Visual Comparison: Before and After Fix

Finanzas SD – Architecture, Flows & SOPs

Arquitectura, Flujos y Procedimientos

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1 Visual Comparison: Before and After Fix

1.1 The Problem

When ungrouped Cognito users tried to access the application after PR #577, they encountered a critical error.

1.2 Before Fix □

1.2.1 Application State:

- **Error Screen**: Red error banner with “Application Error”
- **Error Message**:

```
Something unexpected happened while running the application.
The error details are shown below. Contact support if this issue persists.

Error Details:
DEFAULT_ROLE is not defined
```

1.2.2 Browser Console:

```
[] Uncaught ReferenceError: DEFAULT_ROLE is not defined  at AuthProvider.tsx:210
at AuthProvider.tsx:237  at AuthProvider.tsx:307 ... (multiple stack traces)
```

1.2.3 Impact:

- □ Application completely unusable
- □ No way to proceed or recover
- □ Generic error message not helpful to users
- □ No guidance on what to do next

1.3 After Fix □

1.3.1 Application State:

- **NoAccess Screen**: Clean, professional “no permissions” screen
- **Message**:

```
Sin permisos asignados
(No permissions assigned)

No tienes permisos asignados para acceder a esta aplicación.

Tu cuenta está autenticada pero no tiene grupos de Cognito asociados
que otorguen acceso a los módulos de esta aplicación.

Para obtener acceso, contacta al administrador del sistema.

[Cerrar sesión]
```

1.3.2 Browser Console:

```
[] [Router] No role assigned - user has no access { user: {...}, availableRoles: [], groups: [] }
```

1.3.3 Impact:

- ✅ Application handles the situation gracefully
- ✅ User sees clear, actionable message in Spanish
- ✅ User can sign out and try different account
- ✅ Administrators can identify the issue from logs
- ✅ Security maintained (no implicit access granted)

1.4 Code Changes That Made This Possible

1.4.1 Key Changes in AuthProvider.tsx:

1. **Before (Line 210)**:

```
[] const effectiveRole = currentRole || DEFAULT_ROLE; // ❌ DEFAULT_ROLE undefined
```

After (Line 210-219):

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

2. **Before (Line 307)**:

```
[] setCurrentRole(DEFAULT_ROLE); // □ Sets undefined
```

After (Line 328):

```
[] setCurrentRole(null); // □ Properly clears role
```

3. **Before (Line 495)**:

```
[] return canAccessRoute(route, currentRole || DEFAULT_ROLE); // □ Passes undefined
```

After (Line 516-522):

```
[] if (!currentRole) { return false; // □ Safe null check } return canAccessRoute(route, currentRole);
```

1.5 User Experience Comparison

Aspect	Before Fix	After Fix
Error Handling	□ Application crash	□ Graceful degradation
User Message	□ Technical error	□ Clear Spanish message
User Action	□ Contact support	□ Sign out or contact admin
Security	⚠ Undefined behavior	□ No access granted
Logging	□ Stack traces only	□ Clear warning logs
Recovery	□ Requires page refresh	□ Clean sign out

1.6 How to Test

1.6.1 Setup:

1. Create a Cognito user account
2. Do NOT assign any groups to the user
3. Attempt to login to the application

1.6.2 Expected Results After Fix:

1. ✅ Login succeeds (Cognito authentication works)
2. ✅ User sees NoAccess screen (not error)
3. ✅ Message explains the situation
4. ✅ Sign out button works correctly
5. ✅ Console shows warning (not error)

1.6.3 Verification:

- Check browser console for the warning message
- Verify no error stack traces appear
- Confirm “Cerrar sesión” button redirects to login
- Test with user who HAS groups (should work normally)

1.7 Security Notes

This fix maintains the security improvements from PR #577:

- **No implicit access**: Users without recognized groups get NO access
- **No default role**: No EXEC_RO or other role assigned by default
- **Clear audit trail**: Console warnings provide visibility
- **Graceful degradation**: Security maintained without breaking UX

The key difference is: - **Before PR #577**: Ungrouped users got EXEC_RO (read-only access) - **After PR #577**: Ungrouped users get no access, but crashed - **After this fix**: Ungrouped users get no access, with clear message