

COSMOS

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$                               $
$          LEX LUTHOR          $
$          AND                 $
$    THE LEGION OF DOOM!      $
$          PRESENT:           $
$    HACKING COSMOS PART 1    $
$          BASICS             $
$                               $
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
$                               $
$ IN THIS TUTORIAL WE WILL DEAL WITH $
$ THE VERY BASICS OF COSMOS, THIS IS $
$ A CONTINUING SERIES IN THE USE AND $
$ OPERATION OF BELL'S COSMOS SYSTEM. $
$                               $
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
$          WRITTEN 20-JUN-84      $
$(C) LOD/PNET TELECOMMUNICATIONS INC.$
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I HAVE SEEN MANY PHILES WRITTEN ON COSMOS IN WHICH ALL THEY DID WAS TO COPY THE INFORMATION OUT OF A COSMOS MANUAL THEY FOUND WHILE TRASHING. THIS TUTORIAL WILL HAVE SOME INFORMATION FROM THE MANUAL, BUT MAINLY WAS WRITTEN USING INFORMATION OF FIRST-HAND EXPERIENCE WHILE ON THE SYSTEM.

 COSMOS- COMPUTERIZED SYSTEM FOR
 ----- MAINFRAME OPERATIONS.

COSMOS, IS A WIRE CENTER ADMINISTRATION SYSTEM FOR SUBSCRIBER SERVICES. OR PUT ANOTHER WAY: AN INTER-OFFICE MEMO SENDER. ITS PRIMARY OBJECTIVES ARE:

- 1)TO RELIEVE THE PROBLEMS OF CONGESTION AND LONG CROSS CONNECTION ON THE MAIN DISTRIBUTING FRAME (MFD).
- 2)TO IMPROVE ENTITY LOAD BALANCE AND

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CUSTOMER LINE EQUIPMENT DISTRIBUTION
ACROSS THE WIRECENTERS SWITCHING
EQUIPMENT.

3) TO PROVIDE AN ACCURATE AND READILY
ACCESSIBLE DATA BASE FOR USE BY ALL
AT&T DEPARTMENTS.

4) THE LOOP ASSIGNMENT OFFICE (LAC) USES
IT TO GENERATE ORDERS FOR RAM USE.

EACH TELCO HAS IT'S OWN COSMOS SYSTEM
USUALLY ONE IN EACH AREA CODE.

CAPABILITIES:

COSMOS IS POWER WITH IT YOU CAN
FIND OUT A LOT OF INFO SUCH AS:

GIVE COSMOS A NUMBER AND IT WILL TELL
YOU WHO IT'S BILLED TO, WHO IT'S LISTED
UNDER, WHAT TYPES OF SERVICE THEY HAVE
(TOUCH TONE, ROTARY, FLAT RATE ETC.).

IF A PERSON CHANGES THEIR PHONE NUMBER
YOU CAN FIND OUT WHAT IT WAS CHANGED
TO.

YOU CAN FIND OUT NUMBERS BY GIVING
COSMOS THEIR NAME, EVEN UNPUBLISHED
PHONE NUMBERS!

RISKS:

ONCE UNAUTHORIZED LOGINS ARE DETECTED,
THE COSMOS PHONE NUMBER(S) WILL BE
CHANGED IMMEDIATELY! IT'S NO BIG DEAL
FOR THEM TO CHANGE THE NUMBER, THEY
JUST SEND OUT A LETTER TO THEIR
OFFICES SAYING IT'S CHANGED. BUT
THEY PROBABLY THROW AWAY THOSE PAPERS
AND YOU WILL BE ABLE TO FIND A LOT OF
INTERESTING INFO BY TRASHING.
ALSO, MOST OR ALL CALLS TO COSMOS ARE
TRACED, OR THE NUMBER HAS AN EQUIP

MENT HOOKED UP TO IT, SO BE CAREFUL!

IDENTIFICATION:

COSMOS LOGINS AND PROCEEDURES VARY FROM AREA TO AREA, SOME ASK FOR JUST THE LOGIN AND PASSWORD WITHOUT A WIRECENTER, OTHERS REQUIRE IT. THE PHOLLOWING INFORMATION IS BASED ON SOUTHERN BELL'S COSMOS SYSTEM.

TO IDENTIFY A COSMOS SYSTEM AFTER CONNECTING YOU WILL SEE:

;LOGIN:
PASSWORD:
WC?

THE ;LOGIN: IS THE USERNAME, WHICH USUALLY CONSISTS OF TWO LETTERS AND TWO NUMBERS IE: PA52. SOMETIMES NAME: IS SUBSTITUTED FOR, OR IS REQUIRED WITH ;LOGIN: AGAIN IT DEPENDS ON WHAT SYSTEM YOU ARE ON. NEXT IT WILL ASK FOR THE PASSWORD: WHICH DEPENDING ON THE SYSTEM, HAS DIFFERENT FORMATS FOR PASSWORDS. SOME MAKE A LITTLE SENSE LIKE BASE52 WHILE OTHERS MAY BE EIGHT RANDOM CHARACTERS. LAST THING YOU WILL SEE IS THE WIRECENTER. A WIRECENTER IS USUALLY AN ABBREVIATION OF THE CITY THAT IT COVERS. SUCH AS OA FOR OAKLAND OR PP FOR PEMBROKE PINES, IN ANY CASE IT IS TWO LETTERS. THE WIRECENTER WILL COVER A CERTAIN AMOUNT OF PREFIXES. AND YOU WILL NOT BE ABLE TO LOOK UP OTHER PHONE #'S UNLESS THE PREFIXES ARE IN THE SPECIFIC WIRECENTER. THE PROMT FOR COSMOS IS THE WIRECENTER AND A % SIGN. IE: WC% WHERE WC IS THE WIRE CENTER YOU ARE LOGGED IN AS. IF YOU DO HAPPEN TO GET AHOLD OF A LOGIN AND PASSWORD, BUT THE SYSTEM STILL ASKS FOR A WIRECENTER, THEN YOU CAN TELL WHAT ARE VALID WIRECENTERS BY WHEN IT ASKS FOR LOGIN & PASSWORD, THEN THE

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WIRECENTER AND YOU ENTER A WRONG WC
THE SYSTEM WILL RESPOND WITH:

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;LOGIN: PA52
PASSWORD:
WC?XX
WC??
INVALID LOGIN
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IF YOU NOTICED, WC?? CAME AFTER THE
WIRECENTER, NOW IF YOU HAD A VALID
WC, IT WOULD JUST SAY INVALID LOGIN
AFTER THE WC WITHOUT THE WC??. IE:

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;LOGIN:PA52
PASSWORD:
WC?OA
INVALID LOGIN
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THAT WOULD MEAN YOU HAVE THE CORRECT
WC, BUT INCORRECT PASSWORD. IF ALL
GOES WELL YOU WILL GET OA% AS THE
PROMT FOR WHATEVER YOUR WC IS.

TRANSACTION CODES -----

COSMOS HAS A SET OF THREE LETTER
COMMANDS CALLED TRANSACTION CODES
WHICH TELL THE SYSTEM WHAT TO DO. THEY
ENABLE YOU TO VIEW, MODIFY, OR ADD
INFORMATION ABOUT TELEPHONE NUMBERS,
CLASS OF SERVICE, OPERATING EXCHANGES,
ETC.

HERE IS A BRIEF DESCRIPTION OF THE
MOST COMMONLY USED TRANSACTION CODES:

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CAY - CREATE AN ASSEMBLY
CCA - CHANGE CUSTOMER ATTRIBUTES
DAY - DELETE AN ASSEMBLY
DRE - DENY AND RESTORE ESTABLISHMENT
FLR - FRAME LAYOUT REPORT
ISH - INQUIRE ABOUT A CIRUIT <-PHONE #
LOE - LIST ORIGINATING LINE EQUIPMENT
MAL - MANUAL ASSIGNMENT LIST
MAY - MODIFY AN ASSEMBLY
MCH - MANUALLY CHANGE HUNT
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MDC - MANUALLY DISCONNECT A CIRCUIT
SCA - SERVICE ORDER COMPLETION - AUTO
SIR - SORTING INQUIRY BY RANGE
SLC - SUBSCRIBER LINE COUNTS FOR
CUSTOM CALLING FEATURES
USL - LIST USOC (US) FILE DATA
WCC - WIRE CENTER CHANGE

HERE'S AN EXAMPLE OF A TRANSACTION,
USING ISH (INQUIRE ABOUT A CIRCUIT)
WHICH GIVES INFORMATION ABOUT A
TELEPHONE NUMBER.

WC% ISH
H TN 935-2481

—•

IT WILL THEN PRINT VARIOUS INFORMATION
ABOUT THE PHONE # 935-2481. BUT IT IS
DOUBTFUL YOU WILL UNDERSTAND SINCE IT
IS ALL ABBREVIATED. I WILL EXPLAIN
EVERYTHING IN PART II. AFTER PRINTING
THE INFO ABOUT THE #, COSMOS WILL SAY:
** ISH COMPLETED 20-JUN-84 **

WHEN USING CERTAIN COMMANDS, THERE ARE
VARIOUS LINES TO BE USED. SOME ARE:
H-LINE --REQUIRED IN MOST TRANSACTIONS
FOR ORDER, INQUIRY, AND REPORT DATA.
I-LINE --TRANSACTION INVOLVES INWARD
MOVEMENT (IE: INSTALLING A PHONE).
O-LINE --TRANSACTION INVOLVES OUTWARE
MOVEMENT (IE: DISCONNECTING A PHONE).
R-LINE -- USED FOR MAKING REMARKS TO
SERVICE OR WORK ORDERS. A H-LINE WAS
USED IN THIS EXAMPLE.
TO SIGNIFY THE END OF INPUT FOR MOST
COMMANDS TYPE "." W/OUT QUOTES. YOU
USE A ";" TO SEPARATE CIRCUITS, WHICH
IS GOOD WHEN YOU (OR THE PHONE CO.)
HAS TO ENTER MASSIVE AMOUNTS OF INFO.

PREFIXES, FORMATS AND CODE VALUES:

COSMOS PROVIDES A LANGUAGE BY MEANS
OF WHICH THE USER CAN COMMUNICATE WITH

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THE SYSTEM. THE LANGUAGE INCLUDES VARIOUS PREFIXES AS WELL AS INPUT FORMATS AND INPUT VALUES.

PREFIXES ARE ABBREVIATIONS WHICH REPRESENT SPECIFIC DATA CATEGORIES TO THE SYSTEM WHEN INPUT BY THE USER. AN EXAMPLE OF A PREFIX IS "TN" WHICH MEANS "TELEPHONE NUMBER". AN INPUT FORMAT DEFINES THE NUMBER OF CHARACTERS FOLLOWING A PREFIX AS WELL AS THE PATTERN IN WHICH THESE MUST BE ENTERED FOR EXAMPLE, "TN XXX-XXXX" MEANS THAT THE PREFIX "TN" MUST BE FOLLOWED BY SEVEN CHARACTERS IN THE FORMAT SHOWN.

INPUT VALUES ARE THE ALLOWABLE DATA ENTERED FOR EACH PREFIX IN THE CORRECT INPUT FORMAT. AS MENTIONED IN THE PREVIOUS PARAGRAPH, THE INPUT FORMAT FOR THE PREFIX "TN" IS "TN XXX-XXXX". THE FIRST THREE CHARACTERS (XXX) MUST BE ALPHANUMERIC; THE LAST FOUR (XXXX) MUST BE NUMERIC. SO, COSMOS WOULD CONSIDER AN INPUT OF "TN 935-2481" AS VALID INPUT. BUT YOU *MUST* USE THE CORRECT WIRECENTER FOR THE (XXX) IN QUESTION. IN HACKING COSMOS PART II I WILL HAVE A LIST OF THE MOST COMMONLY USED PREFIXES, FORMATS AND PREFIX CODE VALUES WHICH ENABLE YOU TO READ AND UNDERSTAND COSMOS TRANSACTIONS.

COSNIX

COSNIX IS A MUTATED VERSION OF COSMOS AND UNIX BOTH WRITTEN BY BELL LABS. COSNIX, IS THE OPERATING SYSTEM OF THE COSMOS SYSTEM.

SYSTEM COMMANDS

AS SOME OF YOU WILL NOTICE,IF YOU READ THE BASICS OF HACKING II- VAX'S UNIX,

BY THE KNIGHTS OF SHADOW, ALOT OF THE
COMMANDS USED ON UNIX ARE ALSO USED
ON COSMOS.

COMMANDS ARE AS PHOLLOWS:

WHERE - GIVES LOCATION OF THE SYSTEM:
THIS COMMAND CAN BE \$VERY\$
USEFUL SINCE YOU CAN GO
TRASHING AT THE LOCATION
THAT THE CENTER IS AT.

WC% WHERE

COSMOS 5 <- OR WHATEVER # IT IS.
STREET ADDRESS
CITY, STATE ZIP

WHAT - TELLS WHAT VERSION OF COSNIX
THE SYSTEM IS RUNNING ON.

WC% WHAT

COSNIX OPERATING SYSTEM 9.2.3 RELEASE
DECEMBER 7,1983
14.2.2
MARCH 1,1984

JUST LIKE ON A UNIX, TO SEE WHO ELSE
IS ON THE SYSTEM TYPE:

WC% WHO

COM3	TT00	GB
FW56	TT04	HH
PA52	TT12	PZ
FC55	TT14	OA
RS52	TT15	PZ

IN THE FIRST COLUMN IS THE USERNAME,
THE NEXT IS THIER TT#, AND LAST IS
THE WIRECENTER.

TO SEE WHAT FILES ARE IN THE DIRECTORY
YOU ARE LOGGED IN ON, TYPE:

WC% LS

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TO SEE *ALL* FILES YOU HAVE ACCESS TO:

WC% LS /*

FILES AND PATHS WILL BE EXPLAINED IN
DETAIL IN PARTS II, III.

DATE - SIMPLY GIVES THE DATE

TTY

WC% TTY<-WILL GIVE YOU THE TELETYPWRITER
NUMBER YOU LOGGED ON AS.

USING CONTROL-C WILL INTERRUPT ANY
PROCESS YOU ARE EXECUTING AT THE TIME.
SOMETIMES YOU WILL HAVE TO ENTER IT
MORE THAN ONCE. CTRL-S PAUSES CTRL-Q
RESTARTS AND CTRL-Y LOGS YOU OFF.

THATS IT FOR PART I, IT SHOULD GIVE
YOU A BASIC UNDERSTANDING OF COSMOS.
PART II WILL EXPLAIN THE PREFIXES SO
YOU WILL BE ABLE TO INTERPRET ALOT OF
THE INFORMATION PRINTED BY COSMOS.
AND WILL EXPLAIN PATHS/FILES.

ACKNOWLEDGEMENTS: THE WARLOCK
TUC - TUCBBS
AGRAJAG THE PROLONGED

\$\$\$\$\$\$\$\$\$\$\$=->LEX LUTHOR<=\$\$\$\$\$\$\$\$\$\$\$
KNIGHTS OF SHADOW
LOD

Type number to read, [L] to list over,
or RETURN to quit.

DOWNLOADED FROM P-80 SYSTEMS.....