

F.A.D.E.D NEXUS



**FEDERATED ACCESS & DATA EXCHANGE
FOR DEDICATED SERVERS**

OFFICIAL SERVER & PLAYER MANUAL

F.A.D.E.D NEXUS

Federated Access & Data Exchange for Dedicated Servers

BUILD 42.20.4 • NEXUS SUITE 0.4.5 • GUIDE EDITION 2026-09-02

What Nexus is — explained like you're five

Imagine every Project Zomboid server is its own little world. Normally, those worlds cannot talk to each other.

Nexus is a safe post office between the worlds. Each server gets its own special key. The post office checks the key, then carries approved messages—who is online, cross-server chat, and live survivor information—to the other connected worlds.

1 THE SERVER KNOWS

Your PZ server decides who you are and what your survivor is doing.

2 NEXUS CARRIES

The hub relays only validated, allowed messages between enrolled servers.

3 YOU CHOOSE

Live info is off until you press **GO LIVE**. You can stop it whenever you want.

WHAT NEXUS DOES NOW

- ✓ Replaces the main-menu presentation with the approved text-free Nexus artwork and a collapsible PZ-F-style rail while preserving every vanilla action.
- ✓ Shows approved connected Worlds, current player counts, access mode, capabilities, and published modpack information.
- ✓ Shows a same-screen Faded content stop gate that downloads and SHA-256 verifies the selected World's missing required mods.
- ✓ Uses a one-time device code so a Nexus password is entered only on the HTTPS website—never in Lua or the game mod.
- ✓ Routes global cross-server chat with server and player attribution.
- ✓ Pairs the website to the real in-game player with a private, one-use 60-second code.
- ✓ Broadcasts short-lived survivor vitals only after that player opts in.
- ✓ Keeps exact coordinates hidden unless the player explicitly enables them.
- ✓ Reconnects automatically after normal network interruptions.
- ✓ Opens a native three-window Worlds, Comms and Exchange workspace without hiding the center world.
- ✓ Lets the server show carried inventory and revalidate a local offer draft without moving an item.
- ✓ Ships local health, equipment, nutrition, map and Faded-mod dashboards that work without connecting.

WHAT NEXUS DOES NOT DO

- ✗ It never asks for or stores a hosting-panel, SSH, RCON, database, Project Zomboid account, or server-join password.
- ✗ A Nexus account password is entered only on the HTTPS website; it is never entered into Project Zomboid.
- ✗ It does not let a browser or another server control a survivor or inventory.
- ✗ It never accepts a World-supplied executable or unverified artifact; content must match the pinned official catalog and exact SHA-256.
- ✗ Sending offers, reservations and item movement are safety-locked and unavailable.

The part that works without Nexus

Think of it like a toy with batteries and Wi-Fi. The batteries run the local screens all by themselves. Wi-Fi adds other worlds. If Wi-Fi is off, the local screens keep working.

SURVIVOR PULSE

A local browser dashboard for health, wounds, protection, body temperature, moodles, needs, skills, encumbrance, worn gear, weapon condition and quick-load equipment. Fixed top views keep each screen inside one viewport.

NUTRITION MATRIX

A panel inside Survivor Pulse for calories, carbohydrates, proteins, lipids, weight direction and strength-training nutrition state.

WORLD ATLAS

A separate local browser map with explored fog, notes and supported custom-map geometry. It does not need the Faded Network Hub.

FADED MODS

Pulse checks active mod IDs against the bundled official Faded catalog snapshot and makes one selectable tab per match.

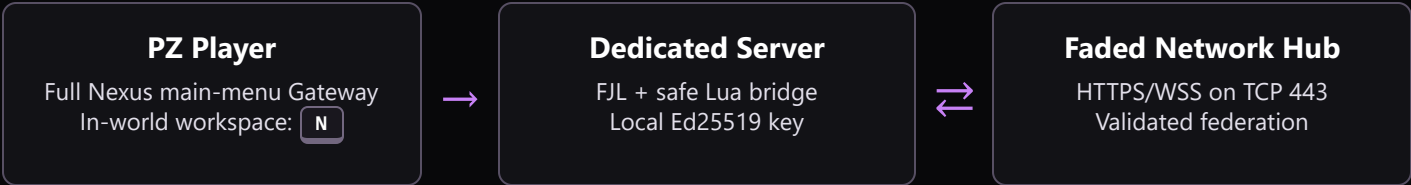
WHERE EACH SCREEN OPENS

Feature	Where you see it	Connection needed?
Worlds / Comms / Exchange	Inside Project Zomboid; press 	Worlds and Comms need an enrolled connected server. Exchange preview is local/server-side; sending is locked.
Pulse / Nutrition / Faded Mods	A normal web browser opened from its local file:/// URL	No. Data stays under Zomboid/Lua/FadedNexusPulse.
World Atlas	A second normal browser tab/window	No hub. Same-server MP markers may use the game server and obey vanilla visibility.

