INTRODUCTION

1.1   OBJECTIVE

Natural Billing 2000 is a **billing, control, traffic system** for a large telephone system. Natural Billing 2000 has designed for support data about **25,000 to 100,000 records per hour**. Natural Billing have an analysis behavior system is called **"Emulated Line Reverse System"**. The data of Natural Billing is correct. Natural Billing can reduce an argument of user.

Natural Billing 2000 has developed for support the international organization. Natural Billing is supported every language by MBCS standard (Multi-Byte Character Set) on Microsoft Windows 95, 98 and by **UNICODE 2.0** standard on Java Platefroms and Microsoft Windows NT. Natural Billing is supported **Zero Administration for Windows (ZAW)** technique on **Client/Server Network** & **Internet/Intranet**. Natural Billing can run about 1,000,000 years (from **01/01/1970 GMT. ± 1,000,000 years**). Natural Billing is present by a picture. Natural Billing can use bilanguages (Thai-English) for running and showing.

1.2   PROPERTIES OF SYSTEM

1. Natural Billing is used a command by a picture and can show the menu and message in two language (Thai or English). Natural Billing is easy for the end user. The user was used the Microsoft Windows.

2. Natural Billing has developed by MFC/C++ 32-Bit and to manage the data by special technique. The special technique is run faster the other the telephone billing software more than 10-100.

3. Natural Billing can present more than 25,000 number or unlimited of the element.

4. Natural Billing can work with the same type or different type of PABX in the same time more than 4 systems and can connect with the same type or different type of PABX by 4 ports RS-232. The user can see the same type or different type of PABX in 4 systems to 1 system.

5. Natural Billing can support the telephone data 25,000 – 100,000 records per hour on Microsoft Windows 95 and 100,000 records per hour on Windows NT by the data didn't corrupt.

6. Natural Billing is keep one record per 128 byte on hard disk. If the hard disk have disk space 128 MB, Natural Billing can keep maximum 1 million records. And if the hard disk is almost full, Natural Billing is automatic delete the beginning of data.

7. Natural Billing is prepared the automatic backup system on disk, hard disk or tape by the user defining. Natural Billing can backup the data from PABX into text file or printer and Natural Billing can use the backup from Microsoft Windows.

8. If Natural Billing cannot run, Natural Billing can backup the data from PABX into text file when Natural Billing can run you can calculate or process the data again.

9. Natural Billing is run real time on-line reporting & inquires when connect the PABX. Natural Billing can calculate or process the data and real time to print report or inquiry the data.

10. Natural Billing can modify a format of data from PABX or a communication with PABX is change.

11. Natural Billing can run on 24 hours that the system don't want the officer for control except the system is change or make a report. If the electricity have a problem, the system can automatic start up when the electricity is completely.

12. Natural Billing is automatic added an extension or a trunk. When the PABX send the data to system, Natural Billing is automatic verify the extension, trunk, tie line, telnet.

13. Natural Billing has a multi-user system and a security system. Natural Billing can setup a performance of program.

14. Natural Billing is supported the Zero Administration for Windows (ZAW). The administrator can adjust a report or define a condition of system in the center.

15. Natural Billing is supported Remote Service by modem for add efficiency of service/training.

16. Natural Billing is a multi-tasking, multi-thread and multi-sharing on Windows 95 and Microsoft Windows NT for a best of efficiency. Natural Billing is run an analysis telephone system, receive a data from PABX and user interface system by computer. Natural Billing can run with the other program on Windows or Dos on Windows and the data is not corrupt.

1.3 PROPERTIES OF TELEPHONE BILLING SYSTEM

1. Emulated Line Reverse System

– If you don't have a line reverse system from TOT, your system will have 30-40 % of error for decision a ring call. For this reason the system must have 30-40 % of error for a billing.

– Emulated Line Reverse System will help you for reduce from 30-40 % error to 3-5 %.

2. The telephone billing report by **extension, trunk, dial group and organization**

3. The telephone summary report by **extension, trunk, dial group and organization**

4. The report can make a **Internal, Incoming, Local, Mobile, Long, International, Tie Line, Telnet.**

5. The user can make a report of **busy, call, duration and billing**

6. Natural Billing is flexible for calculate a billing. The user can adjust a program for user or TOT. Natural Billing can calculate by extension, trunk or call type. The call type can define 8 methods of a calculating. Each method can define 8 range for billing rate. Each a billing rate can define to date and time and date is define to every day, date of week or a holiday.

7. Natural Billing has a Telephone Transfer System. Natural Billing can calculate a bill in each extension or a whole system by the usage time. When you did transfer a line, you can't know this a line transfer. Telephone Transfer System can reduce this problem with the user.

8. Natural Billing can show detail, summary and compare report with bill from TOT and CAT by screen or printer. The report can show by extension. Natural Billing is showing a report in Thai or English when the system is checking the username. Natural Billing is show a report by a time, day, week, month or duration.

9. The Natural Billing report can show in 4 format such as
   - Department   For verify and analysis the telephone traffic by department, division and unit.
   - Extension   For control, calculate billing or analysis the telephone traffic.
   - Trunk   For compare with TOT and CAT billing, verify the line transfer.
   - Dial Group   For verify and analysis the telephone traffic to terminal for example analysis by province, country, telephone number of company group and number of competitive company.

10. **The telephone traffic system is supported 10 million records per month**

11. **Natural Billing can access 10,000 to 100,000 records per second**

12. Natural Billing can show a report in graphic or text file for present in Excel, Word, Lotus.

1.4 BILLING CONTROL

1. Natural Billing can search and to zoom the record.
2. Natural Billing can sort a record and show the minimum or maximum record.
3. Natural Billing can setup the password, authorize, access, account code and private number with normal extension or special extension for the own username or number. This setup is set a special of priority for verify a target number, time, extension and person. User can define an extension number by code. User can change a code and not affect to report.
4. Natural Billing can recorded the dial group, customer number or the supplier number for the separate the detail of telephone report.
5. Natural Billing has a summary report for a call, total call, total time and total amount. Natural Billing can average the traffic telephone by date.
6. Natural Billing has an analysis a behavior user system. For example the peak traffic line is in 16:00 – 17:00 p.m., you can see in Zoom Record by zoom in 16:00 – 17:00. You can see a summary report by call in 16:00 – 17:00.
7. Natural Billing can allocate TOT and CAT billing by department, division or company group and addition a service charge and maintenance charge by department.

