Limitations [5]

This chapter describes hardware and software limitations, as well as limitations on the use of online diagnostics.

5.1 Hardware and software limitations

Although the guest system performance is only marginally less than the host, the UNICOS under UNICOS feature is intended for system testing and upgrading software, and not for creating another production system.

The following are general limitations of this feature:

- The use of a CRAY T3D system from the guest is not supported.
- The guest system is not operated or monitored from the OWS or SWS.
- Tape configurations **must** be identical on the host and the guest. That is, all devices must be in the same position (ordinal) in the configuration. ER90 tapes, though unsupported in the guest, should still be used as place holders in the guest configuration. See Appendix B, page 59, for more information.
- SSD space intended for the guest system must not be in use on the host (that is, SSD space cannot be dynamically allocated at guest boot time). SSD-T storage is not supported (see Section 3.3, page 9).
- Multiple SSDs are not supported.
- Logical CPU 0 is required for booting a guest; therefore, it must not be down at guest boot time.
- Real-time applications may act differently on a guest or a host that has an active guest.
- Dedicating a CPU to a process (cpu(8)) in the guest or in a host with an active guest may result in sporadic execution of the process.
- Unlike the NSC N130 network adapter , HIPPI and FCA-1 (FDDI) interfaces cannot be shared between the host and guest for multiple, simultaneous TCP/IP connections.

  Note that a HIPPI channel can still be shared for other applications.

- No GigaRing supported network adapter can be shared. You will need a second network adapter (for example, MPN Ethernet card) for your guest.
- If an alternate path is available for a disk device shared by the host and guest, both paths **must** be configured in each system.

5.2 Online diagnostics

Online diagnostics are available on both the host and the guest. However, it is advisable that you run them only on the host because of the following considerations:

- SMARTE

  System Maintenance and Remote Testing Environment (SMARTE) is only supported on the host.

- CPU diagnostics

  Performance degradation may occur with the CPU diagnostics while the guest is active. The CPU diagnostics program (`olsbt`(8)) should not be run on either the host or the guest while the guest is active.

- OLNET

  When using the NSC module of the OLNET online diagnostic network communications program in the UNICOS under UNICOS environment, the following situation may cause OLNET not to function as expected: when UNICOS configures up an NSC channel, the associated NSC adapter's unit address is sent from the IOS back to UNICOS so that it can verify that the adapter's unit address is what was specified in the `hycf` configuration file. This unit address also is used when sending packets between the IOS and the UNICOS process that requested the transfer.

  The notification of the adapter's unit address is sent to only the UNICOS host or guest that requested that the channel be configured up. If the guest side configured the channel up, the host side would not be notified of the adapter's unit address, and vice versa. What this means to the OLNET NSC test suite is that some data transfer operations may fail when OLNET is run from a UNICOS system that did not configure up the channel. For example, the local loopback (LL) test mode does not operate successfully; however, the remote loopback (RL) test mode can be used to test the local adapter by specifying the local adapter's address as the *remote address* parameter.