Real Time Programming : Changes/Errata for Irix 5.3

General Points of Interest

- Checked with Webster, ‘Real Time’ is in the dictionary as known topic. Hence, the all course title pages were changed to remove the hyphen.
- Course revision number set to *5.3-1.0*
- Course date reset to *February 6, 1995*

Module 1 : Intro

Notes :

- As requested, the course schedule has been removed from the student manuals, and is only in the instructor manual.

Lab :

- No lab for this module.

Module 2 : Process and System Overview

Notes :

- This chapter has been renamed.
- This chapter has also been reordered. There has been no information removed, but there isn’t a one-to-one correspondence with the previous revision of the chapter.

Lab :

- Corrected order of lab steps and the corresponding answers in the instructor notes.

Module 3 : Real Time Concepts

Notes :

- Only spelling corrections.

Lab :

- No lab for this module.

Module 4 : REACT Features

Notes :

- Removed slide on IRIX 3.3.X Caveats.
- (*Pages 4-29 to 4-32*)Added several slides on external interrupts.

Lab :

C Source:

- No changes required for *REACT Features Lab 1*.
- No changes required for *REACT Features Lab 2*.

- No changes required for *REACT Features Lab 3*.

Fortran Source:

- No changes required for *REACT Features Lab 1*.
- No changes required for *REACT Features Lab 2*.
- No changes required for *REACT Features Lab 3*.

Module 5 : REACT Examples

Notes :

- Only spelling corrections.

Lab :

- No changes required for *REACT Examples Lab 1*.
- Modified `burn` so that it works with large memory configurations. The `malloc()` was failing on large memories.

C Source:

- No changes required to `ast` answers.

Fortran Source:

- No changes required to `ast` answers.

Module 6 : Multiprocessing

Notes :

- (*Page 6-5*) Removed bullet mentioning requiring that use of `usinit()`, `usmalloc()`, etc. require linking with `-lmpc`.
- (*Page 6-41*) Expanded *Quick Reference* Table.

Lab :

C Source:

- No changes required to *Multiprocessing lab*.

Fortran Source:

- No changes required to *Multiprocessing lab*.

Module 7 : Frame Rate Scheduler

Notes :

- This is a new feature, and hence a new chapter.

Lab :

C Source:

- This is the first run of this lab. Let's hope for the best.

Fortran Source:

- Not presently available.

Module 8 : Multi-chassis Programming

Notes :

- Only spelling corrections.

Lab :

C Source:

- No changes required for *Multi-chassis Lab*.

Fortran Source:

- No changes required for *Multi-chassis Lab*.

Module 9 : Graphics

Notes :

- Only spelling corrections.

Lab :

C Source:

- No changes required for *Real-Time Graphics Lab.*

Fortran Source:

- No changes required for *Real-Time Graphics Lab.*

Module 10 : Timing and Profiling Basics

Notes :

- Replaed references to `pixstats` with new `prof -pixie` examples

Lab :

C Source:

Fortran Source:

Module 11 : Program CPU Tuning

Notes :

- Replaed references to `pixstats` with new `prof -pixie` examples

Lab :

- Update from `pixstats.`

C Source:

Fortran Source:

Module 12 : Program Memory Tuning

Notes :

- Replaed references to `pixstats` with new `prof -pixie` examples

Lab :

C Source:

Fortran Source:

Module 13 : Program I/O Tuning

Notes :

- Spelling corrections
- Reworded some bullets a little, but nothing major.

Lab :

Module 14 : Program Graphics Tuning

Notes :

- Replaed references to `pixstats` with new `prof -pixie` examples

Lab :

- No changes required.

Module 15 : System Tuning Introduction

Notes :

- No changes required.

Lab :

- No `~/realtime/burn` ... assume that we'll use the one in `tools`.

Module 16 : System Performanance Analysis

Notes :

- Spelling corrections only

Lab :

- No `~/realtime/burn` ... assume that we'll use the one in `tools`.

Module 17 : System Performance Tuning

Notes :

- Spelling corrections only

Lab :

- No `~/realtime/burn` ... assume that we'll use the one in `tools`.

Appendix A : Fortran Source Code

Notes :

- Removed pages containing only titles and no code.