Downloaded from www.artofhacking.com

FREE PAY TV "LEGALLY"
BY: *THE MAGICIAN*

There are presently many companies which provide sports, movie first run movies, major sporting events, and assorted specials on a pay TV nonscrambled basis. Some of the largest are Home Box Office, Showtime, Cinemax etc. Subscribers pay a monthly fee either to the cable company which they are hooked into, or to the broadcaster himself when no cable is available (ie. Channel 58 in NYC)

Pay TV over a cable can usually be easily decoded using a home built box. This practice is illegal, (Though hard to trace !), and you could be taxed up to $25 for theft of services.

There are however, three "legal" ways to get pay TV at no charge. They are:

1.) Satellite TV
2.) On the air UHF decoding (ie. Channel 68)
3.) Multipoint Distribution Systems (MDS)

Lets first talk about Satellite TV. HBO, Showtime etc. each have a central location in the U.S. where all of their shows originate. In order to get the shows to the many cable systems throughout the world, they beam the signal up to a satellite in synchronous orbit around the earth at approx. 22,300 miles above the equator. These satellites, the most popular are the SATCOMs and SBSs (both having multiple satellites in orbit) then beam back the programming in a omnidirectional pattern towards earth at around 4GHz, allowing cable companies many large dish earth stations to receive them.

It is possible for anyone at home to also receive these programs via a home earth station. Because the satellites transponders are relatively low power, a great deal of sophistication is needed for the received signal.

Due to present day technology limits on the signal to noise ratio of transistors used in the low noise amplifier (LNA) at earth stations, a minimum of a 10 foot in diameter reflective type dish is necessary. The cost of the dish, plus associated electronics puts the total price of the earth station at several thousand dollars, even if you build it yourself.

You will get a perfect picture, and for those in areas were TV reception is not good, or not available, this might be what you need. In suburban areas however, you could pay for an awful lot of legit cable TV fees for the money, and not have to worry about your dish antenna blowing over in a storm. Also, HBO has announced that soon they are going to start encoding their satellite transmissions scaning you will only see garbage on the screen if you have not subscribed to HBO, or someone will come out with a decoder soon thereafter.

There are some strong legal questions as to whether reception of pay TV via home earth station or other methods presented in 2 and 3 above are within the law.

Section 605 of the Federal Communications Act of 1934 forbids the "unauthorized interception or use of radio signals" however it specifically excludes "radio communication which is broadcast or transmitted by amateurs or others for use of the general public".

Since pay TV is broadcast for viewing by the public, reception of the signals appears to be totally legal. Cable operators and pay TV operators sorely disagree with this. They contend that the signals are part of their internal network not for the public, and thus reception is illegal.

So far, the public seems to be winning the arguments in the courts, selling tickets to see the movies you are intercepting (Watch would be blatantly illegal) no one will probably bother you.

Another method of getting pay TV for free "legally" is through the use of on the air decoders for UHF channels which broadcast pay TV scrambled for subscribers with rented special decoders attached to their sets. Last year Radio Electronics magine published a excellent article on how to build one for yourself ! There are only several stations which provide this service in the country, therefore the decoder boxes will not work in many areas.

TAP
Room 603
147 W. 42 St.
New York 10036

MA BELL IS A CHEAP MOTHER

TAP

OCTOBER 1982 No. 78

Perhaps the best and cheapest way to get free pay TV is through the use of signals transmitted by multipoint distribution systems (MDS). In many areas there are several basic cable networks to cover the entire region. It would be quite expensive for each to buy their own satellite earth stations in order to provide customers with pay TV. Instead, someone (the most popular being Microband Associates) sets up an earth station and then retransmits the pay TV signal on 2.1 GHz microwave. The signal is usually omni directional, and is received at the local cable company with special microwave receivers, and then sent out to customers.

An MDS downconverter which will receive these signals and convert them to channel 2 or 3 on your home TV can be built for approx. 50 to 75 dollars, or bought complete for approx. 100 dollars. Articles describing how to build MDS down converters have appeared in the home magazine as well as other publications. An excellent book on the subject which gives complete schematics is "Microwaves & Video", a handbook for video pirates, signal snatchers and home theasts". By Tom Howell and published by Howell Publications, it is available in most stores.

There are two basic types of antennas used for MDS downconverters. An approx. 3 foot dish, or a 3 foot spiral. both work well, but the dish is better.

Since the locations of MDS transmitters are not real known, following this article is a list of all presently licensed MDS stations in the U.S. If you live within 45-50 miles or so of these areas, and have the antenna pointed in the way (like a big mountain !) you should be able to receive MDS and have a perfect picture.

Personally, as we'll be MDS receivers can be found at many electronics stores in major cities. If you can't find one, just pay an issue of CQ magazine (a ham radio mag.) and you will see loads of companies that sell them to you mail order.

Happy viewing, and if you have any questions, comments etc. send them to us at TAP C/O Mr. MAGICIAN

LONGVIEW, MS- Call Signs of MDS TRANSMITTERS

ALBANY, NY	- KPA28	40, 12, 6, 2 - WQG79
ANAHEIM, CA	- KPL79	ROSEVILLE, CA - WSL33
ANCHORAGE, AK - KPO83		ROSEVILLE, VA - WSL33
ATLANTA, GA	- KQB83	SACRAMENTO, CA - WSL33
BALTIMORE, MD	- KPA94	SAGINAW-BAY CITY, MI - KQB83
BOSTON, MA	- KSL33	SAN FRANCISCO, CA - KPP97
BURLINGTON, IA	- KRA62	SAN JOSE, CA - KPP97
CHICAGO, IL	- KGP49	SANTA BARBARA, CA - KPP97
CLEVELAND, OH	- KQQ66	SANTA MARIA, CA - KPP97
DENVER, CO	- KPZ32	SAULT STE. MARIE, MI - KRV54
DETROIT, MI	- WJK22	SCHENECTADY, NY - KSL33
HONOLULU, HI	- KPA43	SEATTLE, WA - KSL33
HOUSTON, TX	- KQF76	SPRINGFIELD, MA - KPA79
INDIANAPOLIS, IN - KPZ33		TAMPA, FL - WUP43
JACKSONVILL, FL- KQD63		TUCSON, AZ - WLH78
KALAMAZOO, MI - KRA29		URBANA, IL - KSK94
LAS VEGAS, NV - KRA85		W. PALM BEACH, FL- WPZ99
LOS ANGELES, CA- KPP79		WASHINGTON, DC - WUP93
LOUISVILLE, KY- KQA85		
MIAMI, FL - WLJ79		
MILWAUKEE, WI - KRA27		
MINNEAPOLIS, MN- KPB99		
NEW ORLEANS, LA- KRA24		

THE UNIX Security Problem
by
Fred Steinbach

In the May/June issue of TAP, number 75, Simon Jester writes about a new method of breaking into computers, a method which was developed on the UNIX system by a group of students at U.C. Berkeley.

After a little thought, and some talking with other nerds hackers (I, too, am one), we managed to find out what the method was. Simon is right - it should work on just about any system, and it probably does have security measures anything in their power.

The idea revolves around a nasty premise - the one that most intelligent terminals have a feature called an "transmit page" function. This function is rarely used, but it is very important to this idea. It sends everything after most commands you send to be executed onto the other person's terminal, after sending the "line: answer" (which shows up on his terminal). Then send the command "ESC z ESC" (ESC is the escape key) to the computer. So it looks to the computer like he just typed those commands.

In essence, then, what will this is good for is for sending commands from other people's terminals. But if the other person whose terminal you're having do the sending is the (super) super-user (the system operator), then you can do anything you want to any account/file. So, if the following appears on your screen - the 29's (super-user's) terminal - where you're root (another name for the SU) would be set to nothing:

```
<DEL> the DEL character code, to break
        him out of whatever he's doing)
mv /etc/passwd    (edit the password
                   file...)
1       (goto line #1, the entry for root)
d       (delete the line)
i       (insert - add a new line...)
root::blahblah.....
        (tells "me" that you're done with
         the text you're adding)
wq      (write and quit)
logout  (log you off from system)
```

In the lines above, "root::blahblah..." should be the first line of the /etc/passwd file (obtained by typing "cat /etc/passwd" and following it with return), without the encrypted password, which is between the first and second colons. The "mv /etc/passwd" is the UNIX command for the editor known as ed.

Anyway, the "logout" command logs the super-user out, and then you should log out and try to log in with the account "root". If all has gone well, the system will not ask for a password - you will be logged in as root. Be sure to then use the "passwd" command to change the password to something other than nothing.

I see I have forgotten how to set stuff onto root's terminal. Well, there are a number of ways to do it. Perhaps the best is to create a file with a text editor that has the necessary control characters and commands in it. For sake of argument, let's say the file name that has all this is "text". Once you have this info in the file, type

```
cat text | /dev/<root's terminal>
```

This will accomplish what we want, without leaving your name on root's screen, but will not work if root has set it so that he can't receive messages from other terminals. If this is the case, one must use the "mail" method as outlined above.

There are other UNIX tricks I will write about in the future, so if you have any questions or comments, please write to me c/o TAP.

Alarms (???)

Continuing on the subject of silent alarms, we came to secondary phone terminals. This is the use of a device known as an automatic fone dialer, at the telephone of the alarm the fone dialer is put on the line and a prepurchased number is dialed, and the fone dialer sends a prerecorded voice message. Some fone dialers allow up a prerecorded voice hysterically screaming help, so house is being ripped off," and also states the parcels name and address. (actualy it should do to prevent false alarms.)

To defeat this setup, we cut the wires on the fone line. Fiveing incoming calls and lifting extension fones will not always work because some units are equipped with a bell tone resistance system that places the call on hold.

There is also a radio transmission system that sends a digital signal to a central office via a small transmitter. There are very difficult to defeat and you would not encounter one unless you were breaking into a very secure place.

The last I knew, some of the more advanced systems you must answer " Yes the Fuck fone it all work together?" Sara's law. Every system has a control box. This box is the brain of the system. All sensors, switches, and computer lines go to the control box. Usually there are one or two terminal strips. This is the place to disable the alarm. It is useful that you track because some of these strips carry 120 V house current. Test of the strips are labled. To disconnect the alarm, disconnect the battery (make sure) and then disconnect the power (never on a direct fone transmission system) 3.) disconnect all the sirnality devices or 4.) short all the sensor direct sources and cut the wires leading to the sensors.

In general if you must attack an alarm system first figure all the ways to defeat it. To do this you need information on the system. Visiting the place of business is a good idea. Sometimes writing the company on a bogus letter head requesting info on that alarm system and having friends with a company number act all good ways to get information.

The "fix" thing now is the portable fone alarm. It is a cheap ultrasonic sensor connected to a built in horn, and almost every radio shack, Lafayette, Allied, and other electronic store carries. The Protector, Big Brother etc. but they are all the same thing. An unusually novel way to thwart these things is to put a small radio in the room and when entering blow the thing away.

The last thing I remember how to penetrate to your area (thats why you allocated your metal right ?. Is just walk up to the thing and mash it with a sledge hammer.

A new development is called burglar alarm with a 24 hour per day monitoring service. They are activated by a total wire. If you get caught by one of these just wait a few minutes for the guy to show. If you did disconnect the line, he'll call the police. Then you have about ten minutes to get out of there. A useful place such as the nearest bathroom. This concludes this series of articles, good luck!

The Stainless Steel Rat

CN/a JUDAS GERARD

CN/A is the acronym for Customer Name/Address; these bureaus exist so that companies can look up the name and/or address of a customer with only the telephone number or service number. All customers' telephone numbers are not listed "unlisted" or "unpublished" numbers, but they are listed in the CN/A bureaus. Telephone people on about 1000% of the time use the CN/A number for the sake of the target number!

This trick is just given by Residence Service Center in Texarkana, Tx so don't a customer on hold and tell them that you have made a rather insistent call to (212) 555-1212. So I need the customer's name and address. That was (212) 555-1212.

