

Validator Upgrade to v1.0.8

Required since block 24630300

W Chain mainnet · node v1.0.8 · Monday 12 October 2026, 09:56 UTC

What this is

A **required** upgrade for every W Chain **mainnet validator**: node **v1.0.8**.

⚠ Required now. The new rules are active since block 24630300 (Monday 12 October 2026, 09:56 UTC).

At block 24630300 new consensus rules switched on for the whole network. A validator still on an older version **stopped producing and signing blocks** at that block, and cannot follow the chain until it is upgraded. Please upgrade **as soon as possible**.

This upgrade replaces **two files**:

- the node binary `w-chain-node` ;
- `genesis.json` . It gets 4 new lines that switch on the new rules at block 24630300. Nothing else in it changes.

Your validator keys, config, chaindata and stake are **untouched**. There is no resync, and the genesis hash does not change. Expect about 10 minutes.

Why it is needed

v1.0.8 is the result of several independent security audits of the node. Among other things, it:

- fixes ways a remote peer could crash a node or stall block production;
- makes consensus messages much smaller, so the chain recovers from failed rounds without a halt;
- makes a validator that falls behind at an epoch boundary catch up by itself, instead of freezing until restarted.

Some of these changes alter consensus rules, so the whole network switched to them together, at block 24630300. Since that block, only v1.0.8 nodes can follow the chain.

⚠ Upgrade as soon as possible. Until your node runs v1.0.8, it is not producing blocks or earning rewards.

Before you start

1. Find your install folder. Most installs use `/opt/w-chain-node` or `~/w-chain` . This shows yours:

```
systemctl cat w-chain-node | grep ExecStart
```

Example: `ExecStart=/root/w-chain/w-chain-node server --config ...` means the node program is `/root/w-chain/w-chain-node`, so your install folder is `/root/w-chain`.

The folder that holds `w-chain-node` is your install folder. Your `genesis.json` is the file given by `--chain` or by `chain_config` in your config; normally it's in the same folder.

Now set `DIR` to **your install folder** from the line above. **Replace `/opt/w-chain-node` with your own folder before you run it.** With the example above, the first line would be `DIR=/root/w-chain`.

```
DIR=/opt/w-chain-node          # <- replace with YOUR install folder
ls -l $DIR/w-chain-node $DIR/genesis.json
```

EXAMPLE OUTPUT (DO NOT PASTE THIS)

```
-rw-r--r-- 1 root root    29957 Oct  5 01:25 /root/w-chain/genesis.json
-rwxr-xr-x 1 root root 74143753 Oct  5 01:25 /root/w-chain/w-chain-node
```

Both files must be listed. `DIR` is forgotten when you close the terminal or reconnect: if that happens, run the `DIR=...` line again before you continue. If `genesis.json` is somewhere else, use that path wherever this guide says `$DIR/genesis.json`.

2. Check your current version:

```
$DIR/w-chain-node version
```

If it already says **v1.0.8** and your `genesis.json` contains `wchainv111`, you are done.

Upgrade steps

 Log in as **root** (or run `sudo -i` first). Copy each grey box **as a whole** and paste it into the terminal.

Step 1 — Download and check the new files (node keeps running)

1a. Download and verify. Paste this box:

```
mkdir -p ~/upgrade-v1.0.8 && cd ~/upgrade-v1.0.8
U=https://github.com/w-chain/node/releases/download/v1.0.8
curl -fL -O $U/w-chain-node-v1.0.8-linux-amd64.tar.gz
curl -fL -O $U/genesis.json
curl -fL -O $U/checksums-v1.0.8.txt
sha256sum -c checksums-v1.0.8.txt
```

`curl` prints download progress first. The last two lines must be:

EXAMPLE OUTPUT (DO NOT PASTE THIS)

```
w-chain-node-v1.0.8-linux-amd64.tar.gz: OK
genesis.json: OK
```

If anything says **FAILED**, delete the folder (`rm -rf ~/upgrade-v1.0.8`) and run 1a again.

