

# AI Model Management System - Test Cases

## Document Information

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## Test Case Overview

### Test Case Template

Field	Description
Test Case ID	Unique identifier for the test case
Test Case Title	Brief description of what is being tested
Module	System module being tested
Priority	High/Medium/Low
Preconditions	Prerequisites that must be met
Test Steps	Step-by-step instructions
Expected Result	Expected outcome
Actual Result	Actual outcome (to be filled during execution)
Status	Pass/Fail/Blocked
Test Data	Data required for test execution
Environment	Test environment requirements

## Test Categories

- **Functional Tests:** Verify functional requirements
- **Integration Tests:** Test module interactions
- **Security Tests:** Verify security requirements
- **Performance Tests:** Test system performance
- **Usability Tests:** Test user experience
- **API Tests:** Test API endpoints
- **Regression Tests:** Ensure existing functionality works

## Authentication & Authorization Test Cases

### TC-AUTH-001: Valid User Login

Field	Value
Test Case ID	TC-AUTH-001
Title	Verify successful login with valid credentials
Module	Authentication
Priority	High
Preconditions	User account exists and is active
Test Steps	1. Navigate to login page 2. Enter valid email and password 3. Click login button
Expected Result	User successfully logged in and redirected to dashboard
Test Data	Email: <a href="mailto:test@example.com">test@example.com</a> , Password: ValidPass123!
Environment	All environments

### TC-AUTH-002: Invalid User Login

Field	Value
<b>Test Case ID</b>	TC-AUTH-002
<b>Title</b>	Verify login failure with invalid credentials
<b>Module</b>	Authentication
<b>Priority</b>	High
<b>Preconditions</b>	User attempts login
<b>Test Steps</b>	1. Navigate to login page 2. Enter invalid email or password 3. Click login button
<b>Expected Result</b>	Login fails with appropriate error message
<b>Test Data</b>	Email: <u>invalid@example.com</u> , Password: WrongPass
<b>Environment</b>	All environments

## TC-AUTH-003: MFA for Admin Users

Field	Value
<b>Test Case ID</b>	TC-AUTH-003
<b>Title</b>	Verify MFA requirement for admin users
<b>Module</b>	Authentication
<b>Priority</b>	High
<b>Preconditions</b>	Admin user account exists with MFA enabled
<b>Test Steps</b>	1. Login with admin credentials 2. Enter MFA code when prompted 3. Verify access granted
<b>Expected Result</b>	Admin user cannot access system without valid MFA code
<b>Test Data</b>	Admin email, password, MFA code
<b>Environment</b>	All environments

## TC-AUTH-004: Session Timeout

Field	Value
<b>Test Case ID</b>	TC-AUTH-004
<b>Title</b>	Verify session timeout after inactivity
<b>Module</b>	Authentication
<b>Priority</b>	Medium
<b>Preconditions</b>	User is logged in
<b>Test Steps</b>	1. Login successfully 2. Remain inactive for session timeout period 3. Attempt to perform an action
<b>Expected Result</b>	User is logged out and redirected to login page
<b>Test Data</b>	Valid user credentials
<b>Environment</b>	All environments

## TC-AUTH-005: Role-Based Access Control

Field	Value
<b>Test Case ID</b>	TC-AUTH-005
<b>Title</b>	Verify users can only access authorized functionalities
<b>Module</b>	Authorization
<b>Priority</b>	High
<b>Preconditions</b>	Users with different roles exist
<b>Test Steps</b>	1. Login as end user 2. Attempt to access admin functionality 3. Verify access denied
<b>Expected Result</b>	Access denied with appropriate error message
<b>Test Data</b>	End user credentials
<b>Environment</b>	All environments

