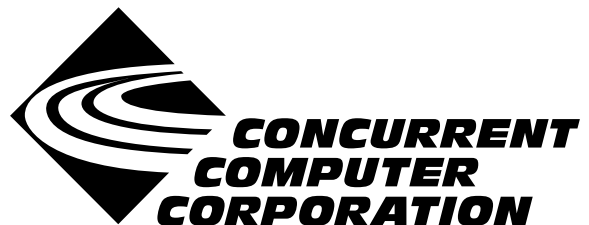


NightBench

Version 2.2 Release Notes (PowerMAX)

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0890514-2.2



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1.0. Introduction

NightBench™ is part of the NightStar™ family of tools and is a graphical user interface for developing software with the MAXAda™ and Concurrent C/C++ compiler toolsets for Concurrent computers running under PowerMAX OS™.

NightBench provides a common work environment for the NEdit editor, MAXAda and Concurrent C/C++ compilers, and other NightStar development tools. NightBench organizes all of the information required for the development of PowerMAX OS applications, ensures consistent, repeatable builds, and provides an efficient interface for editing, browsing, building, and debugging.

2.0. Documentation

Table 2-1 lists the NightBench 2.2 documentation available from Concurrent.

Table 2-1. NightBench Version 2.2 Documentation

Manual Name	Pub. Number
<i>NightBench User's Guide</i>	0890514-070
<i>NightBench Version 2.2 Release Notes (PowerMAX)</i>	0890514-2.2

Copies of the Concurrent documentation can be ordered by contacting the Concurrent Software Support Center. The toll-free number for calls within the continental United States is 1-800-245-6453. For calls outside the continental United States, the number is 1-954-283-1822 or 1-305-931-2408.

Additionally, the manuals listed above are available:

- online using the X Window System™ utility, **nhelp**
- on the Concurrent Computer Corporation web site at www.ccur.com

3.0. Prerequisites

Prerequisites for NightBench Version 2.2 are as follows:

3.1. Software

- PowerMAX OS 4.3 or later
- Élan License Manager™ 5.0.2 or later
- X Window System (X11 Version 6.4.2 or later)
- NightView™ Version 4.4 or later (*for debugging*)
- MAXAda Version 2.0 or later (*for Ada program development*)
- Concurrent C/C++ Version 5.1 or later (*for C/C++ program development*)

3.2. Hardware

- Computer Systems:
 - Power Hawk™ 620 and 640
 - Power Hawk 710, 720 and 740
 - PowerStack™ II and III
 - Night Hawk® Series 6000
 - TurboHawk™
 - PowerMAXION™
- Board-Level Products:
 - Motorola® MVME2604
 - Motorola MVME4604

4.0. System Installation

The NightBench product is installed as a standard PowerMAX software package and utilizes the standard PowerMAX product installation mechanism, `pkgadd` (see `pkgadd(1)`).

The package names are `nbench`, `nbench-ada`, and `nbench-c`.

<code>nbench</code>	contains the language-independent files for NightBench. This package is required. This package depends on the <code>c++-runtime</code> package.
<code>nbench-ada</code>	contains the Ada-specific support files for <code>nbench</code> This package depends on the <code>nbench</code> package.
<code>nbench-c</code>	contains the C/C++-specific support files for <code>nbench</code> This package depends on the <code>nbench</code> package.

NOTE

NightBench will only provide language support for those compilers (MAXAda or Concurrent C/C++) installed on a particular machine.

Please refer to the “Installing Add-on Software” chapter in the *System Administration Volume I* (0890429) manual for further instructions on software installation.

5.0. Overview of NightBench 2.2

5.1. Changes in This Release

In addition to minor enhancements and maintenance, the following changes were made in NightBench 2.2.

5.1.1. Environment-wide Link Options

NightBench 2.2 now supports environment-wide link options in both Ada and C/C++ environments. Environment-wide link options affect all partitions within a given environment. Partitions defined in the environment are linked with these options unless overridden by link options specified for a particular partition.

5.1.2. Target Architecture

NightBench 2.2 allows the user to specify which libraries are included and/or referenced when linking partitions by selecting a target architecture for partitions defined in the environment.

The user must select `nh`, `moto`, or `synergy` for the **Target Architecture** in the **New Environment** dialog when creating a new environment. This will be used as the default target architecture for all partitions in that environment unless otherwise specified.

The user may override the default target architecture for a particular partition using the **Target Architecture** field on the **General** subpage of the **Partitions** page.

If specified for a particular partition or for its containing environment, the partition is linked so that it will execute properly on the specified architecture.

NOTE

This feature is not supported by the Concurrent C/C++ compiler but is provided for expected future functionality in that product.

5.1.3. PowerMAX OS Version

NightBench 2.2 allows the user to specify which libraries are included and/or referenced when linking partitions by selecting the PowerMAX OS version of the target system for partitions defined in the environment.

The user must select either `4.3` or `5.0` for the **PowerMAX OS Version** in the **New Environment** dialog when creating a new environment. This will be used as the default for all partitions in that environment unless otherwise specified.

The user may override the default PowerMAX OS version for a particular partition using the **PowerMAX OS Version** field on the **General** subpage of the **Partitions** page.

If specified for a particular partition or for its containing environment, the partition is linked so that it will execute properly on the specified architecture.

NOTE

This feature is not supported by either the MAXAda or Concurrent C/C++ compilers but is provided for expected future functionality in those products.

6.0. Cautions

6.1. SFNOLIM Kernel Tunable

The `SFNOLIM` kernel tunable should not be set above 1024; doing so may cause NightBench to fail during initialization or when communicating with other tools.

7.0. Direct Software Support

Software support is available from a central source. If you need assistance or information about your system, please contact the Concurrent Software Support Center at 1-800-245-6453. Our customers outside the continental United States can contact us directly at 1-954-283-1822 or 1-305-931-2408. The Software Support Center operates Monday through Friday from 8 a.m. to 7 p.m., Eastern Standard time.

Calling the Software Support Center gives you immediate access to a broad range of skilled personnel and guarantees you a prompt response from the person most qualified to assist you. If you have a question requiring on-site assistance or consultation, the Software Support Center staff will arrange for a field analyst to return your call and schedule a visit.

