Venture Crew 369

The Adventure

VOLUME 6, NUMBER 2, February 1999

Scout Sunday Court-of-Honor!

Calendar of Events:

2/27/99	Maple Sugar Festival
3/6/99	Airforce Museum, Dayton
3/10/99	Exploring Committee Meeting
3/28/99	The Adventure Articles are due
3/30/99	Rappelling Money and Registration due
3/31/99	Exploring Recognition Applications are due
	Post President of the Year
	Post of the Year
	Post Project of the Year
	Post Service Project of the Year
	Exploring Hall of Fame Award
	District Award of Merit
	Spurgen Award
4/13/99	Flower Sale Begins
4/16/99	Recognition Dinner Registration forms due
4/17/99	Rappelling Outing
4/20/99	Venturing Training St. Peters Worthingto [No Meeting]
4/23-25/99	Campout
4/25/99	The Adventure Articles are due
5/8/99	Exploring Recognition Dinner
5/15/99	Venturing Training Chief Logan
5/22/99	Garage Sale
5/23/99	The Adventure Articles are due
5/30/99	Exploring Canoe Trip Registration Due
6/18-20	Exploring Canoe Trip
6/28-7/3	Summer Camp $175.00
9/13/99	First Nighter Week
11/2/99	Election Reporting
12/18/99	Silver Beaver Applications are due
12/24/99	National Young American Applications due

Quote of the Month

The secret of Leadership is to consider the team more important than the product. Remember, a good team can develop many products.

The art of developing and maintaining a strong team is worth more than all the gold in the world. If you know of someone that can build strong teams grab ahold of them as tight as you can!

Congratulations

James D. Corder

I would like to congratulate Stephen Potter on achieving his Blue Cord. In the past 5 years unit has presented only 4 Blue Cords. There is only one Green Cord and only one Gold Cord recipient in Ohio. We also presented Mr. Drake, Mr. Harvey, Nathaniel P. Graham, Ho-Sheng Hsiao, Thomas R. Lowers, and Bill Schwanitz with their Red Cord. Jon Schlegel achieved his Red Cord last year.

Normally we can give the Engineering Exams twice a year, February and August. We have petitioned the Guild to allow us to give the exam a third time in 1999, April or May. They have agreed due to our expected growth in 1999 that we can on the following conditions: That we double in size and build the new classrooms. The blue prints for the new room are at the lumber yard as we speak. They are developing us a materials list and a quote of the cost of goods.

We will go to the City of Columbus for biliding permits once we have the materials list.

Web Status, For February

Hits	*Pages*	*Section*
20605	2809	Bible
18325	2369	Venturing
38028	5924	Scouting
9421	2332	Exploring
48617	7435	ExpNews
28346	2530	Links
135344	12942	Post
17325	2618	Calendar
51714	4007	Members
30251	2848	Adults
2826	615	Toadies
9095	1054	Youth
17088	2013	Program
936	382	Project

Venture Code

I believe that American's Strength lies in her trust in God and in the courage and strength of her people

I will, therefore, be faithful in my religious duties and will maintain a personal sense of honor in my own life.

I will treasure my American heritage and will do all I can to preserve and enrich it.

I will recognize the dignity and worth of my fellowmen and will use fair play and goodwill in dealing with them.

I will acquire the venturing attitude that seeks the truth in all things and adventure on the frontiers of our changing world.

Post Finances

Topic	Need	On-Hand
The Adventure		-$150.00
Floor Fund	$2,500	$2,500.00
Electrical Fund	$2,500	$2,500.00
Room Fund	$3,800	$0.00
Flag Fund	$1,000	$0.00
General Fund		$236.82
Pizza		*+$9.61*
Registration		*+$14.00*
Awards		*-$64.75*
Blue Print Copies		*-$12.63*
Total		$183.05
Grand Total		**$5,183.05**

Up-an-Coming Crew Expenses

12/01/99 Crew Charter	$30.00
12/01/99 Crew Insurance	$175.00
12/31/99 Registration	$335.00
Monthly The Adventure	$75.00

Up-an-Coming Member Expenses

06/01/99 Summer Camp	$175.00
09/01/99 Registration	$25.00

exp369@post369.columbus.oh.us

Mailing to this reflector grants 369 the uncompensated and unrestricted usage of your mail/posting in its [but not limited to] WebPage, Newsletters, books, flyers, etc.!!!

Our Principals:

1) Honor before all else.
2) The difference between a winner and a loser is that the winner tried one more time.
3) K.I.S.M.I.F.

