STATUS: TESTING — NO RELEASE YET Preparation guide · 14 November 2026

SOST V17 — Operator Upgrade Guide

For everyone who runs `sost-node` or `sost-miner`. Read it now, prepare now, and install only the **approved V17 release** when it is published. Plain steps, each one with a check.

⚠ CRITICAL — RISK OF BLOCKCHAIN SPLIT

All validating nodes and miners must prepare the approved V17 release before block #40,000. Running incompatible software after activation can split the network into competing chains, causing rejected blocks, divergent balances and unreliable confirmations. **Recommended coordinated restart window: blocks #39,900–#39,999.** Do not continue mining with an incompatible release after activation.

What you can do today: steps 1 (preparation) and the checklists. **What you must not do today:** install a V17 build. No V17 release has been published, so there are no official V17 binaries, tag or checksums yet. Anything offered as “V17” before the official announcement on this page and on GitHub is not official. The valid build today is **V30000 FINAL** (checksums).

WHEN

Timeline (counted in blocks)

Moment	What happens	What you do
Now → release	Final testing of the candidate	Step 1. Keep running V30000 FINAL.
Release published (well before #39,900)	Tag, binaries, SHA-256 and release notes published here and on GitHub	Steps 2–4: download or build, verify. Do not restart yet unless the release notes say so.
#39,900 → #39,999	Coordinated restart window (100 blocks; about 17 hours at the 10-minute target, but it depends on the real block rate)	Steps 5–8: restart node, then miner, then check.
#40,000	V17 rules activate automatically by height	Step 9: do **not** restart exactly now; watch.
After #40,000	Verification of consensus	Step 9 checks; report problems (step 10).

Live: see the live counter on sostcore.com/sost-v17-upgrade.html

STEP 1

Preparation (safe to do today)

1. **Current height and your node's view.** Replace the user and password file with yours:

```
curl -s --user "myuser:$(cat ~/.sost/rpc.pass)" -H 'content-type: application/json' \
  -d '{"jsonrpc":"1.0","id":1,"method":"getinfo","params":[]}'
http://127.0.0.1:18232/
# check: "blocks" = the height on https://sostcore.com/sost-explorer.html, "profile":
"mainnet", "connections" > 0
```

2. **Installed version.** Write down the SHA-256 of the binaries you run (this identifies the build exactly):

```
sha256sum /path/to/sost-node /path/to/sost-miner /path/to/sost-cli
```

   Compare with the V30000 FINAL checksums on the V30000 page.

3. **System and architecture.** `uname -m` (expect `x86_64`) and `cat /etc/os-release`. Windows users run SOST inside WSL2.

4. **Save how you start things.** Copy your exact start commands (or systemd unit files) to a text file: paths, `--rpc-user`, `--rpc-pass-file`, `--chain`, `--profile`, miner flags such as `--wallet`, `--mining-key-label`, `--threads`.

```
systemctl cat sost-node sost-miner 2>/dev/null > ~/sost-start-commands.txt   # if you use systemd
ps -o args= -C sost-node -C sost-miner >> ~/sost-start-commands.txt           # shows how they run now
```

   Never put a password on the command line (`--rpc-pass`): anyone on the machine can read it. Use `--rpc-pass-file`.

5. **Back up.** Stop nothing yet. Copy your wallet files and keys to an offline place you control, and note where your chain data lives. A copy of the chain file can be made later with the node stopped (step 5).
6. **Know what to stop.** `pgrep -a sost-` lists the SOST processes on the machine.

Nobody from SOST will ever ask for your recovery phrase, private keys or passwords. Do not share them in any channel.

STEP 2

Get V17 — release and checksums

Not published yet. There is no V17 tag and no V17 binary on GitHub Releases. When the release is approved, this section will list: the tag name, the source commit, download links for `sost-node`, `sost-miner`, `sost-cli`, the `SHA256SUMS` file and the release notes. Until then there is nothing to download.

Item	Value
Source code	github.com/Neob1844/sost-core
V17 tag	*published with the release*
sost-node / sost-miner / sost-cli	*published with the release*
SHA256SUMS	*published with the release*
Release notes	*published with the release*

STEP 3

Or build from source (Ubuntu, Debian, WSL2)

Example commands, shown so you can check your build environment now. The definitive version (exact tag, dependencies and flags) is published with the release and replaces this block; the V17 candidate links a pinned version of `libsecp256k1` that may change the dependency list.

```
# EXAMPLE — the tag <V17_TAG> does not exist yet
sudo apt update && sudo apt install -y build-essential cmake git libssl-dev
libsecp256k1-dev
git clone https://github.com/Neob1844/sost-core.git sost-v17 && cd sost-v17
git checkout <V17_TAG>
cmake -S . -B build -DCMAKE_BUILD_TYPE=Release -DSOST_ENABLE_PHASE2_SBPOW=ON -
DSOST_TESTNET_FORKS=OFF -DSOST_DEVNET_FORKS=OFF
# limit the CPU: on a machine that is also mining or running a node use 1–2 jobs, not
all cores
nice -n 19 cmake --build build --target sost-node sost-miner sost-cli -j2
(cd build && ctest --output-on-failure -j2)       # all tests must pass
ls -l build/sost-node build/sost-miner build/sost-cli
```

Do not use `-j$(nproc)` on a machine that is mining or serving a node: it can starve them of CPU and memory (each compile job can use over 1 GB of RAM).

STEP 4

Verify the binaries

```
sha256sum sost-node sost-miner sost-cli
# every line must match SHA256SUMS of the approved V17 release exactly
sha256sum -c SHA256SUMS --ignore-missing      # prints OK for each file
```

- The V17 checksums are **not** the V30000 ones. Never reuse old hashes.
- If your own build gives a different hash, do not install it. Check the tag, the compiler and library versions and the flags; or use the official binaries. **Never run a binary whose SHA-256 does not match.**

STEP 5

Restart the node (during #39,900–#39,999)

- [ ] Your backup from step 1 is done.
- [ ] Stop the node cleanly: `sudo systemctl stop sost-node`, or press `Ctrl+C` once in its terminal and wait.

- [ ] Confirm it stopped: `pgrep -a sost-node` prints nothing.
- [ ] Optional: copy the chain file now that the node is stopped.
- [ ] Replace only the executable: `sudo install -m 0755 sost-node /path/to/your/sost-node` .
- [ ] Keep your chain data and configuration. **Do not delete the blockchain and do not resync** unless a published instruction tells you to.
- [ ] Start it the same way as before: `sudo systemctl start sost-node` , or your saved command.
- [ ] Confirm the binary: `sha256sum /path/to/your/sost-node` matches the release.
- [ ] Peers: `getinfo` shows `"connections"` > 0; `getpeerinfo` lists them.
- [ ] Sync: `"blocks"` keeps rising and matches the Explorer.
- [ ] Canonical chain: `getbestblockhash` equals the tip hash shown on the Explorer at the same height.

WSL2 / Windows: run the same commands inside the WSL terminal; keep the Windows PC from sleeping during the window. **Manual runs:** keep the old start command and replace only the file it points to.

STEP 6

Restart the miner (after the node is confirmed)

- [ ] The upgraded node is synced and has peers (step 5).
- [ ] Stop the old miner (`Ctrl+C` or `systemctl stop`); confirm with `pgrep -a sost-miner` .
- [ ] Replace the executable with the verified V17 `sost-miner` .
- [ ] Keep the same mining address, wallet, key label and flags.
- [ ] Start it with your saved command (`--realtime` stays mandatory).
- [ ] Check it reaches the node and receives work (no RPC errors in its output).
- [ ] Check your next block is accepted (it appears on the Explorer with your address).
- [ ] Confirm no old miner is still running anywhere with the same address.

If a miner cannot be upgraded in time, stop it before #40,000. An old miner after activation produces blocks the network rejects and wastes its work.

STEP 7

NODE_BIND and HEARTBEAT

- **No new registration.** Existing NODE_BINDs stay valid after V17 and heartbeats continue as today. No key change is required.
- From #40,000 a **miner** needs, besides the current mining-activity rules, an active NODE_BIND and heartbeats in 3 of the last 4 epochs (288 blocks each) to be eligible for

the **normal DTD**. Today this applies to the Jackpot V2 only. A miner that wants DTD rewards and has no NODE_BIND should register one with the current tools (`createnodebind` , see the V30000 page) well before #40,000, so its heartbeats count in time.

- New in the V17 CLI: the node key and the mining key can sign the NODE_BIND on different machines (two halves). Optional.

STEP 8

Check before block #40,000

- [ ] The approved V17 binaries are installed (node, miner, CLI).
- [ ] Their SHA-256 match the release.
- [ ] The node is synced (height = Explorer) and has peers.
- [ ] The node runs the V17 build (by checksum; the release notes give the version string to expect).
- [ ] The miner runs the V17 build, gets work and its blocks are accepted.
- [ ] The mining address is the right one.
- [ ] No serious errors in the node or miner logs.
- [ ] Your tip hash equals the Explorer tip hash (no divergent chain).

Download: node checklist · miner checklist.

STEP 9

Activation at #40,000

The new rules activate **automatically by height**. Nothing has to be done at #40,000. **Do not restart exactly at #40,000.** Watch:

- the hash of block #40,000 on your node equals the Explorer's;
- height keeps rising and blocks propagate; peers stay connected;
- the reward split in new blocks is 80 / 15 / 5 (`getblock` shows a `v17_reward` section);
- maturity, DTD and Jackpot behave as described on What's changing;
- no warnings about rejected blocks, forks or reorganizations.

STEP 10

Problems and safe recovery

Problem	What to do
Node does not start	Read the last lines of its output or `journalctl -u sost-node -n 100` . Check the path, permissions (`chmod 0755`) and that no old node still holds the port.
Missing library / dependency error	Use the official binary, or install the dependencies listed in the release notes and rebuild.
Wrong binary	Stop it. Check `sha256sum` . Install the verified file.
RPC not available	Check `--rpc-user` / `--rpc-pass-file` and the port (default 18232); the node may still be loading the chain.
Node out of sync / no peers	Wait a few minutes; check the firewall and internet; add seeds to `seeds.txt` in the data directory. Do not delete the chain.
Blocks rejected	Compare your tip hash with the Explorer. Check that node and miner are both V17. Report it with the log lines.
Miner sends invalid work	It is probably an old miner or it points to an old node. Stop it, check both checksums.
Configuration conflicts	Restore the start command saved in step 1; change one thing at a time.
Reorganization	Up to the 500-block cap the node handles it automatically. Wait for more confirmations before acting on recent transactions.
Possible chain split (your tip differs from the Explorer for several blocks)	Stop mining. Do not send transactions. Report it in the official channels with your height, tip hash and build checksum, and follow the published instructions.

Do not go back to V16 / V30000 after activation on your own

Rolling back a hard fork is not like rolling back a web page. After #40,000 an old node follows a different chain. Any return to old software would need a coordinated, tested plan announced for the whole network.

SOST V17 Operator Upgrade Guide · preparation version, 14 November 2026. It becomes the final guide only when the release section above is filled in from the approved release. Questions: the official community channels listed on Community.