1b. Unpack and check the new node. Run this too, before Step 2. It only checks the new files; your node is not touched yet.

```
tar -xzf w-chain-node-v1.0.8-linux-amd64.tar.gz
chmod +x w-chain-node-linux-amd64
./w-chain-node-linux-amd64 version
grep -c wchainv1 genesis.json
```

EXAMPLE OUTPUT (DO NOT PASTE THIS)

```
[VERSION INFO]
Release version = v1.0.8
Git branch      = fix/v1.0.8
Commit hash    = a474bc5bd34e2c35bbc432ef2e81a62b99673a
Build time     = Thu Oct  8 09:18:20 UTC 2026
4
```

The version must read **v1.0.8**, and the last line must be **4**. Only then go on to Step 2.

Step 2 — Back up the current files

```
sudo cp -a $DIR/w-chain-node $DIR/w-chain-node.v1.0.7.bak
sudo cp -a $DIR/genesis.json $DIR/genesis.json.v1.0.7.bak
```

These two commands print nothing when they succeed.

Step 3 — Replace both files in one restart

```
sudo systemctl stop w-chain-node
sudo cp ~/upgrade-v1.0.8/w-chain-node-linux-amd64 $DIR/w-chain-node
sudo cp ~/upgrade-v1.0.8/genesis.json $DIR/genesis.json
sudo chown --reference=$DIR/w-chain-node.v1.0.7.bak $DIR/w-chain-node $DIR/genesis.json
sudo chmod +x $DIR/w-chain-node
sudo systemctl start w-chain-node
```

These commands print nothing when they succeed. The node is down only for the few seconds between `stop` and `start`.

⚠️ Replace both files before starting. The node reads `genesis.json` only when it starts. A node that only got the new binary, or was not restarted after the genesis change, cannot follow the chain past block 24630300. It stays stuck at that block.

Step 4 — Check it, and send us the result

Run this whole block and **send us a screenshot of the output** (or share your screen with us):

```

echo "version : $($DIR/w-chain-node version | grep -i release)"
echo "binary  : $(sha256sum $DIR/w-chain-node | cut -c1-16)   expected d84bcf09f441160b"
echo "genesis : $(sha256sum $DIR/genesis.json | cut -c1-16)   expected dee473b9506b4583"
echo "rules   : $(grep -c wchainv1 $DIR/genesis.json) of 4"
echo "started : $(systemctl show -p ActiveEnterTimestamp --value w-chain-node)"
echo "genesis : $(stat -c %y $DIR/genesis.json)"
echo "status  : $(systemctl is-active w-chain-node)"
sleep 60
echo "blocks  : $(sudo journalctl -u w-chain-node -S -1min | grep -c 'block committed')"

```

The output looks like this (your times differ; the last line appears after 60 seconds):

EXAMPLE OUTPUT (DO NOT PASTE THIS)

```

version : Release version = v1.0.8
binary  : d84bcf09f441160b   expected d84bcf09f441160b
genesis : dee473b9506b4583   expected dee473b9506b4583
rules   : 4 of 4
started : Thu 2026-10-08 05:44:35 CDT
genesis : 2026-10-08 05:44:34.786882749 -0500
status  : active
blocks  : 26

```

Line	Must show
version	v1.0.8
binary / genesis	the same as the "expected" value next to it
rules	4 of 4
started	the same second as, or later than , the genesis time on the line below it (never hours or days earlier)
status	active
blocks	about 20–35 (blocks come every ~2 s); never 0. If your node was stuck for a while, it first catches up: run the last line again after a few minutes

If all lines match, you are done. You can delete the `.bak` files once the node has run normally for a few days.