Our Creed:

Exploring: Enthusiasm, Energy, & Excellence.

Venture Crew 369:

Venture Crew369 was chartered on December 31, 1994 to the Reformation Lutheran Church.

Venture Crew369 specializes in UNIX for Programmers while emphasizing a deep theme of Engineering Computer Information & Science through an Entrepreneurial Spirit. Membership in Venture Crew 369 is open to young men and women between the ages of 14 [and in high school] and not yet 20. Annual Membership fees are $25

Our Web Page:
http://post369.columbus.oh.us

The views in this NewsLetter are strictly those of Venture Crew 369 and they do not necessarily represents the views or opinions of the Reformation Lutheran Church or the Boy Scouts of America and/or the Simon Kenton Council.

Our E-Mail Addresses

Adults Members:

James D. Corder(E)	jimcor@corder.com
David J. Alden	Consultant
Herb Docken	Institutional Representative
Andy Drake	apdrake@freenet.columbus.oh.us
Todd Edwards	edwards.290@osu.edu
Dennis Fox	Associate Advisor
Rick Gauger	Committee Member
Terry Jones	Committee Memeber
Ralph Maurer(E)	Committee Chairman
Tom Niedzielski(E)	Committee Member
Roy Niedzielski(E)	CommitteeMember
Stephen Potter	spp@colltech.com
Joe Harvey(E)	joharve4@vt.edu

Youth Members:

Neil A. Coplin	zephyr-1@columbus.rr.com
Matthew Corner	blumoose@infinet.com
Jason B. Cunnyngham	PacoElTaco@aol.com
Nathaniel P. Graham	ngraham@iwaynet.com
Ho-Sheng Hsiao	hshsiao@freenet.columbus.oh.us
Alexander Gilly	schorf@gmx.net
Thomas R. Lowers	tom@wclcorp.com
Jesse Kass	jeskas@apexmail.com
Joe Prinz	thrak@m5.columbus.rr.com
James J. Scherer(E)	Skyshark44@aol.com
Jon Schlegel(E)	jschlege@vt.edu
Bill Schwanitz	type_O-@columbus.rr.com
Dave Scruby	-

Post-Toadies:

Opening	Page
Ian Jones	Toadie
Tyler Skirtich	Toadie
Daniel Johnson	plebe
(E)	Eagle Scout

STRONG VALUES STRONG LEADERS CHARACTER COUNTS

Venturer Crew 369
P.O. Box 307218
Gahanna, Ohio 43230
United States of America

We are looking for a new sponsor for The Adventure, Can you help?

Artificial Intelligence in Computer Games

Jesse Kass jeskas@apexmail.com

Modern graphics and sounds approach a level of realism that was unthinkable in the days of Pong. Computer gaming now consists of a broad range of genres, with selections for people in all walks of life. The artificial intelligence in video games, however, has only recently begun to see dramatic changes.

In video games, the field of artificial intelligence is sometimes thought to control the computer-controlled opponents. This is true, but artificial intelligence covers more than just that. In a sense, every object in a game is controlled by artificial intelligence of some sort. If a door is to automatically open when someone approaches or if a trap is to activate when someone touches it, then there must be some code to govern that object's behavior. Given the current popularity of real-time strategy games, artificial intelligence may become even more important. To achieve any level of tactical sophistication, games like Warcraft must have some significant AI controlling each individual unit.

Traditionally, game AI is rule-based. The computer evaluates the game situation, compares that situation to a set of possible conditions, and then generates the appropriate action. This form of AI is often used for a few reasons. This kind of AI is easy to test and is based on traditional programming paradigms. The main problem with this form of AI is that it is predictable, given the same situation, it will always perform the same actions. This makes the game easier to beat and reduces the replay value.

One easy alternative is to use fuzzy logic. Actions are determined by both the conditions and a random element. Given the same situation, it is only probable that the same actions will be performed. Because game play is more unpredictable, there is more of a reason to replay the game. Games like Close Combat 2 and Rainbow 6 showcase this form of AI. A fuzzy rules-set is used to dictate the behavior of each individual character. The effect is remarkable, one can never be certain how one's troops will behave under fire. There is much more reason to play these game's scenarios over and over again than there is with their more traditional predecessors.

Another approach is to use an evolutionary AI. This form of AI utilizes either neural-networks or a genetic algorithms. They are adaptive. They, in a sense, learn over time. They alter their rules set based on what was successful or unsuccessful in the last game. This kind of AI is difficult to program, so it hasn't be used too much so far. Oidian System's Cloak, Dagger, and DNA uses a genetic algorithm to guide the computer opponent's decisions. Over time, the opponents become stronger and are tailored to a player's style.

The future of AI seems bright for the consumer. Across the board, more resources are being used to develop game AI. According to one survey, from 1997 to 1998 the percent of development teams with full-time AI programmers almost doubled. The amount of CPU time devoted to AI calculations increased by a similar amount. The trend seems to away from hard-coded rules-based AI and towards more flexible AI engines. Gamers should expect a richer gaming experience in the future.

Readers interested in learning more about this subject are advised to check out the web site **http://concentric.net/~swoodcoc/ai.html**. It contains a wealth of game AI related material.

Unit UP-Date

James D. Corder

It looks like we will finish the first course in late April or early May. The second book "Intermediate UNIX for Programs" is coming along well. The committee hasn't decided if the course will be on UNIX Shell Programing or Perl Programming.

Because enough youth have passed the course, and since we will be building several new classrooms 369 will be able to double or even triple its size. We are currently interviewing high school programs to see if they live up to our standards. Worthington and Westerville South look as if they have potential students. If the committee agrees the schools will be offered seats in the 1999/2000 program. Of course, Upper Arlington stills qualifies.

The Trip to UNIX

Dennis Foxdennis@axom.com

What should you expect in an operating system? Should you have to reboot more than 2 times per week? Before I ran into an operating system called UNIX I just didn't know. I was a Microsoft clone that thought that point and drool was the only way that it was to be. It seems that Bill Gates has everyone conned into believing that crashing is normal and it isn't a defect in the kernel that makes you have to reboot; but we know better. And it is for this reason that I have changed teams. I have come to expect more. I expect to be able to turn my computer on and leave it on for as long as I like without worry. I should be able to do more than one process at a time without significantly losing performance. I think that I have found what I am looking for with UNIX. It also seems that corporate America as well as most of the providers on the Internet have found that as well. With billions of dollars as well as irreplaceable data at stake maybe they know something that we should know as well. Stability is the way to go.

Designing a simple personal backup system

Jon Schlegel *jschlege@vt.edu*

Almost everyone has lost data on one occasion or another. Due to a hardware malfunction or simply carelessness. Backing up is something you know you should be doing but when you are using a personal computer you rarely have the time; plus where do you put the backup? You can't leave it on the same disk as the original, you probably shouldn't leave it on a device within the computer at all. Especially if you have any really important or non-replaceable material. One of the best solutions is to export the data over a network to a remote location. For complex, or huge backup sets there a number of free and commercial utilities available. Sometimes you just need something to backup a few choice directories; or a small portion of your file system. Also you want the archive in a simple to work with format. This walk through will help in designing an easy to use and modify backup system for yourself. It has the following features:

Easy to implement. Uses a single shell script.

Uses common Unix utilities.

Exports the archive to a remote location using FTP.

Encrypts the archive (optional)

Preparation

To implement this you need an organized file system so that choosing directories to backup is easy. You also need a basic understanding of shell programming. Finally you need an FTP account with a disk quota large enough to hold your compressed and encrypted backup archive.

Doing the job

Start by creating a directory to hold your backup script and its support files. Within that directory you'll want to start a text editor and write the first part of the script. This example script will backup /home and its sub-directories. It also encrypts the archive with pgp v2.6.2. If you don't want to encrypt the archive, or you have a different version of pgp, change the script as needed. Finally it uploads the archive to ftp.example.org. (*Note: Any line - except the first - preceded with a # is a comment and does not need to go in the script.*)

```
#!/bin/sh
#Starts the bourn shell.

TARBALLNAME=backup.tar.gz
#Specifies the filename for your backup
      archive.

PGPNAME=backup.tar.gz.pgp
#Specifies the encrypted archive's
      filename. (Optional)

EXCLUDE=backup.exclude
#Specifies the file that holds filename
      and directory names
#you don't want included in the tarball.

echo "Backup started at: " `date`
cd /home

tar -czvX $EXCLUDE -f $TARBALLNAME *
#This archives and compresses every-
      thing within /home except
#those files and directories listed in
      $EXCLUDE.
/usr/local/bin/pgpe -r "Your Name"
      $TARBALLNAME
#This encrypts the archive with your
      public key so to decrypt
#you must have your private key and
      password. (Optional)

rm $TARBALLNAME
#We don't need this file since it's
      encrypted version exists.
ftp ftp.example.org
#Connect to the ftp site for uploading
      the archive. This is
#all we need to do. We will use a ftp
      macro to actually log
#in and upload the file.
rm $PGPNAME
#Remove the encrypted file now that it
      is at the remote location.

echo "Backup finished at: " `date`
```

