

Script Files

A script file is a sequence of commands used to communicate with your switch. Each switch is slightly different, and thereby requires a customized script. Please keep in mind that the examples provided here serve only as guidelines.

Script File, DMS-10, Example One:

- Using "1" for long-distance switch connection
- Using RD command for one report

DI "15078958600"	Dial number
PA 4	Pause four seconds
TS "\r"	Carriage return
TS "\r"	Carriage return
PA 2	Pause two seconds
TS "\$TMRPRT\r"	Request for traffic report
PA 5	Pause five seconds
TS "\r"	Carriage return
RD	Receive Data
WS "END OF"	Request to end session
PA 3	Pause three seconds
TS "\$LOGOFF\r"	Log off
PA 4	Pause four seconds
HU	Hang up
RM	Reset modem

Script File, DMS-10, Example Two:

- Using "1" for long-distance switch connection
- Using RD command for one report
- Checking for redial

DI "15078958600"	Dial number
IF 1	If the number connects...
PA 4	Pause four seconds
TS "\r"	Carriage return
TS "\r"	Carriage return
PA 2	Pause two seconds
TS "\$TMRPRT\r"	Request for traffic report
PA 5	Pause five seconds
TS "\r"	Carriage return
RD	Receive Data
WS "END OF"	Request to end session
PA 3	Pause three seconds
TS "\$LOGOFF\r"	Log off
PA 4	Pause four seconds
HU	Hang up
RM	Reset modem
EL	Else (or else the number does not connect...then
RE	Attempt failed, so Redial
IE	Ends "Else" block

Script File, DMS-10, Example Three:

- Using "9" to dial out
- Using passwords
- Using two RD commands for two separate reports

```
DI "95078958600"  
PA 5  
TS "****\r"  
PA 5  
TS "####"  
PA 5  
TS "LOGI\r"  
PA 5  
TS "CBSI\r"  
PA 5  
TS "CHARLIE\r"  
PA 7  
TS "PRNT OPM TRAF OSVC ISVC TRK SVCE D1LP\r"  
RD  
PA 7  
TS "PRNT TRK RPRT\r"  
RD  
TS "LOGO\r"  
HU  
RM
```

```
Dial number  
Pause five seconds  
Attention  
Pause five seconds  
Command prompt  
Pause five seconds  
Log in  
Pause five seconds  
Password  
Pause five seconds  
Password  
Pause seven seconds  
Request for traffic report  
Receive data  
Pause seven seconds  
Request for traffic data  
Receive data (separate report/not added to first report)  
Log off  
Hang up  
Reset modem
```

Script File, DMS-100, Example Four:

```
TS "\r"  
WS "DESTINATION"  
TS "9/AB9\r"  
IF WS "BUSY"  
PA 5  
EL  
TS "LACRES\r"  
PA 3  
BR 2  
PA 3  
TS "LOGIN\r"  
PA 8  
TS "ANN\r"  
PA 8  
TS "BRADY\r"  
PA 8  
TS "OMSHOW TRK HOUR;OMSHOW LMD HOUR\r"  
RD  
WS ">"  
PA 5  
TS "OMSHOW RLCDIS HOUR;OMSHOW RCVR HOUR\r"  
RD TRUE  
WS ">"  
PA 5  
TS "OMSHOW CF3P HOUR\r"  
RD TRUE  
WS ">"  
PA 5  
TS "OMSHOW TRA125M1 HOUR\r"  
RD TRUE  
WS ">"  
PA 5  
TS "OMSHOW UCDGRP HOUR\r"  
RD TRUE  
WS ">"  
PA 5  
TS "OMSHOW OFZ HOUR\r"  
RD TRUE  
WS ">"  
PA 5  
TS "LOGOUT\r"  
PA 3  
BR 1  
PA 1  
ED
```

- Using direct switch connection
- Using "if" and "then" commands
- Using passwords
- Using ";" to separate groups
- Using RD and RD TRUE for one report

```
Carriage return  
Wait for switch to answer back to destination  
Address of destination  
If busy  
Pause five seconds  
Then  
Use this alternative address  
Pause three seconds  
Break two seconds  
Pause three seconds  
Log in  
Pause eight seconds  
Password  
Pause eight seconds  
Password  
Pause eight seconds  
Send a report on two different traffic reports  
Receive data  
Wait for command prompt  
Pause five seconds  
Send a report on two different traffic groups  
Receive data and add (append) it to the first report  
Wait for command prompt  
Pause five seconds  
Send a report on a traffic group  
Receive data and add (append) it to the first report  
Wait for command prompt  
Pause five seconds  
Send a report on a traffic group  
Receive data and add (append) it to the first report  
Wait for command prompt  
Pause five seconds  
Send a report on a traffic group  
Receive data and add (append) it to the first report  
Wait for command prompt  
Pause five seconds  
Send a report on a traffic group  
Receive data and add (append) it to the first report  
Wait for command prompt  
Pause five seconds  
Log out  
Pause three seconds  
Break one second  
Pause one second  
End
```

Standard AT Command Set

A modem labeled AT compatible or Hayes compatible, as well as most other modems manufactured in the United States, recognize the following command set for purposes of communication. All commands are preceded by AT and followed by a carriage return with two exceptions: A/ and + + +.

Commands	Modifiers	Function
AT		Attention - wakes up or initializes modem - clears command buffer
AT&		Prefix for advanced commands - not available on all modems
A		Sets to answer mode - manually answer an incoming call
A/		Repeat last command Does not need to be preceded by AT nor followed by a carriage return
C		Enables or disables carrier signal
	C0	Disables carrier transmitter
	C1	Enables automatic carrier on/off switching
D		Dials the number that follows it note: ATD can be used with one or more of the following modifiers
	DP	Dials using pulses
	DT	Dials using tones
	6	(ATDT6) Tests DTMF dialer
	R	Instructs modem to switch to answer mode and to issue carrier frequency when connection is established note: used to call originate-only modems
	W	Waits for dial tone before dialing Pauses before dialing (can be placed anywhere in dial string) Length of pause is determined by S register setting
	/	Pauses 0.125 second before continuing dial command
	;	Dials and remains in command mode after connection
	!	Hookflash - hangs up for 1/2 second and then reconnects
	@	Waits for silence before dialing Time is set by S register

Commands	Modifiers	Function
E		Enables or disables character echo
	E or E0	Disables character echo
	E1	Enables character echo
F		Sets duplex
	F or F0	Half-duplex
	F1	Full-duplex
H0		Hangs up
I		Queries for information about modem
	I0	Product code
	I1	ROM check (checksum)
	I2	ROM memory test
L		Speaker volume control
	L1	Low volume
	L2	Medium volume (the usual default)
M		Speaker on/off control
	M0	Speaker off
	M1	Turns off speaker when modem detects a carrier
	M2	Speaker on
O or O0		Returns online after entering command mode while connected
Q		Enables or disables result code display
	Q0	Enables result code display (the usual default)
	Q1	Disables result code display
Sx _n		Sets register x to value n S registers are used to change timing for various functions as well as features such as the number of rings before a modem answers, special characters, etc.
Sx?		Displays value of internal register x
V		Specifies type of result codes displayed

Commands	Modifiers	Function
	V0	Numeric result codes (1,2,3,etc.)
	V1	Causes result codes to be displayed as words (OK, RING, NO CARRIER, etc.)
Xx		Enables call monitoring and call detection features Features implemented vary depending on the modem, but may include dial tone, busy signal, voice, and transmission speed detection
Z		Restores all default (factory) settings
<RETURN>		Implements commands entered
+++		Enter command mode Does not need to be preceded by AT nor followed by a carriage return

DMS-100 OM Group Numbering System

When you initially set up your operational measurement groups, it is best to design a numbering system that associates similar information and allows for future expansion. Using the sample numbering system or developing a close approximation will save you considerable time in the long run and make it much easier to work with the data.

OM GROUP	NUMBERING SYSTEM	OM GROUP	NUMBERING SYSTEM
TRK	1 - 9,999	CF3P	11,800 – 11,899
SITE	10,200 – 10,299	CF6P	11,900 – 11,999
LMD	10,300 – 10,499	XPMLNK	12,000 – 12,099
BRSTAT	10,500 – 10,599	TCAPUSAG	12,100 – 12,199
TS	10,600 – 10,699	EXT	12,200 – 12,299
OTS	10,700 – 10,799	ISGCPU	12,300 – 12,399
OFZ	10,800 – 10,899	ISGOVLD	12,400 – 12,499
OFZ2	10,900 – 10,999	PRARAC	12,500 – 12,599
TRMTRS	11,000 – 11,099	PRADCHL2	12,600 – 12,699
ANN	11,100 – 11,199	CNAMD	12,700 – 12,799
TONES	11,200 – 11,299	CNDB	12,800 – 12,899
STN	11,300 – 11,399	UCDGRP	12,900 – 12,999
RADR	11,400 – 11,499	ACDGRP	13,000 – 13,099
RCVR	11,500 – 11,599	TFCANA	13,100 – 14,999
PRP	11,600 – 11,699	VF6USAGE	15,000 – 15,099
DTSR	11,700 – 11,799	ENG640M1	15,100 – 15,399

DMS-100 OM Group Numbering System, continued

OM GROUP	NUMBERING SYSTEM
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TRA250M1	15,400 - 15,499
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TRA125M1	15,500 - 15,599
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OMMTX	15,600 - 15,999
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OMMTXHO	16,000 - 16,299
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VFGUSAGE	16,300 - 16,349
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RCF	16,350 - 16,399
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CAUCPSET	17,400 - 17,699
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CAUCPSYS	17,700 - 17,999
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DMS-10 Traffic Group Numbering System

When you initially set up your traffic groups, it is best to design a numbering system that associates similar information and allows for future expansion. Using the sample numbering system or developing a close approximation will save you considerable time in the long run and make it much easier to work with the data.

TRAF GROUP	NUMBERING SYSTEM	TRAF GROUP	NUMBERING SYSTEM
TRK	0-2999	S7L3	12000 - 12499
NTWK	3000-3999	SNRS	12500 - 12999
TRAF	4000-4499	SCCP	13000 - 13499
OSVC	4500-4999	E800	13500 - 13999
ISVC	5000-5499	INTR	14000 - 14499
SVCE	5500-5999	SMDI	14500 - 14999
SREG	6000-6499	SRP	15000 - 15499
TCAP	6500-6999	CLAS	15500 - 15999
MTCE	7000-7499	ISUP	16000 - 16499
HUNT	7500-7999	LDBS	16500 - 16999
CCF	8000-8499	LCM	17000 - 17499
TSMS	8500-9999	SPAN	17500 - 17999
CPU/PRO	10000-10499	RSCS/CPM	18000 - 18499
EQA	10500-10999	LNP	18500 - 18999
D1LP	11000-11499	SFG	19000 - 19499
S7L2	11500 - 11999		

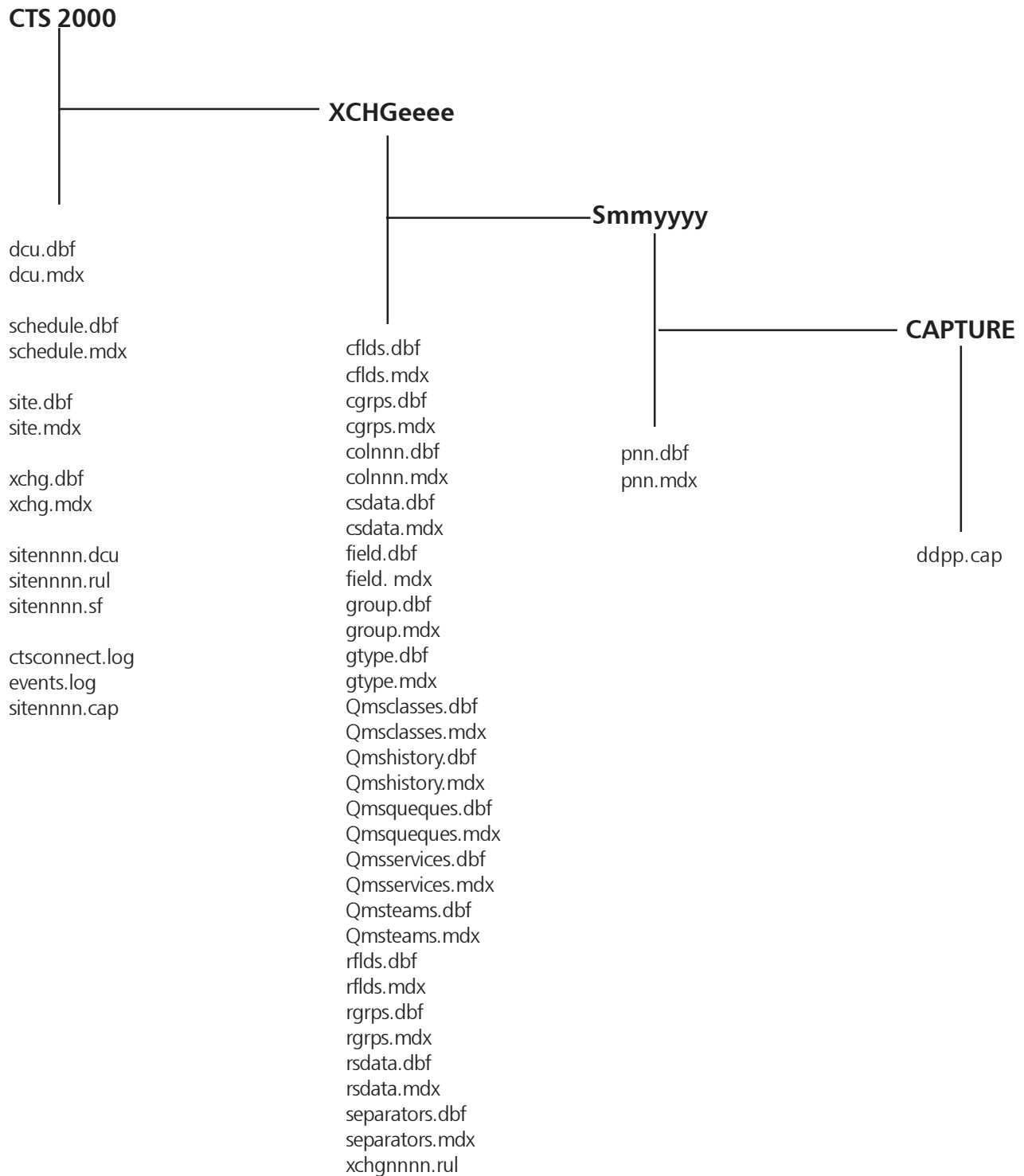
DCO Offices Numbering System

When you initially set up your traffic groups, it is best to design a numbering system that associates similar information and allows for future expansion. Using the sample numbering system or developing a close approximation will save you considerable time in the long run and make it much easier to work with the data.