## Admin Module Test Cases

### TC-ADM-001: Master Admin System Access

Field	Value
<b>Test Case ID</b>	TC-ADM-001
<b>Title</b>	Verify Master Admin can access all system modules
<b>Module</b>	Admin Module
<b>Priority</b>	High
<b>Preconditions</b>	Master Admin account exists
<b>Test Steps</b>	1. Login as Master Admin 2. Navigate to each module 3. Verify access to all functionalities
<b>Expected Result</b>	Master Admin can access all modules and functionalities
<b>Test Data</b>	Master Admin credentials
<b>Environment</b>	All environments

## TC-ADM-002: Create Sub-Master Admin

Field	Value
<b>Test Case ID</b>	TC-ADM-002
<b>Title</b>	Verify Master Admin can create sub-master administrators
<b>Module</b>	Admin Module
<b>Priority</b>	High
<b>Preconditions</b>	Master Admin is logged in
<b>Test Steps</b>	1. Navigate to sub-master admin management 2. Fill in required details 3. Assign role and permissions 4. Submit form
<b>Expected Result</b>	Sub-master admin account is created successfully
<b>Test Data</b>	Sub-admin details: email, name, role
<b>Environment</b>	All environments

## TC-ADM-003: Institution Enrollment Approval

Field	Value
<b>Test Case ID</b>	TC-ADM-003
<b>Title</b>	Verify Institution Approval Admin can approve enrollment requests
<b>Module</b>	Admin Module
<b>Priority</b>	High
<b>Preconditions</b>	Institution enrollment request exists
<b>Test Steps</b>	1. Login as Institution Approval Admin 2. Navigate to enrollment requests 3. Review request details 4. Approve with comments
<b>Expected Result</b>	Institution enrollment is approved and institution gains access
<b>Test Data</b>	Institution enrollment request data
<b>Environment</b>	All environments

## TC-ADM-004: Institution Enrollment Rejection

Field	Value
<b>Test Case ID</b>	TC-ADM-004
<b>Title</b>	Verify Institution Approval Admin can reject enrollment requests
<b>Module</b>	Admin Module
<b>Priority</b>	High
<b>Preconditions</b>	Institution enrollment request exists
<b>Test Steps</b>	1. Login as Institution Approval Admin 2. Navigate to enrollment requests 3. Review request details 4. Reject with detailed reasoning
<b>Expected Result</b>	Institution enrollment is rejected with feedback sent
<b>Test Data</b>	Institution enrollment request data
<b>Environment</b>	All environments

## TC-ADM-005: Institution Suspension

Field	Value
<b>Test Case ID</b>	TC-ADM-005
<b>Title</b>	Verify Institution Approval Admin can suspend institutions
<b>Module</b>	Admin Module
<b>Priority</b>	High
<b>Preconditions</b>	Active institution exists
<b>Test Steps</b>	1. Login as Institution Approval Admin 2. Navigate to active institutions 3. Select institution to suspend 4. Provide justification and suspend
<b>Expected Result</b>	Institution is suspended and loses system access
<b>Test Data</b>	Active institution data
<b>Environment</b>	All environments

## TC-ADM-006: User Registration Approval

Field	Value
<b>Test Case ID</b>	TC-ADM-006
<b>Title</b>	Verify User Approval Admin can approve user registrations
<b>Module</b>	Admin Module
<b>Priority</b>	High
<b>Preconditions</b>	User registration request exists
<b>Test Steps</b>	1. Login as User Approval Admin 2. Navigate to user registration requests 3. Review user details 4. Approve registration
<b>Expected Result</b>	User registration is approved and user gains access
<b>Test Data</b>	User registration request data
<b>Environment</b>	All environments

## TC-ADM-007: AI Model Inventory Management

Field	Value
<b>Test Case ID</b>	TC-ADM-007
<b>Title</b>	Verify AI Model Admin can view all AI models
<b>Module</b>	Admin Module
<b>Priority</b>	High
<b>Preconditions</b>	AI models exist in system
<b>Test Steps</b>	1. Login as AI Model Admin 2. Navigate to AI model inventory 3. Apply various filters 4. Verify all models are visible
<b>Expected Result</b>	All AI models are visible with filtering capabilities
<b>Test Data</b>	Various AI models from different institutions
<b>Environment</b>	All environments

