

Intermittent Connectivity with Network Bonding Enabled



Table of Contents

1. Symptom	1
2. Cause	1
3. Resolution	1

Applies to: Hammerspace 5.2 and later.

1. Symptom

Either or both of these, on a cluster using network bonds:

- Clients see intermittent connectivity to the cluster, while everything else on the network is fine.
- Nodes see intermittent connectivity to one another.



This article covers one specific cause. It is not a complete account of everything that can produce these symptoms. It applies to physical nodes, though the same reasoning can apply to the hypervisor host under a virtual node.

2. Cause

When nodes are deployed, you can enable bonding across one or more interfaces and across two or more network cards per bond. The bond mode is chosen for you, based on the role the interface takes:

- The **data** and **management** roles use 802.1AX/LACP — Linux bond mode 4.
- The **high availability** role uses active/backup — Linux bond mode 1.

If the switch is configured for a different bonding mode than the node's interfaces use, connectivity becomes intermittent.

3. Resolution

Confirm the cluster is using bonds, then check your switch vendor's documentation and set the switch ports to the mode listed above. The switch has to match the node, because Hammerspace does not support changing the default bond modes.

Contact Hammerspace Support if you want the bonds removed from the nodes instead. That requires cluster downtime.



On virtual machines, apply the same reasoning to the hypervisor-to-switch networking.