SYSTEM	DESCRIPTION	NUMBERING SYSTEM
G	group	1 - 2000
H	line subgroup	2001 - 3000
I	individual circuit	3001 - 5000
O	office	5001 - 6000
P	port group	6001 - 8000
R	digital satellite unit remote line group	8001 - 9000
S	digital satellite interface	9001 - 10,000
W	line switch	10,001 - 12,000
X	timeslot interchange	12,001 - 14,000
Y	line group	14,001 - 16,000
	TSEP	17,001 - 19,000

CTS 2000 Data File Layout

During technical support calls you may be asked to identify, locate, and manipulate program files. The Data File Layout gives you a visual look at the file structure within CTS 2000.



WinZip

WinZip is a tool that makes it easy to work with large archive files. An archive file is one that contains other files that are grouped and compressed for the purpose of easy transmission through the Internet and other electronic services or to save disk space when the files are not frequently used. As business partners, we may find it useful to send Zip files to one another on occasion. CBSI will use WinZip to prepare and receive archive files when transport is necessary.

To Create a Zip File

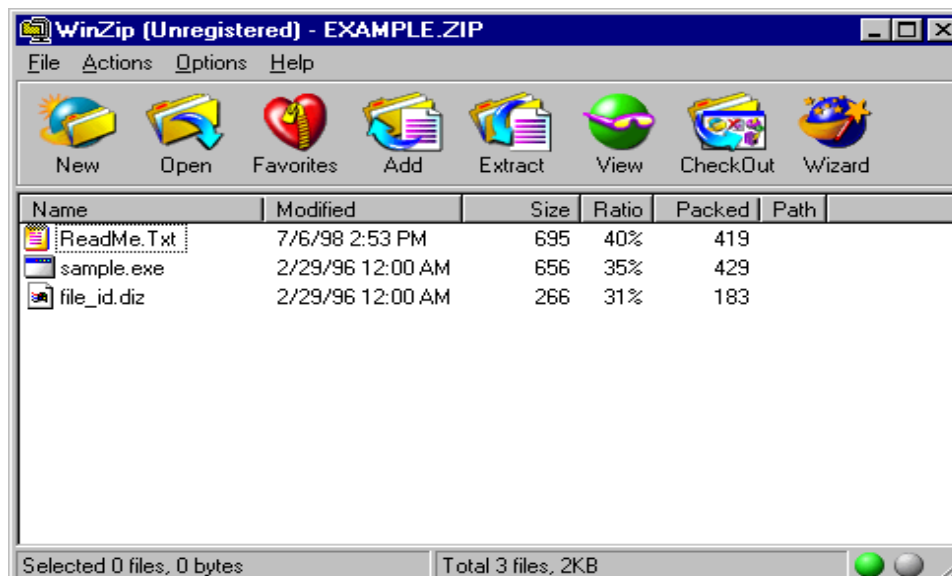
1. Click on the **New** button on the toolbar or **File > New Archive** from the menu.
2. Type the name of the archive that you want to create in the dialog box.
3. Choose the drive and folder where the archive will be created.
4. Check the **Add dialog** box so that you will be able to add files to the archive.

To Add Files to an Archive

1. Click on the **Add** button on the toolbar or **Actions > Add** from the menu.
2. Highlight the files you want to add to the archive in the **Add** dialog box. You can highlight multiple files by holding down the shift key as you click.
3. You can also add files from My Computer or Windows Explorer by dragging them and dropping the files on the WinZip window.
4. Click the **Add** button.

Unzipping a File (Extracting)

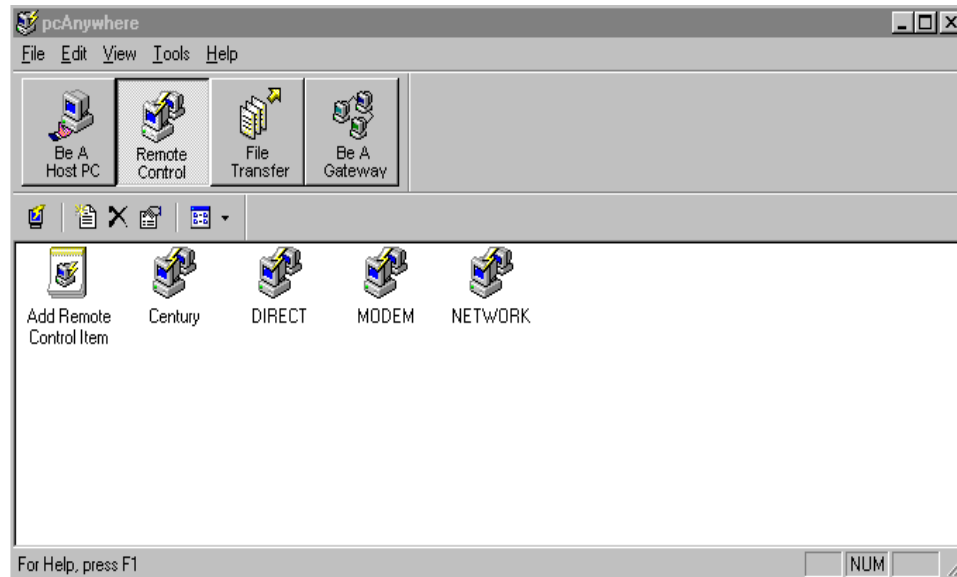
1. Click on the **Extract** button on the toolbar or **Actions > Extract** from the menu.
2. You can unzip files in one of four ways:
 - a) in the **Folders/Drives** list box, highlight a folder and drive
 - b) in the **Extract to** field, type a folder name
 - c) use the down arrow next to the **Extract to** field to pull down a list of previous Extract to folders
 - d) click on the **New Folder...** button to create a new folder for the unzipped files
3. You can unzip **All Files** in the archive, **Selected Files** that you highlight in the main WinZip window, or **Files** that are extracted using filenames (ex: all ".doc" files).
4. Check the **Use Folder Names** box for most unzipping operations.



PC Anywhere

PC Anywhere is an Internet connection that allows technical support personnel at CBSI to view your computer screens simultaneously on CBSI computers. This method enables technical support to quickly and easily determine the source of your concern.

In order to bypass your company's fire wall (security system), PC Anywhere must be configured as per PC Anywhere documentation by your company's MIS Department. The following instructions for PC Anywhere usage are effective only after configuration by your MIS Department.



For the User:

Click once on the **Be a Host PC** button.
Highlight the **Network** icon on the screen.

For CBSI:

Click once on the **Remote Control** button.
To create an icon for the company that you want to work with, click on the **Add Remote Control Item** icon. The Remote Control Wizard will guide you through the configuration of a new remote control connection item. You will need the following information:

- Name
- Connection Device
- Area Code and Telephone Number
- Country and its Code (given on pull down menu)

Use the **checkbox** to automatically begin the remote control session when you complete the process.
If you already have a company icon on screen, highlight the icon for the company that you want to contact.
Click on the menu *File* and then **Connect**.

Report Groups Search / Select Expressions

As you select groups for a requested report, you can use the special characters given below to search for and select the desired groups.

When you search for a sub-string in a string, the match should normally be the exact letters and sequence for a match to be found. The search can be modified to be case-insensitive so that an "abc" search would also find "Abc," "ABC," etc. selections. However, when the sub-string contains a combination of letters, digits, and/or special characters, a specific system of expressions is needed to conduct a search. This system is called Regular Expressions.

Regular expressions are text patterns that are used for string matching. Regular expressions are strings that contain a mix of plain text and special characters to indicate what kind of matching to do. Use the chart below to determine how to write an expression that will search for the groups you want included in your report.

ALL EXPRESSIONS MUST BEGIN AND END WITH QUOTATION MARKS.

Example 1: "[0-9]"

In this example, you are looking for a numeric digit. The expression begins with a quotation mark as all expressions must. The brackets signal that the character you are searching for should match any one of the characters enclosed in the brackets. The dash between the zero and the nine indicates that the character you are searching for can be in the range from 0 to 9. A quotation mark completes the expression. This regular expression will match any character between 0 and 9, that is, any digit.

Example 2: "*"

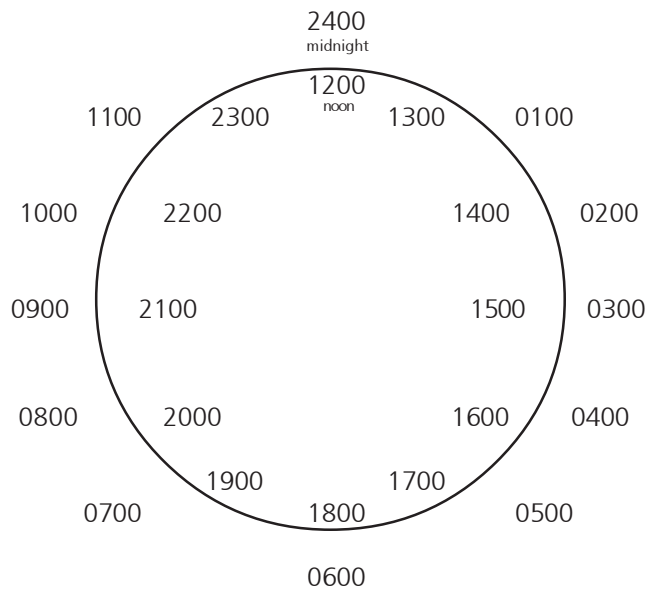
In this example, you are looking for a single special character. The expression begins with a quotation mark as all expressions must. The backslash signals that the character you are searching for is a single character. The asterisk is the character that you are trying to match. A quotation mark completes the expression. This regular expression will match a single asterisk.

Military Time

Military time is a commonly used system of time measurement. You will use military time for many CTS software programs.

Both civilian time and military time express time with four numbers. The first two numbers represent the hour, and the last two numbers represent the minutes. However, civilian time separates the hour and minutes with a colon and military time does not. In addition, military time does not make reference to A.M., P.M., "quarter of," "quarter to," or "half past."

The Military Clock



<u>Civilian Time</u>	<u>Military Time</u>	<u>Spoken</u>
12:01 AM	0001	Oh Oh Oh One
1:00 AM	0100	Oh One Hundred
2:00 AM	0200	Oh Two Hundred
3:00 AM	0300	Oh Three Hundred
4:00 AM	0400	Oh Four Hundred
5:00 AM	0500	Oh Five Hundred
6:00 AM	0600	Oh Six Hundred
7:00 AM	0700	Oh Seven Hundred
8:00 AM	0800	Oh Eight Hundred
9:00 AM	0900	Oh Nine Hundred
10:00 AM	1000	Ten Hundred
11:00 AM	1100	Eleven Hundred
12:00 NOON	1200	Twelve Hundred
1:00 PM	1300	Thirteen Hundred
2:00 PM	1400	Fourteen Hundred
3:00 PM	1500	Fifteen Hundred
4:00 PM	1600	Sixteen Hundred
5:00 PM	1700	Seventeen Hundred
6:00 PM	1800	Eighteen Hundred
7:00 PM	1900	Nineteen Hundred
8:00 PM	2000	Twenty Hundred
9:00 PM	2100	Twenty-One Hundred
10:00 PM	2200	Twenty-Two Hundred
11:00 PM	2300	Twenty-Three Hundred
12:00 MIDNIGHT	2400	Twenty-Four Hundred

CTS Reports

A listing of available CTS Reports is given by name, number, and brief description.

For the equation for the Average Holding Time, see the Average Holding Time Conversion chart in the glossary under the entry **average holding time**.

Information Reports

- T-100 Exchange Summary
Provides a summary of all of the exchanges you have setup. It includes exchange name/number, company name, state, country, number of access lines/groups/fields, and poll and data intervals for each exchange entered in your system.
- T-200 Site Summary
Provides a summary of all of the sites you have setup. It includes poll site name/number, the associated exchange(s) name and number, the poll interval, type of device, start and end text and time zone.
- T-300 Group Summary
Provides a summary of selected groups in an exchange. It includes group name/number/type, search text/equation, subscriber and reference numbers, lines in use, table code, probability code, trunks equipped/working, LM lines, location, coverage market, cell site, associated analog/digital trunk number, and whether or not the group is calculated.
- T-301 Trunk Group Summary
Provides a summary of selected trunk groups in an exchange. It includes Group name/number/type and lines equipped/working.
- T-302 Wireless Trunk Summary
Provides a summary of selected wireless trunk groups in an exchange. It includes group name/number, search text, reference number, location, cell site, coverage market, associated analog/digit trunk numbers, trunks working/equipped, and equation.
- T-400 Field Summary
Provides a summary of fields in selected groups in an exchange. Includes field name, type, and length.
- T-401 Collection Set Field Summary
Provides a summary of all of the fields in each collection set of an exchange. It includes collection set name/number, X and Y location, length, multiplier, and the equation of each collection set entered in a selected exchange.
- T-501 Collection Summary
Provides a summary of all of the collection sets in a selected exchange. It includes the collection set name/number, start text/ occurrence, and end text/occurrences. Traffic group name and number associated with each collection set is also displayed

Busy Hour Reports

- T-2300 Summary
Provides a summary of the busy hour information of each day for each selected group in an exchange. It includes group name/number, peg in/out and total peg, usage in/out and total usage, MOU, avg. HT, max usage, BH of BD, overflow, blktrk, and tandem for each selected group in an exchange.
- T-2301 Detailed Bouncing Busy Hour
Provides a summary for each selected group in an exchange on a daily basis for the selected observation period. It includes group name/number, peg/usage/overflow for each day, trunks working/

equipped, trunks required, and trunks over/under. A total for each column is displayed at the bottom of each group. The highest peg/usage/overflow, hour ending, and traffic % for each day is also displayed at the bottom of each group.

T-2302 Daily Summary

Provides a daily summary report for selected groups in an exchange. It includes group name/number, date, peg in/out and total peg, usage in/out and total usage, MOU (minutes), avg. HT, max usage, max usage interval, overflow, blktrk, and tandem.

T-2400 Bouncing Busy Hour

Displays the busy hour for selected groups in an exchange. It includes group name/number, peg count, and usage for each requested day. The report also shows total usage, high BH usage, avg. BH usage, avg. BH peg, trunks equipped/working, trunks required, and trunks over/under for each selected group in an exchange.

