

# **Test Scenario: Ungrouped Cognito Users**

Finanzas SD – Architecture, Flows & SOPs

Arquitectura, Flujos y Procedimientos

December 23, 2025

## 1 Test Scenario: Ungrouped Cognito Users

### 1.1 Issue Description

After PR #577 (tighten RBAC), ungrouped Cognito users were unable to access the UI and received the error:

```
Application Error  
DEFAULT_ROLE is not defined
```

### 1.2 Root Cause

The AuthProvider referenced an undefined DEFAULT\_ROLE constant in 9 places. When PR #577 removed the default EXEC\_RO assignment for ungrouped users, these references caused the application to crash.

### 1.3 Fix Applied

All DEFAULT\_ROLE references have been removed and replaced with proper null handling.

### 1.4 Test Scenarios

#### 1.4.1 Scenario 1: User with No Cognito Groups

**Setup:** - User authenticates successfully with Cognito - User has NO groups assigned (e.g., cognito:groups claim is empty array)

**Expected Behavior:** 1. ☐ User authenticates successfully (isAuthenticated = true) 2. ☐ availableRoles array is empty 3. ☐ currentRole is set to null 4. ☐ App.tsx checks availableRoles.length === 0 5. ☐ NoAccess component is rendered with message: - “Sin permisos asignados” (No permissions assigned) - Instructions to contact system administrator - Sign out button

**Previous Behavior:** - ☐ Application crashed with “DEFAULT\_ROLE is not defined” error - ☐ User saw error page instead of helpful message

#### 1.4.2 Scenario 2: User with Only Unrecognized Groups

**Setup:** - User has groups like ["ikusi-acta-ui"] or ["UNKNOWN\_GROUP"] - These groups don't map to any application role

**Expected Behavior:** 1. ☐ mapGroupsToRoles returns empty array 2. ☐ Same flow as Scenario 1 - NoAccess component shown

### 1.4.3 Scenario 3: User with Valid Groups (Regression Test)

**Setup:** - User has groups like ["PM0"], ["SDMT"], ["EXEC\_R0"]

**Expected Behavior:** 1. `mapGroupsToRoles` returns corresponding roles 2. `availableRoles` contains the roles 3. `currentRole` is set to first available role 4. User can access the application normally 5. Navigation and role switching work correctly

### 1.4.4 Scenario 4: User Logout (Regression Test)

**Setup:** - Authenticated user clicks logout

**Expected Behavior:** 1. `currentRole` is set to null (not `DEFAULT_ROLE`) 2. `availableRoles` is cleared 3. No errors during logout process 4. User redirected to login page

## 1.5 Code Changes Summary

### 1.5.1 AuthProvider.tsx Changes:

1. **Line 210-219:** Added null check before calling `getRoutesForRole`

```
[] if (!currentRole) { setRouteConfigMissing(true); console.warn("[Router] No role assigned - user has no access", {...}); return; }
```

2. **Line 244-252:** Added check to ensure `currentRole` stays null for users without roles

```
[] if (userRoles.length === 0) { if (currentRole !== null) { setCurrentRole(null); } return; }
```

3. **Line 328, 338, 467:** Changed `setCurrentRole(DEFAULT_ROLE)` to `setCurrentRole(null)`
4. **Line 516-522:** Added null check in `checkRouteAccess`

```
[] if (!currentRole) { return false; }
```

5. **Line 524-530:** Added null check in `checkActionPermission`

```
[] if (!currentRole) { return false; }
```

6. **Line 548, 572:** Removed `|| DEFAULT_ROLE` fallback in session and context value

## 1.6 Verification Steps

### 1.6.1 Manual Testing

1. Create a Cognito user with no groups
2. Authenticate with that user
3. Verify NoAccess screen is shown (not error page)
4. Verify sign out button works

### 1.6.2 Automated Testing

- ☐ JWT tests pass (no default EXEC\_RO for ungrouped)
- ☐ Auth routes tests pass
  
- ☐ Code review completed with no issues
- ☐ CodeQL security scan passed with 0 alerts

## 1.7 Security Impact

This fix maintains the security tightening from PR #577: - Users without recognized groups have NO access (not even read-only) - No implicit EXEC\_RO role assignment - Clear messaging about lack of permissions - Proper audit trail (console warnings logged)