IkeaDocuScan V3 - Business Test Plan: READER ROLE

Version: 1.0 **Date:** 2025-11-14 **Test Role:** Reader (View-Only Access)

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Reader Role Overview

Capabilities

The **Reader** role has **view-only** access to the system with the following capabilities:

☐ **Can Do:** - Login to the application - Search and view documents (filtered by UserPermissions) - View document details and attached PDFs - Export search results to Excel - View reports (Barcode Gaps, Duplicates, Scan Copies, Suppliers) - View action reminders (filtered by permissions) - View reference data (countries, currencies, document types, counter parties)

☐ **Cannot Do:** - Create or edit documents - Delete documents - Check-in scanned files - Send emails with documents - Manage user permissions - Create/edit/delete reference data - Access system configuration - View audit trail (SuperUser only)

Permission Filtering

Critical: Reader sees ONLY documents matching their UserPermission records: - Filter by: `Document Type`, `Country`, `Counter Party` - Documents outside their permissions are **invisible** (not just read-only)

Pre-Test Setup

Test User Account

Username: `DOMAIN\test_reader` **Role:** Reader **AD Group:** `ADGroup.Builtin.Reader` (if using AD groups)

Database Setup

```
-- Verify test user exists
SELECT * FROM DocuScanUser WHERE AccountName = 'DOMAIN\test_reader'

-- Verify user has HasAccess = true (not just IsSuperUser)
-- Should have specific permissions assigned

SELECT
    u.AccountName,
    u.IsSuperUser,
    dt.DtName as DocumentType,
    c.CountryName,
    cp.Name as CounterParty
FROM DocuScanUser u
LEFT JOIN UserPermissions up ON u.UserId = up.UserId
LEFT JOIN DocumentTypes dt ON up.DocumentTypeId = dt.DocumentTypeId
LEFT JOIN Countries c ON up.CountryCode = c.CountryCode
LEFT JOIN CounterParties cp ON up.CounterPartyId = cp.CounterPartyId
WHERE u.AccountName = 'DOMAIN\test_reader'
```

Test Data Requirements

Create the following UserPermissions for test_reader:

Document Type	Country	Counter Party	Purpose
Invoice	Sweden	ACME Corp	Can see invoices for ACME in Sweden
Contract	Denmark	TechCo	Can see contracts for TechCo in Denmark
(None)	Norway	(All)	Can see all document types for Norway

Also create documents that Reader **CANNOT** see: - Invoice for Germany (Reader has no Germany permission) - Purchase Order for any country (Reader has no PO permission)

Test Scenarios

###Authentication & Navigation

TC-R-001: Successful Login

Objective: Verify Reader can log in with Windows Authentication

Pre-conditions: - Test user test_reader exists in DocuScanUser table - IsSuperUser = false - Has at least one UserPermission record

Test Steps: 1. Navigate to application URL 2. Windows Authentication should auto-authenticate 3. Application loads

Expected Result: - User automatically logged in - Home page displays - Navigation menu shows only Reader-accessible items: - Search Documents - Barcode Gaps Report - Duplicate Documents Report - Unlinked Registrations Report - Scan Copies Report - Suppliers Report

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-002: Menu Access Restrictions

Objective: Verify Reader cannot see restricted menu items

Pre-conditions: - Logged in as Reader

Test Steps: 1. Examine navigation menu

Expected Result: Reader should **NOT** see: - ☐ Register Document - ☐ Check-in Scanned - ☐ User Permissions - ☐ Currency (Admin) - ☐ Country (Admin) - ☐ Document Type (Admin) - ☐ Counter Party (Admin) - ☐ Document Names (Admin) - ☐ Configuration - ☐ Audit Trail

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-003: Direct URL Access to Restricted Pages

Objective: Verify Reader cannot access restricted pages via direct URL

Pre-conditions: - Logged in as Reader

Test Steps: 1. Attempt to navigate to `/documents/register` 2. Attempt to navigate to `/documents/checkin/testfile.pdf` 3. Attempt to navigate to `/admin/users` 4. Attempt to navigate to `/admin/configuration` 5. Attempt to navigate to `/admin/audit`

Expected Result: - All attempts should result in: - Access Denied error message - OR redirect to home/unauthorized page - OR 403 Forbidden response

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

Document Search & Filtering

TC-R-010: Basic Document Search

Objective: Verify Reader can search for documents within their permissions

Pre-conditions: - Logged in as Reader - Test documents exist that match Reader's permissions

Test Steps: 1. Navigate to "Search Documents" 2. Leave all filters empty 3. Click "Search"

Expected Result: - Results display only documents matching Reader's UserPermissions - Should see invoices for Sweden/ACME and contracts for Denmark/TechCo - Should NOT see documents outside permissions (Germany invoices, POs, etc.)