T-2401 Daily Selected Hour Trunk

Provides a list of information regarding a selected hour for selected groups in an exchange. It includes the date, peg in/out and total peg, usage in/out and total usage, overflow, blk, tandem, glare, infail, outfail, avg. HT, the selected hour, trunks equipped/working, trunks required, and trunks over/under. The observation period total and average are also displayed for every column.

T-2402 Daily Busy Hour Trunk Report with Daily Totals

Provides two reports for each selected group. Busy hour information includes the selected date, BH peg in/out and total peg, BH usage in/ out and total usage, BH overflow, BH Blk, BH abandon, BH tandem, BH glare, BH infail, BH outfail, BH avg. HT, busy hour, Trunks equipped/working, trunks required, and trunks over/under. Daily total information includes the selected date, peg in/out and total peg, usage in/out and total usage, overflow, blk, abandon, tandem glare, infail, outfail and avg. HT. Both reports display observation period totals and period averages.

T-2403 Bouncing Busy Hour Report with Summary

Provides group name/number, peg count, and usage for each requested day. For each selected group in an exchange it shows total usage, high BH usage, avg. BH usage, avg. BH peg, trunks equipped/working, trunks required, and trunks over/under. The summary includes group name/number, avg. BH peg, avg. BH usage, high BH usage, total usage, the traffic table, trunks equipped/working, trunks required, and trunks over/under. A five-period growth forecast is incorporated in the summary as well.

T-2404 Daily Percent of Engineered Capacity

Provides information for the busy hour of selected groups in an exchange. It is possible to specify whether to display just the information for groups over a specified daily percent of engineered capacity, or information for all groups displayed regardless of being over/under capacity.

This report includes the group name/number, date, busy hour, total daily usage, engineered usage, grade of service, trunks equipped/working, trunks required, trunks over/under, and daily % of engineered capacity. There are also observation period averages at the bottom.

T-2406 Daily Time Consistent Busy Hour

This report displays the time consistent busy hour data on a daily basis. The busy hour is determined by:

- Sum the consistent hourly usage for every day of the observation period.
- Determine the hour of the highest sum of the hourly usage.

The Peak Hour/# of Times column tells the reader what hour has the highest sum of the hourly usage (first occurrence) and how many times that highest sum of the hourly usage occurred. The report includes the group name/number and the peg count and usage for each group per day. Also displayed is the BH total usage, the total usage, high usage, avg. usage, avg. peg, avg. HT, Peak Hour/ Number of times, trunks working/equipped, trunks required, and trunks over/under.

- T-2701 Bouncing Busy Hour Report with Overflow
Provides bouncing busy hour information with overflow included. The report includes the group name/number and the peg count and usage for each group's busy hour per day. Also displayed is the high BH usage, avg. BH, avg. BH usage of the 3 highest, trunks working/equipped, trunks required, and trunks over/under.
- T-2704 Summary - % of Engineered Capacity
Provides a summary of selected groups for the total length of the observation period. The report includes the group name/number, location, trunk group type, BH peg count, BH usage, busy hour, table, grade of service, BH capacity, % capacity, total usage, high BH usage, avg. BH usage, trunks equipped/working, trunks required, and trunks over/under.
- $$\% \text{ Capacity} = \frac{\text{Avg. BH CCS}}{\text{Engineered CCS}} \times 100$$
- T-2705 Summary - % of Engineered Capacity Report with Overflow
Displays the % of engineered capacity based on the Grade of Service criteria input in the Groups tab of CTS 2000 Setup. The Busy Hour capacity is the engineered capacity for any given hour. The T-2705 is similar to the T-2704 report, however the T-2705 also displays the overflows for the Busy Hour.
- T-2706 Summary Time Consistent Busy Hour
Displays the peak hour information for the observation period. The total usage is calculated for the whole observation period. The BH total usage, high usage, avg. usage, avg. peg, avg. HT, trunks equipped/working and required, and trunks over/under are calculated for the peak busy hour of the observation period.
- T-2800 10 High Busy Hour Trunk Requirements
Displays information for the 10 highest busy hours of the observation period. For each group, the busy hour day, time, avg. usage, and avg. HT are displayed. The avg. usage is calculated for the 10 highest busy hours for each group. The number of trunks equipped/working is displayed and the trunks required is figured by the avg. usage of the 10 highest busy hours' usage. The trunks over/under is also displayed.
- T-2801 Monthly Avg. 10 High Busy Hour Trunk Traffic Report
Displays the avg. peg and usage for the 10 highest busy hours for the selected month. Also calculates the YTD Variance for avg. peg and avg. usage for each group. The total of the avg. peg and usage for the 10 highest busy hours is displayed at the bottom of the report.
- $$\text{YTD Variance} = \frac{\text{Current Avg. CCS} - \text{previous month's Avg. CCS}}{\text{previous month's Avg. CCS}} \times 100$$
- T-2802 Monthly Total Traffic Report
Displays the total peg and usage for the selected groups in the selected month. Also calculates the YTD Variance for total peg and total usage for each group. The monthly total of all columns is displayed at the bottom of the report.
- $$\text{YTD Variance} = \frac{\text{Current Avg. CCS} - \text{previous month's Avg. CCS}}{\text{previous month's Avg. CCS}} \times 100$$
- T-2810 Insufficient Trunk Requirements
Displays information on any hour for any group that had insufficient trunks in the observation period. The data displayed includes group name/number, date, poll period, reference #, peg, usage, OVFL, trunks equipped/working and required, and trunks over/under.
- T-2811 Trunk Capacity Expectations
This report has two sections. The first section of the report is information on the selected groups for the observation period. The second section is a summary of the busy hour of the busy day. Informa-

tion displayed in this report includes group name/number, date, poll period, ref #, peg, usage, OVFL, trunks equipped/working and required, trunks over/under and % of capacity.

T-2812 Percent of Engineered Capacity Summary

Displays information about the busy hour of the selected groups over the percent of engineered capacity specified. The report includes group name/number, busy hour, BH usage, total usage for the observation period, engineered usage (determined by the trunks working), grade of service, trunks equipped/working and required, trunks over/under and % of engineered usage.

$$\% \text{ of engineered usage} = \frac{\text{BH CCS}}{\text{Engineered CCS}} \times 100$$

T-2820 Monthly Busy Hour Trunk Report with Daily Totals

Displays busy hour information about the selected groups for the observation period with daily totals. The report includes the following information about the busy hour: date, trunks equipped/working/required, ending BH peg/usage/OVFL, BH peg in/out, BH total peg, BH usage in/out, BH total usage and BH OVFL. The daily totals are specified for the fields selected before the report is ran.

OM Group Reports

T-2x99 OM ACDGRP Report

The OM group ACDGRP provides information about the traffic for an Automatic Call Distribution Group. The ACDGRP report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the % abandoned, % answered and % deflected. Totals are displayed at the bottom of the report.

$$\% \text{ abandoned} = \frac{\text{ACDABNDN}}{\text{ACDOFFR}} \times 100$$

$$\% \text{ answered} = \frac{\text{ACDANSR}}{\text{ACDOFFR}} \times 100$$

$$\% \text{ deflected} = \frac{\text{ACDFLCT}}{\text{ACDOFFR}} \times 100$$

The ACDGRP reports: 2199, 2299, 2399, 2499, and 2799. Fields required for group ACDGRP:

ACDOFFR	ACDANSR	ACDDFLCT	ACDABNDN
ACDNS	ACDPRMPT	ACDBLOCK	ACDTMOFL
ACDTMINF	ACDTMANS	ACDCIF	ACDXFER
ACDCPK	ACDUSAGE	ACDICQD	ACDREQD
ACDDMCT	ACDQABN	ACDRQRTE	

T-2x59 OM ANN Report

The OM group ANN provides information on traffic for recorded announcement machines. The ANN report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the % OVFL and AVG. HT. Totals are displayed at the bottom of the report. The usage register's scan rate is 100.

$$\% \text{ OVFL} = \frac{\text{ANNOVFL}}{\text{ANNATT}} \times 100$$

The ANN reports: 2159, 2259, 2359, 2459, and 2759. Fields required for group ANN:

ANNATT	ANNOVFL	ANNTRU	ANNSBU	ANNMBU
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T-2x60 OM AUTHCAV Report

The OM group AUTHCAV counts the transaction of the cellular authentication and voice privacy unit. (CAVU), which is the off-board-processing unit used to execute the cellular authentication and voice encryption (CAVE) algorithm. The registers in this group peg in the computing module (CM) even though CAVU is a peripheral unit. The AUTHCAV report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the % COMP. Totals are displayed at the bottom of the report.

$$\% \text{ COMP} = \frac{\text{CAVSUCC}}{\text{CAVATTS}} \times 100$$

The AUTHCAV reports: 2160, 2260, 2360, 2460, and 2760. Fields required for group AUTHCAV:

CAVATTS	CAVSUCC	CAVFRM	CAVFTIME
CAVFRS	CAVREQUC	CAVRQBSC	CAVRQSSD
CVRQORIG	CVRQREG	CVRQTERM	CVAKEYCK

T-2x61 OM AUTHCTR Report

The OM group AUTHCTR provides information the following transactions: authentications performed at the authentication center (AC), shared secret data (SSD) updates, Unique Challenges (performed for SSD updates, and requested by the AC), failed authentications and authentication result (AUTHR) mismatches reported by the serving system. The AUTHCTR report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The AUTHCTR reports: 2161, 2261, 2361, 2461, and 2761. Fields required for group AUTHCTR:

ACAUTHRQ	ACAUTHSC	ACNOAUTH	ACAUTHRM	ACOFAIL
ACORIGRQ	ACREGRQ	ACFLSHRQ	ACTERMQR	ACUNSPRQ
ACSSDURQ	ACSSDUSC	ACSSDUFL	ACSSDUNC	ACSSDUNA
ACSSDERR	ACUCREQ	ACUCSUCC	ACUCFAIL	ACUCNR
ACUCNA	ACDENY	ACMUCFL	ACMUCNR	ACMARMM
ACMRCMM	ACMAPRM	ACMUNBSC	ACMOFAIL	

T-2x62 OM BRSTAT Report

The OM group BRSTAT (BRISC Occupancy Status) uses the Bell-Northern Research reduced instruction set computer (BRISC) to provide data on CPU usage (occupancy) for Super Node Offices. BRSTAT generates data when it creates a value representing the ratio of real time spent on a CPU function to the time allocated for that function. The system updates the usage registers this group every minute to reflect this ratio.

The BRSTAT report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The BRSTAT reports: 2162, 2262, 2362, 2462, and 2762. Fields required for group BRSTAT:

BRSCAP	BRSCMLX	BRSSCHED	BRSFORE	BRSMOINT
BRSDNC	BRSONM	BRSGTERM	BRSBKG	BRSIDLE
BRSAUXCP	BRNETM	BRSSNIP		

T-2x63 OM C7LINK1 Report

OM group C7LINK1 (CCS7 link group 1) provides information on the failures and recoveries of a Common Channel Signaling 7 (CCS7) link. A CCS7 link is a communication path that moves voice or signaling messages between two signaling points in a CCS7 network.

The C7LINK1 report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The C7LINK1 reports: 2163,

2263, 2363, 2463, and 2763. Fields required for group C7LINK1:

C7LKSYNU	C7LKFAIL	C7ABNRFB	C7EXDLAY	C7EXERR
C7EXCONG	C7ALIGNF	C7SUERR	C7NACKRX	C7STALFL
C7TLALFL	C7NETCON	C7SLTFL	C7NUCFL	C7COV
C7CBK	C7LKUNAU	C7MANB	C7BSYON	C7BSYOFF
C7LINH	C7LUNINH	C7RINH	C7RUNINH	C7LPO
C7RPO	C7AUTOCO	C7ERRSEC	C7CLB	

T-2x64 OM C7LINK2 Report

The OM group C7LINK2 (CCS7 link group 2) provides information on calls and congestion for Common Channel Signaling 7 (CCS7). A CCS7 link is a communication path. This path moves voice or signaling messages between two signaling transfer points (STP) in a CCS7 network system.

The C7LINK2 report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The C7LINK2 reports: 2164, 2264, 2364, 2464, and 2764. Fields required for group C7LINK2:

C7MSUTX	C7MSURX	C7BYTTX	C7BYTRX	C7BYTRT
C7MSUDSC	C7ONSETV	C7ABATEV	C7STRET	C7MSBRET
C7MSGLOS	C7MSGMSQ	C7MSUOR	C7MSUTE	C7MSUTS

T-2x65 OM C7LINK3 Report

The OM group C7LINK3 (Common Channel Signaling 7 link group 3) monitors the traffic and performance of a message signal unit (MSU) for a Common Channel Signaling 7 (CCS7) link. Message signal units are a part of a signal. The C7LINK3 report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The C7LINK3 reports: 2165, 2265, 2365, 2465, and 2765. Fields required for group C7LINK3:

C7MSOR	C7MSOR2	C7MSTE	C7MSTE2	C7MSTS	C7MSTS2	C7MSUBOV
C7LV1CGU	C7LV2CGU	C7LV3CGU	C7LPOU	C7RPOU	C7HWLLP	C7HWMTS
C7HWST	C7HWTOT	C7RTOVLD	C7BFOVFL	C7CLBU	VALIDLK	LSCCPRX
LSCCPRX2	LSCCPTX	LSCCPTX2	LUPARX	LUPARX2	LUPATX	LUPATX2

T-2x67 OM C7ROUTE

The OM group C7ROUTE (CCS7 route) describes the performance and use of Common Channel Signaling 7 (CCS7) routes. The C7ROUTE report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The C7ROUTE reports: 2167, 2267, 2367, 2467, and 2767. Fields required for group C7ROUTE:

C7RTUNAU	C7TFA	C7TFR	C7TFP	C7CNTREER
C7FRCREER	C7XTFA	C7XTFR	C7XTFP	

T-2x68 OM CF3P Report

Lines that use the Three-way Calling (3WC) feature request *three-port conference circuits* (CF3P). Calls that go to service analysis position after the activation of the position request three-port conference circuits. Trunk test positions request three-port conference circuits when a request to monitor talking is issued. The CF3P report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the UNAVAIL CKTS, Calls in Queue, % OVFL and % LOAD. Totals are displayed at the bottom of the report.

$$\text{UNAVAIL CKTS} = \frac{\text{CNFSBU} + \text{CNFMBU}}{\text{MULTIPLIER (dependent on display interval)}}$$

$$\text{Calls in Queue} = \text{CNFOVFL} - \text{CNFQOVFL}$$

$$\% \text{ OVFL} = \frac{\text{CNFSZRS}}{\text{CNFSZRS} + \text{CNFOVFL}} \times 100$$

$$\% \text{ LOAD} = \frac{\text{CNFTRU}}{(\text{AVAIL CKTS} - \text{UNAVAIL CKTS}) \times \text{multiplier}} \times 100$$