EXACTLY WHAT AN OFFLINE PLAYER DOES

1. Enable FadedNexus, FadedNexusPulse, FadedNexusNutrition and FadedNexusMap.
2. Load the save once so the local data files are created.
3. Open **Options** → **Mods** → **F.A.D.E.D Nexus // Survivor Pulse** and copy/open its Dashboard URL.
4. Open **Options** → **Mods** → **F.A.D.E.D Nexus // World Atlas** and copy/open its Atlas URL.
5. Put either browser window on a second screen. Do not press GO LIVE unless you separately want cross-server broadcasting.

How the pieces fit together



VANILLA LOGIN STAYS FINAL

After the Faded content gate is ready, Nexus hands the approved address to Project Zomboid. PZ still performs account/server-password login and its normal Steam Workshop check.

NO EXTRA INBOUND PORT

The connector initiates one outbound TLS connection to `network.fadedmods.com` on TCP 443. Nexus does not expose a new game-server port.

AUTHORITY STAYS LOCAL

The real server-side `IsoPlayer` supplies in-world identity. A client message cannot claim a different username, Steam ID, role, world, or inventory.

PRIVATE KEY STAYS HOME

The connector generates its private key on the server. Only its public key is registered. Never copy the identity directory to another server.

LIVE INFO EXPIRES

Broadcasts use 15-second leases. The server refreshes an active broadcast; stop, disconnect, expiry, disable, or revoke removes it.

SERVER SOFTWARE STACK

Piece	Where it runs	Job
FadedNexus	Server + clients	Native UI, bounded PZ commands, server tick bridge, poster/icon.
Pulse / Nutrition / Atlas	Clients; Atlas peer helper also runs server-side	Local second-screen export, manifest tabs, nutrition and map. No hub required.
Faded Java Loader 0.3.4	Dedicated server and connected client JVMs	Loads the trusted Nexus plugin before PZ starts; the client side powers the Gateway/content gate.
FadedJavaLoaderBridge 0.3.8	Server and connected clients	Safe Lua bootstrap, game-ready signal and multiplayer matching.
Faded Network Hub	<code>network.fadedmods.com</code>	Pairing, authentication, routing, expiry, audit.

Requirements and responsibilities

HOST REQUIREMENTS

- ✓ Project Zomboid dedicated server Build **42.20.4**.
- ✓ The bundled Java 25 runtime and permission to add FJL's `-javaagent` startup argument.
- ✓ Read/write access to the server root and its Zomboid data root.
- ✓ Outbound DNS and TCP 443 access to `network.fadedmods.com`.
- ✓ Correct system time (NTP/time synchronization enabled).
- ✓ A Nexus manager account assigned to an approved World and a private way to receive its one-time enrollment code.

Managed hosting warning. If the panel cannot edit JVM arguments, `ProjectZomboid64.json`, or the Java startup command before launch, it cannot load FJL after the JVM has started. Ask the host to support FJL or move to a compatible host.

WHO DOES WHAT

Role	Responsibility
Server manager	Provide public directory facts, install FJL/Nexus, create a World-scoped enrollment in the manager portal, protect the connector identity, publish only verified pack data, and verify logs.
Nexus operator	Approve the World, assign its manager account, audit changes, and disable/revoke only the affected identity when necessary.
Player	Install the suite, optionally pair a Nexus account by device code, select a World, complete normal PZ login, and separately choose whether to broadcast.

BACK UP BEFORE CHANGING THE SERVER

1. Stop the dedicated server cleanly.
2. Back up its active server INI and startup configuration.
3. Back up the Zomboid data root's `mods` and `FadedJavaLoader` configuration folders if they already exist.

The manager does not surrender server credentials. Nexus never needs the hosting-panel, SSH, RCON, database, PZ account, or join password. The one-use enrollment code authorizes one connector for one approved World; that connector creates and keeps its own private key.