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-011: Search by Barcode

Objective: Verify search by specific barcode

Pre-conditions: - Logged in as Reader - Know barcode of document Reader has permission to see: 12345678 - Know barcode of document Reader does NOT have permission: 99999999

Test Steps: 1. Navigate to "Search Documents" 2. Enter barcode 12345678 in barcode field 3. Click "Search" 4. Note results 5. Clear search 6. Enter barcode 99999999 7. Click "Search"

Expected Result: - First search: Document 12345678 displays (if within permissions) - Second search: No results (document outside permissions is hidden)

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-012: Filter by Document Type

Objective: Verify filtering by document type respects permissions

Pre-conditions: - Logged in as Reader - Reader has permission for "Invoice" but NOT "Purchase Order"

Test Steps: 1. Navigate to "Search Documents" 2. Select "Invoice" from Document Type dropdown 3. Click "Search" 4. Note results 5. Clear search 6. Select "Purchase Order" from Document Type dropdown 7. Click "Search"

Expected Result: - Invoice search: Shows invoices within Reader's country/counter party permissions - Purchase Order search: No results (Reader doesn't have PO permissions)

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-013: Advanced Search - Date Range

Objective: Verify date range filtering works correctly

Pre-conditions: - Logged in as Reader

Test Steps: 1. Navigate to "Search Documents" 2. Set Receiving Date "From": 2025-01-01 3. Set Receiving Date "To": 2025-01-31 4. Click "Search"

Expected Result: - Results show only documents received in January 2025 - Still filtered by Reader's permissions - Date filtering works correctly

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-014: Search with Special Characters

Objective: Verify search handles special characters without errors

Pre-conditions: - Logged in as Reader

Test Steps: 1. Navigate to "Search Documents" 2. Enter in Document No field: `INV-2025/001` 3. Click "Search" 4. Try another search with: `O'Brien Contract` 5. Try another search with: `Test & Co.`

Expected Result: - No SQL errors - Search handles special characters correctly - Results match if documents exist

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

Document Viewing

TC-R-020: View Document Details

Objective: Verify Reader can view document details

Pre-conditions: - Logged in as Reader - Know barcode of document within Reader's permissions

Test Steps: 1. Search for document 2. Click on document row or View button 3. Document details modal/page opens

Expected Result: - All document fields display correctly: - Barcode, Document Type, Document Number - Counter Party, Third Party - Dates, Amounts, Currency - Comments, Action Description - Flags (Fax, Original, Confidential, etc.) - No edit fields (all read-only) - No Save/Delete buttons - Download PDF button present (if file attached)

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-021: View/Download Attached PDF

Objective: Verify Reader can view and download attached PDF

Pre-conditions: - Logged in as Reader - Document with attached PDF exists within permissions

Test Steps: 1. Search for document with PDF 2. Open document details 3. Click "View PDF" or "Download" button

Expected Result: - PDF opens in browser OR downloads - File is correct PDF for that document - No errors

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-022: Attempt to View Document Outside Permissions

Objective: Verify Reader cannot access documents outside their permissions

Pre-conditions: - Logged in as Reader - Know barcode of document outside Reader's

permissions: 99999999

Test Steps: 1. Manually navigate to URL: /documents/edit/99999999 2. Or attempt API call directly (if testing API)

Expected Result: - Access Denied error - Document details do NOT display - No information leaked about the document

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

Excel Export

TC-R-030: Export Search Results to Excel

Objective: Verify Reader can export filtered search results

Pre-conditions: - Logged in as Reader - Search returns at least 10 results

Test Steps: 1. Navigate to "Search Documents" 2. Perform search (results display) 3. Click "Export to Excel" button

Expected Result: - Excel file downloads: Documents_Export_YYYYMMDD_HHMMSS.xlsx - File contains: - All columns from search results - Only documents Reader has permission to see - Formatted headers - Data matches what's on screen - File opens in Excel without errors

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-031: Export Large Result Set

