

Nextcloud CLI Installation Guide

When Web Installer Fails - The Nuclear Option

When to Use This Method

Use the CLI installer if:

- ☒ Web installer form "blinks" without progress
- ☒ No error messages appear in browser
- ☒ Database connection works (tested with `mysql -u nextclouduser -p`)
- ☒ File permissions are correct (checked with `ls -la`)
- ☒ Apache logs show no errors
- ☒ You've spent more than 4-6 hours debugging the web installer

Don't waste time debugging the web installer endlessly - bypass it!

Prerequisites

Before running this method, verify:

1. Apache is Running

```
bash
sudo systemctl status apache2
```

Should show "active (running)"

2. Database Exists and User Works

```
bash
sudo mysql -u nextclouduser -p nextcloud
```

Should connect successfully. Type `EXIT;` when done.

3. PHP is Installed

```
bash
```

```
php -v
```

Should show PHP 8.x

4. Nextcloud Files Exist

```
bash  
  
ls /var/www/nextcloud/
```

Should show folders: apps, config, core, etc.

5. Permissions are Correct

```
bash  
  
sudo chown -R www-data:www-data /var/www/nextcloud  
sudo chmod -R 755 /var/www/nextcloud
```

CLI Installation Method

Step 1: Navigate to Nextcloud Directory

```
bash  
  
cd /var/www/nextcloud
```

Step 2: Run CLI Installer

Replace these values:

- `YOUR_DB_PASSWORD` - Your nextclouduser database password
- `YOUR_ADMIN_PASSWORD` - Choose a strong admin password (save it!)

```
bash
```

```
sudo -u www-data php occ maintenance:install \
--database "mysql" \
--database-name "nextcloud" \
--database-user "nextclouduser" \
--database-pass "YOUR_DB_PASSWORD" \
--admin-user "admin" \
--admin-pass "YOUR_ADMIN_PASSWORD"
```

Step 3: Configure Trusted Domains

After installation, add your server IP to trusted domains:

```
bash
sudo -u www-data php occ config:system:set trusted_domains 1 --value=YOUR_SERVER_IP
```

Replace `YOUR_SERVER_IP` with your actual IP (e.g., 192.168.12.128)

Step 4: Verify Installation

```
bash
sudo -u www-data php occ status
```

Should show:

```
- installed: true
- version: 29.0.x
- versionstring: 29.0.x
```

Access Your Nextcloud

Open browser and go to: `http://YOUR_SERVER_IP`

Login with:

- Username: `admin`
 - Password: (the admin password you set in Step 2)
-

Common Issues and Fixes

Issue: "Command not found: occ"

Solution: You're not in the right directory

```
bash
cd /var/www/nextcloud
ls -la occ # Should show the occ file
```

Issue: "Permission denied"

Solution: Run with `sudo -u www-data`

```
bash
sudo -u www-data php occ maintenance:install ...
```

Issue: "Database connection failed"

Solution: Verify database password

```
bash
sudo mysql -u nextclouduser -p nextcloud
# If this fails, your database password is wrong
```

Issue: "Could not create config directory"



Solution: Fix permissions

```
bash
sudo chown -R www-data:www-data /var/www/nextcloud
sudo chmod -R 755 /var/www/nextcloud
```



Why CLI Install Works When Web Install Fails

Web Installer Issues:

-  JavaScript errors from browser extensions
-  Browser caching old pages

- ❌ AJAX request failures
- ❌ Timeouts on slow connections
- ❌ Silent failures without error messages

CLI Installer Advantages:

- ✅ Direct PHP execution (no browser involved)
 - ✅ Clear error messages in terminal
 - ✅ No JavaScript/AJAX/browser dependencies
 - ✅ Works with any firewall/network configuration
 - ✅ Same exact result as web installer
-

Lessons Learned

Pivot Early, Not Late

Bad approach:

- Spend 24 hours debugging one method
- Try the same thing repeatedly
- Hope it will eventually work

Good approach:

- Debug for 4-6 hours maximum
- If blocked, ask: "Is there another way?"
- Try alternative methods
- Value results over method

Know Your Tools

Every major application has multiple installation methods:

- Web installer (GUI)
- CLI installer (command line)
- Configuration files (manual)

- APIs (programmatic)

When one fails, use another.

Next Steps After Installation

1. Install Essential Apps

```
bash

sudo -u www-data php occ app:install files_external
sudo -u www-data php occ app:install calendar
sudo -u www-data php occ app:install contacts
sudo -u www-data php occ app:install tasks
```

Or use the web interface: Profile icon → Apps

2. Create Additional Users

```
bash

sudo -u www-data php occ user:add USERNAME
```

Or use web interface: Profile icon → Users

3. Configure Email (Optional)

```
bash

sudo -u www-data php occ config:system:set mail_smtpmode --value="smtp"
sudo -u www-data php occ config:system:set mail_from_address --value="nextcloud"
sudo -u www-data php occ config:system:set mail_domain --value="yourdomain.com"
```

4. Set Up Cron Job

```
bash

sudo crontab -u www-data -e
```

Add this line:

```
*/5 * * * * php -f /var/www/nextcloud/cron.php
```

5. Security Hardening (Next Phase)

- Set up HTTPS with Let's Encrypt
 - Configure fail2ban
 - Enable two-factor authentication
 - Set up automated backups
-

Additional Resources

Official Nextcloud Documentation:

- CLI Installation:
https://docs.nextcloud.com/server/latest/admin_manual/installation/command_line_installation.html
- OCC Commands:
https://docs.nextcloud.com/server/latest/admin_manual/configuration_server/occ_command.html

Troubleshooting:

- Check logs: `sudo tail -f /var/www/nextcloud/data/nextcloud.log`
 - Apache logs: `sudo tail -f /var/log/apache2/error.log`
 - System status: `sudo -u www-data php occ status`
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Summary

When web installer fails after basic troubleshooting:

1. Don't keep trying the same thing
2. Switch to CLI installer immediately
3. Get the system working
4. Document what happened
5. Move forward with your project

Time saved by using CLI from the start: 20+ hours