Install FJL and the Nexus mod

1. INSTALL AND VERIFY FADED JAVA LOADER

Use the current compatibility baseline, FJL 0.3.4. Do not raise every mod's loader requirement for a server-specific configuration fix. Run the command appropriate to the host while the server is stopped.

Windows dedicated server

```
fjl.bat install-server-windows --server-dir "C:\path\to\Project Zomboid Dedicated Server" --json
fjl.bat verify --server-dir "C:\path\to\Project Zomboid Dedicated Server" --json
```

Linux dedicated server

```
sh ./fjl.sh install-server-linux --server-dir "$PWD" --json
sh ./fjl.sh verify --server-dir "$PWD" --json
```

Hosted-panel package

```
sh ./fjl.sh install-server-hosted --server-dir "$PWD" --json
sh ./fjl.sh verify --server-dir "$PWD" --json
```

The verification must identify the server environment and the 42.20 compatibility profile without safe-mode degradation.

2. INSTALL THE NEXUS SUITE AND FJL COMPANION

Run `install-local.ps1`, or copy the folders from `Contents/mods`, so these exact files exist:

```
<Zomboid data root>/mods/FadedNexus/42/mod.info
<Zomboid data root>/mods/FadedNexusPulse/42/mod.info
<Zomboid data root>/mods/FadedNexusNutrition/42/mod.info
<Zomboid data root>/mods/FadedNexusMap/42/mod.info
<Zomboid data root>/mods/FadedJavaLoaderBridge/42/mod.info
```

3. ENABLE THE SERVER MOD IDS

Edit the active `<servername>.ini`. Preserve every existing mod ID, keep the FJL companion first, and keep Nutrition after Pulse:

```
Mods=ExistingModA;ExistingModB;FadedJavaLoaderBridge;FadedNexus;FadedNexusPulse;FadedNexusNutrition;FadedNexusMap
```

Do not omit FadedJavaLoaderBridge. FJL may discover the Nexus JAR, but without its companion Lua bootstrap it does not receive the safe game-ready signal and the in-game Java bridge remains unavailable.

Enroll one approved World

4. CREATE THE CONNECTOR CONFIGURATION

After a Nexus administrator approves the World and assigns its manager account, create:

```
<Zomboid data root>/FadedJavaLoader/data/faded.nexus.bridge/config.properties
```

Copy the exact approved World UUID and public connection facts from the manager portal:

```
hubUrl=https\://network.fadedmods.com/
serverName=Your Approved World Name
worldId=00000000-0000-0000-0000-000000000000
publicHostname=play.example.com
gamePort=16261
directUdpPort=16262
maxPlayers=32
pzBuild=42.20.4
capabilities=world_listing,heartbeat,player_count,presence,comms,live_survivor_data,join_ticket
maintenance=false
```

Do not add `serverId` yourself. The bridge writes it after enrollment. A heartbeat cannot silently change the approved hostname or ports.

5. CREATE A ONE-TIME ENROLLMENT

The assigned manager signs in at `network.fadedmods.com`, opens **My connected worlds**, and creates an enrollment for that World. It is displayed once, expires in five minutes, and cannot enroll any other World.

Place only that code at exactly:

```
<Zomboid data root>/FadedJavaLoader/data/faded.nexus.bridge/enrollment-code.txt
```

6. START THE SERVER IMMEDIATELY

On first successful startup the connector:

- 1. generates an Ed25519 private key locally;
- 2. sends only its public key and the one-time World-scoped code;
- 3. saves the assigned `serverId`;
- 4. deletes `enrollment-code.txt`; and
- 5. authenticates outbound and begins signed heartbeat/federation traffic.

Important: every dedicated server gets a different identity and enrollment. Never clone `FadedJavaLoader/data/faded.nexus.bridge` to a second server.

WHAT A MANAGER PROVIDES—AND WHAT THEY DO NOT

Provide	Never provide
World name, public hostname, game/UDP ports, region, access mode, build, capacity, capabilities, and verified pack IDs/versions/hashes.	Panel/SSH/RCON/database credentials, PZ accounts, join passwords, private keys, or permanent Nexus secrets.