The CF3P reports: 2168, 2268, 2368, 2468, and 2768. Fields required for group CF3P:

CNFSZRS	CNFOVFL	CNFQOCC	CNFQOVFL	CNFQABAN
CNFTRU	CNFSBU	CNFMBU	AVAIL CKTS	UNAVAIL CKTS

T-2x97 OM CF3P for TOPS Report

The OM group CF3P for TOPS is a variant of CF3P and applies to TOPS offices with toll and combined local/toll. The CF3P for TOPS report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the UNAVAIL CKTS, Calls in Queue, % OVFL and % LOAD. Totals are displayed at the bottom of the report.

$$\text{UNAVAIL CKTS} = \frac{\text{CNFSBUT} + \text{CNFMBUT}}{\text{multiplier}}$$

$$\text{Calls in Queue} = \text{CNFOVFLT} - \text{CNFQOVFT}$$

$$\% \text{ OVFL} = \frac{\text{CNFOVFLT} + \text{TOPSOVFL}}{(\text{CNFSZRST} + \text{CNFOVFLT} + \text{TOPSZRS} + \text{TOPSOVFL})} \times 100$$

$$\% \text{ LOAD} = \frac{\text{CNFTRU} + \text{TOPSTRU}}{(\text{AVAIL CKTS} - \text{UNVAIL CKTS}) \times \text{multiplier}} \times 100$$

The CF3P for TOPS reports: 2197, 2297, 2397, 2497, and 2797. Fields required for group CF3P for TOPS:

CNFSZRST	CNFOVFL	CNFQOCC	CNFQOVFT
CNFQABNT	CNFTRUT	CNFSBUT	CNFMBUT
TOPSZRS	TOPSOVFL	TOPSTRU	AVAIL CKTS

T-2x33 OM CF6P Report

The OM group CF6P provides information on the use of a 6-port conference circuit. The CF6P report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the UNAVAIL CKTS, Calls in Queue, % OVFL and % LOAD. Totals are displayed at the bottom of the report.

$$\text{UNAVAIL CKTS} = \frac{\text{CF6SBU} + \text{CF6NBU}}{\text{multiplier}} \times 100$$

$$\text{Calls in Queue} = \text{CF6OVFL} - \text{CF6QOVFL}$$

$$\% \text{ OVFL} = \frac{\text{CF6OVFL}}{\text{CF6SZRS} + \text{CF6OVFL}} \times 100$$

$$\% \text{ LOAD} = \frac{\text{CF6TRU}}{(\text{AVAIL CKTS} - \text{UNAVILA CKTS}) \times \text{multiplier}} \times 100$$

The CF6P reports: 2133, 2233, 2333, 2433, and 2733. Fields required for group CF6P:

CF6SZRS	CF6OVFL	CF6QOCC	CF6QOVFL
CF6QABAN	CF6TRU	SEQQRY	MCCSACBS

T-2x69 OM CP Report

The OM group CP provides information on the use of call processing software resources such as call condense blocks, call processes, multi-blocks, wakeup blocks, and long buffers. CP contains 27 peg registers. The CP report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The CP reports: 2169, 2269, 2369, 2469, and 2769. Fields required for group CP:

CCBSZ	CCBOVFL	CPSZ	CPTRAP	CPSUIC	ORIGDENY
WAITDENY	CPLSZ	CPLOOVFL	CPLPOVFL	CPLOSZ	OUTBSZ
OUTBOVFL	MULTSZ	MULTOVFL	WAKESZ	WAKEOVFL	CINITC
WINITC	INITDENY	INLBSZ	INLBOVFL	CPLBOOVF	

T-2x70 OM DCCICPCP Report

The OM group DCCICPCP (Digital Control Channel ICP Call Processing) contains OMs that are collected and pegged in the Intelligent Cellular Peripheral (ICP) and are used for call processing activities. The registers in this group provide useful information to aid in system DCCH performance problems. The DCCICPCP report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the % MBL ORIG COMP. Totals are displayed at the bottom of the report. The DCCICPCP reports: 2170, 2270, 2370, 2470, and 2770. Fields required for group DCCICPCP:

DPAGEREQ	DCCPGRES	DCCMBORG	DMBLORGC	DMBLTERC
DCCHMSG	DINCPGRE	DUNEXPGR	DCCHMWOA	DCCMWOC1
DCCMWOCR	DDIRETRY	DSBITMIS	DPRADPA	DPREXPA
DPGREXPA	DPGRADPA	DCCRMHOF	DCRGATTS	

T-2x46 OM DTSR Report

The OM group DTSR (Dial Tone Speed Recording) provides information for the host site register. The DTSR provides information on the ability of the switch to return a dial tone for a host site in 3's. The DTSR report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the % DELAY. Totals are displayed at the bottom of the report.

$$\% \text{ DELAY} = (\text{DELAY} \div \text{TOTAL}) \times 100$$

The DTSR reports: 2146, 2246, 2346, 2446, and 2746. Fields required for group DTSR:

TOTAL	DELAY
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T-2x55 OM DTSRPM Report

The OM group DTSRPM (Dial Tone Speed Recording on a peripheral module base) provides information on dial tone speed recording (DTSR). This group provides information on DTSR for each peripheral module (PM) and for all line concentrating devices (LCD) in the switch. The DTSRPM report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the % DPL DELAY, % DGT DELAY AND % KS DELAY. Totals are displayed at the bottom of the report.

$$\% \text{ DPL DELAY} = \frac{\text{DPLDLY}}{\text{DPLTOT}} \times 100$$

$$\% \text{ DGT DELAY} = \frac{\text{DGTDLI}}{\text{DGTTOT}} \times 100$$

$$\% \text{ KS DELAY} = \frac{\text{KSDLY}}{\text{KSTOT}} \times 100$$

The DTSRPM reports: 2155, 2255, 2355, 2455, and 2755. Fields required for group DTSRPM:

DPLTOT	DPLDLY	DGTTOT	DGTDLI	KSTOT	KSDLY
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T-2x71 OM HUNT Report

The OM group HUNT provides information on the performance of each hunt group in the DMS switch. The OM group HUNT counts: attempts to terminate calls on lines in the hunt group, attempts that fail to find an available line and overflow, and calls attempted again that terminate on a line and fail. The HUNT report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the % OVFL and % REHUNT. Totals are displayed at the bottom of the report.

$$\% \text{ OVFL} = \frac{\text{HUNTOVFL}}{\text{HUNTATT}} \times 100$$

$$\% \text{ REHUNT} = \frac{\text{HUNTRHNT}}{\text{HUNTATT}} \times 100$$

The HUNT reports: 2171, 2271, 2371, 2471, and 2771. Fields required for group HUNT:

HUNTATT	HUNTOVFL	HUNTRHNT	HUNTTRF	HUNTMNT
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T-2x72 OM ICPCP Report

The OM group ICPCP (Intelligent Cellular Peripheral Call Processing) pegs intelligent cellular peripheral (ICP) call processing events. This information is used to update the appropriate OM tables in the control module (CM) for a cell site. Also, appropriate CM OMs are pegged when maintenance actions are performed (either system or manually invoked). The ICPCP report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the % MBL ORIG COMP. Totals are displayed at the bottom of the report.

$$\% \text{ MBL ORIG COMP} = \frac{\text{MBLORGCO}}{\text{MBLORG}} \times 100$$

The ICPCP reports: 2172, 2272, 2372, 2472, and 2772. Fields required for group ICPCP:

MBLORG	MBLORGCO	PAGEREQ	PAGERESP	MBLTERCO	MBLREGR	MBLINCPT
MBLREORD	CCHMSG	DIRETRY	SATTOS	INVSATDT	INCPGRES	SBITMIS
EBITMS	PGHASH	PGHASHTO	UNEXPGI	NBPREQI	NBPRSPI	RSPLSHRQ
RSPLSHSC	SFAILQRY	SPASSQRY	SIGNORED	CCHMWOA	CCHMWOC1	CCHMWOCR
VHCMWOA	VCHMWOC1	VCHMWOCR				

T-2x73 OM ICPDCP Report

The OM group ICPDCP (Intelligent Cellular Peripheral Digital Call Processing) pegs digital call processing events that occur on an intelligent cellular peripheral (ICP). The ICPDCP report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the % MBL ORIG COMP. Totals are displayed at the bottom of the report.

$$\% \text{ MBL ORIG COMP} = \frac{\text{DMBORDCO} + \text{DMBORACO}}{\text{DMBLORG}} \times 100$$

The ICPDCP reports: 2173, 2273, 2373, 2473, and 2773. Fields required for group ICPDCP:

DMBLORG	DMBORACO	DMBORDCO	DPAGRESP	DMBTRACO
DMBTRDCO	DICCHMSG	DVCCTOS	INVDVCC	

T-2x77 OM ISUPCONN Report

The OM group ISUPCONN (Integrated Services Digital Network User Part Connection) provides information on circuit availability and successful call attempts. This information is used to determine the effects of the surrounding network on integrated services digital network (ISDN) user part (ISUP) performance. The ISUPCONN report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The ISUPCONN reports: 2177, 2277, 2377, 2477, and 2777. Fields required for group ISUPCONN:

ISCONBAD	ISCONUCE	ISCONUCC	ISCONUCA	ISCONUCF	ISCONUCN	ISCONUCB
ISCONUCS	ISCONUCO	ISCONCOT	ISCONICC	ISCONFAR	ISCONINR	

T-2x78 OM ISUPERRS Report

The OM group ISUPERRS (Integrated Services Digital Network User Part Errors) counts abnormal conditions, unexpected messages, and the absence of acknowledgment messages during call setup, call take down, and maintenance procedures on the switch. These counts are used by maintenance personnel to track integrated services digital network user part (ISUP) stability. The ISUPERRS report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The ISUPERRS reports: 2178, 2278, 2378, 2478, and 2778. Fields required for group ISUPERRS:

ISERRRSC	ISERRGRS	ISERRBLO	ISERRBAD	ISERRRLC	ISERRREL
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T-2x79 OM ISUPUSAG Report

The OM group ISUPUSAG (Integrated Services Digital Network User Part Usage) counts incoming and outgoing integrated services digital network user part (ISUP) messages. The ISUPUSAG report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the % ORIG and % TERM. Totals are displayed at the bottom of the report.

$$\% \text{ ORIG} = \frac{\text{OUT}}{\text{OUT} + \text{IN}} \times 100$$

$$\% \text{ TERM} = \frac{\text{IN}}{\text{IN} + \text{OUT}} \times 100$$

The ISUPUSAG reports: 2179, 2279, 2379, 2479, and 2779. Fields required for group ISUPUSAG:

ISMSGOUT	ISMSGIN
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T-2x80 OM LM Report

OM group LM (Line module maintenance summary) provides maintenance measurements for line modules and remote line modules. The LM report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The LM reports: 2180, 2280, 2380, 2480, and 2780 Fields required for group LM:

LMERR	LMFLT	LMSBU	LMMBU	LMCCTDG	LMCCTFL
LMMBP	LMSBP	LMMBTCO	LMSBTCO	LMCCTOP	

T-2x48 OM LMD Report

OM group LMD (Line Traffic) provides traffic information for the following peripheral modules (PM): remote line modules (RLM), line concentrating modules (LCM), virtual line concentrating modules (VLCM), remote concentrator terminals (RCT), remote concentrator subscribers (RCS), integrated services line modules (ISLM), digital line modules (DLM), very small remotes (VSR), enhanced line concentrating modules (ELCM), integrated services digital network (ISDN) line concentrating modules (LCMI), intelligent peripheral equipment (IPE) line modules (LM).

The LMD report shows the usage per poll interval on all of the fields listed below for the observation period. It also calculates the CCS per Attempt, % ORIG and % TERM. Totals are displayed at the bottom of the report.

$$\text{CCS per Attempt} = \frac{\text{LMTRU}}{\text{NTERMATT} + \text{NORIGATT}}$$

$$\% \text{ ORIG} = \frac{\text{NORIGATT}}{\text{NTERMATT} + \text{NORIGATT}} \times 100$$

$$\% \text{ TERM} = \frac{\text{NTERMATT}}{\text{NTERMATT} + \text{NORIGATT}} \times 100$$

The LMD reports: 2148, 2248, 2348, 2448, and 2748. Fields required for group LMD:

NTERMATT	NORIGATT	LMTRU	TERMBLK	ORIGFAIL	PERCLFL
STKCOINS	REVERT	MADNTATT	ORIGBLK	ORIGABN	

T-2x22 OM LNP Report

OM group LNP (local number portability) allows subscribers to change service providers and retain a directory number (DN). The LNP report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The LNP reports: 2122, 2222, 2322, 2422, and 2722. Fields required for group LNP:

LNPQRY	LNPQRY1	LNPQFT1	LNPRFERR	LNPQFRTE	LNPQESC
LNPQESC1	LNPQFACG	LNPQFSCP	LNPQFSSP	LNPRFCNT	LNPRFDSC
LNPRFSTR	LNPPORT	LNPPORT1	LNPREL	LNPUADNR	LNPUAHOM
LNPQLRNQ	LNPQLRNR	LNPQLRNV	LNPQLRNA		

T-2x23 OM NARUSAGE Report

OM group NARUSAGE (Network Access Registers Usage) provides information about network access registers. The NARUSAGE report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The NARUSAGE reports: 2123, 2223, 2323, 2423, and 2723. Fields required for group NARUSAGE:

NARTOTAL	NARBLCKD	NARTRAF
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T-2x49 OM OFZ Report

OM group OFZ (Office Traffic Summary) provides information for traffic analysis. The OM group OFZ uses a primary route scoring philosophy. This OM group differs from OTS because OFZ counts calls for the intended destination, not the destination where the call terminates.

The OFZ report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The OFZ reports: 2149, 2249, 2349, 2449, and 2749. Fields required for group OFZ:

NORIG	ORIGTRM	ORIGLKT	ORIGABDN	ORIGTONE
ORIGANN	ORIGOUT	NIN	INOUT	INLKT
INABNM	INABNC	INTONE	INANN	INTRM
OUTNWAT	TRMNWAT	TRMMFL	TRMBLK	LNMBPC

T-2x51 OM OFZ2 Report

OM group OFZ2 is an extension of the OM group OFZ. The OFZ2 report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The OFZ2 reports are 2151, 2251, 2351, 2451 and 2551. Fields required for group OFZ2:

OFZNCIT	OFZNCTC	OFZNCLT	OFZNCBN	OFZNCID	OFZNOSC	OFZNCOT
OFZNCRT	OFZNCIM	OFZNCON	OFZNCOF	PSGM	PDLM	

T-2x81 OM OMMTX Report

OM group OMMTX (Operational Measurement Mobile Telephone Exchange) pegs the events that apply specifically to a subscriber unit. The OMMTX report shows the usage per poll interval on all of the fields listed below for the observation period. A ratio for each attempted and completed type is listed also. This report also calculates TOT ATTS, MMATTS/TOT ATTS, CALL ATTS and CALL COMP.

