

Building World Class IT teams for you!

# IT, AIX, Solaris, UNIX Training

# About C.E.I.

C.E.I. is a full service UNIX training and consulting company, with over 20 years experience in training and programming in the UNIX environments. C.E.I. began working with UNIX in the 70's before AT&T / Bell Laboratories commercially released UNIX to North America.

### **Our Training Philosophy**

We have found that many companies are not willing to openly talk about their technical needs in a classroom environment where their fellow students might be the competition. Therefore, we operate on a one client per class philosophy.

## **Our Most Popular Course**

• CU115 UNIX Boot Camp (3 Days)

This hands-on course teaches the participant how to use the programming constructs of the Born shell language to write scripts that may be used to simplify or automate tasks. It is intended for programmers of other Operating Systems coming to UNIX for the first time and anyone needing to learn how to read and write Born shell scripts of a simple to medium level of complexity.

# C.E.I.

Corder Enterprises International

sales@corder.com http://www.corder.com 77 North High St. Columbus, Ohio 43230

### **USA Locations**

Atlanta, GA	Dallas, TX	Orlando, FL	
Charlotte, NC	Denver, CO	Phoenix, AZ	
Chicago, IL	Detroit, MI	San Diego, CA	
Cincinnati, OH	Houston, TX	Tampa, FL	
Cleveland, OH	Indianapolis, IN	Washington, DC	
Columbus, OH			

# http://www.corder.com

#### On Site vs. Off Site

On Site (Your Facilities) / Off Site (Our Facilities)

**On Site Training** can save you money since you are paying on a per instructor basis instead of a per employees basis. On Site training can be beneficial if you have adequate facilities to offer the training and can resist interrupting the class. However, in case of an emergency the students are still in your building. Moreover, any class notes and/or programs would be housed on your computers.

**Off Site Training** gives a better opportunity for your employees to learn. Staff members are less likely to interrupt an Off Site class. The student will be on-time to classes due to the lack of interruptions. Off Site local training gives you the best of both worlds. The student is removed from the distractions of their work environment but you don't encounter the travel expenses. However, Off Site Training tends to cost more than On Site Training.

1 (866) 521-1776

### 4 Week UNIX Boot Camps

C.E.I. offers intense 4 week UNIX Boot Camp is designed for the company and/or department that is migrating to UNIX. It is designed for Managers, Programmers, and System Administrators:

Managers will benefit from understanding the day to day requirements of their staff. Moreover, they will learn the terminology of the UNIX environment and have a suffi cient knowledge bank to lead their UNIX IT teams.

Programmers - Some programmers need more than a working knowledge of the UNIX environment from which they will develop their thoughts and ideas. They will need a keen understanding of the UNIX operating system itself. The C.E.I. UNIX Boot Camp will benefit them in assisting them to develop soupier code more closely integrated within the UNIX platform.

System Administrators, whether coming to UNIX for the fi rst time or simply implanting a new flavor of the UNIX environment one will benefi t from the C.E.I. UNIX Boot Camp. It is an intense 4 to 5 week training program, depending on OS, designed to bring your staff up to seed in the short possible time.

Week	UNIX Boot Camp	AIX	Linux	Solaris
(1a)	UNIX for Programmers	CU300	CU300	CU300
(1b) <sup>1</sup>	Fundamentals of UNIX	CU001	CU001	CU001
(2) <sup>1</sup>	Advanced UNIX Tools	CU214	CU214	CU214
(3) <sup>1</sup>	System Administration	CA611	CL030	CS502
Opt.	Advanced System Admin.	CA612		
(4)	UNIX System Security	CU005	CU005	CU005

Courses within the UNIX Boot Camp<sup>1</sup> were selected after review by SMEs (Subject Matter Experts) from both Corder Enterprises International and SAGE Certifi cation. Therefore, successful completion of the C.E.I. UNIX Boot Camp can assist you and your staff in becoming cSAGE certifi ed.

#### Solaris Certification Prep-Course Coming Soon!

C.E.I. is developing Sun Solaris Certifi cation Preparatory Courses for Sun<sup>2</sup> Microsystems' 310-011 and 310-012 exams.