Below are the service bureau numbers, and in (nearly) the local business listings published either in the white or yellow pages of the phone book. Only one CN/A is completely listed in Local Area(s). Others are limited exclusively to TAP.

To close this tutorial, allow me to warn you that the telephone company frowns on people who experiment with the CN/A and ANI/LOCIDENT's. Be informed that the is an ex-person in California who was prosecuted for using the CN/A number to convince him to commit his suicide. Remember, you have been warned. (Signed) GERARD.

201 - (201) 434-7070	512 - (512) 445-5600	615 - (615) 320-6600	
202 - (202) 331-1000	513 - (513) 421-9900	616 - (616) 471-8111	
203 - (203) 789-7600	514 - (514) 397-8200	617 - (617) 743-7777	
204 - 947-0442	515 - (515) 281-5000	618 - (618) 233-1000	
205 - (205) 323-1100	516 - (516) 454-1000	619 - (619) 231-1212	
206 - (206) 281-3800	517 - (517) 487-2750	701 - (701) 237-5050	
207 - (207) 797-2750	518 - (518) 462-2996	702 - (702) 322-2996	
208 - (208) 336-3500	601 - (601) 355-0400	703 - (703) 821-2000	
209 - (415) 495-3000	602 - (602) 957-2200	704 - (704) 372-0404	
210 - (210) 349-5744	603 - (603) 627-7711	705 - (705) 675-9200	
212 - (212) 509-5858	604 - (604) 682-2996	706 - (706) 324-0256	
213 - (213) 629-5600	605 - (605) 336-0400	707 - (707) 546-4020	
214 - (214) 960-5721	606 - (606) 678-4000	708 - (708) 250-9000	
215 - (215) 440-5600	607 - (607) 734-3300	709 - (709) 722-8000	
216 - (216) 464-2345	608 - (414) 481-2340	712 - (712) 277-1295	
217 - (217) 529-5050	609 - (201) 474-7070	713 - (713) 961-2000	
218 - (218) 727-6810	610 - (215) 640-5600	714 - (714) 540-8400	
219 - (219) 423-2300	612 - (612) 338-0755	715 - (715) 344-1234	
220 - (614) 464-2345	613 - (613) 237-1450	716 - (716) 852-2345	
224 - (312) 640-1000	614 - (614) 464-2345	717 - (717) 657-4300	
225 - (504) 387-5900	615 - (615) 320-6600	718 - (718) 895-1000	
228 - (601) 948-5351	616 - (616) 774-8236	719 - (719) 473-7676	
231 - (313) 961-8000	617 - (617) 482-1776	801 - (801) 531-2000	
234 - (216) 464-2345	618 - (618) 233-1000	802 - (802) 864-5511	
239 - (305) 599-1000	619 - (619) 231-1212	803 - (803) 254-4100	
240 - (301) 340-1000	701 - (701) 237-5050	804 - (804) 649-2345	
248 - (313) 858-1000	702 - (702) 322-2996	805 - (805) 963-1234	
251 - (205) 438-1000	703 - (703) 821-2000	806 - (806) 762-1651	
252 - (919) 758-1000	704 - (704) 372-0404	807 - (807) 623-5555	
253 - (206) 572-2000	705 - (705) 675-9200	808 - (808) 521-4811	
254 - (817) 761-2000	706 - (706) 324-0256	809 - (809) 721-1234	
256 - (205) 539-1794	707 - (707) 546-4020	810 - (810) 239-4555	
260 - (219) 432-2000	708 - (708) 250-9000	812 - (812) 424-2345	
262 - (414) 547-8800	709 - (709) 722-8000	813 - (813) 229-1234	
267 - (215) 440-5600	712 - (712) 277-1295	814 - (814) 453-4500	
270 - (502) 926-8000	713 - (713) 961-2000	815 - (815) 963-1234	
272 - (315) 474-1500	714 - (714) 540-8400	816 - (816) 842-1420	
276 - (606) 326-2600	715 - (715) 344-1234	817 - (817) 332-1234	