The last column of the report is a % column calculates CALL COMP divided by CALL ATTS. Totals are

displayed at the bottom of the report.

TOT ATTS = OMATTS + REGATTS + HOATTS + MOATTS + MMATTS + LMATTS + MLATTS + EXSPATTS

CALL ATTS = MLATTS + LMATTS + MMATTS + MOTTS

CALL COMP = MLCOMPS + LMCOMPS + MNCOMPS + MOCOMPS

The OMMTX reports: 2181, 2281, 2381, 2481, and 2781. Fields required for group OMMTX:

MLATTS	MLCOMPS	LMATTS	LMCOMPS	MMATTS	MMCOMPS	MOATTS
MOCOMPS	OMATTS	OMCOMPS	HOATTS	HOCOMPS	PGREQS	PGRESPS
MBORIGS	MTRMT	DROPCALL	DROPHO	REGATTS	REGCOMPS	EXSPATTS
EXSPCOMP	STIMEOUT	DMBORIGS	DPGRES	DHOATTS	DHOCOMPS	DDRPCALS
DDROPHO	MOBANS	DVCCTO	OMMTXSP1			

T-2x82 OM OMMTX3 Report

OM group OMMTX3 (Operational Measurement Mobile Telephone Exchange 3) is pegged to record the mobile call processing events such as the number of mobile registrations. The registers in this group are used to engineer the load balancing among the cells. The OMMTX3 report shows the usage per poll interval on all of the fields listed below for the observation period. The OMMTX3 reports: 2182, 2282, 2382, 2482, and 2782. Fields required for group OMMTX3:

PWRUPREG	PARMCHRG	TIMBSREG	ZONEBREG	DISTBREG
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T-2x83 OM OMMTXHO Report

OM group OMMTXHO (Operational Measurement Mobile Telephone Exchange Handoff) pegs the events that apply to handoff-related information including attempted and completed handoffs. The OMMTXHO report shows the usage per poll interval on all of the fields listed below for the observation period. The OMMTXHO reports: 2183, 2283, 2383, 2483, and 2783. Fields required for group OMMTXHO:

HOSENTCP	CALLOVER	NORESP	NOADJCEL	ABOVETH	NOVOICE	HOFFREQ
HOFFRTRY	HINREQ	HINRTRY	HOUTREQ	HOUTRTRY	HOVRREQ	HOVRTRY
HOVRHOTL	LCRREQS	LCRRESPS	ADHOFF	HDIRREQ	HDIRRTRY	HMTCREQ
HMTCRTRY	DAHOFF	DDHOFF	MAHOATT	MAHOCMP	HOACKSWB	

T-2x21 OM ONI Report

OM group ONI (Operation Number Identification) provides information about centralized automatic message accounting (CAMA) calls that use ONI. The ONI report shows the usage per poll interval on all of the fields listed below for the observation period. The ONI reports: 2121, 2221, 2321, 2421 and 2721. Fields required for group ONI:

ONATT	ONISZRS	ONIOVFL	ONIOCCU	ONICHDLU
ONIQOCC	ONIQOVFL	ONIQABAN	ONIQTOUT	ONIDELGT
ONIFDISC	ONIMTCHC	ONIVRGCA	ONISBU	ONIMBU

T-2x37 OM OTS Report

OM group OTS (Office Traffic Summary) counts calls by source and destination. Sources can be trunk, line, or system generated. The OTS report shows the usage per poll interval on all of the fields listed below for the observation period. The OTS reports: 2137, 2237, 2337, 2437, and 2737 Fields required for group OTS:

NORG	ORGTRM	ORGOUT	ORGTRMT	ORGABDN	ORGLKT
ORGFSET	NINC	INCTRM	INCOUT	INCTRMT	INCABNM
INCABNC	INCLKT	INCFSET	NSYS	SYSTRM	SYSOUT
SYSTRMT	SYSABDN	SYSLKT	SYSFSET		

T-2x43 OM QMSACT Report

OM group QMSACT (Queue Management System Activity) records events that occur in the Queue Management System call and agent manager (QMS CAM) when the QMS CAM interacts with other applications. There are two sections to the QMSACT report. The summary section (listed first) and the detail section. This report shows the usage per poll interval on all of the fields listed below for the observation period for each selected group. The QMSACT reports: 2143, 2243, 2343, 2443, and 2743. Fields required for group QMSACT:

CALLARV	CALLQD	CALLDEFL	OVLMAX	OVLNOCQE	SPLCLREQ	NOSPLCL
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T-2x47 OM QMSDATA Report

OM group QMSDATA records events in the Queue Management System call and agent manager (QMS CAM). The system searches call and agent queues in response to requests from QMS applications. There are two sections to the QMSDATA report. The summary section (listed first) and the detail section. This report shows the usage per poll interval on all of the fields listed below for the observation period for each selected group. QMSDATA reports: 2147, 2247, 2347, 2447, and 2747. Fields required for group QMSDATA:

CQELHIGH	CTAQATT	CTAQDEPT	CQAQATT	CQAQDEPT
CQAQSRCH	PRAQATT	PRAQDEPT	CQSRCATT	CQSCONS

T-2x39 OM RADR Report

OM group RADR provides information about receiver attachment delay recorder tests. The RADR report shows the usage per poll interval on all of the fields listed below for the observation period for each selected group. The RADR reports: 2139, 2239, 2339, 2439, and 2739. Fields required for group RADR:

RADTESTC	RADLDLYP	RADUDLYP
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T-2x34 OM RCF Report

OM group RCF counts remote call forwarded calls to toll offices with centralized automatic message accounting (CAMA) billing systems. RCF also counts remote call forwarded calls to intertoll trunks in local automatic message accounting (LAMA) offices. Two registers count call forward attempts and calls the system fails to forward. The usage register records if remote call forwarded calls are in progress. The RCF report shows the usage per poll interval on all of the fields listed below for the observation period. This report also calculates % COMP and AVG HT. Totals are displayed at the bottom of the report.

$$\% \text{ COMP} = \frac{(\text{RCFOFFRD} - \text{RCFDFLD})}{\text{RCFIFFRD}} \times 100$$

$$\text{AVG HT} = \frac{\text{RCFUSAG} \div 6}{\text{RCFOFFRD} - \text{RCFDFLD}}$$

The RCF reports: 2134, 2234, 2334, 2434, and 2734. Fields required for group RCF:

RCFOFFRD	RCFUSAG	RCFDFLD
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T-2x52 OM RCVR Report

OM group RCVR counts successful and failed attempts to obtain receiver circuits in the DMS. The RCVR report shows the usage per poll interval on all of the fields listed below for the observation period. This report also calculates % OVFL, AVG HT and % REF MF. Totals are displayed at the bottom of the report.

$$\% \text{ OVFL} = \frac{\text{RCVQOVFL}}{\text{RCVRSZRS}} \times 100$$

$$\text{AVG HT} = \frac{\text{RCVTRU}}{\text{RCVRSZRS}} \times 100$$

$$\% \text{ REF MF} = \frac{\text{RCVRSZRS} + \text{RCVQOVFL} + \text{RCVQABAN}}{\text{ACCUM MIN}} \times 100$$

The RCVR reports: 2152, 2252, 2352, 2452, and 2752. Fields required for group RCVR:

RCVRSZRS	RSVOVFL	RCVQOCC	RCVQOVFL
RCVQABAN	RCVTRU	RCVCSBU	RCVMBU

T-2x84 OM RSCIR Report

OM group RSCIR (Remote Switching Center Inter-Switching Channel Traffic) evaluates traffic loads on inter-switching channels. Inter-switching channels are channels on the DS-1 links that connect two remote switching centers (RSC) located at a remote site. The RSCIR report shows the usage per poll interval on all of the fields listed below for the observation period. This report also calculates % L/L BLK, % L/T BLK, % T/L BLK and % T/T BLK. Totals are displayed at the bottom of the report.

$$\% \text{ L/L BLK} = (\text{RSCIRBLL} \div \text{RSCIRALL}) \times 100$$

$$\% \text{ L/T BLK} = (\text{RSCIRBLT} \div \text{RSCIRATL}) \times 100$$

$$\% \text{ T/L BLK} = (\text{RSCIRBTL} \div \text{RSCIRATL}) \times 100$$

$$\% \text{ T/T BLK} = (\text{RSCIRBTT} \div \text{RSCIRATT}) \times 100$$

The RSCIR reports: 2184, 2284, 2384, 2484, and 2784. Fields required for group RSCIR:

RSCIRALL	RSCIRBLL	RSCIRALT	RSCIRBLT	RSCIRATL
RSCIRBTL	RSCIRATT	RSCIRBTT	RSCIRCBU	

T-2x85 OM RSCIS Report

OM group RSCIS (Remote Switching Center Intra-Switching Traffic) evaluates traffic loads on intra-switching channels in a remote switching center. The RSCIS report shows the usage per poll interval on all of the fields listed below for the observation period. This report also calculates % L/L BLK, % L/T BLK, % T/L BLK and % T/T BLK. Totals are displayed at the bottom of the report.

$$\% \text{ L/L BLK} = (\text{RSCISBLL} \div \text{RSCISALL}) \times 100$$

$$\% \text{ L/T BLK} = (\text{RSCISBLT} \div \text{RSCISALT}) \times 100$$

$$\% \text{ T/L BLK} = (\text{RSCISBTL} \div \text{RSCISATL}) \times 100$$

$$\% \text{ T/T BLK} = (\text{RSCISBTT} \div \text{RSCISATT}) \times 100$$

The RSCIS reports: 2185, 2285, 2385, 2485, and 2785. Fields required for group RSCIS:

RSCISALL	RSCISBLL	RSCISALT	RSCISBLT	RSCISATL
RSCISBTL	RSCISATT	RSCISBTT	RSCISCBU	

T-2x44 OM SITE for RLM Report

OM group SITE for RLM provides information on traffic-related counts and dial-tone speed recording (DTSR) for remote sites. The operating company uses DTSR to measure the ability of the switch to retain data. The SITE for RLM report shows the usage per poll interval on all of the fields listed below for the observation period. This report also calculates the % intrasit, % dp_delay and % dt_delay. Totals are displayed at the bottom of the report.

$$\% \text{ intrasit} = \frac{\text{intrasit}}{\text{intrasit} + \text{intrasit} + \text{rorigout} + \text{interm}} \times 100$$

$$\% \text{ dp_delay} = \frac{\text{dpdelay}}{\text{dptestc}} \times 100$$

$$\% \text{ dt_delay} = \frac{\text{dtdelay}}{\text{dttestc}} \times 100$$

The SITE for RLM reports: 2144, 2244, 2344, 2444, and 2744. Fields required for group SITE for RLM:

INTRASIT	INTERSIT	RORIGOUT	INRTERM
DPTSTC	DPDELAY	DTTESTC	DTDELAY

T-2x45 OM SITE for RPM Report

OM group SITE for RPM provides information on traffic-related counts and dial-tone speed recording (DTSR) for sites using remote peripheral modules (RPM). The SITE for RPM report shows the usage per poll interval on all of the fields listed below for the observation period. This report also calculates the % INTRASIT, % LM_DP_DEL, % LM_DT_DEL, % LCM_DP_DE, % LCM_DT_DE, % LCM_KS_DE, % RCT_DP_DE, % RCT_DT_DE and % DLMKS_DEL. Totals are displayed at the bottom of the report.

$$\% \text{ INTRASIT} = \frac{\text{INTRASIT}}{(\text{INTRASIT} + \text{INTERSIT} + \text{RORIGOUT} + \text{INRTERM})} \times 100$$

$$\% \text{ LM_DP_DEL} = (\text{LMDPD} \div \text{LMDPT}) \times 100$$

$$\% \text{ LM_DT_DEL} = (\text{LMDTD} \div \text{LMDTT}) \times 100$$

$$\% \text{ LCM_DP_DE} = (\text{LCMDPD} \div \text{LCMDPT}) \times 100$$

$$\% \text{ LCM_DT_DE} = (\text{LCMDTD} \div \text{LCMDTT}) \times 100$$

$$\% \text{ LCM_KS_DE} = (\text{LCMKSD} \div \text{LCMKST}) \times 100$$

$$\% \text{ RCT_DP_DE} = (\text{RCTDPD} \div \text{RCTDPT}) \times 100$$

$$\% \text{ RCT_DT_DE} = (\text{RCTDTD} \div \text{RCTDTT}) \times 100$$

$$\% \text{ DLMKS_DEL} = (\text{DLMKSD} \div \text{DLMKST}) \times 100$$

The SITE for RPM reports: 2145, 2245, 2345, 2445, and 2745. Fields required for group SITE for RPM:

INTRASIT	INTERSIT	RORIGOUT	INRTERM	LMDP_T
LMDP_D	LMDT_T	LMDT_D	LCMDP_T	LCMDP_D
LCMDT_T	LCMDT_D	LCMKS_T	LCMKS_D	RCTDP_T
RCTDP_D	RCTDT_T	RCTDT_D	DLMKS_T	DLMKS_D

T-2x38 OM SOTS Report

OM group SOTS (Supplementary office traffic summary) counts calls the system routes to generalized no-circuit treatment (GNCT). These registers provide information on outgoing and terminating network performance. The SOTS report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The SOTS reports: 2138, 2238, 2338, 2438, and 2738. Fields required for group SOTS:

SOTSNCBN	SOTSNCID	SOTSNCIM	SOTSNCFIT	SOTSNCLT	SOTSNCOF
SOTSNCON	SOTSNCOT	SOTSNCRT	SOTSNCTC	SOTSNOSC	SOTSPDLM
SOTSPSGM	SOUTNWT	SOUTMFL	SOUTRMFL	SOUTOSF	SOUTROSF
STRMNWT	STRMMFL	STRMBLK	STRMRBLK	STRMGSGL	

T-2x53 OM STN Report

OM group STN (Special Tones) provides information about special tones broadcast from trunk cards in the maintenance trunk modules. The STN report shows the usage per poll interval on all of the fields listed below for the observation period. This report also calculates the % Overflow. Totals are displayed at the bottom of the report.