Know that it really works

REQUIRED SERVER-LOG CHECKPOINTS

```
F.A.D.E.D Nexus bridge loaded; waiting for game-ready.  
Lifecycle phase: GAME_READY  
Nexus pairing succeeded for server <uuid>.      # legacy setup only  
Nexus enrollment succeeded for world <uuid>.    # 0.4 World setup  
Nexus connector is connected.  
*** SERVER STARTED ***  
[FadedNexus] Server bridge active: connected
```

Nexus 0.4.5 retains the 15-second World heartbeat, proactive connection rotation, and verified-pack restart repair. It also fixes narrow list stencils in the in-game workspace, enlarges the Exchange desk and Gateway readiness card, and makes content-service failures readable without reporting a false zero-download result. A normal upgrade reuses the protected connector identity; no World should be re-enrolled.

TWO-SERVER ACCEPTANCE TEST

1. From the full-screen Nexus main menu, collapse/expand the rail, exercise every vanilla action, then open **Nexus Servers**.
2. Select a World with a published pack, choose **Download + Verify**, and confirm the same Nexus screen reports progress, the built-in gate verifies/stages content, exits PZ, applies safely, relaunches, and restores the World.
3. Pair again after the restart (tokens stay memory-only), request authorization, and confirm native PZ multiplayer opens at the approved address.
4. Complete ordinary PZ/Steam/server-password authentication and join enrolled World A and World B with test players.
5. Press **N** on both and confirm **LINK: connected**.
6. Confirm Worlds, Comms, inventory, draft and partner rows use the full width of their panes, and that the taller Exchange desk remains above the hotbar.
7. Send Nexus chat from A; verify it appears on B with correct World/player attribution.
8. On A, press **GO LIVE**; verify B sees the survivor but no exact x/y/z location.
9. Press **STOP LIVE**; verify the live entry disappears.
10. Separately pair the in-world web dashboard and verify browser chat/live data. This server-signed session is not the main-menu account session.

RELEASE CHECKLIST

Check	Expected
Mod version	Build 42.20.4 / FJL 0.3.4 / Bridge 0.3.8 / Nexus 0.4.5
Offline suite	Four folders present; local Pulse and Atlas URLs open with the hub unavailable
Network	Outbound trusted HTTPS/WSS only; no new inbound Nexus port
Coordinates	Hidden by default; only explicit player opt-in includes them
Identity	Steam ID when available; otherwise server-scoped hash
Gateway	Account token stays memory-only; native PZ login remains final; gameplay connects directly to the World host
Trading	Authoritative inventory/draft preview only; send and item movement locked

STRESS-TEST GATE Publish the immutable Nexus 0.4.5 client first, update every affected World pack, and only then plant/restart the matching server bridge. Complete the full pack download/verify/restart/resume and native-login test before broad invitations. This correction belongs to Nexus and does not require raising FJL above 0.3.4.

Exactly what players do

1 GET THE BASE SUITE

Close PZ. Use Faded Local Mod Installer 0.3.0 (Java Loader tab, then Nexus tab) or another approved bootstrap to install FJL 0.3.4, Bridge 0.3.8, Nexus 0.4.5 and the four Nexus modules. Verify, then fully restart PZ through Steam once.

2 OPEN NEXUS SERVERS

The Nexus art and collapsible side rail own the main-menu look. Continue, Load, Tutorial, Solo, Multiplayer, Host, Options, Mods, Workshop, Credits and Exit still call vanilla code.

3 PAIR THIS GAME

Choose **PAIR THIS GAME**. Sign in or register only at the HTTPS website, enter the eight-character device code, then return and choose **I APPROVED THE CODE**.

4 CHOOSE A WORLD

Review approved name, live state, players, PZ build, access mode, capabilities and the published pack. Offline or maintenance Worlds cannot issue a join authorization.

5 DOWNLOAD + VERIFY

The Nexus screen lists missing/outdated Faded mods. One click downloads approved catalog artifacts, verifies exact sizes and SHA-256, safely stages/applies them, relaunches Steam/PZ and restores the World.

6 CONTINUE WITH VANILLA LOGIN

Pair again only if the content restart cleared the memory-only token. Nexus opens native multiplayer; enter the normal PZ account/server password and let vanilla PZ check any Steam Workshop requirements.

7 OPEN ALL THREE

After joining, press **N** for Worlds on the left, Comms on the right and Exchange across the bottom. The center world stays visible.

8 CHOOSE WHAT IS LIVE

Chat globally, choose readiness signals, and press **GO LIVE** only when you want approved survivor information visible. Exchange sending remains safety-locked.

