

# Part III - Jaleo 2.1

## Installation & Setup

### Guide

#### 1. Introduction

This manual is a guide to setup and configuration of Jaleo workstations. It contains the information required to setup a Jaleo system, both from a software and hardware point of view. It has been written with the end user in mind, but unfortunately UNIX system configuration involves some non trivial topics.

**In particular, real time performance disk storage setup for Jaleo PLUS requires some insight in UNIX operation. We do not recommend that inexperienced users attempt to configure Jaleo PLUS systems themselves. Please ask your dealer or distributor for a properly configured system.**

For normal Jaleo configuration, we do assume some basic know how on SGI system usage and configuration.

A number of standard software tools from Silicon Graphics are required for the configuration. Not all details on SGI tool operation can be covered here - it may, from time to time, be necessary to access Silicon Graphics original documentation.

#### 1.1 A Note To Jaleo 1.x and 2.0x Users

Jaleo 2.1 has a new installation procedure. **Do not try to install Jaleo 2.1 using the 1.x or 2.0x installation procedures.** This will definitely fail. Please use the new mechanism as described in this guide.

#### 1.2 Prerequisites and Requirements

##### 1.2.1 System Configuration

To proceed, you need an SGI workstation equipped with at least 96 MB memory (installation on machines with less memory will be possible, but operation of Jaleo will not be very efficient. For training purposes, it may be acceptable, for any serious production work it is certainly not). You must also have a DAT drive available to read the distribution media. Also you may need a CD ROM drive for system software installation purposes.

For Jaleo PLUS configuration, you must have at least an ONYX VTX with two processors and 256 MB RAM. Jaleo will run on machines equipped with Extreme graphics, but this is not a recommended configuration, as real time full res playout is limited to the Sirius board and can not be shown on the SGI monitor. Also, Extreme graphics equipped machines can not easily be

extended as one IO slot is used by the Extreme board, while larger graphics subsystems are connected using special slots.

The ONYX must have 4 SCSI controllers available to access at least 8 identical disk drives. The disk drives can be mounted in an external array, in which case you need 4 SCSI controllers accessible externally, or you can mount half of them in the external drive slots and half of them in an external vault. In this case, 2 SCSI controllers must be accessible externally and 2 internally. The disk array must be capable of providing 42 MB/second for PAL operation with a considerable headroom. For NTSC, demands are only slightly lower.

You also need a Sirius Video subsystem.

In terms of system software, you must have at least:

- IRIX 5.2 or newer

plus the necessary software subsystems to drive video hardware.

Note: Jaleo and Jaleo PLUS have not been tested on POWER Indigo2 and POWER ONYX machines with IRIX 6.0. We do strongly recommend not to use Jaleo on these machines.

### **1.2.2 Required Knowledge**

We assume that you know how to log in into a running SGI system and that you are familiar with the SGI desktop tools. You should know how to

- handle windows, including moving, resizing, iconifying them
- use the system toolchest and its system administration tools

We also assume that you know what a shell window is and that you know basic UNIX commands to change directories, list disk contents and the like.

If you are totally new to Silicon Graphics machines and UNIX in general, we recommend to spend some time with the SGI hardcopy and online documentation first, and/or get an experienced user or your dealer/distributor to help you with installation and setup of Jaleo.

## **1.3 Where to Find More Information**

The most important source to informations about the various system administration tools that may be required during installation or configuration is the Silicon Graphics online documentation. It comes in two flavos:

- Fully fledged online books, with illustrations, hypertext and usually many pages of text.
- Man pages specific to the various tools, containing compressed and quite technical reference information. The manual pages are a standard UNIX mechanism of online information. Though their content is often quite brief, they offer a lot of information to the intermediate or experienced user.

Online information can be accessed after logging in into any account on your SGI workstations.

To access system documentation, press and hold the left mouse button on the help entry of the system toolchest. You will find several items of interest popping up:

- Desktop Help gives way to an easy to use help system explaining the SGI desktop

- Online Books accesses the main system documentation librarian and bookreader
- Manual Pages gives access to the standard UNIX manual page presentation program

As each of the available help systems provides its own easily accessible help system, we will not explain further detail of online help operation here. Where necessary we will give appropriate cross references.

## 1.4 Overview of the Installation and Configuration Process

**Configuration of Jaleo involves some non-trivial access to UNIX functionality. This is especially true for Jaleo PLUS. If you are not an experienced UNIX user, please ask your dealer or distributor for a properly configured system.**

- As a first step, your machine must be prepared for Jaleo operation. This involves setup of a suitable swap space and the installation of the appropriate subsets of system software. It also involves planning disk usage for Jaleo operation.
- Jaleo Software must be installed and made accessible from each account that is supposed to use Jaleo. Additional users can also be set up at any time later.
- A work directory for Jaleo must be set up for each account that is supposed to use Jaleo.
- The main configuration file `.jaleorc` must be set up for every user of Jaleo. This involves preparations for cache usage etc.
- Live Video output for the monitor and single frame windows must be configured if appropriate video hardware is available.
- A raw device must be set up for use with Jaleo. This may involve creating logical volumes depending on your system configuration. **For Jaleo PLUS, the logical volume must contain at least 8 disks connected to 4 controllers for real time performance. Improperly configured disk arrays will prevent real time playback and capture with the system.** Disk configuration is the major configuration difference between Jaleo PLUS and Jaleo composite installations.
- Device configuration files for Disk devices must be configured. This is especially important if a Raw or DiskCache device has been configured in the `.jaleorc` file - without configuring the appropriate devices, Jaleo will not operate properly.
- Device configuration files for IO devices must be configured for your setup. This involves defining the DDR connection you have etc.