$$\% \text{ Overflow} = (\text{STNOVFL} \div \text{STNATTS}) \times 100$$

The STN reports: 2153, 2253, 2353, 2453, and 2753. Fields required for group STN:

STNATTS	STNMTCHF	STNOVFL	STNMBU	STNSBU	STNTRU
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T-2x86 OM TCAPUSAG Report

OM group TCAPUSAG (Transaction Capabilities Application Part Usage Measurements) records the use of transaction capabilities application part (TCAP) for each subsystem. Examples of transaction capabilities: messages, transaction and components. The TCAPUSAG report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The TCAPUSAG reports: 2186, 2286, 2386, 2486, and 2786. Fields required for group TCAPUSAG:

TCMSGOUT	TCMSGIN	TCUNIDIR	TCQWPERM	TCQNPERM	TCCWPERM
TCCNPERM	TCRESPNS	TCINVKL	TCINVKNL	TCRSLTL	TCRSLTNL
TCRTERR	TCREJECT	TCABORT	TCDPUSE		

T-2x56 OM TFCANA Report

OM group TFCANA (traffic separation/traffic analysis) provides information on call attempts, call setup time, and call connect time. The information occurs at source-traffic-separation and destination-traffic-separation intersections. The TFCANA report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. This report also calculates the ORIG USG, TERM USG (TFANCU), ORIG usage (usage in the selected unit), TERM usage (usage in the selected unit), TOTAL usage, ORIG AVG HT, TERM AVG HT and TOTAL AVG HT.

$$\text{ORIG USG} = \text{TFANSU} - \text{TFANCU}$$

$$\text{TOTAL usage} = \text{ORIG usage} + \text{TERM usage}$$

$$\text{ORIG AVG HT} = \text{Original Time} \div \text{TFANPEG}$$

$$\text{TERM AVG HT} = \text{Term Time} \div \text{TFANPEG}$$

$$\text{TOT AVG HT} = \text{Total Time} \div \text{TFANPEG}$$

The TFCANA reports: 2156, 2256, 2356, 2456, and 2756. Fields required for group TFCANA:

TFANPEG	TFANSU	TFANCU
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T-2x54 OM TONE Report

OM group TONE provides information on traffic for tone generators. The OM group TONE contains two peg registers, TONEATT and TONEOVFL. The TONE report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The TONE OVFL % is also calculated.

$$\text{TONE OVFL \%} = (\text{TONEOVFL} \div \text{TONEATT}) \times 100$$

The TONE reports: 2154, 2254, 2354, 2454, and 2754. Fields required for group TONE:

TONEATT	TONEOVFL
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T-2x42 OM TOPSDACC Report

OM group TOPSDACC (Traffic Operator Position System Directory Assistance Call Completion) counts call completions that are handled by an operator and by Automatic Directory Assistance Call Completion (ADACC). ADACC allows a subscriber making directory assistance (DA) call to be connected to the requested number without originating a new call. The subscriber can be connected to the requested number manually by an operator, or automatically by an audio response unit (ARU). There are 2 sections to the TOPSDACC report, the summary section and the detail section. The summary section shows the totals for sections of poll intervals. The detail section shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The TOPSDACC reports: 2142, 2242, 2342, 2442, and 2742. Fields required for group TOPSDACC:

OHACCPT	AREQST	ADENY	AOFFER	AACCP
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T-2x40 OM TOPSQMS Report

OM group TOPSQMS (TOPS queue management system) records queuing events for TOPS calls that request an operator position from the queue management system (QMS) call and agent manager (CAM). TOPSQMS also records the action taken by the QMS CAM, in response to these requests. The queuing events are counted for each call queue. There are 2 sections to the TOPSQMS report, the summary section and the detail section. The summary section shows the totals for sections of poll intervals. The detail section shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. The % ABANDON is also calculated.

$$\% \text{ ABANDON} = (\text{CABANDON} \div \text{POSRQSTD}) \times 100$$

The TOPSQMS reports: 2140, 2240, 2340, 2440, and 2740. Fields required for group TOPSQMS:

POSRQSTD	CQUEUED	GOTPOSIM	CDEFLECT	COVFLMAX
COVFLNCQ	CQDENIED	CABANDON	CREQUEUE	

T-2x98 OM TRK Report

OM group TRK (Trunk Group) provides information on trunk traffic for each trunk group. The TRK report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. Totals are displayed at the bottom of the report. The % ORIG COMP, % TERM COMP, % OVFL, % CAPACITY and IN/TOT COMP is also calculated.

$$\% \text{ ORIG COMP} = \frac{\text{CONNECT} - \text{OUTMTCHFL}}{\text{NATTMPT}} \times 100$$

$$\% \text{ TERM COMP} = \frac{(\text{INCATOT} - \text{PRETAB} - \text{INFAIL})}{\text{INCATOT}} \times 100$$

$$\% \text{ OVFL} = (\text{NOVFLATB} \div \text{NATTMPT}) \times 100$$

$$\% \text{ CAPACITY} = (\text{TRU} \div \text{Engineered CCS}) \times 100$$

$$\text{IN/TOT} = \frac{\text{IN}}{\text{INCATOT} - \text{PRETAB} - \text{INFAIL} + \text{CONNECT} - \text{OUTCHF}}$$

The TRK reports: 2198, 2298, 2398, 2498, and 2798. Fields required for group TRK:

INCATOT	PRERTEAB	INFAIL	NATTMPT	NOVFLATB	GLARE	OUTFAIL
DEFLDCA	DREU	PREU	TRU	SBU	MBU	OUTMTCHF
CONNECT	TANDEM	AOF	ANF	TOTU	ANSWER	INVAUTH
BLKCTRK	MAXBU	TRU2WIN	NCTPASS	NCTFAIL	ACCCONG	NOANSWER
INANSWER	OUTANSU	INANSU	ANSU	NANS	CONGEST	

T-2x87 OM TRMTCM Report

OM group TRMTCM (Customer Miscellaneous Treatment) counts calls that the system routes to a treatment. The treatment is a result of a customer action, but does not relate to authorization. The TRMTCM report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. Totals are displayed at the bottom of the report. The TRMTCM reports: 2187, 2287, 2387, 2487, and 2787. Fields required for group TRMTCM:

TCMUNDT	TCMPDIL	TCMPSIG	TCMVACT	TCMUNDN	TCMBLDN	TCMOPRT
TCMTRBL	TCMANCT	TCMDISC	TCMATBS	TCMTDBR	TCMVACS	TCMANTO
TCMCFWW	TCMVCCT	TCMATDT	TCMCBTN	TCMCHAN	TCMCHAF	TCMOSVR
TCMNC8F	TCMNTRS	TCMNCREJ	TCMUPAB	TCMCNAD	TCMVPFX	TCMN9DF
TCMN9OB	TCMN9NS	TCMRING				

T-2x88 OM TRMTCU Report

OM group TRMTCU (Customer Unauthorized Treatment) counts calls that the system routes to a treatment. The treatment notifies the subscriber that the action of the subscriber is not correct for reasons of authorization. These treatments normally indicate that the subscriber dials a sequence of digits that is not correct or follows a procedure that is not correct. The TRMTCU report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. Totals are displayed at the bottom of the report. The TRMTCU reports: 2188, 2288, 2388, 2488, and 2788. Fields required for group TRMTCU:

TCUINAC	TCUCNDT	TCUMSCA	TCUMSLC	TCUUNCA	TCUHNPI	TCUUNOW
TCUTDND	TCUUNIN	TCUORSS	TCUTESS	TCUDNTR	TCUNOCN	TCUINAU
TCUTINV	TCUCNOT	TCUDCFC	TCUDODT	TCURSDT	TCUFNAL	TCUUMOB
TCUANIA	TCUNACK	TCUCACE	TCUD950	TCUN950	TCUILRS	TCUNACD
TCUDACD	TCUABF	TCUFDNZ				

T-2x89 OM TRMTCU2 Report

OM group TRMTCU2 (Customer Not Authorized Treatment Extension) is an extension of group TRMTCU. The OM group TRMTCU2 counts calls that the system routes to a treatment. The treatment notifies the subscriber that an action is not correct for reasons of authorization. The TRMTCU2 report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. Totals are displayed at the bottom of the report. The TRMTCU2 reports: 2189, 2289, 2389, 2489, and 2789. Fields required for group TRMTCU2:

TCUCCNV	TCUCCNA	TCULCAB	TCUINCC	TCUANBB	TCUIMCC	TCUSCUN
TCUINPD	TCUNPAR	TCUIDPB	TCUCNAC	TCUN00B	TCUCOSX	TCUCACB
TCUBBFS	TCUCCIR	TCUJCCN	TCUCCCF	TCULCNV	TCUCGFL	TCUVPFL
TCUPTFL	TCUBCNI	TCUJACK	TCUITCF	TCUAARD	TCUGFNV	TCUEROR
TCUERTR	TCUERTO	TCUESNIF	TCUITDN			

T-2x90 OM TRMTER Report

OM group TRMTER (Equipment-related Treatment Group) counts calls that the system routes to a treatment. The system routes the calls to a treatment because of a failure caused by a switching equipment failure. The TRMTER report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. Totals are displayed at the bottom of the report. The TRMTER reports: 2190, 2290, 2390, 2490, and 2790. Fields required for group TRMTER:

TERSYFL	TERSSSTO	TERRODR	TERPNOH	TERPTOF	TERNMZN	TERERDS
TERSTOB	TERSTOC	TERINOC	TERAIFL	TERFDER	TERCONP	TERSCFL
TERNONT	TERNCUN	TERANFL	TERMTOC	TERINBT	TERC7AP	TERDTFL
TERPERR	TERINVM	TERSONI	TERQ33A	TERQ33B		

T-2x91 OM TRMTFR Report

OM group TRMTFR (Feature-Related Treatment) counts calls that the system routes to a treatment that is a normal progression of a call. The TRMTFR report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. Totals are displayed at the bottom of the report. The TRMTFR reports: 2191, 2291, 2391, 2491, and 2791. Fields required for group TRMTFR:

TFRBUSY	TRFMANL	TRFORMC	TFRCONF	TFRRRPA	TFRORAF	TFRRRF
TFRORAC	TFRORMF	TFRSRRR	TFRPRSC	TFRMHLD	TFRPGTO	TFRCTO
TFRNINT	TFRNCIX	TFRNCII	TFRNCTF	TFRFCOV	TFRILRR	TFRSINT
TFRWJUC	TFRFRDR	TFRSORE	TFRCCAP	TFRACPR	TFRADPA	TFRCCDT
TFRCBDN	TFRSCRJ	TFRICNF				

T-2x92 OM TRMTRS Report

OM group TRMTRS (Resource Shortage Treatment) counts calls the system routes to a treatment because a shortage of software or hardware resources causes a failure. The TRMTRS report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. Totals are displayed at the bottom of the report. The TRMTRS reports: 2192, 2292, 2392, 2492, and 2792. Fields required for group TRMTRS:

TRSNOSC	TRSNBLH	TRSNBLN	TRSCQOV	TRSNCRT	TRSNECG	TRSFECG
TRSTOVD	TRSSORD	TRSGNCT	TRSNOSR	TRSCGRO	TRSCHNF	TRSORAR

T-2x93 OM TS Report

OM group TS (Time Switch) records the use of the peripheral-side (P-side) time switches. Eight usage registers for each network module record the use of a separate time switch within the network module. New network modules have data in fields TS0 through TS3. Registers TS4 through TS7 apply to offices equipped with NTOX48 networks.

The TS report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. Totals are displayed at the bottom of the report. The TS reports: 2193, 2293, 2393, 2493, and 2793. Fields required for group TS:

TS0	TS1	TS2	TS3	TS4	TS5	TS6	TS7
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T-2x50 OM UCDGRP Report

OM group UCDGRP (Uniform Call Distribution) registers provide information on the use of the integrated business network (BN) feature Uniform Call Distribution (UCD). The OM group UCD permits calls in IBN systems to distribute evenly to a number of specified 500/2500 stations acting as UCD agents.

The UCDGRP report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. Totals are displayed at the bottom of the report. The % ANSWERED, % ABANDON and % DEFLECTED is also calculated.

$$\% \text{ ANSWERED} = (\text{UCDANSR} \div \text{UCDOFFR}) \times 100$$

$$\% \text{ ABANDON} = (\text{UCDABNDN} \div \text{UCDOFFR}) \times 100$$

$$\% \text{ DEFLECTED} = (\text{UCDDFLCT} \div \text{UCDOFFR}) \times 100$$

The UCDGRP reports: 2150, 2250, 2350, 2450, and 2750. Fields required for group UCDGRP:

UCDOFFR	UCDANSR	UCDDFLCT	UCDABNDN	UCDNS	UCDPRMPT	UCDBLOCK
UCDUSAGE						

T-2x94 OM UTR Report

OM group UTR (Universal Tone Receiver) counts and records call-processing requests from lines and trunks to UTRs. The registers of this OM group also record the activities in request-wait queues.

The UTR report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. Totals are displayed at the bottom of the report. The % OVFL and % ABANDON is also calculated.

$$\% \text{ OVFL} = \frac{\text{UTROVFL}}{(\text{UTRSZRS} + \text{UTROVFL} + \text{UTRQABAN})} \times 100$$

$$\% \text{ ABANDON} = \frac{\text{UTRQABAN}}{(\text{UTRSZRS} + \text{UTROVFL} + \text{UTRQABAN})} \times 100$$

The UTR reports: 2194, 2294, 2394, 2494, and 2794. Fields required for group UTR:

UTRSZRS	UTROVFL	UTRQOCC	UTRQOVFL	UTRQABAN	UTRTRU	UTRSAMPL
UTRRADA	UTRLDLYP	UTRUDLYP				

T-2x41 OM VSNCOM Report

OM group VSNCOM (Voice Services Node) measures call attempts and dispositions for voice services node (VSN)-related calls on an application base.

The VSNCOM report shows the usage per poll interval on all of the fields listed below for the observation period. Totals are displayed at the bottom of the report. Totals are displayed at the bottom of the report. The VSNCOM reports: 2141, 2241, 2341, 2441, and 2741. Fields required for group VSNCOM:

VSNATT	VSNIDFL	VSNNOVL	VSNVFL	VSNOPRF	VSNOPRB	VSNVABN
VSNVABA	VSNDAVT	VSNVABT				

T-2x96 OM XPMLINK

OM group PMLNK (Voice Services Node) records one-way and two-way link blockage and use for all extended multiprocessor system (XMS)-based peripheral modules (XPM) with switched lines. The XPMLNK report: 2196, 2296, 2396, 2496, and 2796. Fields required for group XPMLNK:

CSLCBU	PSLCBU	CSLAA	PSLAA	CSLBLK	PSLBLK	CSLMU
PSLMU						

Overflow Reports

T-2120 Daily Overflow

Displays BH overflow statistics for the selected groups in the observation period. The report includes the following information about the BH overflow: group name/number, the date and poll interval of the overflow, usage during the BH, peg of BH overflow, BH overflow, percentage of BH overflow, trunks equipped/working and required, and trunks over/under for each group that experienced an overflow during the observation period for the groups selected.