WHAT “GO LIVE” SHARES

The server creates a short-lived view of allowed survivor information such as display name, health/vitals state, status and the player's chat/trade-interest preference. The receiving server sees where it came from and that it is server-authoritative.

Exact coordinates are separate. They are off by default. A normal live broadcast does not imply your exact position. Enable exact position only when you intentionally want to share it.

HOW TO STOP SHARING

- Press **STOP LIVE** in the Nexus panel.
- Disconnect from the server; the broadcast expires/removes automatically.
- If a server is disabled/revoked, all of its active broadcasts are purged.

Your browser dashboards are separate. Opening Pulse, Nutrition, the Faded Mods tabs, or Atlas does not press GO LIVE and does not make them visible to other servers.

Three identities stay separate: your optional Nexus account selects a World; your PZ/Steam/server login decides whether you may enter it; your in-world server-signed session authorizes chat/live data. Nexus never receives the PZ credentials.

Two kinds of browser page: Pulse and Atlas use local `file:///` addresses and work offline. `network.fadedmods.com` hosts Nexus account/device approval and the connected federation dashboard. Game tokens stay memory-only and are cleared when you sign out or restart PZ.

Safety rules built into Nexus

Risk	Control
Fake server	One-use, one-World enrollment plus a unique local Ed25519 key; only the public key is registered and every session must answer a signed challenge.
Stolen/replayed login	Passwords use Argon2id; sessions/codes are hash-backed and time-bounded; refresh tokens rotate; join tickets are short-lived and replay-tracked.
Password exposure	Nexus passwords are entered only on HTTPS. PZ/Steam/join and infrastructure credentials never go to Nexus. The game receives an access-only, memory-only device token.
Client identity spoofing	The PZ server supplies the actual IsoPlayer; client identity fields are ignored.
Unwanted tracking	Live is player-opt-in, leased, explicitly stoppable, and coordinates are a second opt-in.
Remote code	Only bundled, allow-listed methods and strict message schemas exist. No dynamic Lua/code execution.
Inventory loss	Trading/item operations are absent and feature-locked until a later authoritative proof.
Runaway traffic	Message sizes, event queues, player counts, rate limits, heartbeats, and reconnect backoff are bounded.

CONNECTOR IDENTITY HANDLING

- ✗ Do not upload it to Workshop.
- ✗ Do not send it to support.
- ✗ Do not store it in a public or shared Git repository.
- ✗ Do not reuse it for another server.

The sensitive directory is:

```
<Zomboid data root>/FadedJavaLoader/data/faded.nexus.bridge/
```

Credentials are not an onboarding shortcut. A support technician may work through a server manager's normal provider process only when separately authorized, but those provider credentials are unrelated to Nexus operation and must never be stored in the World, mod, connector configuration, or guide.

IF COMPROMISE IS SUSPECTED

1. Stop the connector/server if safe.
2. Ask the Nexus operator to **disable** the server for reversible containment.
3. If compromise is confirmed, **revoke** it. Revocation is permanent.
4. Remove the compromised local identity and enroll a new identity through a verified channel.