Objective: Verify export handles large data volumes

Pre-conditions: - Logged in as Reader - Search returns 500+ results

Test Steps: 1. Perform search with many results 2. Click "Export to Excel"

Expected Result: - Export completes (may take time) - Excel file downloads successfully - All records present in export - No timeout errors

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-032: Export with No Results

Objective: Verify export handles empty result set

Pre-conditions: - Logged in as Reader

Test Steps: 1. Perform search that returns 0 results 2. Attempt to click "Export to Excel"

Expected Result: - Export button disabled OR - Export creates Excel with headers only (no data rows) OR - Warning message: "No results to export"

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

Permission Boundaries

TC-R-040: Attempt to Register Document

Objective: Verify Reader cannot access document registration

Pre-conditions: - Logged in as Reader

Test Steps: 1. Verify "Register Document" not in menu 2. Attempt direct URL: `/documents/register` 3. Attempt API call: `POST /api/documents`

Expected Result: - Menu item not visible - Direct URL redirects or shows Access Denied - API call returns 403 Forbidden

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-041: Attempt to Edit Document

Objective: Verify Reader cannot edit documents

Pre-conditions: - Logged in as Reader - Know barcode of document within permissions: `12345678`

Test Steps: 1. View document details 2. Look for Edit/Save buttons 3. Attempt direct URL: `/documents/edit/12345678` 4. Attempt API call: `PUT /api/documents/12345678`

Expected Result: - No Edit/Save buttons in UI (all read-only) - Direct URL shows read-only view OR Access Denied - API call returns 403 Forbidden

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-042: Attempt to Delete Document

Objective: Verify Reader cannot delete documents

Pre-conditions: - Logged in as Reader

Test Steps: 1. View document details 2. Look for Delete button 3. Attempt API call: `DELETE /api/documents/12345678`

Expected Result: - No Delete button visible - API call returns 403 Forbidden - Document remains in database

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-043: Attempt to Check-in PDF

Objective: Verify Reader cannot access check-in functionality

Pre-conditions: - Logged in as Reader

Test Steps: 1. Verify "Check-in Scanned" not in menu 2. Attempt direct URL: `/documents/checkin/testfile.pdf` 3. Attempt to access scanned file list

Expected Result: - Menu item not visible - Direct URL redirects or shows Access Denied - Cannot access check-in functionality

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-044: Attempt to Send Email

Objective: Verify Reader cannot send emails with documents

Pre-conditions: - Logged in as Reader - On search results page

Test Steps: 1. Select documents in search results 2. Look for "Send Email" or "Email Selected" button

Expected Result: - No email functionality visible - Cannot send emails with documents

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-045: Attempt to Access User Permissions

Objective: Verify Reader cannot access user management

Pre-conditions: - Logged in as Reader

Test Steps: 1. Verify "User Permissions" not in menu 2. Attempt direct URL: `/admin/users` 3. Attempt API call: `GET /api/userpermissions`

Expected Result: - Menu item not visible - Direct URL shows Access Denied - API call returns 403 Forbidden

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-046: Attempt to Manage Reference Data

Objective: Verify Reader cannot create/edit/delete reference data

Pre-conditions: - Logged in as Reader

Test Steps: 1. Navigate to any reference data page (if visible for viewing) 2. Look for Create/Edit/Delete buttons 3. Attempt API calls: - `POST /api/countries` - `PUT /api/currencies/USD` - `DELETE /api/counterparties/1`

Expected Result: - Reference data visible for viewing only (if accessible) - No Create/Edit/Delete buttons - All API modification calls return 403 Forbidden

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

Real-Time Updates

TC-R-050: Receive Real-Time Updates (SignalR)

Objective: Verify Reader receives real-time updates when data changes

Pre-conditions: - Logged in as Reader (Browser 1) - Second user logged in as Publisher (Browser 2) - Both viewing same search results

Test Steps: 1. Reader: Perform search, results display 2. Publisher: Edit a document visible to Reader 3. Publisher: Save changes 4. Observe Reader's screen

Expected Result: - Reader's search results update automatically (SignalR push) - Changed document reflects new values - No page refresh required

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-051: SignalR Connection Loss and Reconnect

Objective: Verify Reader's SignalR reconnection works

Pre-conditions: - Logged in as Reader - SignalR connection established

Test Steps: 1. Open browser dev tools, Network tab 2. Simulate network interruption (disconnect WiFi briefly) 3. Reconnect network 4. Have another user make changes

