

Rapidlogger Systems

Tech Note #101 - Troubleshooting RapidHub Instability With Multiple Connected Units

This tech note describes the process to diagnose RapidHub software that becomes unresponsive or closes on its own after a period of time when several Rapidlogger units are connected simultaneously. See Tech Note 52 for initial RapidHub setup.

How Many Units to Connect

RapidHub will accept connections from up to 16 Rapidlogger units. In practice, run 8 or fewer units on one RapidHub instance. The PC running RapidHub should have at least 8 GB of RAM, and more if RapidVu or other software is running alongside it. Most reports of RapidHub becoming unresponsive come from running near the upper limit on a PC that is short on memory.

Symptom

RapidHub connects successfully to all units at startup, but after a few minutes of running with a higher number of units connected, the software becomes unresponsive or closes without an error message.

Likely Causes

- Too many units, or not enough memory on the PC -- more than 8 connected units, or a PC with less than 8 GB of RAM. Check this first.
- Duplicate or conflicting static IP addresses among the connected units (see Tech Note 5, Tech Note 6 and Tech Note 9 for static IP setup).
- Network switch limitations -- an unmanaged or low quality switch or hub can drop packets or introduce broadcast storms once several units are polling at once.
- Windows Firewall or antivirus software interrupting the connection after some number of open sockets is reached.
- An outdated version of RapidHub that has a scaling issue fixed in a later release.

Diagnostic Steps

1. Count the connected units and check the PC's installed RAM. If more than 8 units are connected, or the PC has less than 8 GB, reduce the unit count or move to a better specified PC before investigating further.
2. Confirm the RapidHub version in use and check the support downloads page for a newer release.
3. Verify every connected unit has a unique static IP

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address and that none conflict with the PC or the router itself.

4. If using an unmanaged switch, temporarily connect through a known good managed switch to rule out network hardware.
5. Open Windows Task Manager while reconnecting units one at a time rather than all at once, and watch CPU and RAM usage on the RapidHub process as each unit is added, to identify the point at which resources spike.
6. Temporarily disable Windows Firewall and antivirus, on a test basis only, to see if the crash still occurs. Re-enable them afterwards and add a specific exception for RapidHub if that resolved it.
7. If the crash still occurs after the steps above, gather the number of units connected, the exact time to failure, the RapidHub version, the PC operating system version and specifications, and whether Task Manager showed a resource spike, then contact support with that information.