Firewall (strongly recommended)

A validator needs **one** port open to the internet: **1478/tcp** (peer-to-peer). Everything else should be closed. The node's RPC (8545) and admin API (9632) must **only** listen on `127.0.0.1`. Check:

```
sudo ss -ltnp | grep w-chain-node
```

You should see	Meaning
0.0.0.0:1478	P2P: must be public
127.0.0.1:8545	JSON-RPC: local only ✓
127.0.0.1:9632	admin API: local only ✓

If 8545 or 9632 show 0.0.0.0 or *, set `jsonrpc_addr` / `grpc_addr` in your config to 127.0.0.1:8545 / 127.0.0.1:9632 and restart. **Never expose 9632.** It has no password.

Option A — ufw (Ubuntu / Debian)

⚠ **Allow SSH first, or you will lock yourself out.** If your SSH port is not 22, use your port number below.

```
sudo apt-get install -y ufw
sudo ufw allow 22/tcp
sudo ufw allow 1478/tcp
sudo ufw default deny incoming
sudo ufw default allow outgoing
sudo ufw --force enable
sudo ufw status verbose
```

`ufw status` should list only your SSH port and 1478, for both IPv4 and IPv6.

If you can, restrict SSH to your own IP instead of the whole internet (replace 1.2.3.4):

```
sudo ufw allow from 1.2.3.4 to any port 22 proto tcp
sudo ufw delete allow 22/tcp
```

⚠ **If Docker is installed on the same machine:** Docker adds its own firewall rules, and published container ports bypass ufw. Bind containers to 127.0.0.1, or use your provider's firewall (Option B).

Option B — your cloud provider's firewall (AWS, Contabo, Hetzner...)

Allow **inbound** only:

- TCP **1478** from anywhere (IPv4 and IPv6);
- TCP **22** (SSH) from your own IP.

Allow all **outbound**. On AWS this is the instance's **Security Group**.

Check from outside

Open a **new terminal on your own computer** (your laptop or PC, **not** logged in to the server) and run, with your server's public IP:

Mac:

```
nc -zv -G 5 <your-server-ip> 1478
nc -zv -G 5 <your-server-ip> 8545
nc -zv -G 5 <your-server-ip> 9632
```

Linux:

```
nc -zv -w 5 <your-server-ip> 1478
nc -zv -w 5 <your-server-ip> 8545
nc -zv -w 5 <your-server-ip> 9632
```

Windows (PowerShell):

```
Test-NetConnection <your-server-ip> -Port 1478
Test-NetConnection <your-server-ip> -Port 8545
Test-NetConnection <your-server-ip> -Port 9632
```

Port	Must show
1478	succeeded / TcpTestSucceeded : True
8545	refused or timed out / TcpTestSucceeded : False
9632	refused or timed out / TcpTestSucceeded : False

Running these on the server itself proves nothing, because the firewall does not filter the server's own connections.

Your validator keeps committing blocks after the firewall is on. Run this on the server to confirm (about 20–35):

```
sudo journalctl -u w-chain-node -S -1min | grep -c 'block committed'
```

Troubleshooting

The node does not start: `fork is not available: wchainv1...` The new `genesis.json` is in place but the binary is still the old one. Repeat Step 3 and check `$DIR/w-chain-node version` says v1.0.8.

The node starts but commits no blocks. Check port **1478** is open from the internet (see "Check from outside"). Give it a minute after a restart.

⚠ Do not roll back. Block 24630300 has passed, so going back to v1.0.7 is no longer possible: an old node cannot follow the chain after that block. Do not restore the `.bak` files. If anything goes wrong, contact us.

Summary

What changes	node binary + <code>genesis.json</code> (4 new lines)
Keys, config, chaindata, stake	untouched
Resync	no
Rules switched on	block 24630300 (Monday 12 October 2026, 09:56 UTC)
Upgrade by	now : required
Older versions	cannot follow the chain after block 24630300
Firewall	only 1478/tcp public; 8545 and 9632 on 127.0.0.1 only
Several validators	upgrade them one at a time
Proof for us	a screenshot of the Step 4 output