1.5 PROPERTY OF TELEPHONE TRAFFIC SYSTEM

1. Have 4 types of analysis telephone traffic
    -   By Duration   For example is 1, 2, 3 minute
    -   By Range of Time   For example is 10:00 – 11:00 p.m.
    -   By Day of Week   For example is Sunday, Monday, .., Saturday
    -   By Date   For example is 02/02/1998

2. Have 4 types of telephone data
    -   By Busy
    -   By Call
    -   By Duration
    -   By Total Amount

3. Have 4 types of analysis telephone traffic format
    -   By Number
    -   By Line Graph
    -   By Bar Graph

4. Type of Analysis
    -   By Department
    -   By Extension
    -   By Trunk
    -   By Dial Group

1.6 ENTERPRISE Client/Server

1. Natural Billing can connect to **Client/Server On Networking** by unlimited user of file sharing.
2. Natural Billing can connect to **Java Client/Server On Networking** by TCP/IP Socket on Natural Server.
   Natural Billing can **run on Microsoft Windows 95, 98, NT Workstation, NT Server, Windows 2000**

TELEPHONE BILLING PRODUCT GROUP

Natural Technology is developed the Natural Billing more than 5 years. Natural Billing is too big software and a high performance. Natural Technology is separate Natural Billing by business group.

Natural Billing 2000 < DataBase 64-Bit Edition >

1. **Business Edition**

   * For medium and large Office and Apartment
   * Two Language (Thai-English)
   * Connect to PABX 4 Com.Port

   - **Office/Apartment**   (Same Professional Not include Department)
   - **Enterprise Client/Server**   (for Office)

2. **International Edition**

   * For Medium and large International Office
   * Two Language (Thai-English)
   * Add Auto Slip for Hotel & Auto Print for Print Backup
   * Save and Export a report in Text File, HTML File
   * Connect to PABX 4 Com.Port

   - **Enterprise Client/Server** (for Office / Hotel)
   - **Internet for Office / Hotel**

Version / Ability	Billing Edition		International Edition	
	Office / Apartment	Enterprise	Enterprise	Internet
Department	–	Full	Full	Full
Extension	✓	✓	✓	✓
Trunk Port	✓	✓	✓	✓
Dial Group	Unlimited	Unlimited	Unlimited	Unlimited
PMS / Console	✓	✓	✓	✓
SMDR, USB, TCP/IP	✓	✓	✓	✓
Reverse เทียม	✓	–	✓	✓
Edit Call/Bill	–	–	✓	✓
Multi-Language	–	–	–	✓
LAN < TCP/IP >	–	–	–	✓
LAN < File Sharing >	–	✓	✓	✓
Auto Print/ย้ายแผนก	–	–	✓	✓
Tab/Text/HTML File	–	–	✓	✓

Item Telephone traffic report by item

Organize Set of extension, trunk, dial group (same with subdirectory of DOS for the summary report)

Extension Station number or personal (access/authorize/account code) or personal (private number for separate a work or private number) and user login (for setup the priority of user)

Trunk External port such as DIS, ISDN, Mobile, Analog Line, Tie Line, Leased Line

Dial Group Set of terminal number such as company group, customer, province country group for the verify telephone traffic by work or private number

Text File Save to **text file** and convert to **Excel, Word, Lotus or print to Text mode**

L/R Emulated Line Reverse System is verify a call

Billing , Control, Traffic Report
Present to screen and report in 2 Language (Thai-English)
Automatic create extension and dial group
Using a program directory for search a name and number
Backup system, Verify data, Data lost and damage
Multi-user system & License system for a security system
Change a report or condition of program
Run multi-tasking & multi-thread on Microsoft Windows 95, 98, NT
Support remote service system by modem

Summary Report

- Percent Report
- Allocation Billing
- Sort Record & Max / Min
- Search a specific data (Zoom Record)
- Report by Access Code (Authorize / Account)
- Private telephone number report

Billing Report

- Sort Record & Max / Min
- Search a specific data (Zoom Record)
- Report by Access Code (Authorize / Account)
- Private telephone number report

Dial Report

- Sort Record & Max / Min
- Search a specific data (Zoom Record)
- Report by Access Code (Authorize / Account)
- Private telephone number report

Traffic Report

- Search a specific data (Zoom Record)
- Report by Access Code (Authorize / Account)
- Private telephone number report
- **Analysis / Compare** by time, day, week and month
- **Analysis / Compare** by call, time, money

Emulated Line Reverse System

Reduce error of billing compare with TOT from 10% is

Reduce error of call by call compare with TOT from 30% is

Telephone Billing System
Front Management System For Apartment
Check-In/Check-Out
Automatic calculate a rent
Calculate independent of service and discount rate by room
Separate the main service such as rent, electric charge, water charge
Separate by service and each item can assign **16 item** such as Mini Bar
Front Management System For Hotel
Booking/Check In/Check Out
Show the booking room, sale room and empty room
Show list of person will stay
Show list of person is staying
Show list of person will go out
Show list of person was stayed
Alarm and stop to use a telephone if over a credit limit
Convert to Access, Excel, FoxPro by Standard ODBC
Billing System for Hotel/Apartment
Show current Balance amount
Show income amount or payment amount
Show detail of current balance amount
Show detail of payment amount
Show a user name of data entry
Show a user name of cashier
Verify item of billing*
Billing
Receipt
Tax Invoice
Incoming Summary Report and Revenue Organization
Incoming Detail Report with Revenue Organization
Payment Detail Report by cash, cheque and credit card
Show a graphic for analysis (forecast and compare)

1.8 EMULATED LINE REVERSE SYSTEM

Now nobody to solve the problem about the telephone billing is not correct. When you press 9 for dial number and then you hang up a telephone, the telephone system can't know a line is connected except the Line Reverse System for TOT.