## TC-ADM-008: AI Model Download

Field	Value
<b>Test Case ID</b>	TC-ADM-008
<b>Title</b>	Verify AI Model Admin can download AI models
<b>Module</b>	Admin Module
<b>Priority</b>	High
<b>Preconditions</b>	AI models exist in system
<b>Test Steps</b>	1. Login as AI Model Admin 2. Navigate to AI model inventory 3. Select model to download 4. Initiate download
<b>Expected Result</b>	AI model is downloaded successfully with metadata
<b>Test Data</b>	AI model data
<b>Environment</b>	All environments

## TC-ADM-009: Blockchain Model Aggregation

Field	Value
<b>Test Case ID</b>	TC-ADM-009
<b>Title</b>	Verify AI Model Admin can upload aggregated models to blockchain
<b>Module</b>	Admin Module
<b>Priority</b>	High
<b>Preconditions</b>	Multiple AI models exist for aggregation
<b>Test Steps</b>	1. Login as AI Model Admin 2. Select models for aggregation 3. Configure aggregation settings 4. Upload to blockchain
<b>Expected Result</b>	Aggregated model is successfully uploaded to blockchain
<b>Test Data</b>	Multiple AI models, blockchain configuration
<b>Environment</b>	All environments

## Hospital/Research Institute Module Test Cases

### TC-INS-001: Department Registration Approval

Field	Value
<b>Test Case ID</b>	TC-INS-001
<b>Title</b>	Verify Institution Admin can approve department registrations
<b>Module</b>	Institution Module
<b>Priority</b>	High
<b>Preconditions</b>	Department registration request exists
<b>Test Steps</b>	1. Login as Institution Admin 2. Navigate to department registration requests 3. Review department details 4. Approve registration
<b>Expected Result</b>	Department registration is approved and department gains access
<b>Test Data</b>	Department registration request data
<b>Environment</b>	All environments

### TC-INS-002: AI Model Approval by Institution

Field	Value
<b>Test Case ID</b>	TC-INS-002
<b>Title</b>	Verify Institution Admin can approve AI models from departments
<b>Module</b>	Institution Module
<b>Priority</b>	High
<b>Preconditions</b>	AI model submitted by department
<b>Test Steps</b>	1. Login as Institution Admin 2. Navigate to pending AI models 3. Review model documentation 4. Approve model
<b>Expected Result</b>	AI model is approved and advances to next stage
<b>Test Data</b>	AI model from institutional department
<b>Environment</b>	All environments

### TC-INS-003: Latest Aggregate Model Download

Field	Value
<b>Test Case ID</b>	TC-INS-003
<b>Title</b>	Verify Institution can download latest aggregate models
<b>Module</b>	Institution Module
<b>Priority</b>	High
<b>Preconditions</b>	Aggregate models are available
<b>Test Steps</b>	1. Login as Institution Admin 2. Navigate to aggregate models 3. Select latest model 4. Download model
<b>Expected Result</b>	Latest aggregate model is downloaded successfully
<b>Test Data</b>	Available aggregate models
<b>Environment</b>	All environments

### TC-INS-004: Research Scholar Onboarding

Field	Value
<b>Test Case ID</b>	TC-INS-004
<b>Title</b>	Verify Institution can approve research scholar onboarding
<b>Module</b>	Institution Module
<b>Priority</b>	High
<b>Preconditions</b>	Scholar onboarding request exists
<b>Test Steps</b>	1. Login as Institution Admin 2. Navigate to scholar onboarding requests 3. Review scholar credentials 4. Approve onboarding
<b>Expected Result</b>	Scholar onboarding is approved and scholar gains access
<b>Test Data</b>	Scholar onboarding request data
<b>Environment</b>	All environments

