## Periodic Maintenance

Preventative maintenance on computer systems is essential to maintain system reliability and stability. Dust and debris buildup inside a computer can cause the system to run hotter and can eventually lead to premature component failure. RAVE recommends periodic removal of dust and debris from computer systems and filters to ensure proper operation. Reseating memory and PCIe devices may also be necessary on a periodic basis.

All periodic maintenance must be performed in a controlled ESD environment to minimize the risk of damage to sensitive electronic devices caused by electrostatic discharge.

Below is a list of recommended periodic maintenance items. The required frequency of maintenance items will vary depending on the environment that the system is in.

| Interval | Task |
|---|---|
| **Every 3-6 months** | Blow out dust with low-pressure compressed air; clean fan filters; verify all fans spin and sensors read normal. |
| **Annually** | Review event logs: look for ECC > 0, PCIe AER counters, NVMe SMART errors, PSU “power-good” faults.<br><br>Check for BIOS, BMC, NVMe and GPU firmware updates.<br><br>Inspect capacitors for bulging, GPU connector for discoloration, PSU cables for chafing. |
| **When relocating / after shipping** | Reseat memory, GPUs, add-in cards, using ESD strap and electronic contact cleaner if oxide is visible. |
| **When errors appear** | Reseat the affected memory module/card, run memory test or GPU burn-in, replace if the error follows the module. |

Reseating components on a periodic schedule may be justified in the following environments:

- High-vibration
- High-humidity / sulphur