2. This program nor any of the materials contained herein is associated in any manner with Sun Microsystems.

#### **Customer Comments**

Qwest was on an old FDDI network and they desperately needed to upgrade to a switched Gigabit network. In addition, they wanted to convert all of the IP's to a new schema which would allow for better performance and growth. All of the employees said that it could not be done and Jim Corder was brought in to lead the project. He rapidly assessed the situation, personally developed scripts to go out and discover what was on the network, and then came up with a plan to implement the new network. He involved both management and employees in the project and fostered a "can-do" philosophy. This led to this supposedly "impossible task" to be completed almost flawlessly and with no impact to the end users. Jim Corder did a fantastic job and I would highly recommend him to run any project.

> Jim Power Sr. Engineer Qwest Communications Inc.

C.E.I.'s technical training is top of the line. But their leadership training has shown me how to take technical tools to solve real business problems.

> Jon Hogue Developer Nationwide Insurance

I have found C.E.I.'s trainers to be extremely knowledgeable of UNIX system administration. They also exhibited sound working knowledge of business operations. C.E.I. provided thorough insight into customer IT issues, and was always concerned with the customer's bottom line. C.E.I. trainers are very adept at out-of-the-box thinking, many times creating solutions that saved the business units time and considerable expense. They displayed skill at analyzing complex issues and translating them into terms the intended audience could easily grasp. This proved very benefi cial to business units that had an understanding of the data requirements, but were unsure of the possible implementations. C.E.I.'s direction and management style helped set my career on solid footing.

> Dana L. Ritter Disaster Recovery Team Nationwide Insurance

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<sup>1.</sup> Course curriculum for cSAGE Certifi cation

#### Shell Programming

# • CU002 UNIX Bourne Shell Programming (4 Days)

This course teaches attendees how to use the Bourne shell to design and develop command language programs. Topics include an overview of the shell and it's functions, command line processing, control constructs (for, while, case, etc.), conditional branching, quoting, positional parameters, command substitution, pipelines, use of built-in shell commands, functions, sub-shells, signals, traps, shell programming effi ciencies, and debugging. This course is applicable to all releases of UNIX which have the Bourne shell.

#### • CU003 UNIX Korn Shell Programming (4 Days)

The korn shell implements job control, command line editing, aliases, and new built-in commands and functions in addition to those features found in the bourne shell. Topics include an overview of the shell and it's functions, control constructs (for, while, case, etc.), conditional branching, quoting, positional parameters, command substitution, pipelines, use of built-in shell commands, job control, command line editing, alias mechanisms, functions, sub-shells, signals, traps, shell programming efficiencies, and delagging. This course is applicable to all releases of UNIX which support the Korn shell.

#### • CU019 UNIX C Shell Programming (4 Days)

The C shell is the optional user interface on Berkeley UNIX systems and implements features such as job control, command line editing, aliases, and additional built in commands not found in the standard Bourne shell. Topics include an overview of the C Shell and it's functions, control constructs (foreach, while, switch, etc.), conditional branching, quoting, positional parameters, command substitution, pipelines, use of built-in shell commands, job control, history and alias mechanisms, sub-shells, shell programming efficiencies, and debugging. After completion of this course the attendee will be able to use the C Shell to design and develop complex command language programs.

#### • CU103 Korn Shell Programming (3 Days)

This hands-on course teaches the participant how to use the programming constructs of the Korn shell language to write scripts that may be used to simplify or automate tasks.

#### • CU115 UNIX Boot Camp (3 Days)

This hands-on course teaches the participant how to use the programming constructs of the Born shell language to write scripts that may be used to simplify or automate tasks. It is intended for programmers of other Operating Systems coming to UNIX for the first time and anyone needing to learn how to read and write Born shell scripts of a simple to medium level of complexity.

#### Misc. UNIX

• CU011 UNIX Tools (3 Days)

In this course the attendee will learn how to use more than 50 UNIX commands and their various options and will then be able to interface them together using shell programming constructs. This is an extensive hands-on course and is supported by the excellent UNIX Desktop Guide to Tools textbook by Peter Holsberg. Attendees are encouraged to bring example problems to class so they can be assisted with developing correct solutions. The overall objective of this course is to provide the attendee with the knowledge about UNIX commands so that they can select the appropriate commands for many types of data processing applications.