## TC-INS-005: Research Scholar Suspension

Field	Value
<b>Test Case ID</b>	TC-INS-005
<b>Title</b>	Verify Institution can suspend research scholars
<b>Module</b>	Institution Module
<b>Priority</b>	High
<b>Preconditions</b>	Active research scholar exists
<b>Test Steps</b>	1. Login as Institution Admin 2. Navigate to active scholars 3. Select scholar to suspend 4. Provide justification and suspend
<b>Expected Result</b>	Scholar is suspended and loses appropriate access
<b>Test Data</b>	Active scholar data
<b>Environment</b>	All environments

## Department-Research Labs Module Test Cases

### TC-DEPT-001: Department Information Update

Field	Value
<b>Test Case ID</b>	TC-DEPT-001
<b>Title</b>	Verify Department HOD can update department information
<b>Module</b>	Department Module
<b>Priority</b>	Medium
<b>Preconditions</b>	Department HOD is logged in
<b>Test Steps</b>	1. Login as Department HOD 2. Navigate to department settings 3. Update department information 4. Save changes
<b>Expected Result</b>	Department information is updated successfully
<b>Test Data</b>	Updated department information
<b>Environment</b>	All environments

## TC-DEPT-002: Scholar Onboarding Process

Field	Value
<b>Test Case ID</b>	TC-DEPT-002
<b>Title</b>	Verify Department can initiate scholar onboarding
<b>Module</b>	Department Module
<b>Priority</b>	High
<b>Preconditions</b>	Department HOD is logged in
<b>Test Steps</b>	1. Login as Department HOD 2. Navigate to scholar management 3. Initiate new scholar onboarding 4. Fill required details and submit
<b>Expected Result</b>	Scholar onboarding request is submitted to institution
<b>Test Data</b>	New scholar details
<b>Environment</b>	All environments

## TC-DEPT-003: Departmental AI Model Review

Field	Value
<b>Test Case ID</b>	TC-DEPT-003
<b>Title</b>	Verify Department can review AI models from scholars
<b>Module</b>	Department Module
<b>Priority</b>	High
<b>Preconditions</b>	AI model submitted by scholar
<b>Test Steps</b>	1. Login as Department HOD 2. Navigate to pending AI models 3. Review model details 4. Approve or reject model
<b>Expected Result</b>	AI model is reviewed and decision is recorded
<b>Test Data</b>	AI model from departmental scholar
<b>Environment</b>	All environments

## TC-DEPT-004: Scholar Suspension Management

Field	Value
<b>Test Case ID</b>	TC-DEPT-004
<b>Title</b>	Verify Department can suspend scholars
<b>Module</b>	Department Module
<b>Priority</b>	High
<b>Preconditions</b>	Active scholar exists in department
<b>Test Steps</b>	1. Login as Department HOD 2. Navigate to scholar management 3. Select scholar to suspend 4. Document justification and suspend
<b>Expected Result</b>	Scholar is suspended at departmental level
<b>Test Data</b>	Active scholar data
<b>Environment</b>	All environments

## TC-DEPT-005: Model Quality Assurance

Field	Value
<b>Test Case ID</b>	TC-DEPT-005
<b>Title</b>	Verify Department implements model quality assurance
<b>Module</b>	Department Module
<b>Priority</b>	High
<b>Preconditions</b>	AI model submitted for review
<b>Test Steps</b>	1. Login as Department HOD 2. Navigate to model review 3. Apply quality standards checklist 4. Document quality assessment
<b>Expected Result</b>	Model quality is assessed against defined standards
<b>Test Data</b>	AI model with quality metrics
<b>Environment</b>	All environments

## Research Scholar Module Test Cases

### TC-SCHOL-001: Scholar Profile Management

Field	Value
<b>Test Case ID</b>	TC-SCHOL-001
<b>Title</b>	Verify Research Scholar can manage profile information
<b>Module</b>	Research Scholar Module
<b>Priority</b>	Medium
<b>Preconditions</b>	Research Scholar is logged in
<b>Test Steps</b>	1. Login as Research Scholar 2. Navigate to profile settings 3. Update personal information 4. Save changes
<b>Expected Result</b>	Profile information is updated successfully
<b>Test Data</b>	Updated profile information
<b>Environment</b>	All environments

