

High-Performance Nextcloud & MariaDB Deployment (CasaOS)

Status: Verified Deployment

Environment: Ubuntu (CasaOS) | Synology DS1522+ Backend

Core Architecture: Dedicated Mini PC for compute; "GoonersNAS" for muscle storage.

1. Preparation: The Network Bridge

To allow Nextcloud and MariaDB to communicate securely without using public IP addresses, they must reside on the same Docker network.

- **Network Name:** `big-bear-nextcloud-ls`
- **Note:** Ensure both containers are assigned to this network in their respective CasaOS settings to enable internal DNS resolution.

2. Database Setup (MariaDB)

We use the LinuxServer image for consistency and PUID/PGID support, which is vital for permission management.

Category	Setting / Value
Image	<code>linuxserver/mariadb</code>
Network	<code>big-bear-nextcloud-ls</code>
Port	Host 3306 -> Container 3306
Volume	<code>/DATA/AppData/mariadb/config</code> -> <code>/config</code>

Environment Variables:

```
MYSQL_ROOT_PASSWORD = [YourSecretRootPassword]
MYSQL_DATABASE = nextcloud
MYSQL_USER = nc_user
MYSQL_PASSWORD = [YourSecretUserPassword]
PUID = 1000
PGID = 1000
TZ = America/Chicago
```

3. Application Setup (Nextcloud LS)

The **Nextcloud LS** (LinuxServer.io) version is preferred for its robust handling of PUID/PGID variables when mapping to NAS-based storage.

Category	Setting / Value
Image	<code>linuxserver/nextcloud</code>
Port	Host 10443 -> Container 443
Web UI	HTTPS (Required for Authentik)
Volume 1	<code>/DATA/AppData/nextcloud/config</code> -> <code>/config</code>
Volume 2 (NAS)	<code>/mnt/synology/nextcloud_data</code> -> <code>/data</code>

4. Initial Configuration (The Setup Screen)

Navigate to `https://nc.goonersnas.com` to complete the wizard.

- **Admin Account:** Create a master local admin.
 - **Storage & Database:** Select **MySQL/MariaDB**.
 - **Database User:** `nc_user`
 - **Database Host:** `mariadb:3306`
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5. Troubleshooting & Critical Fixes

“ **The "Access Denied" Loop:** If the installer rejects your credentials, MariaDB likely initialized with old variables.

Fix: Stop MariaDB, delete all contents of `/DATA/AppData/mariadb/config`, and restart. It will re-generate the database with the correct PUID/PGID and credentials.

“ **The "App Unavailable" Error:** This is a protocol mismatch in CasaOS.

Fix: Manually use `https://` in the browser and update the App Settings to use the HTTPS dropdown.

6. Post-Install Checklist

- [] Enable **External Storage Support** for Synology integration.
- [] Install **Social Login** for Authentik OIDC.
- [] Download **ONLYOFFICE Desktop Editors** for native local editing.

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