Setting up the FTP macro

Most unix ftp programs support macroing. We are depending on it for this script for without it we don't have such an easy way to transfer the backup archive. The trick lies in setting up your .netrc file. This is where you'll define what you want the ftp client to do when it connects to specified machines. When you create this file make sure it is chmod 600. If it is readable by anyone by you the ftp client won't allow it to work, for security reasons. When you define the macro in the file, make sure you call it 'init'. The init macro is run upon connection to the site. Don't leave any blank lines between the machine definition to the exit command. **See .netrc**

.netrc

```
machine ftp.example.org     # Define who to connect to
login MyUserName            # Set your username
password MyPassword         # Set your password
macdef init                 # Define the macro called 'init'.
cd /BackupDir               # Change to the directory
binary                      # Make sure you are in binary mode.
put backup.tar.gz.pgp       # Upload the file.
exit                        # Exit the ftp client.
```

Finishing up

At this point we have a working, and simple backup system. The last thing we need to do is automate it. Place it in your daily or weekly, or monthly scripts. Make sure you redirect output to a log file, and errors to e-mail. If you set it up as a cron job, the cron daemon will automatically send standard error to e-mail. All you have to do is redirect stdout to a log file.

This isn't a perfect system of backing up. It simply overwrites old backup archives instead of staggaring it so you can go back more than a day, and it doesn't care if files havn't changed since the last backup. What this is, is a fairly simple system that can be created quickly with everyday utilities on almost any unix system. It can be expanded on to become a more complete backup system with only slightly more in depth knowledge of shell scripting.

My First Sun box

Bill Schwanitz
type_o-@columbus.rr.com

For quite some time now I have been looking for my own personal workstation. The biggest problem I encountered was with the prices. The machines I wanted would cost me nearly $4,000.00 used (Sun Ultra 1 170E) So I had to settle on something a bit more affordable.

My first sun box is a Sun SparcStation IPC. It was made in 1995 and has 24MB of ram, about 1.3GB of disk space, two frame buffers, a cdrom drive and an 8 mm tape drive. All for $250.00

This machine is defiantly not a screamer, in fact it is quite slow. Do I care? No! The purpose of this machine is to experiment with Solaris and the Sun architecture.

Due to a dead NVRAM, I cannot install Solaris on the box. The person I purchased the machine from was very nice and is getting me a new chip. The NVRAM, as I understand it, contains the Host ID#, MAC address, and boot strap directions.

For those interested, the first operating system I installed on the box was OpenBSD 2.4. It was the only thing which did not seem to care about the NVRAM. I guess this is since OpenBSD was made for to work on PCs too, it could use the more advanced information that the SunOS and Solairs operating system does.

Scout Sunday Court-of-Honor

James D. Corder

With over on hundred in attendance and more food than all can eat the Scout Sunday Court-of-Honor was a huge success.

To honor the youth that have advanced in rank, the founder of Scouting Lord Robert Stephenson Smyth Baden-Powel, and our heavenly father we gather together the first weekend of February for a 24 hour celebration. We begin with a pot luck dinner on Saturday Evening, Scout Sabbath. A overview of the year gone by, and the presentation to those of new ranks.

I am please to say that we presented 5 Red Cords and 1 Blue Cord. The cords represent the Venturer's placement from their Engineering Examination. There are 300 possible points. 80+=Red, 160+=Blue, 260+=Green, and a perfect score of 300=Gold. There is only one Gold Cord in Ohio.

Once the parents leave the building tremendous fun begins!

The evening is started off with the Dart Ball Competition Finalist. The game is played like baseball. However, one throws darts at a baseball diamond instead of balls. Congratulations go to Mr. Potter's team: Jason B. Cunnyngham, James, Scherer, & Bill Schwanitz!

Around midnight we send out for massive quantities of pizza where by the Venturers and Toadies can gorge themselves. Of course the computers are dragged out. Many of the Venturer's brought their own personal computers. Senior Venturers aid the new comers in converting their system from Micosoft to Solaris. The computer games continue until 6:00 in the morning.

Smart Venturers got some sleep. 6:00a.m. the church is cleaned up. Breakfast is cooked and cleaned. 8:00a.m. Scout Sunday begins with Sunday School. 10:00 we attend Church Services. The wise Venturers stay awake. Those that does off get several sharp elbows in there side and a personal visit from the Pastor during services. Noon, the parents return so we can pour their youth into their vehicles.