### TC-SCHOL-002: AI Model Upload

Field	Value
<b>Test Case ID</b>	TC-SCHOL-002
<b>Title</b>	Verify Research Scholar can upload AI models
<b>Module</b>	Research Scholar Module
<b>Priority</b>	High
<b>Preconditions</b>	Research Scholar is logged in
<b>Test Steps</b>	1. Login as Research Scholar 2. Navigate to model upload 3. Select model file and provide metadata 4. Submit model
<b>Expected Result</b>	AI model is uploaded successfully for review
<b>Test Data</b>	AI model file and metadata
<b>Environment</b>	All environments

## TC-SCHOL-003: Model Submission History

Field	Value
<b>Test Case ID</b>	TC-SCHOL-003
<b>Title</b>	Verify Research Scholar can view model submission history
<b>Module</b>	Research Scholar Module
<b>Priority</b>	Medium
<b>Preconditions</b>	Scholar has submitted models previously
<b>Test Steps</b>	1. Login as Research Scholar 2. Navigate to model history 3. Apply filters to view specific models 4. Review submission details
<b>Expected Result</b>	Model submission history is displayed with filtering options
<b>Test Data</b>	Historical model submissions
<b>Environment</b>	All environments

## TC-SCHOL-004: Model Version Management

Field	Value
<b>Test Case ID</b>	TC-SCHOL-004
<b>Title</b>	Verify Research Scholar can manage model versions
<b>Module</b>	Research Scholar Module
<b>Priority</b>	Medium
<b>Preconditions</b>	Scholar has existing model
<b>Test Steps</b>	1. Login as Research Scholar 2. Navigate to existing model 3. Upload new version 4. Compare versions
<b>Expected Result</b>	New model version is uploaded and version history is maintained
<b>Test Data</b>	Model file versions
<b>Environment</b>	All environments

## TC-SCHOL-005: Model Status Tracking

Field	Value
<b>Test Case ID</b>	TC-SCHOL-005
<b>Title</b>	Verify Research Scholar can track model approval status
<b>Module</b>	Research Scholar Module
<b>Priority</b>	High
<b>Preconditions</b>	Scholar has submitted models
<b>Test Steps</b>	1. Login as Research Scholar 2. Navigate to submitted models 3. Check approval status 4. View feedback comments
<b>Expected Result</b>	Model approval status is clearly displayed with feedback
<b>Test Data</b>	Submitted models with various statuses
<b>Environment</b>	All environments

## End User Module Test Cases

### TC-USER-001: User Self-Registration

Field	Value
<b>Test Case ID</b>	TC-USER-001
<b>Title</b>	Verify End User can register for system access
<b>Module</b>	End User Module
<b>Priority</b>	High
<b>Preconditions</b>	None
<b>Test Steps</b>	1. Navigate to registration page 2. Fill all required fields 3. Upload required documents 4. Accept terms and submit
<b>Expected Result</b>	Registration is submitted successfully for approval
<b>Test Data</b>	User registration details and documents
<b>Environment</b>	All environments

## TC-USER-002: Registration Status Tracking

Field	Value
<b>Test Case ID</b>	TC-USER-002
<b>Title</b>	Verify End User can track registration status
<b>Module</b>	End User Module
<b>Priority</b>	Medium
<b>Preconditions</b>	User has submitted registration
<b>Test Steps</b>	1. Navigate to registration status page 2. Enter registration reference 3. Check current status 4. View any feedback
<b>Expected Result</b>	Registration status is displayed with timeline
<b>Test Data</b>	Registration reference number
<b>Environment</b>	All environments