The research and development group in Thailand was try a method to know for line is connect or not. The first method they find a TONE signal of TOT but something the TONE signal is too short. If the TONE signal is too short, the system can't separate the signal (between ring backing, busy tone or speaking).

In April'1994 telephone system can verify the speaking, this method is better than TONE signal. If the analog filter circuit is not complete, the system has a noise. And the system is almost complete if we use the digital filter circuit but the digital filter is a high cost.

In October'1993 telephone system can verify a line is connect or not. Natural BillThai 2.0 can solve this problem. We are use 4 years for research and develop the telephone system, 1 year for correct the problem, 2 months for develop Natural BillThai 2.0 and 4 months for testing the system. The Emulated Line Reverse is a prototype for telephone system.

Natural Billing 98 is developed by MFC/C++ of Microsoft Visual C++. The MFC/C++ is a high technology for expert system and develop the program look like the human. The knowledge of Natural Billing 98 is a probability for a call and behavior of the user. Natural BillThai has more than 1,000 customers in 5 years. The Emulated Line Reverse System can calculate a bill almost the TOT billing and reduce an argument.

Table: Compare Error of Billing System

Telephone Billing System	Error	Remark
Line Reverse System of TOT	0 - 2 %	Request Difficult
Time Metering Billing System of Thailand	30 - 40 %	Compare with TOT Bill
Time Metering Billing System of International	30 - 40 %	Compare with TOT Bill
Call Progress, Tone Detection, Voice Censor	15 – 30 %	Up to the circuit
Natural BillThai Version 2.6	10 – 20 %	For ISAAC PABX
Natural BillThai Version 3.2	5 – 7 %	For every type of PABX
Natural Billing 98 (Version 7.2)	3 – 5 %	For every type of PABX

Note
- If the telephone exchange is not complete running or the system is a different type, model and technology, Line Reverse System may be have an error.
- The time metering method will make an error of telephone billing system in Thailand and International. Such as the system will calculate a bill while you hold a line more than 30 second.
- The error of **Call Progress, Tone Detection, Voice Censor:** This error is better than time metering method but telephone system will have a noise and can't catch the special signal.
- Natural Billing has a analysis system for behavior of telephone. The system can reduce an error 3–5 percent.

Emulated Line Reverse System

1 2   80 + 10 + 10 = 100

Busy   **Ring**

Busy ← → Connect

X

XXX-XXXX •————————————————→

YYY-YYYY   Not Sure ?

XXX-XXXX •————————————————→

X
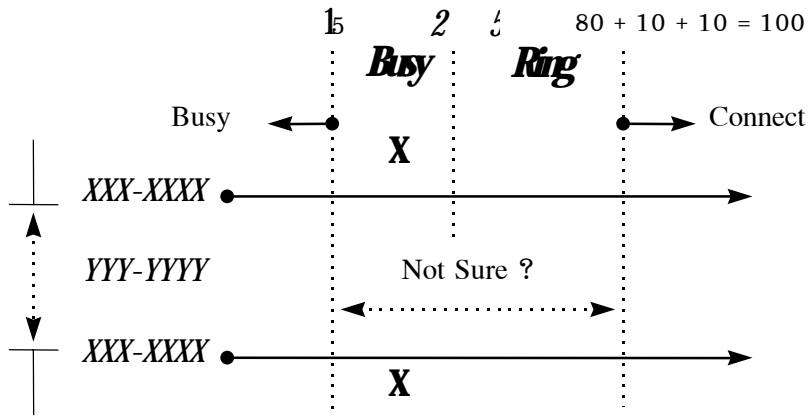
Analysis Behavior of user System by Probability Rule

931-9999

931-9999

Hook

931-9999

Hook

Verify the Hook System

9, xxx-xxxx   181   5 second

                151, 161   10 second

                XXX-XXXX   15 second

10 minute   *Busy* ←   → *Connect*

9, xxx-xxxx
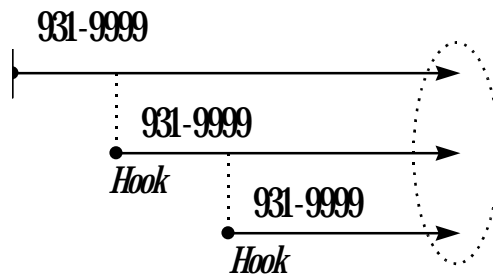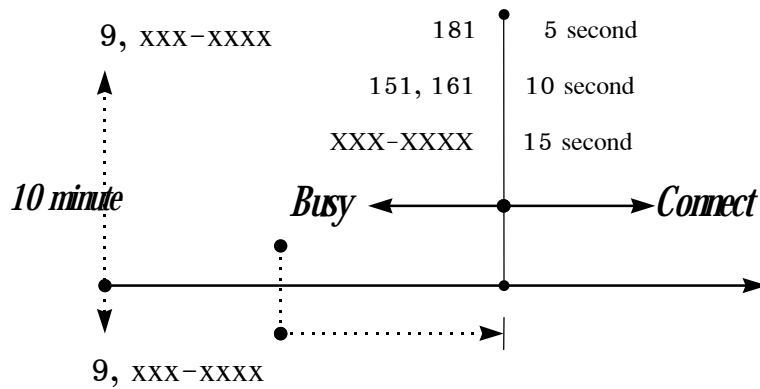
Time Metering System (1 Call or telephone number is assigned)

1.9   HARDWARE AND SOFTWARE

1.9.1 HARDWARE

- Computer 386Dx and up, support 32-Bit, can run on Microsoft Windows 95 or Microsoft NT 4.0 Thai Edition
- Minimum 8 MB memory and expect 12 MB and up or not less than 10 percent of data
- Minimum 100 MB Hard Disk space
- Printer can supported in graphic mode and can run on Microsoft Windows such as EPSON LX-300, LQ-300, LQ-2170, NEC P2000 or Panasonic KX-P 1121