When something does not connect

Symptom	Meaning / fix
Cannot validate plugin... build unknown	FJL cannot read PZ's build marker. Verify the server installation and that its Zomboid/game paths contain the expected version.txt; rerun FJL verification. Do not bypass the build constraint.
Java bridge unavailable	Confirm the connected-core IDs include FadedJavaLoaderBridge;FadedNexus in that order. Verify the FJL companion files exist in the active data root.
Pulse/Atlas local page has no data	Load a save once, confirm the companion mod is enabled, and use the current URL from its Options > Mods page. The URL points at local Zomboid/Lua data and does not require the hub.
waiting-for-pairing	The server has no trusted identity. Check the exact pairing-code.txt path and file permissions.
pairing-failed	The code may have expired, been consumed, or been copied incorrectly. Request a new one-use file. Never disable TLS validation.
World stays offline after enrollment	Check the exact worldId, enrollment-code.txt, approved public hostname/ports, outbound HTTPS, and heartbeat response. Do not fall back to a provider password.
World goes offline after about one hour but PZ stays up	Confirm the server loaded Nexus 0.4.5. Preserve logs, verify zero players and use a controlled restart only if needed. Do not re-enroll the World, change FJL or schedule hourly restarts. The connector rotates two minutes before expiry; repeat the 65-minute soak and inspect bounded renewal/reconnect evidence.
Gateway device code expired	Choose PAIR THIS GAME again. Approve the new code on the HTTPS site; never type the Nexus password into a mod field.
World cannot be selected/joined	It must be approved, online, out of maintenance, and report the join capability. Review its published pack/build and normal PZ access mode.
Content gate is unavailable	Close PZ, verify FJL 0.3.4 in the installer Java Loader tab, fresh-reinstall Bridge 0.3.8 and Nexus 0.4.5 if needed, confirm both mods are enabled, then fully relaunch through Steam. The installer is only the one-time bootstrap; it is not used for the World pack.
HTTP 503 while reading a World pack	The selected World published a legacy exact-version pack that no longer matches the official catalog. The manager must update the server files and publish a new verified pack. Nexus 0.4.5 shows this as a wrapped, retryable content-check failure and does not claim zero required downloads. Players must not re-enroll the server or bypass the check.
Worlds, Comms or Exchange text is squeezed into a narrow strip	The client is older than Nexus 0.4.5. Install and verify the exact published 0.4.5 client, fully restart PZ, then reopen with N . Version 0.4.5 moves each vanilla list scrollbar to the resized pane edge so the entire row remains visible.
Redirect invalid for reading: WRITE	The client is still running the affected Nexus 0.4.3 restart helper. Close PZ, install the exact published Nexus 0.4.5 client, verify it, and restart through Steam. The already verified attempt stopped before changing live mod folders; do not change FJL or re-enroll the server.
Download + Verify fails	Keep PZ open, confirm the official HTTPS endpoints and free disk space, and read the bounded gate error. Size/hash/ZIP/mod identity mismatches fail closed; prohibited mods are reported instead of deleted.
reconnecting	Use the matching Nexus 0.4.5 build, then check DNS, outbound TCP 443, system time and https://network.fadedmods.com/health. The bridge reports bounded WebSocket close details, rotates sessions before expiry and retries automatically with jitter.
Website says player pairing required	Press PAIR WEB DASHBOARD inside the in-game Comms window, then enter the code within 60 seconds. Each code works once; request a fresh code if it expires.
Server connected; player panel is not	Ensure the player has the same Nexus mod version, restart the client after installation, and check PZ mod mismatch logs.
Chat/live does not cross servers	Verify both origins show connected. Check rate/size errors and confirm live was explicitly started; live expires without refresh.
Exact position is missing	This is the safe default. The player must explicitly opt in to exact coordinates.

Never “fix” TLS by trusting every certificate. Correct DNS, time, CA trust, or network interception instead. The production endpoint must remain https:// and wss://.

USEFUL PUBLIC CHECKS

https://network.fadedmods.com
https://network.fadedmods.com/health

WHAT TO INCLUDE IN A SUPPORT REPORT

- PZ build, FJL version, Nexus version, host OS and the relevant redacted log lines.
- Whether FJL reported GAME_READY and whether Lua reported connected.
- Never include passwords, enrollment/pairing-code contents, private-key material, session tokens, join tickets, or live coordinates.

Manager and operator lifecycle

Managers act only on assigned Worlds through the HTTPS manager portal. Administrators use protected control-plane access for approvals, role assignment, audit, containment, and revocation. Neither workflow requires a manager's provider credentials.

FIRST OWNER AND MANAGER SETUP

1. After the 0.4 migration, create the first owner through the protected admin CLI using `--password-file`. Never place a password in command arguments or shell history.
2. The owner creates/approves a World and assigns its manager account.
3. The manager verifies public hostname, ports, build, capacity, access mode and capabilities, then creates the one-use enrollment.
4. After the connector heartbeat is healthy, publish only a catalog-verified World pack.

CONTAIN OR REVOKE

Use the account/server-specific admin actions and audit log. Disable for reversible investigation; revoke for confirmed compromise. A server credential rotation replaces only that connector's public key and revokes its sessions.

DISABLE

Reversible containment. Sessions are revoked, the connector is rejected, and origin live broadcasts are removed. Use while investigating.

REVOKE

Permanent for that connector identity. Use for a confirmed compromise or disposable test identity. A replacement is explicitly enrolled with a new local key.

ROUTINE HEALTH

- Confirm the hub, database and edge containers are healthy.
- Review authentication failures without exposing credential material.
- Run the documented health/VPS/backup validation gates after deployment changes.
- Keep PostgreSQL/API ports private; public listeners remain 22, 80 and 443 only.
- Keep `TRADING_ENABLED=false` and join-ticket enforcement off until the native login hook passes the disposable two-World gate.

