The UNICOS under UNICOS feature lets a site run two copies of the UNICOS operating system concurrently on a single Cray Research mainframe. One UNICOS system, the *host*, boots normally with most of the system resources. A second UNICOS system, the *guest*, can be started by an authorized user. This second system should be considered a completely **separate** Cray system. A guest system requires its own administration (separate from the host system) and is seen as an independent machine by users and networks.

When planning to run or configure a guest system, you must keep in mind that a guest is a complete second operating system. It requires the same minimal resources as any stand-alone kernel, including mainframe memory and basic file systems.

Both the host and the guest system must contain support for the UNICOS under UNICOS feature.

Note: This feature is not an application running on the host. There are two distinct kernels coexisting on the hardware.

The guest feature is designed for software testing and system upgrading, and not for production.

Although this feature is designed for multiple guests, only **one** active guest is currently supported on a host system.

1.1 Checklist

This document is intended to guide you through the entire process of planning, installing, configuring, and running a guest system. The following is a summary of the steps needed to get your guest system running in multiuser mode.



The following is a checklist of changes you need to make to get a guest system running in multiuser mode:

• Prepare your roots for running as a host or a guest

You will need to change your root file systems so that they can be run as either a host or a guest. This entails creating guest and host versions of selected files (such as /etc/fstab).

- Update your IOS parameter to accommodate a guest system and create a guest IOS parameter file (primarily for the SSD solid-state storage device partitioning considerations).
- Configure your UNICOS under UNICOS feature options

Use the UNICOS Installation/Configuration Menu System to set up your guest system profile (for things like maximum guest memory, CPU percentage, and so on).

- Validate a user
- Boot a guest to single-user mode

- Obtain the guest console and bring a guest to multiuser mode
- Shut down your guest system

1.2 Organization

This document describes the UNICOS under UNICOS feature and is organized as follows:

- Features
- Hardware support
- Software support
- Limitations
- Installation and configuration
- Getting started
- Multiuser mode guests
- Monitoring and analysis
- Troubleshooting
- guest Messages