Table: Compare with Computer and Extension/Trunk

Extension Number	Minimum Specification	Expect Specification
500 Numbers	486DX-33, RAM 8 MB	PENTIUM-100, RAM 16 MB
1,000 Numbers	PENTIUM-100, RAM 16 MB	PENTIUM-166, RAM 32 MB
1,500 Numbers	PENTIUM-166, RAM 32 MB	PENTIUM-166, RAM 64 MB
2,500 Numbers	PENTIUM-166, RAM 64 MB	PENTIUM-200, RAM 128 MB

1.9.2 SOFTWARE

Software is a set of system such as

- Microsoft Windows 95 Thai Edition (Service Pack 1, 2)
- Microsoft Windows 98 Thai Edition (Second Edition or Service Pack)
- Microsoft Windows NT Version 4.0 Thai Edition (Service Pack)
- Microsoft Windows 2000

Note
- If you want to keep a data more than 1 million records, you must use Microsoft Windows NT and have a minimum 32 MB memory
- Minimum 1.2 GB of SCSII Hard Disk

1.9.3 LIMITATION OF SYSTEM

Normally the anti-virus program is not allow for keep a data, the data may be lost. The anto-virus program is a shareware software. If you must use anti-virus program, you must run **VSAFE program for MS-DOS or Norton Anti-Virus** but you must set a parameter for **not allow to save a data to disk is off.**

1.10 FUNCTION KEY

| Function Key	Meaning
Alt	Key for go to menu and press Esc for exit program
Home	Go to begin of line
End	Go to end of line
PageUp	Go up to one page
PageDown	Go down to one page
Ctrl + Home	Go to the first line of first page
Ctrl + End	Go to the last line of last page
Ctrl + PageUp	Go to the first line of first page
Ctrl + PageDown	Go to the last line of last page
↑	Go up one line
↓	Go down one line
←	Go left 1 column
→	Go right 1 column
Ctrl + ←	Go to previous record
Ctrl + →	Go to next record
Ctrl + I	Entry the password
Ctrl + O	Exit the password
Ctrl + L	Set up a priority for access program
Ctrl + U	Adjust a performance of program
Ctrl + A	Adjust the telephone billing system
Alt + F4	Exit program

1.11   FUNCTION KEY AND MAIN MENU-1

Command	Function Key	Meaning
	F1	Show a department of name or number or a line can access.
	F2	Show a name or extension number of selected department.
	F3	Show a name of trunk number.
	F4	Show a name or number or dial group.
	F5	Show a busy data.
	F6	Show a data is sort by type of call.
	F7	Show an internal data.
	F8	Show an incoming data.
	F9	Show a local data.
	F10	Show a mobile data.
	F11	Show a long Dx data.
	F12	Show an international data.
		Show a data in text
		Show a data in line graph
		Show a data in bar graph

Command	Function Key	Meaning
		Show a data from PABX.
		Save a data from PABX.
		Analysis a telephone traffic.
		Set range of date for to show data.
		Print a report (same on screen).
	Insert	Select the unselected data and cancel selected data.
	Ctrl + Insert	Cancel a selected name or number.
	Ctrl + ←	Show a previous record.
	Ctrl + →	Show a next record.
	Ctrl + Shift + F	Summary report of Organize, Extension, Trunk, Dial group
	Ctrl + Shift + S	Show some section of Organize, Extension, Trunk, Dial Group
	Ctrl + Shift + F1	Telephone traffic report (Text, Line Graph, Bar Graph, Text File)
	Ctrl + Shift + F2	Monetary Summary Report (Text, Text File)
	Ctrl + Shift + F3	Analysis Timely Traffic Report (Text, Line Graph, Bar Graph, Text File)
	Ctrl + Shift + F4	Analysis Traffic Report (Text, Line Graph, Bar Graph)