## TC-USER-003: AI Model Discovery

Field	Value
<b>Test Case ID</b>	TC-USER-003
<b>Title</b>	Verify End User can discover available AI models
<b>Module</b>	End User Module
<b>Priority</b>	High
<b>Preconditions</b>	End User is logged in
<b>Test Steps</b>	1. Login as End User 2. Navigate to model catalog 3. Browse available models 4. Apply filters to refine search
<b>Expected Result</b>	Available AI models are displayed with filtering options
<b>Test Data</b>	Available AI models
<b>Environment</b>	All environments

## TC-USER-004: Model Documentation Access

Field	Value
<b>Test Case ID</b>	TC-USER-004
<b>Title</b>	Verify End User can access model documentation
<b>Module</b>	End User Module
<b>Priority</b>	High
<b>Preconditions</b>	End User is logged in
<b>Test Steps</b>	1. Login as End User 2. Select an AI model 3. View model documentation 4. Review usage guidelines
<b>Expected Result</b>	Comprehensive model documentation is accessible
<b>Test Data</b>	AI model with documentation
<b>Environment</b>	All environments

## TC-USER-005: Image Upload for Prediction

Field	Value
<b>Test Case ID</b>	TC-USER-005
<b>Title</b>	Verify End User can upload images for prediction
<b>Module</b>	End User Module
<b>Priority</b>	High
<b>Preconditions</b>	End User is logged in
<b>Test Steps</b>	1. Login as End User 2. Select AI model 3. Upload image file 4. Submit for prediction
<b>Expected Result</b>	Image is uploaded successfully and prediction is initiated
<b>Test Data</b>	Valid image files (JPEG, PNG)
<b>Environment</b>	All environments

## TC-USER-006: Prediction Results Display

Field	Value
<b>Test Case ID</b>	TC-USER-006
<b>Title</b>	Verify End User can view prediction results
<b>Module</b>	End User Module
<b>Priority</b>	High
<b>Preconditions</b>	Prediction has been processed
<b>Test Steps</b>	1. Login as End User 2. Navigate to prediction results 3. View prediction outcome 4. Check confidence scores
<b>Expected Result</b>	Prediction results are displayed with confidence scores
<b>Test Data</b>	Processed predictions
<b>Environment</b>	All environments

## TC-USER-007: Prediction History Management

Field	Value
<b>Test Case ID</b>	TC-USER-007
<b>Title</b>	Verify End User can manage prediction history
<b>Module</b>	End User Module
<b>Priority</b>	Medium
<b>Preconditions</b>	User has previous predictions
<b>Test Steps</b>	1. Login as End User 2. Navigate to prediction history 3. Filter by date and model 4. Export or delete predictions
<b>Expected Result</b>	Prediction history is displayed with management options
<b>Test Data</b>	Historical predictions
<b>Environment</b>	All environments

## TC-USER-008: Invalid Image Upload

Field	Value
<b>Test Case ID</b>	TC-USER-008
<b>Title</b>	Verify system handles invalid image uploads
<b>Module</b>	End User Module
<b>Priority</b>	High
<b>Preconditions</b>	End User is logged in
<b>Test Steps</b>	1. Login as End User 2. Attempt to upload invalid file format 3. Try uploading oversized file 4. Upload corrupted image
<b>Expected Result</b>	Appropriate error messages are displayed for invalid uploads
<b>Test Data</b>	Invalid image files
<b>Environment</b>	All environments

## Integration Test Cases

### TC-INT-001: Cross-Module User Data Consistency

Field	Value
<b>Test Case ID</b>	TC-INT-001
<b>Title</b>	Verify user data consistency across modules
<b>Module</b>	Integration
<b>Priority</b>	High
<b>Preconditions</b>	User exists across multiple modules
<b>Test Steps</b>	1. Update user profile in one module 2. Check if changes reflect in other modules 3. Verify data synchronization
<b>Expected Result</b>	User data is consistent across all modules
<b>Test Data</b>	User data in multiple modules
<b>Environment</b>	All environments

