



Technical UNIX User Group

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newsletter of the
Technical UNIX[®]
User Group

This month ...

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Book Reviews

A Day in the Life of a Systems Administration

Question From the Floor

November Minutes

January Agenda

Late Breaking News...
Next Meeting to be held at
UNISYS
See ANNOUNCEMENT for details

Thoughts From The Editor

By Susan Zuk

Happy New Year!!! Hope the holidays passed joyously and you are all ready for a new year.

This month's newsletter includes book reviews and a shell programming section. The first review discusses a book on shell scripting using the Bourne shell. For those of you needing some helpful hints this might be the book you require. The second review deals with system administration. The reviewer likes this book as well as the first one. He also states that this book is well written and is useful for experienced as well as novice users. Take a look at these reviews to see if you could have any interest in them.

The section called "A Day in the Life of a Systems Administrator" deals with a question on writing menus using the Bourne shell. This question and answer article should be read to gain some helpful hints. Have you been writing any shell scripts lately? If you have why not send in your favorites to be included in the next newsletter?

Our newest article called Questions From the Floor, asks if anyone knows of a script for iNET2000 and envoy access. Let us know for the next newsletter and give Derek Hay a call if you can give him a hand.

Finally I will close with a Fortune (or MisFortune) submitted by Gilles Detillieux. This fortune is very relevant as we approach the date of January 15th.

Old soldiers never die. Young ones do!

Let's hope we don't have to worry about this coming true. Take care and I hope you and your families have a healthy and prosperous New Year.

Bye for Now!!!

P.S. How about a New Year's resolution: Submitting at least one article in 1991?

Group Information

The Technical Unix User Group meets at 7:30 pm the second Tuesday of every month, except July and August. The newsletter is mailed to all paid up members 1 week prior to the meeting. Membership dues are \$20 annually and are due at the October meeting. Membership dues are accepted by mail and dues for new members will be pro-rated accordingly.

The Executive

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ANNOUNCEMENT...

Meeting Location:

The January meeting location will be provided by UNISYS Canada, Inc. at the UNISYS Building, 1000-1661 Portage Avenue.. Upon entering the building you will then be required to sign-in. Please sign-in using "TUUG" as the agency represented.

Book Watch

By John Kelly

Reprinted from *lusr/group CommUNIXations* December 1991

Book : UNIX Applications Programming: Mastering The Shell

Author : Ray Swartz

Publisher : Sams; 452 pages

A few years ago, Ray Swartz wrote a series of articles in *UNIX World* about programming business applications. This book is an extension of that series and concentrates on the UNIX toolbox concept and tools available to the programmer. It focuses on the Bourne shell, reasoning that it is the only shell available on all true versions of UNIX. The book is intended for experienced UNIX users.

After explaining some key concepts, Swartz details the UNIX command processor and how UNIX processes each command. Moving on, he explains the concept of UNIX filter and how commands affect and are affected by the pipeline.

The book then discusses *grep*, *sed*, *awk* and *sort*. The chapter on regular expressions goes into full detail, unlike many books, which add only a short section at the end. They are, after all, used in most UNIX tools. The book also shows how to extend commands and use the pipeline to its fullest extent as well as the other pipeline commands. (*wc*, *cut*, *unique*, *join*, *pr*, *tee*, *tail*, and *tr*).

The next section is the heart of the book, covering Bourne shell programming. Starting with the creation of simple scripts, the author works through all the functions and capabilities of the shell. Chapters are devoted to the case statement, logical operators, the *for* loop and shell variables. Good examples for writing interactive shell scripts - something most UNIX programmers do at one time or another - are included. The book details how shell variables really work and how to control the process environment. A final chapter in this section deals with *exec*, *hash*, *wait* and shell options. If you use the Bourne shell for programming, this section can be a great help.

Having started by explaining UNIX tools and the Bourne shell, Swartz lastly turns to creating applications, exploring the finer points of *awk* programming. This part is useful for both the beginner and the experienced programmer. It shows how to set up a mail merge and how to create your own UNIX tools.

Finally, the author explains the core of an accounts receivable system. This provides a good example of the true power of shell programming. The book concludes with a Bourne shell quick reference, a regular expression quick reference and the answers to the hands-on exercises that appear throughout the book.

This is a solid, well-written book on programming applications using the Bourne shell. It includes plenty of examples, and the author anticipates problems the reader will stumble on and takes the time to explain their solutions.



Book : A Practical Guide to the UNIX System (second edition)

Author : Mark G. Scobell

Publisher : Benjamin/Cummings; 692 pages

With so many people jumping on the UNIX bandwagon these days, there is a need for a general-purpose UNIX user's guide for those who already have some computer experience. The new edition of *A Practical Guide to the UNIX System* fills that need. The author calls his book "practical" because he uses tutorial examples and a "guide" because he takes you from logging in to system administration. The book covers AT&T's System V and 4.3BSD at a brisk pace.

The book is divided into two major sections, the first of which covers the UNIX system itself. Sobell starts with the history of UNIX, then quickly moves to logging on and off the system. Early on he points out those little things that seem to hang up beginners, such as shell, special control characters, changing a password and quoting characters. By the end of the first chapter the reader has heard of *vi*, *cat*, *more*, *pg*, and *rm*.