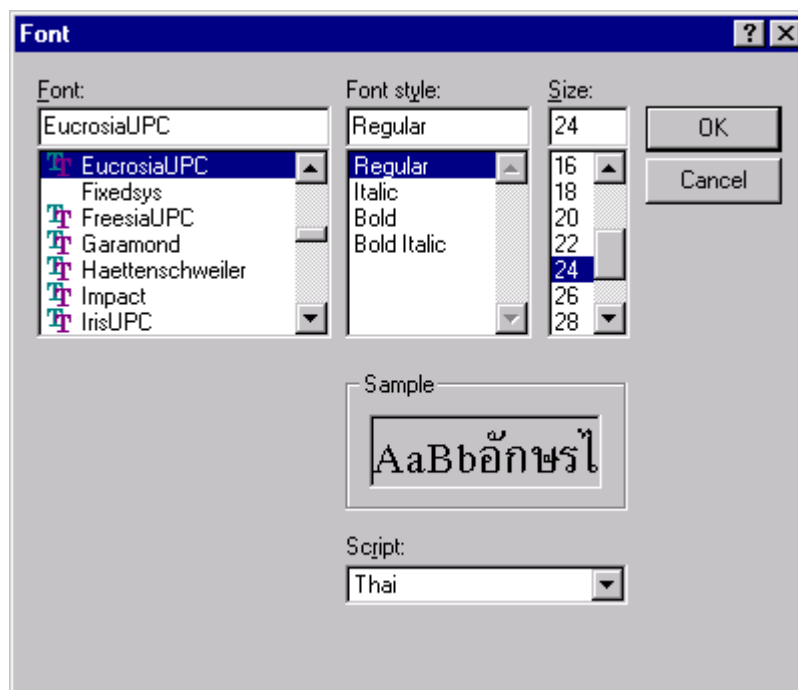## 1.12 MAIN MENU OF Natural Billing
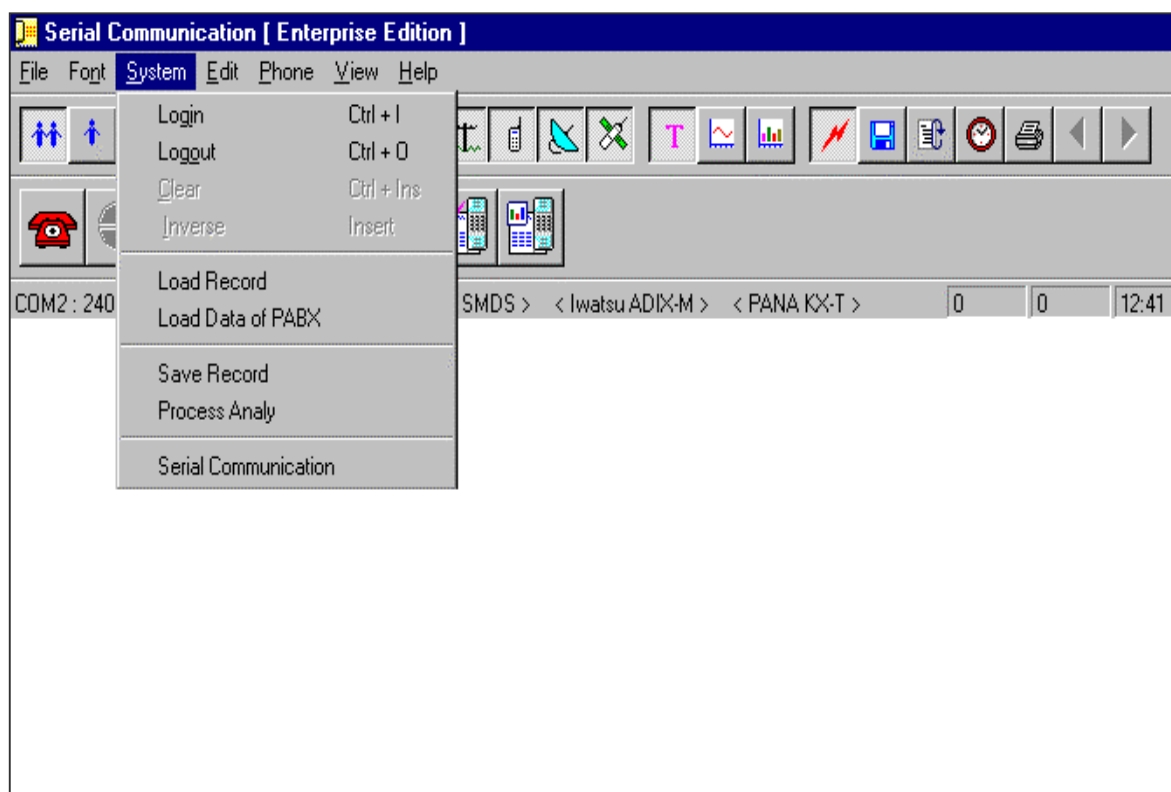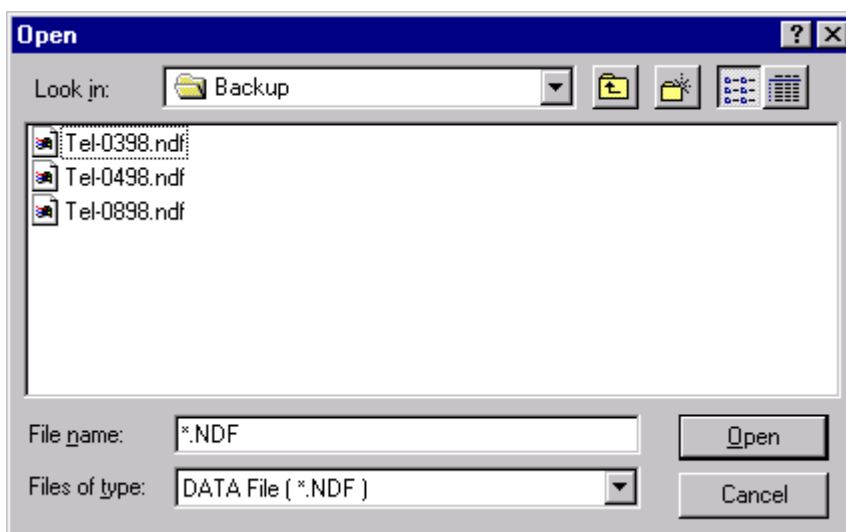
Menu "File"
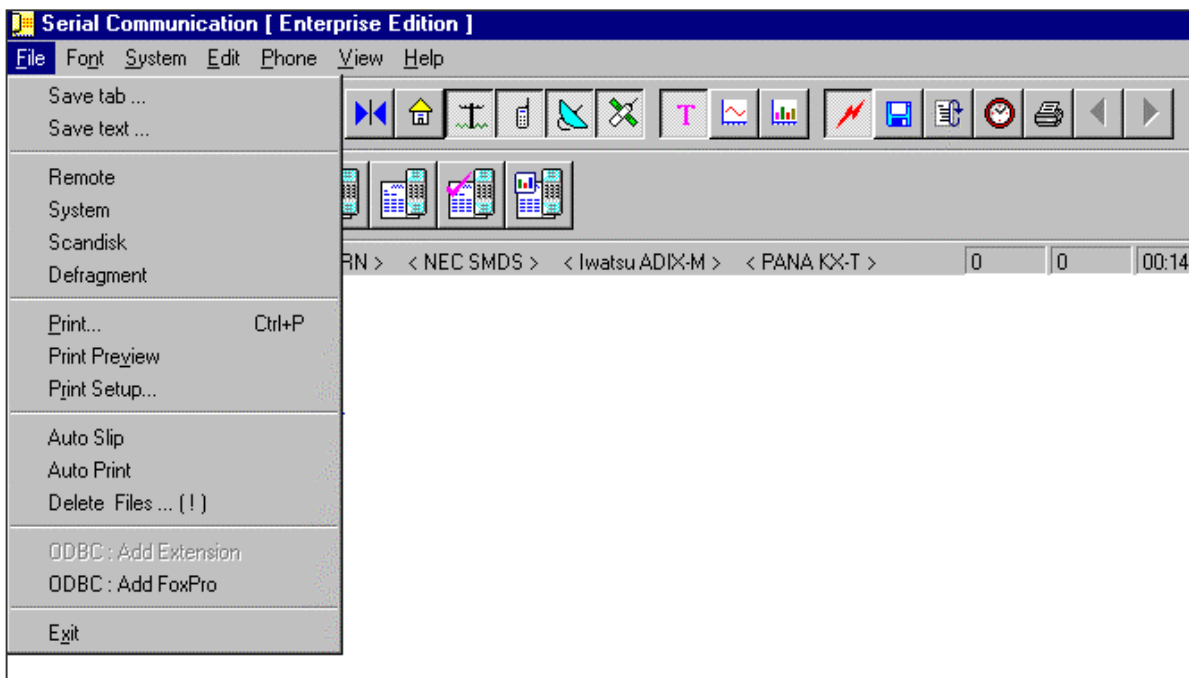
Menu "Font"
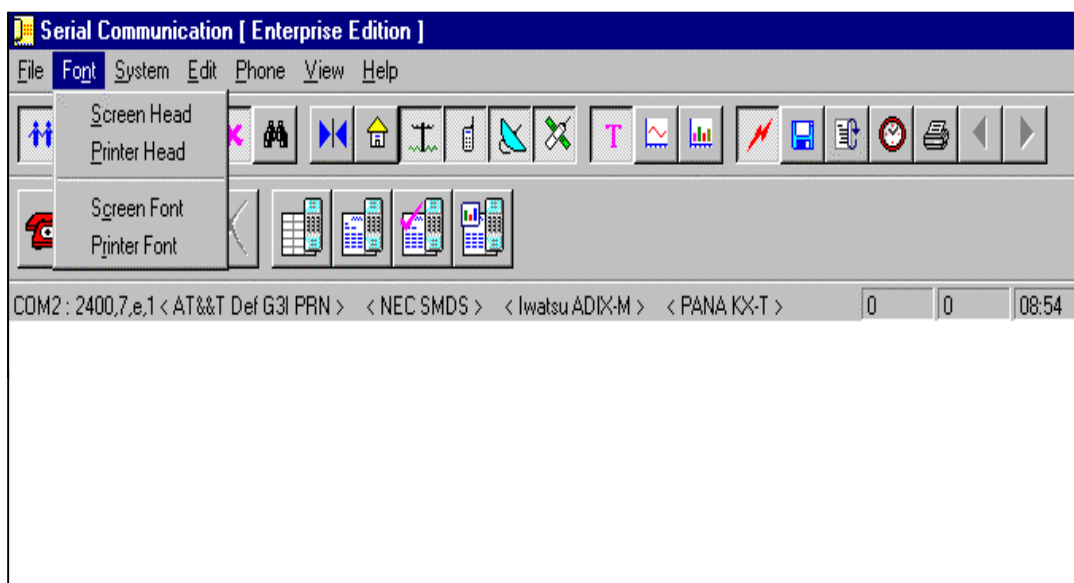
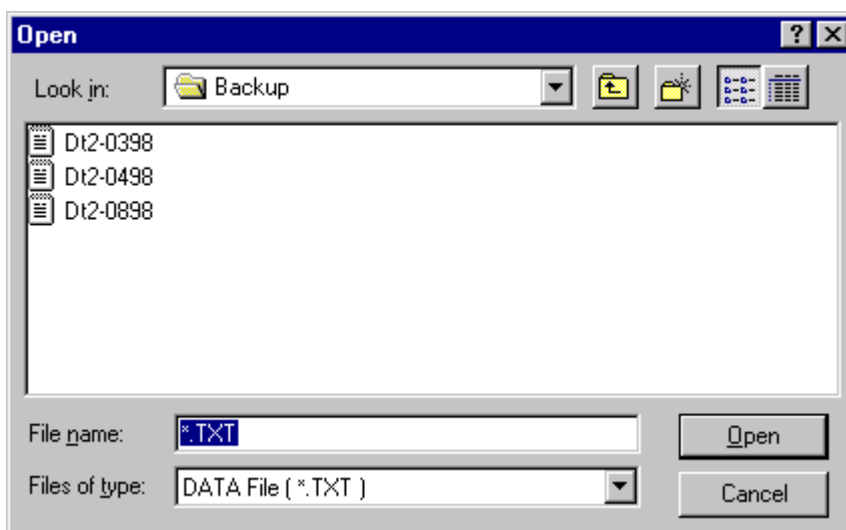When you choose a menu "Font", your screen is show "Font" for choose font type.
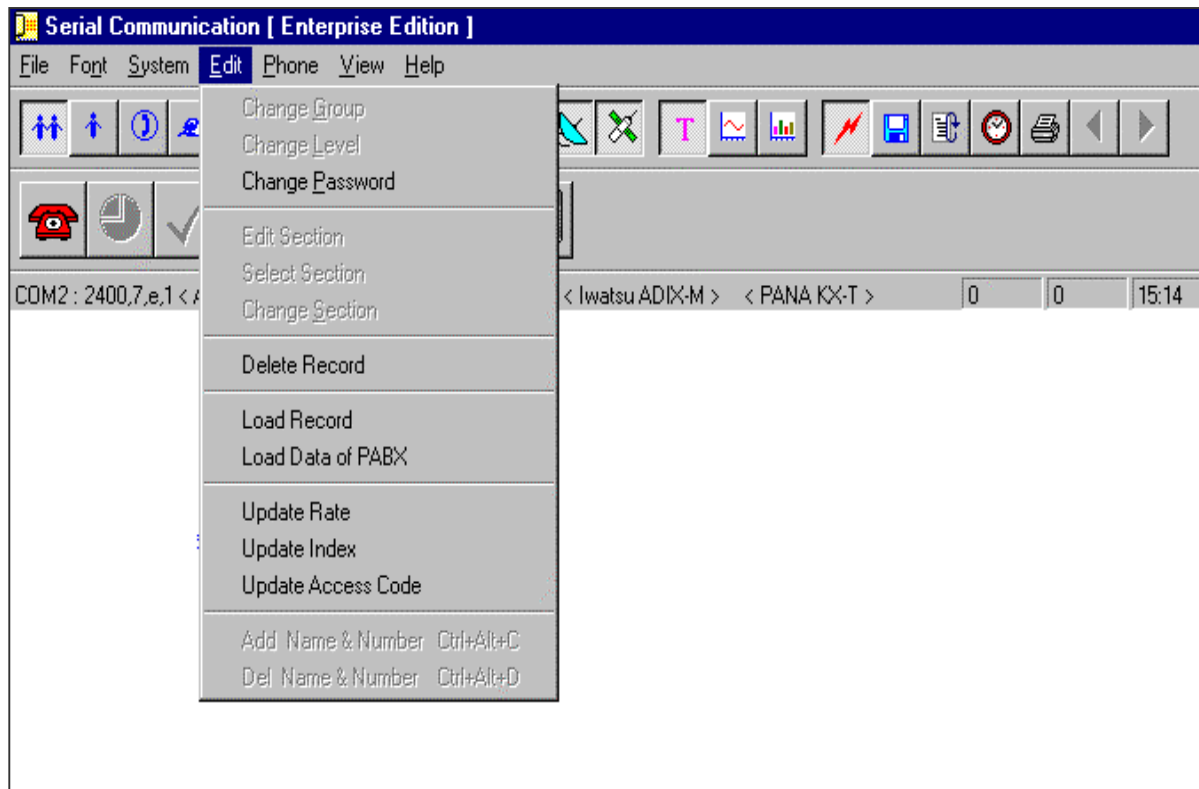