• CU007 VI Screen Editor (Basic) (1 Day)

This course is designed for current UNIX users who need to upgrade their ed (line editor) skills or for those who will only be using vi as part of another application (Informix, etc.). It covers the same vi topics found in CU001 - Fundamentals of UNIX and the material in either of these courses is considered the prerequisite to the Advanced vi Editing course. Topics include the fundamental vi commands, moving around within a file, adding and inserting tat, rearranging text, global substitutions (ex sub-mode), and setting up the editing environment.

#### • CU008 VI Screen Editor (Advanced) (2 Days)

This course teaches how to use the more advanced features of the visual (vi) text editor. Topics include a brief review of the fundamental vi commands, searching/goto commands, ex (line editor) interface, defi ning macros, and customizing the editing environment.

#### • CU012 UNIX awk Programming (2 Days)

AWK is a pattern matching and processing utility which is excellent for data base scanning, processing, and conversion. Because AWK uses 'C' language syntax, it is also an excellent tool for 'C' program prototyping. This course teaches attendees how to use AWK to perform these functions. Examples of data base manipulation using AWK will be provided and attendees will develop AWK programs to perform these functions.

#### • CU005 UNIX System Security (5 Days)

This course discusses UNIX security and how system managers and administrators can implement security measures on UNIX. The focus of the course is on the inherent security vulnerabilities commonly found on UNIX systems and how to correct them. Examples are presented which illustrate how to insure a high level of security confi dence against unauthorized users from accessing the system. The common methods used to penetrate UNIX systems, gain unauthorized root access permission, become another user, plant trojan horses or spoofs, and other ways of circumventing the normal system protection are disclosed. Each attendee will receive detailed audit checklists and a diskette containing UNIX shell and C programs which will assist in performing security auditing and risk analysis.

#### • CU006 UNIX Security for Users (1 Day)

This seminar is designed to make all users aware of the UNIX security vulnerabilities and show them how to prevent an unauthorized user from compromising their login account or data. The security features which are provided as part of the operating system are first discussed. Then, some of the ways in which unauthorized people may use to gain access to a UNIX system or another users fi les and directories are discussed. Nat, the ways of preventing unauthorized access are described in detail, along with exact descriptions of each UNIX command and the way it is used. Each attendee will be provided with a self-assessment checklist and sample programs which will allow them to perform a personal audit on their account. The seminar concludes with a discussion of the in login and/or fi les.

#### • CU001 Fundamentals of UNIX (4 Days)

This course introduces attendees to the UNIX Operating System and provides the initial knowledge and hands-on experience to get them started using UNIX quickly and effi ciently Subjects covered include an overview of operating system concepts and UNIX architecture, how to log on and off, UNIX system documentation, communications and status inquiry commands, the structure of the UNIX fi le system, fi le and directory manipulation commands, how to use the vi (visual) text editor, the use of the shell as a command interpreter and programming language, and the use of over 25 commands for data manipulation.

# • CU030 Advanced UNIX Programming (5 Days)

This course is designed for system and application programmers, system analysts, and engineers responsible for supporting a UNIX operating system and/or for system and application software development. The course provides detailed discussions and handson examination of the structure of a UNIX system, the physical and logical fi le system implementation, process control mechanisms, I/ O subsystem, kernel operations, memory management, interrupt handling, and interprocess communications. Throughout the course the information presented is related to the attendee through: 1) the execution of common UNIX user/administrator commands; and, 2) writing, compiling, and executing example 'C' language programs which examine and display internal system data structures on a live UNIX system.

#### C.E.I. is proud to be a:



#### AIX (some curses have the same title but different content)

#### • CA601 Fundamentals of AIX (4 Days)

This course introduces attendees to the AIX Operating System and provides the initial knowledge and hands-on experience to get them started using AIX quickly and effi ciently Subjects covered include an overview of operating system concepts and AIX architecture, how to log on and off, AIX system documentation, communications and status inquiry commands, the structure of the AIX fi le system, fi le and directory manipulation commands, how to use the vi (visual) text editor, the use of the shell as a command interpreter and programming language, and the use of over 25 commands for data manipulation.

#### • CA602 AIX System Administration (5 Days)

Attendees of this course will learn how to perform most day-today system administration tasks. Topics include system start-up and shutdown, adding/deleting users, installing terminals, modems, and printers, backing up and restoring system and user data, application package installation, security, and general administrative advice. A diskette containing helpful System Administration utilities and guidelines is also provided to each attendee.

