review export file
Expected Result	Export file contains all required fields; format correct.
Validation Criteria	All required fields; Format correct
Notes	Regulatory compliance.

Test Case 55: Regulatory: Country-Specific Entitlement Reporting

Test ID	TC_055
Module	Compliance > Localization

Category	Functional
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	5 minutes
Description	Ensure entitlement reports include all Egypt-specific fields as per regulatory requirements.
Objective	Validate country-specific reporting.
Preconditions	Reporting enabled
Test Steps	Generate report for Egypt; Review report
Expected Result	Report includes all required Egypt-specific data.
Validation Criteria	All Egypt fields present
Notes	Localization compliance.

Test Case 56: Error Handling: Unexpected Server Error

Test ID	TC_056
Module	Error Handling > General
Category	Error
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	3 minutes
Description	Ensure user receives generic error message and system logs details.
Objective	Handle unexpected server errors gracefully.
Preconditions	
Test Steps	Cause server exception; Observe user feedback; Check logs
Expected Result	User sees generic error; error logged.
Validation Criteria	User informed; Error logged
Notes	General error handling.

Test Case 57: Performance: Entitlement Report Generation Time

Test ID	TC_057
Module	Performance > Reporting
Category	Performance
Priority	Medium
Test Type	Positive

Risk Level	Medium
Estimated Time	7 minutes
Description	Measure time to generate report with 10,000 records.
Objective	Validate reporting performance.
Preconditions	Large data set present
Test Steps	Generate report; Record time to completion
Expected Result	Report generated within SLA (e.g., 30s).
Validation Criteria	Within SLA
Notes	Performance reporting.

Test Case 58: Usability: Tab Order and Keyboard Navigation

Test ID	TC_058
Module	UI/UX > Accessibility
Category	Usability
Priority	Low
Test Type	Positive
Risk Level	Low
Estimated Time	3 minutes
Description	Check that tab order is logical and all fields accessible via keyboard.
Objective	Improve accessibility.
Preconditions	Onboarding form open
Test Steps	Tab through fields; Observe focus order
Expected Result	Tab order logical; all fields reachable.
Validation Criteria	Logical tab order
Notes	Accessibility.

Test Case 59: Usability: Mobile Responsiveness

Test ID	TC_059
Module	UI/UX > Mobile
Category	Usability
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	5 minutes
Description	Verify onboarding and entitlement screens are responsive on mobile devices.

Objective	Validate mobile usability.
Preconditions	Mobile device available
Test Steps	Open app on mobile; Perform onboarding
Expected Result	UI adapts; all features usable.
Validation Criteria	Responsive layout; All functions work
Notes	Mobile usability.

Test Case 60: Entitlement Assignment with Conditional Mandatoriness

Test ID	TC_060
Module	Entitlement Management > Conditional Logic
Category	Functional
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	3 minutes
Description	Test that conditional mandatory fields are enforced based on selected sub-product.
Objective	Validate conditional mandatoriness.
Preconditions	Admin user logged in
Test Steps	Select sub-product with conditional field; Leave field blank; Submit
Expected Result	Submission blocked; error for missing conditional field.
Validation Criteria	Conditional fields enforced
Notes	Conditional logic.

Test Case 61: Integration: Entitlement Assignment via API

Test ID	TC_061
Module	API > Entitlement Management
Category	Integration
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	4 minutes
Description	Verify that entitlements can be assigned via API and reflected in UI.
Objective	Validate API-driven entitlement assignment.
Preconditions	API credentials available

Test Steps	Assign entitlement via API; Check in UI
Expected Result	Entitlement assigned and visible in UI.
Validation Criteria	API assignment reflected
Notes	API/UI sync.

Test Case 62: Performance: Bulk Entitlement Revocation

Test ID	TC_062
Module	Performance > Bulk Operations
Category	Performance
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	10 minutes
Description	Test system performance during bulk entitlement revocation.
Objective	Assess bulk operation scalability.
Preconditions	1000 customers with entitlements
Test Steps	Initiate bulk revocation; Monitor completion time
Expected Result	All entitlements revoked within acceptable time.
Validation Criteria	All processed; Within time limit
Notes	Bulk operation.

Test Case 63: Security: Access Log Review for Entitlement Changes

Test ID	TC_063
Module	Security > Audit Logging
Category	Security
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	3 minutes
Description	Ensure all entitlement changes are logged with user, action, and timestamp.
Objective	Validate audit logging for security.
Preconditions	Audit logging enabled
Test Steps	Change entitlement; Review access logs
Expected Result	Log contains all relevant details.

Validation Criteria	Log accuracy; All details present
Notes	Security audit.

Test Case 64: Usability: Field Label Localization

Test ID	TC_064
Module	UI/UX > Localization
Category	Usability
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	3 minutes
Description	Verify field labels and help texts are localized based on selected language.
Objective	Validate localization of UI.
Preconditions	Multiple languages enabled
Test Steps	Switch language; Check field labels
Expected Result	All labels and help texts localized.
Validation Criteria	All UI elements localized
Notes	Localization.

Test Case 65: Security: Entitlement Assignment Audit Trail Tampering Attempt

Test ID	TC_065
Module	Security > Audit Logging
Category	Security
Priority	Critical
Test Type	Negative
Risk Level	Critical
Estimated Time	4 minutes
Description	Test that audit logs for entitlement assignments cannot be tampered with by any user.
Objective	Ensure audit log immutability.
Preconditions	Admin user logged in
Test Steps	Attempt to edit/delete audit log entry; Observe result
Expected Result	Modification blocked; audit logs remain unchanged.
Validation Criteria	Logs immutable
Notes	Audit trail security.

