i18n VERIFICATION PLAN - Callastar

Date: 2025-12-29
Branch: feature/i18n-phase1
Commit: 2c734d4
Status: ✅ FIXES APPLIED - READY FOR VERIFICATION

🎯 WHAT WAS FIXED

3 Critical Changes Applied:

1. **middleware.ts** (Line 9): `localePrefix: 'as-needed'` → `'always'`
2. **navigation.ts** (Line 4): `localePrefix: 'as-needed'` → `'always'`
3. **navbar.tsx** (Line 80): Removed `router.refresh()` call

Bugs Fixed:

✅ **Bug #1**: Redirect to `/en` instead of `/` or `/fr` (default locale)
✅ **Bug #2**: Double locale `/en/en` instead of `/en` when switching language

🧪 VERIFICATION STEPS

Prerequisites:

```
cd /home/ubuntu/github_repos/callastar
npm run dev
```

Test Suite:

✅ Test 1: Default Locale on Launch

Steps:
1. Clear browser cookies for localhost
2. Navigate to `http://localhost:3000/`
3. Observe the URL redirect

Expected Result:
- URL should redirect to `http://localhost:3000/fr/`
- Page content should be in French
- Language selector should show "FR"

Bug #1 Status: FIXED if URL shows `/fr/` instead of `/en`

✅ Test 2: Language Switch from French to English

Steps:
1. Start on `http://localhost:3000/fr/`

2. Click the language selector dropdown

3. Click "🇬🇧 English"

4. Observe the URL change

Expected Result:

- URL should change to `http://localhost:3000/en/`

- NO double locale like `/en/en` or `/fr/en`

- Page content should change to English

- Language selector should show "EN"

Bug #2 Status: FIXED if URL is clean `/en/` without duplication

✅ Test 3: Language Switch from English to French

Steps:

1. Start on `http://localhost:3000/en/`

2. Click the language selector dropdown

3. Click "🇫🇷 Français"

4. Observe the URL change

Expected Result:

- URL should change to `http://localhost:3000/fr/`

- NO double locale like `/fr/fr` or `/en/fr`

- Page content should change to French

- Language selector should show "FR"

✅ Test 4: Deep Link to Creators Page

Steps:

1. Navigate directly to `http://localhost:3000/fr/creators`

2. Verify page loads in French

3. Switch to English

4. Verify URL changes to `http://localhost:3000/en/creators`

5. Switch back to French

6. Verify URL changes back to `http://localhost:3000/fr/creators`

Expected Result:

- All navigation maintains correct locale prefix

- No URL errors or 404s

- Language switches correctly on deep links

✅ Test 5: Browser Language Detection

Steps:

1. Set browser language to English (en-US) in browser settings

2. Clear browser cookies for localhost

3. Navigate to `http://localhost:3000/`

4. Observe the URL redirect

Expected Result:

- URL should STILL redirect to `http://localhost:3000/fr/` (default locale)
- French should be shown (not English)
- Browser language preference should NOT override default locale

Note: This confirms the fix for Bug #1 - browser detection no longer overrides default

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✅ Test 6: Authentication Flow with Locales

Steps:

1. Navigate to `http://localhost:3000/fr/auth/login`
2. Verify login page is in French
3. Navigate to `http://localhost:3000/en/auth/login`
4. Verify login page is in English
5. Login from French page
6. Verify redirect maintains `/fr/` prefix in dashboard URL

Expected Result:

- Login pages load in correct language
- Post-login redirects maintain locale
- No locale prefix lost during auth flow

✅ Test 7: Protected Routes with Locales

Steps:

1. Clear auth cookies (logout)
2. Try to access `http://localhost:3000/fr/dashboard/user`
3. Verify redirect to `/fr/auth/login`
4. Try to access `http://localhost:3000/en/dashboard/creator`
5. Verify redirect to `/en/auth/login`

Expected Result:

- Protected route redirects maintain locale
- Login page shows in correct language
- No locale prefix errors

📊 VERIFICATION CHECKLIST

Use this checklist to confirm all tests pass:

