KerioConnect®

USER MANUAL

Sync-state repair

USER GUIDE & QUICK START



GFI Software™

1 Introduction & overview

1.1 What it does

The repair buttons perform two operations per affected user:

- Removes the ActiveSync sync database (`.asy`) for each device, with a `.asy.bak` backup. This resets the device's sync key so it performs a full resynchronization.
- Removes the journal database (`.journal.db`) for the user's mailbox, with a `.journal.db.bad-<timestamp>` backup. Also removes the associated WAL and SHM files. The journal DB tracks mailbox change watermarks used by Webmail, WebAdmin, and ActiveSync.

No mail, calendar, or contact data is deleted. Only sync-state metadata is reset.

1.2 When to use it

- ActiveSync devices stop syncing or get stuck in a sync loop
- SQLite errors referencing .journal.db appear in the server error log
- Corrupt or stale journal database causes repeated change-tracking failures
- Devices fail to provision after a server crash, migration, or upgrade

1.3 Before you begin

- **Run during non-business hours:** Affected devices must resynchronize all data and affected Webmail sessions must re-login.
- **macOS:** Increase maxfiles to 4096+ (default is 256). (Optional but recommended)

2 The three buttons

2.1 Per-device: Repair sync state

- **Location:** Accounts > Users > More Actions > Mobile Devices tab > select device > toolbar
- **What it does:** Backs up and removes the user's `.journal.db` and `.asy`.
- **Steps:**
  1. Navigate to Accounts > Users > More Actions.
  2. Select the Mobile Devices tab, select the affected device.
  3. Click Repair Sync State.
  4. Confirm when prompted. Click Yes to proceed.
- **Scope:** One device + that user's journal DB.

2.2 Bulk: Repair all sync state

- **Location:** Accounts > Users > select user(s) > toolbar
- **What it does:** For each selected user, backs up .asy for every device the user has, then backs up and removes the user's `.journal.db`.
- **Steps:**
  1. Navigate to Accounts > Users.
  2. Select one or more users (Ctrl+Click / Shift+Click).
  3. Click Repair All Sync State.
  4. Click Start Now to proceed, or Cancel to abort.
  5. A result dialog shows success/failure per user.
- **Scope:** All devices + journal DB for each selected user.

2.3 Server-wide: Repair all sync state (server)

- **Location:** Accounts > Users > toolbar (visible to full administrators only)
- **What it does:** Enumerates all users across all domains and runs the bulk repair on every user.
- **Steps:**
  1. Navigate to Accounts > Users.
  2. Click Repair All Sync State (Server).
  3. Click Start Now to proceed, or Cancel to abort.
  4. Wait for completion — may take several minutes on large servers.
- **Scope:** All devices + journal DB for every user in every domain.

3 Post-repair: expected warnings

If a repaired user has an active Webmail or WebAdmin session at the time of repair, two transient warnings occur:

```
# In the server log
Failed to obtain changes from journal DB of user ~user@example.com.
```

- **In the browser:** A "server error, invalid watermark value" pop-up.
- **Cause:** The session holds a stale watermark from the deleted journal DB.
- **Resolution:** The user must **log out and log back in.** The warnings stop immediately.

4 Verification

Check	How	Expected
Log entries	`grep SYNC-RECOVERY` in error log	`[SYNC-RECOVERY]` line per repaired user/device
Journal backup	List user's mailbox directory	`.journal.db.bad-<timestamp>` file present
ASY backup	List user's `#sync/ directory`	`<device-hash>.asy.bak` file present
Device re-sync	Trigger manual sync on device	Completes without error
Idempotency	Run repair again on same user	Succeeds (safe to repeat)
Service stability	Check server status	No restart needed

5 Backup file locations

- **Linux:** `/opt/kerio/mailserver/store/mail/<domain>/<user>/`
- **Windows:** `C:\Program Files\Kerio\MailServer\store\mail\<domain>\<user>\`
- **Steps:**

```
.journal.db.bad-<timestamp> – journal DB backup
```

```
#sync/<device-hash>.asy.bak – ActiveSync sync DB backup
```

These can be deleted once the user is confirmed to be syncing normally.

Copyright © GFI USA, LLC, All rights reserved.