T-2125 Overflow Summary

Displays a summary of overflow information for the groups selected during the observation period. The report includes: group name/number, total peg, BH peg, date and interval of BH peg, total overflow, percentage of total overflow, BH overflow, date and interval of BH overflow and % of BH overflow.

Wireless Reports

T-2405 Average 8 Day Highest Busy Hour

This report is to be run for a 10-day observation period. It can be ran for shorter or longer observation periods, but the statistics may mean something different than intended.

If ran for 10 days, it will find the busy hour for each day, then take out the highest and the lowest busy hours, and average the remaining 8 busy hours.

The report lists the group name/number, location, coverage market, group type, the average ATT in and out (which is the average of the 8 busy hours), total ATT (Avg. ATT in + Avg. ATT out), Avg. usage, trunks equipped/working and required (trunks required calculated per the average usage), trunks over/under and BLK percentage.

There are blockage threshold counts at the bottom of the report.

T-2410 Daily Customer Concern

This report provides a daily summary for each group selected, for every day of the observation period. It displays the Cell Site, Location, LOST CALLS DROP, LOST CALLS SU FA, LOST CALL MOB RO, DIRECTED RETRY INFO ONLY, LOST CALLS TOTAL, TRK ATT TOTAL and LOST CALLS %. Daily totals and Observation Period totals of the columns are listed at the bottom of the report.

All fields in the below calculations are from collection set OMMTX unless otherwise specified.

For an Analog Site

LOST CALLS DROP = DROPCALL - DDRPCALS

LOST CALLS SU FA = STIMEOUT - DUCATO

LOST CALLS MOB RO = (from collection set ICPCP) MBLREORD

LOST CALLS HO FA = DROPHO - DDRPHO

DIRECTED RETRY INFO ONLY = (from collection set ICPCP) DIRETRY

LOST CALLS TOTAL = LOST CALLS DROP + LOST CALLS SU FA + LOST CALL MOB RO + LOST CALLS HO FA

TRKATT TOTAL = (from collection set TRK) INCATOT + NATTMPT

LOST CALLS % = LOST CALLS TOTAL ÷ TRKATT TOTAL

All fields in the below calculations are from collection set OMMTX unless otherwise specified.

For a Digital Site

LOST CALLS DROP = DDRPCALS

LOST CALLS SU FA = DUCCTO

LOST CALLS MOB RO = Always zero

LOST CALLS HO FA = DDROPHO

DIRECTED RETRY INFO ONLY = Always zero

LOST CALLS TOTAL = LOST CALLS DROP + LOST CALLS SU FA + LOST CALL MOB RO + LOST CALLS HO FA

TRKATT TOTAL = (from collection set TRK) INCATOT + NATTMPT

LOST CALLS % = LOST CALLS TOTAL ÷ TRKATT TOTAL

T-2710 Summary Customer Concern

This report provides totals for each group selected, for the total of the observation period.

The report displays the Cell Site, Location, LOST CALLS DROP, LOST CALLS SU FA, LOST CALL MOB RO, DIRECTED RETRY INFO ONLY, LOST CALLS TOTAL, TRK ATT TOTAL and LOST CALLS %.

Observation period totals for every column are listed at the bottom of the report.

All fields in the below calculations are from collection set OMMTX unless otherwise specified.

For an Analog Site

LOST CALLS DROP = DROPCALL - DDRPCALS

LOST CALLS SU FA = STIMEOUT - DUCATO

LOST CALLS MOB RO = (from collection set ICPCP) MBLREORD

LOST CALLS HO FA = DROPHO - DDRPHO

DIRECTED RETRY INFO ONLY = (from collection set ICPCP) DIRETRY

LOST CALLS TOTAL = LOST CALLS DROP + LOST CALLS SU FA + LOST CALL MOB RO + LOST CALLS HO FA

TRKATT TOTAL = (from collection set TRK) INCATOT + NATTMPT

LOST CALLS % = LOST CALLS TOTAL ÷ TRKATT TOTAL

All fields in the below calculations are from collection set OMMTX unless otherwise specified.

For a Digital Site

LOST CALLS DROP = DDRPCALS

LOST CALLS SU FA = DUCCTO

LOST CALLS MOB RO = Always zero

LOST CALLS HO FA = DDROPHO

DIRECTED RETRY INFO ONLY = Always zero

LOST CALLS TOTAL = LOST CALLS DROP + LOST CALLS SU FA + LOST CALL MOB RO + LOST CALLS HO FA

TRKATT TOTAL = (from collection set TRK) INCATOT + NATTMPT

LOST CALLS % = LOST CALLS TOTAL ÷ TRKATT TOTAL

T-2712 Wireless MOU Summary

This report provides a MOU summary for the selected groups in the observation period. It displays the group number, CLLI code, Location, Cell Site, Coverage Market and Minutes of Use.

Misc. - Quarter Hour

T-2130 Quarter Hour Data

This report provides a summary of every 15-minute interval for each group for the length of the observation period selected.

The report displays the time interval, incoming/outgoing and total peg, incoming/outgoing and total usage, Average Holding Time and Overflow.

At the end of each group, there is a summary for all hours, for busy hours and for off busy hours. The summary displays max usage, interval at which it occurred, the daily traffic % and the period traffic %.

T-2131 Quarter Hour Summary

This report provides a summary of every 15-minute interval of the observation period selected.

The report displays the information per each group selected. Each interval is listed, and along side of that is the peg and usage for each day of the observation period. There is a Totals column that totals the peg and usage of every day in the observation period for every interval.

At the bottom of the summary for each group there are totals for every column. The max peg/usage and interval ending is listed. Last, the traffic % is displayed (Total divided by Max peg or usage)

T-2132 Quarter Hour Selected Fields

This report provides a summary of the selected fields of every 15-minute interval for each group for the length of the observation period selected.

At the bottom of the summary for each group there are totals for every column. The max usage and interval is listed. Last, the traffic % is displayed (Total divided by Max usage).

Misc. - Half Hour

T-2230 Half Hour Data

This report provides a summary of every 30-minute interval for each group for the length of the observation period selected.

The report displays the time interval, incoming/outgoing and total peg, incoming/outgoing and total usage, Average Holding Time and Overflow.

At the end of each group, there is a summary for all hours, for busy hours and for off busy hours. The summary displays max usage, interval at which it occurred, the daily traffic % and the period traffic %.

T-2231 Half Hour Summary

This report provides a summary of every 30-minute interval of the observation period selected.

The report displays the information per each group selected. Each interval is listed, and along side of that is the peg and usage for each day of the observation period. There is a Totals column that totals the peg and usage of every day in the observation period for every interval.

At the bottom of the summary for each group there are totals for every column. The max peg/usage and interval ending is listed. Last, the traffic % is displayed (Total divided by Max peg or usage)

T-2232 Half Hour Selected Fields

This report provides a summary of the selected fields of every 30-minute interval for each group for the length of the observation period selected.

At the bottom of the summary for each group there are totals for every column. The max usage and interval is listed. Last, the traffic % is displayed (Total divided by Max usage).

Misc. - Hourly

T-2330 Hourly Data

This report provides a summary of every hour interval for each group for the length of the observation period selected.

The report displays the time interval, incoming/outgoing and total peg, incoming/outgoing and total usage, Average Holding Time and Overflow.

At the end of each group, there is a summary for all hours, for busy hours and for off busy hours. The summary displays max usage, interval at which it occurred, the daily traffic % and the period traffic %.

T-2331 Hourly Summary

This report provides a summary of every hour interval of the observation period selected.

The report displays the information per each group selected. Each interval is listed, and along side of that is the peg and usage for each day of the observation period. There is a Totals column that totals the peg and usage of every day in the observation period for every interval.

At the bottom of the summary for each group there are totals for every column. The max peg/usage and interval ending is listed. Last, the traffic % is displayed (Total divided by Max peg or usage).

T-2332 Hourly Selected Fields

This report provides a summary of the selected fields of every hour interval for each group for the length of the observation period selected.

At the bottom of the summary for each group there are totals for every column. The max usage and interval is listed. Last, the traffic % is displayed (Total divided by Max usage).

Misc. - Daily

T-2432 Daily Selected Fields

This report provides a summary of the selected fields of every day for each group for the length of the observation period selected.

At the bottom of the summary for each group there are totals for every column. The max usage and interval is listed. Last, the traffic % is displayed (Total divided by Max usage).

Misc. - Summary

T-2731 Circuits Working/Equipped Reconciliation

Running this report will automatically update your circuits working and equipped in the traffic group setup.

This report compares the circuits working/equipped in the capture file for the date/hour selected against what is currently in the setup. Any changes that need to be done to the circuits working/equipped in Setup will be corrected by running this report.

The report displays the group name/number and the previous and new value of the circuits equipped and working.

T-2732 Summary Selected Fields

This report will display the group name/number and totals of any fields you select for the observation period.

QMS Reports - QFADS

T-5100 QFADS Quarter Hour Summary Report

This report displays QMS team, queue, service and class summaries for every 15-minute interval. The QMS Teams section displays the following fields: IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC, REQ POS and ANS. The QMS Queues section displays the following fields: IPS, RPS, TPS, TOTAL CBWV, AWT, CW and ANS. The QMS Services section displays the following fields: SI, SWV and SAWT. The QMS Classes section displays the following fields: IPS, RPS, TPS, TOTAL CBWV and AWT.

T-5200 QFADS Half Hour Detailed Report

This report displays QMS team, queue, service and class summaries for every 30-minute interval. The QMS Teams section displays the following fields: IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC, REQ POS and ANS. The QMS Queues section displays the following fields: IPS, RPS, TPS, TOTAL CBWV, AWT, CW and ANS. The QMS Services section displays the following fields: SI, SWV and SAWT. The QMS Classes section displays the following fields: IPS, RPS, TPS, TOTAL CBWV and AWT.

T-5300 QFADS Hourly Detailed Report

This report displays QMS team, queue, service and class summaries in hour intervals. The QMS Teams section displays the following fields: IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC, REQ POS and ANS. The QMS Queues section displays the following fields: IPS, RPS, TPS, TOTAL CBWV, AWT, CW and ANS. The QMS Services section displays the following fields: SI, SWV and SAWT. The QMS Classes section displays the following fields: IPS, RPS, TPS, TOTAL CBWV and AWT.

T-5400 QFADS Daily Detailed Report

This report displays QMS team, queue, service and class summaries in daily intervals. The QMS Teams section displays the following fields: IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC, REQ POS and ANS. The QMS Queues section displays the following fields: IPS, RPS, TPS, TOTAL CBWV, AWT, CW and ANS. The QMS Services section displays the following fields: SI, SWV and SAWT. The QMS Classes section displays the following fields: IPS, RPS, TPS, TOTAL CBWV and AWT.

T-5700 QFADS Summary

This report displays QMS team, queue, service and class summaries with a summary of the daily intervals in the observation period. The QMS Teams section displays the following fields: IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC, REQ POS and ANS. The QMS Queues section displays the following fields: IPS, RPS, TPS, TOTAL CBWV, AWT, CW and ANS. The QMS Services section displays the following fields: SI, SWV and SAWT. The QMS Classes section displays the following fields: IPS, RPS, TPS, TOTAL CBWV and AWT.

QMS Reports - QTADS

- T-5110 QTADS Quarter Hour Detailed Report
This report displays QMS team, queue, service and class summaries in 15-minute intervals. The QMS Teams section displays the following fields: IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC, REQ POS and ANS. The QMS Queues section displays the following fields: IPS, RPS, TPS, TOTAL CBWV, AWT, CW and ANS. The QMS Services section displays the following fields: SI, SWV and SAWT. The QMS Classes section displays the following fields: IPS, RPS, TPS, TOTAL CBWV and AWT.
- T-5210 QTADS Half Hour Detailed Report
This report displays QMS team, queue, service and class summaries in 30-minute intervals. The QMS Teams section displays the following fields: IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC, REQ POS and ANS. The QMS Queues section displays the following fields: IPS, RPS, TPS, TOTAL CBWV, AWT, CW and ANS. The QMS Services section displays the following fields: SI, SWV and SAWT.
- T-5310 QTADS Hourly Detailed Report
This report displays QMS team, queue, service and class summaries in hourly intervals. The QMS Teams section displays the following fields: IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC, REQ POS and ANS. The QMS Queues section displays the following fields: IPS, RPS, TPS, TOTAL CBWV, AWT, CW and ANS. The QMS Services section displays the following fields: SI, SWV and SAWT.
- T-5310 QTADS Hourly Detailed Report
This report displays QMS team, queue, service and class summaries in hourly intervals. The QMS Teams section displays the following fields: IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC, REQ POS and ANS. The QMS Queues section displays the following fields: IPS, RPS, TPS, TOTAL CBWV, AWT, CW and ANS. The QMS Services section displays the following fields: SI, SWV and SAWT.
- T-5410 QTADS Daily Detailed Report
This report displays QMS team, queue, service and class summaries in daily intervals. The QMS Teams section displays the following fields: IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC, REQ POS and ANS. The QMS Queues section displays the following fields: IPS, RPS, TPS, TOTAL CBWV, AWT, CW and ANS. The QMS Services section displays the following fields: SI, SWV and SAWT.
- T-5710 QTADS Summary Report
This report displays QMS team, queue, service and class summaries by calculating a summary of the daily intervals in the observation period. The QMS Teams section displays the following fields: IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC, REQ POS and ANS. The QMS Queues section displays the following fields: IPS, RPS, TPS, TOTAL CBWV, AWT, CW and ANS. The QMS Services section displays the following fields: SI, SWV and SAWT.

QMS Reports - Force Management Reports

- T-5430 Force Management Schedule Summary Report
This report displays the time interval period and the required positions for each interval for the observation period.

QMS Reports - Detail

T-5123 Team System Quarter Hour Report

This report has 2 sections: a 6-hour summary section and a more detailed section for each interval. The Summary section appears first and a section for each day for the whole observation period exists below that. The Summary Page displays the following information: the time interval, IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC and ANS. The daily detail sections contain the same information as the summary section, but divided up for each interval. At the bottom there are system totals for every column. For the usage related columns, the max usage is displayed along with the interval of the max usage and the % of traffic that the max usage accounted for.