- [ ] Test 1: Default locale redirects to `/fr/` ✅
- [ ] Test 2: French → English produces `/en/` (not `/en/en`) ✅
- [ ] Test 3: English → French produces `/fr/` (not `/fr/fr`) ✅
- [ ] Test 4: Deep links maintain correct locale ✅
- [ ] Test 5: Browser language doesn't override default ✅
- [ ] Test 6: Auth flow maintains locale ✅
- [ ] Test 7: Protected routes maintain locale ✅

🐛 IF BUGS STILL EXIST

Debug Steps:

1. **Check console for errors:**
   - Open browser DevTools (F12)
   - Look for any next-intl or navigation errors
   - Check Network tab for redirect chains

2. **Verify configuration:**
   ```bash
       cd /home/ubuntu/github_repos/callastar
       grep -n "localePrefix" middleware.ts navigation.ts
       grep -n "router.refresh" components/navbar.tsx
   ```
   - Both should show `localePrefix: 'always'`
   - navbar.tsx should NOT have `router.refresh()` after `router.replace()`

3. **Clear cache and rebuild:**
   ```bash
       rm -rf .next
       npm run dev
   ```

4. **Check git status:**
   ```bash
       git status
       git log --oneline -1
   ```
   - Should show commit 2c734d4 with "fix(i18n): Fix persistent locale bugs"

📈 EXPECTED BEHAVIOR SUMMARY

URL Structure:

Navigation	Before Fix	After Fix
Root URL	`/` → `/en` ❌	`/` → `/fr/` ✅
French home	`/`	`/fr/`
English home	`/en`	`/en/`
French creators	`/creators`	`/fr/creators`
English creators	`/en/creators`	`/en/creators`
Switch FR→EN	`/en/en` ❌	`/en/` ✅
Switch EN→FR	Sometimes broken ❌	`/fr/` ✅

Key Changes:

- ✅ All URLs now have explicit locale prefix
- ✅ Default locale (French) shows as `/fr/` not `/`
- ✅ No more double locales during language switch
- ✅ No more unwanted redirects to English
- ✅ Consistent pathname handling across all pages

🚀 NEXT STEPS AFTER VERIFICATION

If All Tests Pass:

1. ✅ Push changes to GitHub:
   ```bash
   cd /home/ubuntu/github_repos/callastar
   git push origin feature/i18n-phase1
   ```

2. ✅ Create Pull Request for review

3. ✅ Update project documentation about URL structure change

4. ✅ Consider adding automated tests for i18n navigation

If Tests Fail:

1. ❌ Document which specific test(s) failed
2. ❌ Provide exact error messages or unexpected behavior
3. ❌ Share browser console logs
4. ❌ Report back for further diagnostic

🎓 TECHNICAL BACKGROUND

Why `localePrefix: 'always'` Fixes Both Bugs:

Bug #1 (Redirect to /en):
- **Root Cause**: With `'as-needed'`, default locale (fr) has no prefix
- **Problem**: Browser Accept-Language header detects English
- **Result**: Redirects to `/en` instead of staying on `/`
- **Fix**: With `'always'`, default locale has explicit `/fr/` prefix
- **Outcome**: Root redirects to `/fr/`, no ambiguity

Bug #2 (Double locale /en/en):
- **Root Cause**: Inconsistent pathname handling with `'as-needed'`
- **Problem**: Sometimes pathname includes locale, sometimes doesn't
- **Result**: `router.replace()` adds locale on top of existing locale
- **Fix**: With `'always'`, pathname behavior is predictable
- **Outcome**: `usePathname()` always returns path without locale

Why Removing `router.refresh()` Helps:

- `router.replace()` is asynchronous - takes time to complete

- `router.refresh()` immediately re-renders components
- Middleware processes request during navigation transition
- Can cause double-processing or incorrect state
- **Fix**: Let `router.replace()` complete naturally

References:

- next-intl: localePrefix (https://next-intl-docs.vercel.app/docs/routing#locale-prefix)
- next-intl: Navigation APIs (https://next-intl-docs.vercel.app/docs/routing/navigation)
- Best Practices for Multilingual Next.js Apps (https://next-intl-docs.vercel.app/docs/routing/middle-ware)

Generated: 2025-12-29
Status: ✅ READY FOR VERIFICATION
Confidence: HIGH (based on root cause analysis and next-intl documentation)