Menu "System"

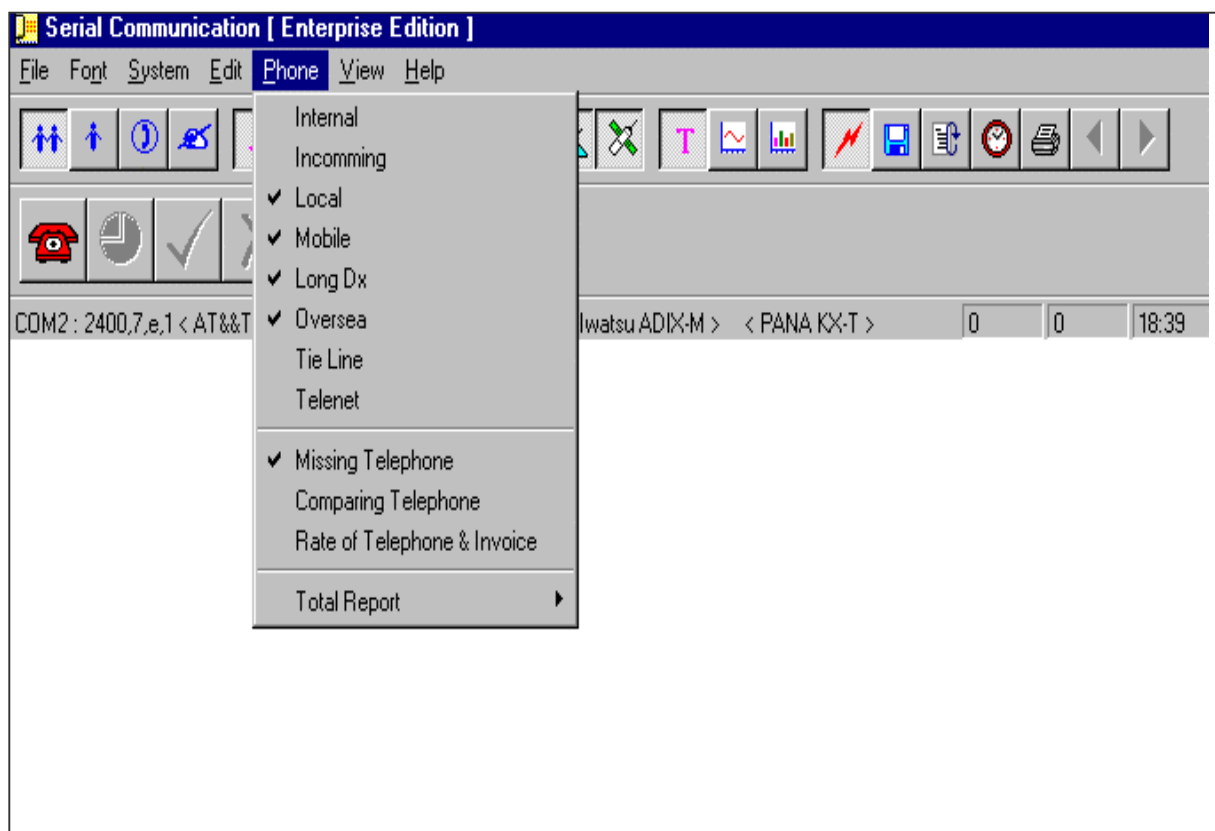When your choose "Load Record" from menu "System", your screen is show screen for read a backup date (.NDF File)

When your choose "Load Data of PABX" from menu "System", your screen is show screen for read a data from PABX (.TXT File)
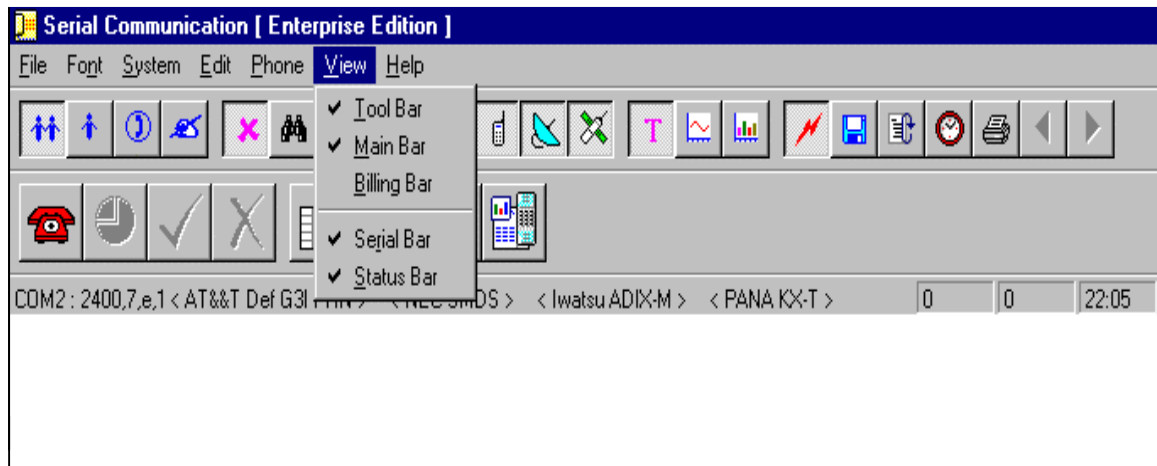
Menu "Edit"