## TC-INT-002: Approval Workflow Integration

Field	Value
<b>Test Case ID</b>	TC-INT-002
<b>Title</b>	Verify approval workflow across modules
<b>Module</b>	Integration
<b>Priority</b>	High
<b>Preconditions</b>	Approval workflow is configured
<b>Test Steps</b>	1. Submit request in one module 2. Verify approval appears in appropriate admin module 3. Complete approval process 4. Verify status updates across modules
<b>Expected Result</b>	Approval workflow functions seamlessly across modules
<b>Test Data</b>	Approval workflow test data
<b>Environment</b>	All environments

## TC-INT-003: AI Model Lifecycle Integration

Field	Value
<b>Test Case ID</b>	TC-INT-003
<b>Title</b>	Verify AI model lifecycle across modules
<b>Module</b>	Integration
<b>Priority</b>	High
<b>Preconditions</b>	AI model upload and approval process
<b>Test Steps</b>	1. Upload model as scholar 2. Verify department can review 3. Check institutional approval 4. Confirm admin visibility 5. Verify end user access
<b>Expected Result</b>	AI model progresses through complete lifecycle
<b>Test Data</b>	AI model test data
<b>Environment</b>	All environments

## TC-INT-004: Blockchain Integration

Field	Value
<b>Test Case ID</b>	TC-INT-004
<b>Title</b>	Verify blockchain integration for model aggregation
<b>Module</b>	Integration
<b>Priority</b>	High
<b>Preconditions</b>	Blockchain network is available
<b>Test Steps</b>	1. Aggregate multiple models 2. Upload to blockchain 3. Verify transaction success 4. Check model availability
<b>Expected Result</b>	Model aggregation and blockchain upload successful
<b>Test Data</b>	Multiple AI models for aggregation
<b>Environment</b>	All environments

## TC-INT-005: Authentication System Integration

Field	Value
<b>Test Case ID</b>	TC-INT-005
<b>Title</b>	Verify external authentication system integration
<b>Module</b>	Integration
<b>Priority</b>	High
<b>Preconditions</b>	External authentication system configured
<b>Test Steps</b>	1. Attempt SSO login 2. Verify LDAP authentication 3. Test fallback authentication 4. Check role mapping
<b>Expected Result</b>	External authentication works correctly with fallback
<b>Test Data</b>	SSO and LDAP credentials
<b>Environment</b>	All environments

## Performance Test Cases

### TC-PERF-001: Page Load Performance

Field	Value
<b>Test Case ID</b>	TC-PERF-001
<b>Title</b>	Verify page load times meet requirements
<b>Module</b>	Performance
<b>Priority</b>	High
<b>Preconditions</b>	System is running under normal load
<b>Test Steps</b>	1. Load various pages 2. Measure load times 3. Verify all pages load within 3 seconds
<b>Expected Result</b>	All pages load within 3 seconds
<b>Test Data</b>	Various page URLs
<b>Environment</b>	Production-like environment

### TC-PERF-002: API Response Time

Field	Value
<b>Test Case ID</b>	TC-PERF-002
<b>Title</b>	Verify API response times meet requirements
<b>Module</b>	Performance
<b>Priority</b>	High
<b>Preconditions</b>	APIs are available
<b>Test Steps</b>	1. Call various API endpoints 2. Measure response times 3. Verify responses within 200ms
<b>Expected Result</b>	API responses within 200ms for standard operations
<b>Test Data</b>	API endpoint test data
<b>Environment</b>	Production-like environment

## TC-PERF-003: Concurrent User Load

Field	Value
<b>Test Case ID</b>	TC-PERF-003
<b>Title</b>	Verify system supports concurrent users
<b>Module</b>	Performance
<b>Priority</b>	High
<b>Preconditions</b>	Load testing tools configured
<b>Test Steps</b>	1. Simulate 10,000 concurrent end users 2. Monitor system performance 3. Verify response times maintained
<b>Expected Result</b>	System maintains performance with 10,000+ concurrent users
<b>Test Data</b>	Load testing scripts
<b>Environment</b>	Production-like environment

## TC-PERF-004: