

Executive Overview

USP Firmware Status

What We Tested

We ran a full evening review of the current M62 firmware using our Oktopus-based USP lab. That included:

- normal read-only status and discovery checks
- targeted nightly write tests
- direct router verification over SSH
- a one-time non-reset capability exercise to see how far USP configuration control can be pushed

Overall Status

This firmware is in a usable position for visibility and targeted testing, but it is not yet stable enough for broad automation.

In plain terms:

- the platform is good at reading device state
- it supports some focused change actions
- it becomes unreliable when many configuration changes are attempted in sequence

What Looks Good

- Device discovery and parameter collection are working.
- Basic health and runtime visibility are working.
- Router-side validation gives us strong evidence when we need to confirm real behavior.
- Guest Wi-Fi toggle and rollback worked successfully in the nightly test.
- The device remained recoverable throughout the exercise without needing a factory reset.

What Looks Acceptable But Limited

- Some individual Wi-Fi changes can be applied through USP.
- The new UI action model is useful for targeted troubleshooting and lab use.
- The firmware can support focused support-style actions if they are used carefully and one at a time.

What Still Needs Work

- Repeated USP write activity becomes unstable quickly.

- Rollback after multiple changes cannot yet be trusted.
- Controller-side Wi-Fi client and topology views can fall behind router reality.
- Radio control remains one of the weaker paths.
- Speed-test related operational validation is still incomplete.

Risk Position

For engineering and lab use, this firmware is workable now.

For broader operational use, the main caution is this:

USP should be treated as a reliable read and targeted-action interface, not yet as a high-volume configuration engine.

Bottom Line

This firmware is moving in the right direction and is strong enough to support ongoing QA, demonstrations, and commercial use.

The next engineering focus should be:

1. improve repeated write stability
2. improve rollback reliability
3. improve controller alignment with actual router Wi-Fi state

Recommendation

Share this firmware status as:

- good progress on visibility and targeted controls
- acceptable for continued lab validation
- not yet ready for aggressive automated change campaigns

Supporting Detail

Engineering detail and raw artifacts are available separately in the full firmware report and supporting nightly and commercial builds.