DOCUMENTATION PROJECT HISTORY

Leonard P. Bucuvalas
LenB@PrismNet.com / (512) 913-5339

Technical Documentation Development
and
Documentation Project Management

This document describes a few of the documentation projects I have been responsible for over the course of my career. In most documentation development environments, I was responsible for establishing, tracking, and maintaining the documentation development schedule using a variety of tools including: FrameMaker, Excel, Word, Primavera Team Player, and Power Point.

Metrowerks - A Motorola Corporation (Austin, TX)

I was assigned as an on-staff senior technical writer.

The primary product developed by Metrowerks is ***CodeWarrior***. The CodeWarrior product is a GUI-based software development application that incorporates an integrated development environment. This enables developers to code their applications while simultaneously running an associated program - such as EMACS. CodeWarrior provides all the essentials for coding in C, C++ and Java, CodeWarrior for Windows supports multiple platforms and features an ANSI/ISO C++ compiler.

I was responsible for documenting an analysis tools suite, and CodeWarrior iterations targeted at the gaming and desktop sectors. The documentation development environment was diverse and dynamic, providing me with the opportunity to further enhance my technical skills as a documentation developer.

- **Analysis Tools Documentation for the PlayStation2 Platform -** The analysis tools developed by Metrowerks engineering enables developers to graphically analyze and then optimize the efficiency of their code. I was tasked to provide both **manuals** and **help files** for both the PlayStation2 and GameCube platforms. The manuals described how the tools operated and how to use the GUI environment. It was required of me to learn and run the tool set to ensure the accuracy of each procedure that was incorporated into the manuals.
- **CodeWarrior Documentation for Desktop and GameCube -** I was also responsible for providing documentation to support the desktop sector and the Nintendo GameCube platform. The target-specific manuals are called *targeting* manuals by Metrowerks. I developed the ***Targeting GameCube*** manual and updated the compiler information for the ***Targeting Windows*** manual. I was also responsible for developing an **HTML-based error reference system help file** for the desktop version of CodeWarrior. Each error message is defined providing a detailed description of its meaning to the developer, and provides either a fix or a work-around to ensure the developer's continued productivity.

To develop these help files and manuals, I not only relied on input from engineering, but I also ran the applications in a simulated development environment to ensure the accuracy of all procedures and screen shots.

To further facilitate and shorten the development cycle, I used WebWorks Publisher 2000 to develop conversion filters that converted Frame Maker manuals into Compressed HTML (CHM) format.

In addition to my responsibilities as a technical documentation developer, I was also responsible for ensuring the full documentation production for each software release. Each release featured a full documentation suite consisting of PDF files, CHM files, and help files.

Motorola Computer Corporation (Austin, TX)

I was assigned as a contract senior technical writer to develop a documentation for the MCUez™ product suite.

The MCUez application is used by a software engineering environment to develop applications in assembly language, and to debug assembly and C applications based on Motorola's 8- and 16-bit microcontrollers. The MCUez development toolset includes a configuration shell, assembler, linker, and debugger.

It was my responsibility to **manage and lead a team of technical writers** to develop documentation for each of the following tools in the MCUez product suite.

- **ezASM -** The assembler features a graphical interface an generators for S-records, map files, and list files. User-controlled listings and support for most Motorola microcontroller sets are incorporated.
- **ezLink -** The linker also features a graphical user interface and is used to merge an application's object files into a simple "absolute" file that can be loaded into the target system.
- **ezDebug -** The debugger provides assembly and source-code debugging using Motorola's ELF/DWARF 2.0-compliant object format debugger. I was responsible for the documentation development of this product.

As a team manager, I was called upon to:

- Ensure the accuracy of all documentation
- Conduct weekly project team meetings
- Interface with Motorola engineering development in Austin, Texas
- Interface with engineering development in Switzerland
- Provide regular reports on the documentation development schedule

Digital Equipment Corporation (Maynard, MA)

I was assigned as an on-staff senior technical writer.

I began my stay with Digital Equipment Corporation (DEC) collaborating on various documentation projects. As my successes were noted, I was given ownership of the *Telephone Management System* project. I was responsible for the full design and development of both the owner's manual and the installation guide. In a **Society for Technical Communicators** competition, I was awarded the **Award of Achievement** for the Telephone Management Systems Owner's Manual.

All the while, upper management was noting the advent of the personal computer system and launched full-scale development of their own proprietary personal computer system - *The Professional 300 Series PC*.

The Professional 300 Series PC was based on the J11 microprocessor and the DC365 Control Gate Array. The J11 microprocessor is a hybrid integrated circuit that incorporates a PDP-11 processor, a memory management unit, and a floating point unit. The DC365 Control Gate Array interfaces the J11 microprocessor to the rest of the system providing functions such as: direct memory access; bus timing and arbitration; and power-up data.

I was tasked to **manage and lead a team of four writers, two editors, and two illustrators** to develop a two-volume, 1200-page, hardware engineering design reference manual. Volume 1 provides engineering design data on the motherboard areas of the Professional 300 Series PC. Volume 2 provides engineering design data on all associated peripheral sub-systems.

Technical reviews were coordinated between four separate engineering development sites among five individual engineering departments. All scheduling information was tracked using milestone and Gant charts. Each phase of the project was described in a project development plan that included all scheduling information as well as budget projections.

Including my management responsibilities, I was responsible for developing various sections including the processor section.

I was also responsible for developing sections on the Telephone Management System and the Extended Bitmap Module. The Telephone Management System converted digital data to analog. This enabled two people to be discussing a project while simultaneously viewing project data on their terminals. The Extended Bitmap Module provided video control using two 8263 video gate arrays.

Stratus Computer Corporation (San Jose, CA)

I was hired as an on-staff senior/lead technical writer.

I was assigned to develop a system administration manual that described how to use the Stratus FTX Operating System. FTX is an implementation of the AT&T System V, Release 4 UNIX package.

The administrator manual was divided into two volumes and accurately describes each aspect and phase system administration for the Stratus hardware platform.

The documentation process was implemented by rewriting original source documentation as provided by UNIX System Laboratories (USL), and by documenting all added-value services that were coded into the UNX source code by Stratus Engineering.

Each phase of the documentation process included:

- Engineering interviews
- Rewriting engineering specifications and transcription of engineering interviews captured on microcassette devices
- Testing of all user-oriented commands

In the course of developing the system administration manual, we set up a test platform in the QA lab, running FTX, and mirrored the Technical Publication group. At the end of each week and once during the week, we would run system administration procedures to ensure their operability on the Stratus hardware platform.

All documentation was developed using the following embedded documentation formatting command languages: troff and tbl. The text editor used was vi.

Advanced Micro Devices (Austin, TX)

I was hired as a contract senior technical writer.

My task was to develop a hardware reference manual that described AMD's implementation of the Intel 486 microprocessor.

At the time, AMD had a license to redesign the 486 using Intel's 486DX chip mask. Along with the 486, AMD developed a companion chip that provided AT-standard peripheral functionality including:

- Diskette Controllers
- Parallel Port Interface
- UART functionality
- Serial Port Interface
- Real-time clock signal generation
- System power management
- PCI Bus Interface

The manual describes, in great detail, the system architecture providing a focus on memory organization, system-level interrupts, and on-board register organization. Also included is information on the PCI Bus and ISA Bus architecture.

Including my responsibilities as a writer, I was also tasked to design and develop the Frame Maker templates that were used for the manual.

All graphic illustration was done using various packages such as Micrographics Designer and Freehand.