UPGRADE SEQUENCE

1. Read release compatibility notes and back up configuration.
2. Stop PZ cleanly and replace all four complete suite folders: `FadedNexus`, `FadedNexusPulse`, `FadedNexusNutrition` and `FadedNexusMap`.
3. Keep the existing connector identity directory; do not re-enroll for a normal upgrade.
4. Verify JAR/hash, FJL discovery, game-ready, connector status and native UI.
5. Run the two-server acceptance test before reopening broadly.

Keep retired updates out of live scan roots. Federated Server stays on FJL 0.3.4 and uses server-sync `keepBackups: 0`. Recovery comes from verified root-only server backups. Other hosts must also place any rollback copy outside every FJL/PZ mod scan root.

FAQ and glossary

DOES EVERY PLAYER NEED FJL?

Yes for the connected 0.4.5 main-menu Gateway: players need FJL 0.3.4, Bridge 0.3.8 and Nexus 0.4.5 once. The current Faded Local Mod Installer is an approved one-time bootstrap channel. After the linked-world menu appears, the in-game gate handles World-specific Faded content without launching an external installer. The dedicated server separately owns its own FJL connector identity. The offline browser suite remains usable without connecting or broadcasting.

DOES NEXUS REPLACE NORMAL PZ NETWORKING?

No. The Gateway discovers and authorizes an approved World, then opens native multiplayer. PZ/Steam still authenticates the player and gameplay connects directly to the World host—not through the Nexus VPS.

DO SERVER MANAGERS GIVE F.A.D.E.D THEIR PASSWORDS?

No. They provide public directory facts and create one short-lived enrollment for one approved World. Hosting-panel, SSH, RCON, database, PZ account, and join passwords are not Nexus credentials and must never be entered into the system.

WHY DOES A PLAYER HAVE A NEXUS ACCOUNT AND A PZ ACCOUNT?

The optional Nexus account is for the Worlds directory, consent, roles and join authorization. The PZ/Steam account and any server password are still the final authority for entering that server. The two passwords never share a form or token.

CAN ANOTHER SERVER SEE ME AUTOMATICALLY?

It can see server presence according to the federation protocol. Your detailed live survivor broadcast is off until you choose **GO LIVE**, and exact coordinates need a separate opt-in.

CAN I USE ONE ENROLLMENT FOR MULTIPLE SERVERS?

No. An enrollment is one-use, five-minute, and scoped to one World. Each connector generates and keeps its own private key.

WHY IS TRADING DISABLED?

Cross-server item movement can destroy or duplicate items if any step is ambiguous. Exchange can already show server-derived inventory and validate a local draft, but Nexus will not enable sending or movement until authoritative reservation, removal, delivery, rollback, idempotency and crash recovery pass on disposable real-game fixtures.

GLOSSARY

Term	Plain meaning
Federation	Independent servers cooperating without becoming one server.
Hub	The protected post office that authenticates and routes Nexus messages.
Connector	The server-only Java component that maintains the secure hub link.
World	An approved directory record for one independently managed PZ dedicated server.
Enrollment	A one-use authorization that binds one connector public key to one assigned World.
Device pairing	A one-time browser approval that gives PZ a memory-only Nexus access token without exposing the password to Lua.
Join ticket	A short-lived, World-bound Nexus authorization; it does not replace native PZ authentication.
Ed25519	The digital-signature key type used to prove a connector's identity.
Lease	A short expiry timer; live info disappears unless the server keeps refreshing it.
Server-authoritative	The dedicated server—not a client textbox—determined the identity/state.

The shortest version: offline dashboards work immediately. A manager receives an approved World, enrolls its locally keyed connector once, publishes an exact pack, and verifies heartbeat. A player installs the base Nexus/FJL client once, selects a World, uses the same-screen download/verify gate, and then completes normal PZ login plus any vanilla Steam Workshop check. In-world **N** federation and GO LIVE remain separately consented.

Handbook: docs/OWNER_AGENT_OPERATIONS_HANDBOOK.md • Stress test: docs/COMMUNITY_STRESS_TEST_RUNBOOK.md • Manager: docs/SERVER_MANAGER_ONBOARDING.md • Player: docs/PLAYER_JOIN_FLOW.md • Security: docs/SECURITY_MODEL.md