Chapters 3 and 4 cover the UNIX file structure, creating and removing directories, communicating with other users, displaying on-line documentation and system access permissions. Chapter 5 examines the shell. The author does a nice job illustrating command syntax and how the shell processes it by displaying graphically steps the shell takes when interpreting input. The chapter also explains standard input and

output, the concept of the terminal as a file, redirection, pipes and file names with special characters like ? and [].

These first five chapters (116 pages) compress most of the information a user needs to work effectively with UNIX. It amounts to the fastest "jump start" to UNIX I have ever read, written in clear style that manages to fit in all necessary information.

Thereafter, the pace slows somewhat as the author covers vi and nroff in detail. Then he presents chapters on programming in the Bourne shell and C shell. Chapter 10 covers programming tools, the C language, make and the source code control system (SCCS).

The last chapter of the book's first section covers system administration, giving information that is accurate but rather sketchy. I wish that the book spent less time with nroff and more time with systems administration. More examples here would also help.

The second part of the book is really a reference section, which covers most of the major UNIX utilities. Each utility is described, its applicability to System V and BSD noted, arguments and options listed and finally several examples given. I rate highly this section of the book. Convenient and easy to read, it makes a good desk reference. Appendix A covers the Korn shell, Appendix B explains regular expressions and a glossary is provided for the novice user.

Overall, this is an excellent introduction to UNIX for someone who already is familiar with at least one computer operating system. The graphics and illustrations work well but the typeface is hard on the eyes. I wish it had a hard cover because everyone keeps borrowing it from me.

John Kelly is a consulting services specialist with Prime Computer who has worked with UNIX for several years.

A Day in the Life of A Systems Administrator

By Derek Hay & GillesDetillieux

Question:

I am about to try to learn about shell programming, and have nowhere to really start for a novice. What I want to do is write a menu shell, a simple interface for my users that is run as they login. It will first tell them about the system (eg. date cal who) then display any mail for them and their calendar. Then the main menu will start up. Each option from the menu will run a simple 3 line alias file which will start up vpix and the appropriate DOS batch file, or run the mail facility with the "to person" appended to the command.

Do you know of any menu shell that may be floating around that I can look at?

Attached is my start, but as you can see it only works as far as the read command.

```
# menu shell for FACS Records Centre
# May 17, 1990
# executed from the users .profile
#
#
date;echo;who -u -H;echo
echo "hit <RETURN> to check your mail";read a
mail
echo "hit <RETURN> to check your calendar";read a
echo "CHECKING YOUR CALENDAR";calendar
echo;echo;echo;echo;echo;echo;echo;echo;echo;echo;
```

```
echo;echo;echo;echo;echo;echo;echo;echo;echo;echo;
echo
"*****"
echo
"*          MENU          *"
echo
"*****"
echo
"*          *"
echo
"* 1 - Storage System    5 - Word Processing  *"
echo
"*          *"
echo
"* 2 - Vault System     6 - Mail System    *"
echo
"*          *"
echo
"* 3 - Sales System     7 - Calendar      *"
echo
"*          *"
echo
"* 4 - Office Support   8 - UNIX Command  *"
echo
"*          *"
echo
"*****"
echo
"*          *"
echo
"*          Please enter a number or type exit  *"
echo
"*          *"
echo
"*****"
read a
#if a
#   1  storage
#   2  vault
#   3  sales
#   4  office
#   5  word
#   6  mail
#   7  calendar
#   8  unix
#   exit exit
#fi
```




Technical UNIX® User Group

TUUG Business Meeting Minutes

Tuesday, November 13, 1990

President's Remarks:

Our new president, Eric Carsted, chaired his first meeting, and discussed some of his plans for the group. Some ideas mentioned include setting up a "mini-conference," bringing in a big name speaker, and attracting corporate sponsors.

Treasurer's Remarks:

The financial statements for the '89-'90 year appeared in the November newsletter. For the new year, 24 out of 43 past members have renewed to date.

Membership Secretary's Remarks:

Our new membership secretary, Darren Sampson, will start a membership drive, initially phoning past members who have not renewed.

Newsletter Editor's Remarks:

Please submit any technical questions you may have (a la round table) for a Q&A column we would like to start.

Meeting Coordinator's Remarks:

Kirk Marat, the new meeting coordinator, requested suggestions and/or offers for topics and/or locations for future meetings. A possible topic suggested at the time was C program structuring, covering separate compilation, use of header files, declarations vs definitions, use of "make", etc.

Secretary's Remarks:

The position of secretary is still vacant. Gilbert Detillieux is filling in for the time being.



Technical UNIX® User Group

Agenda
for
Tuesday, January 8, 1991
7:30pm
UNISYS
1000-1661 Portage Avenue

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| 1. Round Table | 7:30 |
| 2. Business Meeting | 8:00 |
| a) Minutes of November's Meeting | |
| b) Membership Secretary's Report | |
| c) Newsletter Report | |
| d) Treasurer's Report | |
| 4. Break | 8:30 |
| 5. Presented Topic | 8:40 |
| Coherent - a UNIX-like O/S for 286/386 PCs | |
| Presented By Kevin McGregor | |
| 6. Adjourn | 9:30 |