281 - (713) 961-2000	716 - (716) 852-2345	818 - (818) 240-1000	
283 - (513) 421-9900	717 - (717) 657-4300	819 - (819) 569-9811	
285 - (707) 546-4020	718 - (718) 895-1000	901 - (901) 761-2345	
286 - (313) 961-8000	719 - (719) 473-7676	902 - (902) 421-1810	
287 - (313) 259-9300	801 - (801) 531-2000	903 - (903) 744-4511	
289 - (416) 362-2511	802 - (802) 864-5511	904 - (904) 224-8494	
292 - (313) 259-9300	803 - (803) 254-4100	905 - (905) 677-1234	
293 - (313) 259-9300	804 - (804) 649-2345	906 - (906) 225-1234	
294 - (408) 296-1200	805 - (805) 963-1234	907 - (907) 561-5454	
295 - (717) 657-4300	806 - (806) 762-1651	908 - (908) 232-1234	
296 - (605) 336-0400	807 - (807) 623-5555	909 - (909) 793-4111	
297 - (213) 629-5600	808 - (808) 521-4811	912 - (912) 233-5959	
298 - (907) 561-5454	809 - (809) 721-1234	913 - (913) 273-1782	
301 - (301) 340-1000	810 - (810) 239-4555	914 - (914) 761-2345	
302 - (302) 571-1000	812 - (812) 424-2345	915 - (915) 533-1000	
303 - (303) 629-8888	813 - (813) 229-1234	916 - (916) 920-0200	
304 - (304) 340-9800	814 - (814) 453-4500	917 - (917) 464-2345	
305 - (305) 599-1000	815 - (815) 963-1234	918 - (918) 584-9111	
306 - (306) 359-7000	816 - (816) 842-1420	919 - (919) 834-1000	
307 - (307) 635-1121	817 - (817) 332-1234	920 - (920) 437-1234	
308 - (308) 236-1234	818 - (818) 240-1000	921 - (921) 441-1010	
309 - (309) 674-1121	819 - (819) 569-9811	922 - (922) 784-9111	
310 - (310) 640-1000	901 - (901) 761-2345		
312 - (312) 640-1000	902 - (902) 421-1810		
313 - (313) 259-9300	903 - (903) 744-4511		
314 - (314) 241-2345	904 - (904) 224-8494		
315 - (315) 474-1500	905 - (905) 677-1234		
316 - (316) 267-3855	906 - (906) 225-1234		
317 - (317) 635-1121	907 - (907) 561-5454		
318 - (318) 221-2345	908 - (908) 232-1234		
319 - (319) 366-0900	909 - (909) 793-4111		
320 - (612) 920-2500	912 - (912) 233-5959		
321 - (305) 599-1000	913 - (913) 273-1782		
323 - (213) 629-5600	914 - (914) 761-2345		
324 - (504) 387-5900	915 - (915) 533-1000		
325 - (915) 533-1000	916 - (916) 920-0200		
326 - (513) 421-9900	917 - (917) 464-2345		
327 - (615) 320-6600	918 - (918) 584-9111		
328 - (919) 834-1000	919 - (919) 834-1000		
330 - (216) 464-2345	920 - (920) 437-1234		
331 - (618) 233-1000	921 - (921) 441-1010		
332 - (212) 509-5858	922 - (922) 784-9111		
334 - (205) 438-1000			
336 - (919) 758-1000			
337 - (214) 960-5721			
339 - (617) 482-1776			
340 - (809) 721-1234			
341 - (415) 495-3000			
342 - (504) 387-5900			
343 - (613) 237-1450			
344 - (809) 721-1234			
345 - (813) 229-1234			
346 - (713) 961-2000			
347 - (718) 895-1000			
348 - (313) 259-9300			
350 - (213) 629-5600			
351 - (617) 482-1776			
352 - (904) 224-8494			
353 - (809) 721-1234			
354 - (809) 721-1234			
355 - (801) 531-2000			
356 - (809) 721-1234			
357 - (313) 259-9300			
358 - (809) 721-1234			
359 - (809) 721-1234			
360 - (206) 281-3800			
361 - (809) 721-1234			
362 - (809) 721-1234			
363 - (809) 721-1234			
364 - (809) 721-1234			