

insmod ERROR - could not insert module - Operation not permitted

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Symptom

This problem is usually realized after a failed replication. The Server Backup Manager may contain the following error in the task logs.

An exception occurred during the request. The replication driver was not detected
detail: An error occurred while loading the hcpdriver module, please check your system logs;
Please run "r1soft-setup --get-module " on your Agent to install one.).

Attempts to load the module manually result in :

ERROR: could not insert module /lib/modules/r1soft/hcpdriver-cki-XXX.ko: Operation not permitted

The following error can also be found in Syslog / Messages log :

kernel: hcp: ERROR: Could not init mrf hash!

And lastly, the following error is shown in the dmesg log after a manual attempt to load the module :

insmod : page allocation failure: order:5, mode:0x40d0

Cause

In this case, memory fragmentation can be responsible for our memory allocation request being denied by the Linux Kernel. There are not enough contiguous pages to allocate. This can happen on servers with longer uptimes, usually with high or varying usage by database engines and applications.

Resolution

Rebooting the protected machine should allow the module to load before the memory becomes fragmented. NOTE: This behavior can return after a reboot if the memory becomes fragmented to a point where our memory allocation request is denied