#### • CA603 AIX Network Administration (2 Days)

This course provides knowledge and hands-on experience necessary to configure and maintain a TCP/IP network environment. Topics include an overview of basic networking concepts, checking for proper installation of hardware and software, names, purpose, and format of each network control file, configuring the network, setting up network and/or remote file systems, and setting up the Network Information Service (formally, Yellow Pages).

#### • CA611 AIX System Administration (5 Days)

This course combines lectures and hands-on labs to teach the participant how to manage the AIX operating system. It includes information on basic system administration, as well as including topics that are AIX-specifi c that would be of interest to administrators coming from other platforms. The course may be customized to include topics associated with AIX on the SP platforms.

# • CA612 Advanced AIX System Admin. (3 Days)

This course provides follow-on training for students who have completed the AIX System Administration class. The topics in this course go beyond the basics to include tasks involving security, the ODM, problem solving and performance.

#### CA613 AIX Network Administration (3 Days) This course teaches the skills necessary to confi gure and manage TCP/IP, NFS, NIS and DNS.

#### Solaris

• CS501 Fundamentals of UNIX SVR4 (4 Days)

This course introduces attendees to the UNIX System V Release 4 Operating System and provides the initial knowledge and hands-on experience to get them started using UNIX quickly and efficiently Subjects covered include an overview of operating system concepts and UNIX architecture, how to log on and off, UNIX system documentation, communications and status inquiry commands, the structure of the UNIX fi le system, fi le and directory manipulation commands, how to use the vi (visual) text editor, the use of the shell as a command interpreter and programming language, and the use of over 25 commands for data manipulation.

CS502 Solaris System Administration (5 Days) Attendees of this course will learn how to perform most day-today system administration tasks. Topics include system start-up and shutdown, adding/deleting users, installing terminals, modems, and printers, backing up and restoring system and user data, application package installation, security, and general administrative advice. A diskette containing helpful System Administration utilities and guidelines is also provided to each attendee.

#### CS503

#### 03 Solaris Network Admin. (2 Days)

This course provides knowledge and hands-on experience necessary to confi gure and maintain a TCP/IP network environment. Topics include an overview of basic networking concepts, checking for proper installation of hardware and software, names, purpose, and format of each network control fi le, confi guring the netwick, setting up network and/or remote fi le systems, and setting up the Network Information Service (formally, Yellow Pages).

#### Solaris Certification Prep-Course Coming Soon!

 CS500 Introduction To Solaris 8 Operating Env. This course introduces attendees to the Solaris 8 Operating Environment and provides the initial knowledge and hands-on experience to get them started using UNIX quickly and effi ciently Subjects covered include an overview of operating system concepts and UNIX architecture.

## CS501 Basic System Administration Certification Preparation

This course introduces students to the Solaris 8 Operating Environment by providing instructor-led, interactive lectures, hands-on exercises, and review questions. Students will become proficient in basic g a Solaris 8 OE administration by installing and confi guring an operational Solaris 8 OE system which they will use throughout the course, starting up and shutting down the system, maintaining fi lesystems, adding and removing user accounts, and installing printers. Students will demonstrate completion of the course requirements by passing an end of course exam. This course is designed to provide assistance in preparing to take the Solaris 8 OE Basic System Administrator Certifi cation Exam 310-011.

# CS502 Advanced Solaris 8 OE System Administration

This course teaches students how to effectively administer and maintain Solaris systems. A good system administrator must not only be technically qualified, but must also be able to manage system resources to keep users working efficiently In addition to teaching students how to perform basic system administration tasks, this module shows students how to effectively balance user requirements with the technical aspects of the Solaris system. Students will demonstrate completion of the course requirements by passing an end of course exam. This course is designed to provide assistance in preparing to take the Solaris 8 OE Advanced System Administrator Certific cation Exam 310-012.

#### CS503 Solaris Network Administration

This comprehensive course provides instruction on Solaris network administration and security. Students will be introduced to networking terminology and will learn how to administer Solaris TCP/IP networks through lectures and hands-on exercises.

#### On Site (UNIX)

Costs are based on a per day instructor fee, plus expenses.

Expenses include, but not limited to: travel, hotel, car, meals, manuals, equipment/system rental, facilities rental, etc. Fixed Expenses are due even if the class is canceled!