T-5124 Quarter Hour Answer Time Exception Report

This report allows you to display queues for each 15-minute period that had calls answered over a selected time limit. Each interval that had exceptions is displayed by itself on a page. There are totals at the bottom of each section for every column. Summary information is displayed at the end of the report. Also, there is a listing at the end of the report of the days and intervals containing exceptional answer times. The fields included in the report: time and date interval, Queue, CW, IPS, PRS, TPS, TOTAL, ANS, Amt. ANS Over the selected time and % of Calls Over the selected time.

$\% \text{ of Calls Over the selected time} = \text{Total for each group} \div \text{Period Total}$

T-5223 Team System Half Hour Report

This report has 2 sections: a 6-hour summary section and a more detailed section. The Summary section appears first and a section for each day for the whole observation period exists below that. The Summary Page displays the following information: the time interval, IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC and ANS. Totals are displayed at the bottom for every column. The detail section contains the same information as the summary section, but is divided for each interval. Totals are also displayed at the bottom for every column. At the end of the report, there are system totals for every column. For the usage related columns, the max usage is displayed along with the interval of the max usage and the % of traffic that the max usage accounted for.

T-5224 Half Hour Answer Time Exception

This report allows you to display queues for each 30-minute period that had calls answered over a selected time limit. Each interval that had exceptions is displayed by itself on a page. There are totals at the bottom of each section for every column. Summary information is displayed at the end of the report. Also, there is a listing at the end of the report of the days and intervals containing exceptional answer times. The fields included in the report: time and date interval, Queue, CW, IPS, PRS, TPS, TOTAL, ANS, Amt. ANS Over the selected time and % of Calls Over the selected time.

$\% \text{ of Calls Over the selected time} = \text{Total for each group} \div \text{Period Total}$

T-5323 Team System Hourly Report

This report has 2 sections: a 6-hour summary section and a more detailed section. The Summary section appears first and a section for each day for the whole observation period exists below that. The Summary Page displays the following information: the time interval, IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC and ANS. Totals are displayed at the bottom for every column. The detail section contains the same information as the summary section, but is divided for each interval. Totals are also displayed at the bottom for every column. At the end of the report, there are system totals for every column. For the usage related columns, the max usage is displayed along with the interval of the max usage and the % of traffic that the max usage accounted for.

T-5324 Hourly Answer Time Exception Report

This report allows you to display queues for each hour that had calls answered over a selected time

limit. Each interval that had exceptions is displayed by itself on a page. There are totals at the bottom of each section for every column. Summary information is displayed at the end of the report. Also, there is a listing at the end of the report of the days and intervals containing exceptional answer times. The fields included in the report: time and date interval, Queue, CW, IPS, PRS, TPS, TOTAL, ANS, Amt. ANS Over the selected time and % of Calls Over the selected time.

$\% \text{ of Calls Over the selected time} = \text{Total for each group} \div \text{Period Total}$

T-5426 QMS Queues Detail Report

This report displays team information and queue detail information. The team information is first, followed by the queue detail information. A 6-hour summary section appears first and detail sections for the whole observation period are below that. The Summary Page displays the following information: the time interval, IPS, RPS, TPS, TOTAL, CBWV, CW, AWT and ANS. Totals for the 24 hour period are displayed on the bottom of the summary section. The detail section has information for each interval in the observation period. The same columns as in the summary are displayed for the detail section.

QMS Reports - Summary

T-5420 QMS Team Summary Report

This report displays a summary of team information. For each team, a 6-hour summary section appears first and detail sections for the whole observation period are below that. The Summary Page displays the following information: the 6-hour interval, IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC and BDH. Totals for the 24 hour period are displayed on the bottom of the summary section. The detail section has information for each interval in the observation period. The detail section contains the following information: the time interval, IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC and REQ POS.

T-5421 QMS Queues Daily Summary Report

This report displays a summary of team information per day. For each team, a 6-hour summary section appears first and detail sections for observation period are below that. The Summary Page displays the following information: the 6-hour interval, IPS, RPS, TPS, TOTAL, CBWV, CW, AWT and ANS. Totals for the 24-hour period are displayed on the bottom of the summary section. The detail section has information for each interval in the observation period. It displays the same columns of information as the Summary Page.

T-5422 QMS Queues Summary Report

This report displays a summary of team information for the whole observation period. For every team, a 6-hour summary of the whole observation period appears first and a detail section is below that. The Summary Page displays the following information: the 6-hour interval, IPS, RPS, TPS, TOTAL, CBWV, CW, AWT and ANS. Totals for each column are displayed on the bottom of the summary section. The detail section has information for each interval for the total of the observation period. It displays the same columns of information as the Summary Page.

T-5523 Team System Quarter Hr. Summary Report

This report displays a summary of team information for the whole observation period. This report has 2 sections: a 6-hour summary section and a detailed section for each 15-minute interval. The Summary Page appears first and displays the following information: the 6-hour time period, IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC and ANS. There are totals at the bottom of every column for the Summary Page. The detail section contains the same header information as the Summary Page, but has the information for the observation period divided up for each 15-minute interval. At the bottom of the detail section there are system totals for every column. For the usage related columns, the max usage is displayed along with the interval of the max usage and the % of traffic that the max usage accounted for.

T-5623 Team System Half Hour Summary Report

This report displays a summary of team information for the whole observation period. This report has

2 sections: a 6-hour summary section and a detailed section for each half hour interval. The Summary Page appears first and displays the following information: the 6-hour time period, IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC and ANS.

There are totals at the bottom of every column for the Summary Page. The detail section contains the same header information as the Summary Page, but has the information for the observation period divided up for each half hour interval. At the bottom of the detail section there are system totals for every column. For the usage related columns, the max usage is displayed along with the interval of the max usage and the % of traffic that the max usage accounted for.

T-5723 Team System Hourly Summary Report

This report displays a summary of team information for the whole observation period. This report has 2 sections: a 6-hour summary section and a detailed section for each hour interval. The Summary Page appears first and displays the following information: the 6-hour time period, IPS, RPS, TPS, TOTAL, CBWV, NCWV, IDLT, AWT, AOP, %OCC and ANS. There are totals at the bottom of every column for the Summary Page.

The detail section contains the same header information as the Summary Page, but has the information for the observation period divided up for each hour interval. At the bottom of the detail section there are system totals for every column. For the usage related columns, the max usage is displayed along with the interval of the max usage and the % of traffic that the max usage accounted for.

Customer Reports

T-2605 Hourly Data Report

This report displays hourly customer data for the selected groups. The report displays the following information: hourly interval, Incoming/Outgoing and Total Calls, Incoming/Outgoing and Total Usage, Average Holding Time, Minutes of Use, Busies, % Busies, Lines Working/Required and Blocking Probability. There are totals at the bottom of each group. For the usage related columns, the max usage is displayed along with the interval of the max usage and the % of the daily traffic that the max usage accounted for.

$$\% \text{ Busies} = \frac{\text{OVFL}}{\text{peg count} + \text{OVFL}} \times 100$$

T-2606 Hourly Data Report (minutes)

This report displays customer line information along with lines required to carry the traffic based on the grade of service criteria in a summary format. The report displays the following information: hourly interval, Incoming/Outgoing and Total Calls, Incoming/Outgoing and Total Minutes, Average Holding Time, Minutes of Use, Busies, % Busies, Lines Working/Required and Blocking Probability. There are totals at the bottom of each group. For the usage related columns, the max usage is displayed along with the interval of the max usage and the % of the daily traffic that the max usage accounted for.

$$\% \text{ Busies} = \frac{\text{OVFL}}{\text{peg count} + \text{OVFL}} \times 100$$

T-2610 Summary Report

Based on the grade of service criteria, this summary format report displays customer line information with the lines required to carry traffic. The Customer Summary Report displays the following information per group for each day of the observation period. For each hour of each day, the report displays the Calls and Minutes of Use. The last column is a total of the Calls and Minutes of use for every day in that time interval. There are totals at the bottom of each group. For each Minutes of Use column, the max usage is displayed along with the interval of the max usage and the % of the daily traffic that the max usage accounted for. The Lines Working, Lines Required and the Blocking Probability is included for each group on the lower right hand bottom corner of the report under the Total Minutes of use.

T-2615 Summary Report with Busies

Same as T-2610, but with Busies and % Busies also included in each daily interval count.

$$\% \text{ Busies} = \frac{\text{OVFL}}{\text{peg count} + \text{OVFL}} \times 100$$

T-2616 Detailed Business Hour Report

This report displays customer line information along with lines required to carry the traffic based on the grade of service criteria in a summary format. The daily calls per hour, minutes of use and busies are displayed for each group for every hour. The Observation Period AVG MOU is displayed for every hour. The Lines Working/Required and Blocking Probability is also displayed for every hour for every group. At the bottom of the report there are 24-hour totals for the Calls, MOU and Busies for each day. Daily BH Usage, hour of the BH usage ending, % traffic the BH is of the 24-hour total is also displayed. Below the 24-hour total information is the following: Business Hour Totals, Business Hour BH Usage, hour the Business Hour BH Usage ends and the % traffic the BH is of the Business Hour Total.

T-2625 Bouncing Busy Hour Report

This report displays the daily busy hour calls and minutes of use. Five day business hour total minutes of use, total minutes of use, high and average busy hour minutes of use, and average busy hour calls are displayed. Lines required are based on average busy hour usage.

WIRING INSTRUCTIONS

DMS100 to CTS DCU

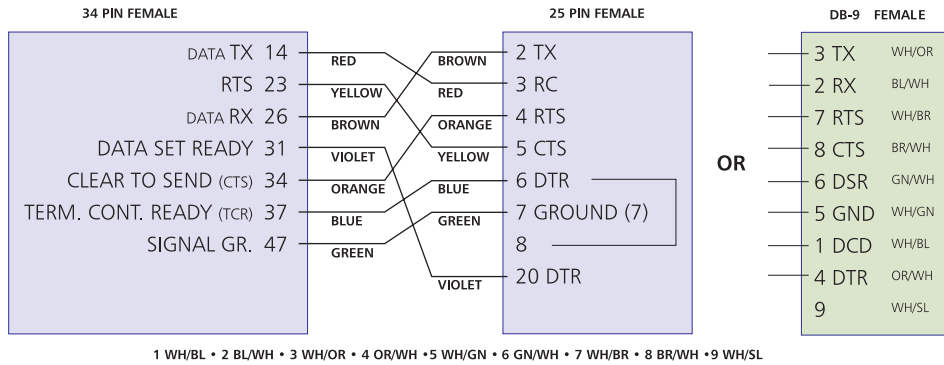


Table: Traffic Engineering Conversion Factors

From	To				
	Seconds	Minutes	Hours	CCS	Erlangs
Seconds	EQUAL	÷ 60	÷ 3600	÷ 100	÷ 3600
Minutes	x 60	EQUAL	÷ 60	x .6	÷ 60
Hours	x 3600	x 60	EQUAL	x 36	EQUAL
CCS	x 100	÷ .6	÷ 36	EQUAL	÷ 36
Erlangs	x 3600	x 60	EQUAL	x 36	EQUAL

CCS = Centum Call Seconds

36 CCS = 1 hour

1 Erlang = 1 hour

1 Erlang = 36 CCS = 1 hour

ASCII CHARACTER CODE/HEX/DECIMAL CONVERSION CHART

CTRL-	CODE	HEX	DEC	CODE	HEX	DEC	CODE	HEX	DEC	CODE	HEX	DEC
@	NUL	00	0	SP	20	32	@	40	64	`	60	96
A	SOH	01	1	!	21	33	A	41	65	a	61	97
B	STX	02	2	"	22	34	B	42	66	b	62	98
C	ETX	03	3	#	23	35	C	43	67	c	63	99
D	EOT	04	4	\$	24	36	D	44	68	d	64	100
E	ENQ	05	5	%	25	37	E	45	69	e	65	101
F	ACK	06	6	&	26	38	F	46	70	f	66	102
G	BEL	07	7	'	27	39	G	47	71	g	67	103
H	BS	08	8	(	28	40	H	48	72	h	68	104
I	HT	09	9	)	29	41	I	49	73	i	69	105
J	LF	0A	10	*	2A	42	J	4A	74	j	6A	106
K	VT	0B	11	+	2B	43	K	4B	75	k	6B	107
L	FF	0C	12	,	2C	44	L	4C	76	l	6C	108
M	CR	0D	13	-	2D	45	M	4D	77	m	6D	109
N	SO	0E	14	.	2E	46	N	4E	78	n	6E	110
O	SI	0F	15	/	2F	47	O	4F	79	o	6F	111
P	DLE	10	16	O	30	48	P	50	80	p	70	112
Q	DC1	11	17	1	31	49	Q	51	81	q	71	113
R	DC2	12	18	2	32	50	R	52	82	r	72	114
S	DC3	13	19	3	33	51	S	53	83	s	73	115
T	DC4	14	20	4	34	52	T	54	84	t	74	116
U	NAK	15	21	5	35	53	U	55	85	u	75	117
V	SYN	16	22	6	36	54	V	56	86	v	76	118
W	ETB	17	23	7	37	55	W	57	87	w	77	119
X	CAN	18	24	8	38	56	X	58	88	x	78	120
Y	EM	19	25	9	39	57	Y	59	89	y	79	121
Z	SUB	1A	26	:	3A	58	Z	5A	90	z	7A	122
[	ESC	1B	27	;	3B	59	[	5B	91	{	7B	123
\	FS	1C	28	<	3C	60	\	5C	92	|	7C	124
]	GS	1D	29	=	3D	61	]	5D	93	}	7D	125
^	RS	1E	30	>	3E	62	^	5E	94	~	7E	126
_	US	1F	31	?	3F	63	_	5F	95	DEL	7F	127

NUL Null, or all zeros

SOH Start of Heading

STX Start of Text

ETX End of Text

EOT End of transmission

ACK Acknowledge

BEL Bell or Alarm

BS Back Space

HT Horizontal Tab

VT Vertical Tab

CR Carriage Return

NAK Negative Acknowledge

ETB End Transmission Block

DC1 Device Control 1

DC2 Device Control 2

DC3 Device Control 3

DC4 Device Control 4

CAN Cancel

EM End of Medium

SUB Substitute

FS File Separator

GS Group Separator

RS Record Separator

US Unit Separator

SP Space

DEL Delete

SI Shift In

SO Shift Out

SYN Sync.

LF Line Feed

FF Form Feed

ENQ Enquiry

ESC Escape

DLE Data Link

Escape