Expected Result: - SignalR attempts automatic reconnection - Connection re-establishes - Updates resume after reconnection - No errors visible to user

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

Edge Cases

TC-R-060: User with No Permissions

Objective: Test Reader with zero UserPermission records

Pre-conditions: - Create test user with HasAccess = true but zero UserPermissions

Test Steps: 1. Login as this user 2. Navigate to Search Documents 3. Perform search

Expected Result: - Search returns zero results - Message: "No documents found" or "You have no document permissions" - No errors - Application doesn't crash

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-061: Permission Change During Active Session

Objective: Verify behavior when Reader's permissions change mid-session

Pre-conditions: - Logged in as Reader - Reader has permissions for Invoice/Sweden

Test Steps: 1. Reader: Perform search, see invoices 2. SuperUser: Remove Reader's Invoice permission via User Permissions page 3. Reader: Perform search again (without logging out)

Expected Result: - After permission change, Reader sees fewer documents - Change takes effect within cache timeout (5 minutes max) - OR Reader must log out/in to see change (document expected behavior)

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-062: Very Long Search Results

Objective: Test UI with 1000+ search results

Pre-conditions: - Database has 1000+ documents within Reader's permissions

Test Steps: 1. Perform search that returns 1000+ results 2. Scroll through results 3. Observe pagination or virtual scrolling

Expected Result: - Results display (may be paginated) - UI remains responsive - No browser crash or freeze - Export still works

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-063: SQL Injection Attempt in Search

Objective: Verify search fields are protected against SQL injection

Pre-conditions: - Logged in as Reader

Test Steps: 1. Navigate to Search Documents 2. Enter in Document No field: `'; DROP TABLE Documents; --` 3. Enter in Comment field: `' OR '1'='1` 4. Click Search

Expected Result: - No SQL error - No database corruption - Search treats input as literal string - Either no results or valid search results (if any match)

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-064: XSS Attempt in Search Results

Objective: Verify search results don't execute injected scripts

Pre-conditions: - Document exists with Comment: `<script>alert('XSS')</script>`

Test Steps: 1. Search for document with scripted comment 2. View search results 3. Open document details

Expected Result: - Script tag displayed as text (HTML encoded) - No JavaScript alert executes - No XSS vulnerability

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-065: Concurrent Sessions - Same User

Objective: Test Reader logged in from multiple browsers

Pre-conditions: - Same Reader account

Test Steps: 1. Login as Reader in Chrome 2. Login as same Reader in Firefox 3. Perform actions in both browsers 4. Check for conflicts

Expected Result: - Both sessions work independently - No session conflicts - Both receive SignalR updates

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-066: Session Timeout

Objective: Verify behavior after session timeout

Pre-conditions: - Logged in as Reader

Test Steps: 1. Login 2. Leave browser idle for session timeout period (e.g., 30 minutes) 3. Attempt to perform search

Expected Result: - Redirect to login page OR - Session expired message - After re-authentication, can continue working

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-067: Special Characters in Document Data

Objective: Verify display of documents with special characters

Pre-conditions: - Documents exist with special characters: - Counter Party: `O'Brien & Associates` - Document No: `INV/2025-001` - Comment: `€1,000.50 payment due`

Test Steps: 1. Search for these documents 2. View in search results 3. Open document details 4. Export to Excel

Expected Result: - All special characters display correctly - No encoding issues - Excel

export shows special characters correctly

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

TC-R-068: Unicode Characters in Search

Objective: Verify support for international characters

Pre-conditions: - Documents with Unicode characters exist (Swedish: åäö, Danish: æøå)

Test Steps: 1. Search using Unicode characters 2. View results

Expected Result: - Search works correctly with Unicode - Results display Unicode characters properly

Actual Result: [To be filled]

Status: ☐ Not Run | ☐ Pass | ☐ Fail

Notes:

Test Results Summary

Test Execution Summary

Category	Total	Pass	Fail	Blocked	Not Run
Authentication & Navigation	3				
Document Search & Filtering	5				
Document Viewing	3				
Excel Export	3				
Permission Boundaries	7				
Real-Time Updates	2				
Edge Cases	9				
TOTAL	**32**				

Critical Defects

Defect ID	Severity	Description	Status

Sign-Off

Tested By: _____ **Date:** _____

Approved By: _____ **Date:** _____

Notes:

Next Steps: Proceed to BUSINESS_TEST_PLAN_PUBLISHER.md