Menu "Phone"

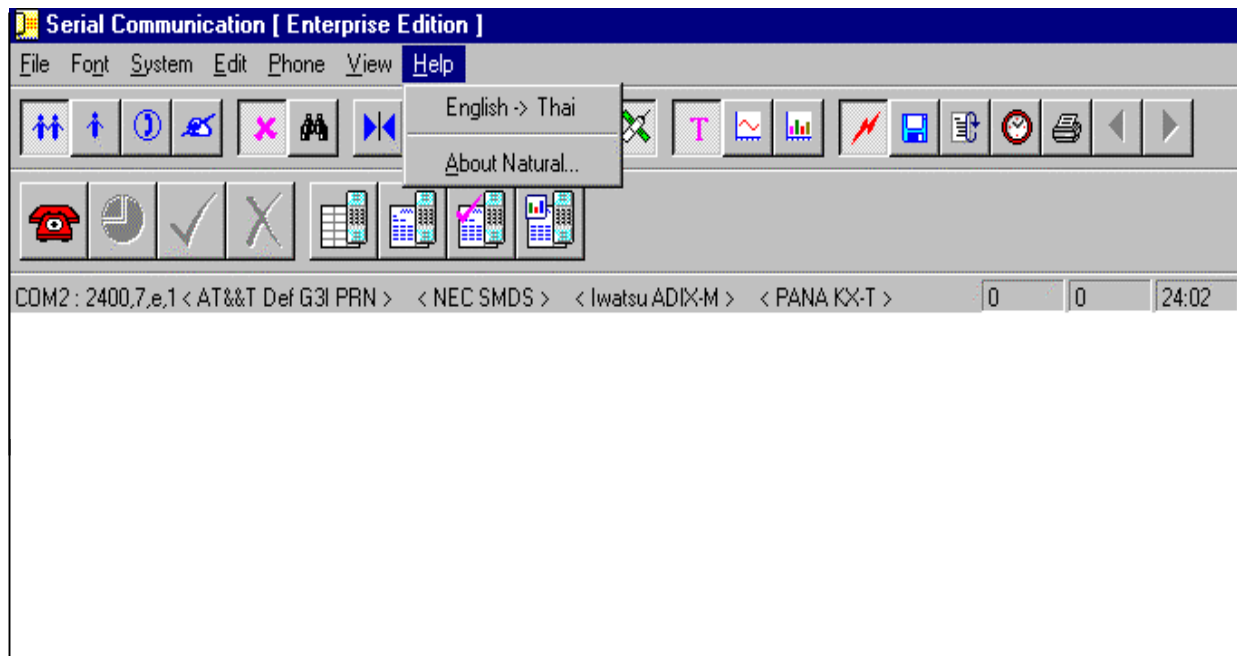## Menu "View"

Select a tool bar, main bar, billing bar, serial bar and status bar to show.

Menu "Help"

Change Language Display English => Thai
Change Language Display Thai => English

2 Installation

Natural Billing have a file *.EXE, *.BNF, *.TXT for set up the system.

File	Remark
A:\SETUP.EXE	This program is for set up a Natural Billing.
A:*.TX_	Keep the Text Rate File in Directory Rate
A:\NATURAL.EX_	Natural Billing Program.
A:\NATURAL.BN_	Keep the priority of the license.

2.1 Checking the Computer

- Computer is necessary for run on 24 hours. If computer is not completely, you must reduce the CLK.
- Normally the user is setup the program in desktop computer but the system is running on 24 hours, you must setup on workstation.

2.2 Operating System Installation

- Microsoft Windows 95 Thai Edition and 95 Service Pack 1 (Windows 95 Upgrade Thai Edition)
- Microsoft Windows 95 Thai Edition (Service Pack 2.1)
- Microsoft Windows 98 Thai Edition (Second Edition or Service Pack)
- Microsoft Windows NT Version 4.0 Thai Edition (Service Pack)
- Microsoft Windows 2000

2.3 Natural Billing Installation

2.3.1 Call the Natural Billing set up file

- Start => Run => Select the hard disk drive for setup program. Example is drive C.
- Insert setup disk in disk drive A and entry the command C:\> A:SETUP and press enter button. Natural Billing is created subdirectory and copy all file to hard disk.
- Setup a group and extension. Natural Billing is setup about 30 minutes. If you want to print many the employee name and authorize code, you will be setup about 7 days. You can use ODBC or DAO of the Microsoft Excel, Lotus, dBase or Access for reduce the time of setup the program.
- Setup a trunk or CO.Line is the same of setup extension but CO.Line is number of the telephone number.
- If you didn't setup extension or CO.Line, the program is automatic setup and set member to PABX group.

2.3.2   Add command to C:\AUTOEXEC.BAT
          VERIFY ON
          SET TMP=C:\TEMP
          SET TEMP=C:\TEMP
          SETCTEMP=C:\TEMP
          DEL C:\TEMP\~*.*
          DEL C:\TEMP*.TMP
          DEL C:\TEMP*.~MP
          DEL C:\TEMP*._MP
          SCANDISK /ALL /AUTOFIX /NOSAVE /NOSUMMARY
2.3.3   Modify C:\WINDOWS\SYSTEM.INI for Microsoft Windows 95, Windows 98
              ;SHELL=C:\EXPLORER.EXE
   SHELL=C:\BILLING\NATURAL.EXE

2.4 Set up communication of Natural Billing and PABX

2.4.1 The technical (level 0) is only setup program with PABX. The technical must know the detail of PABX
for setup the program Natural Billing (Baud Rate, Data Bit, Stop Bit, Parity, Connector)

2.4.2 Setup communication for PABX

Select the menu system and Serial Communication (RS-232) and press Enter.

Screen Serial Communication (Assign the standard communication RS-232C)
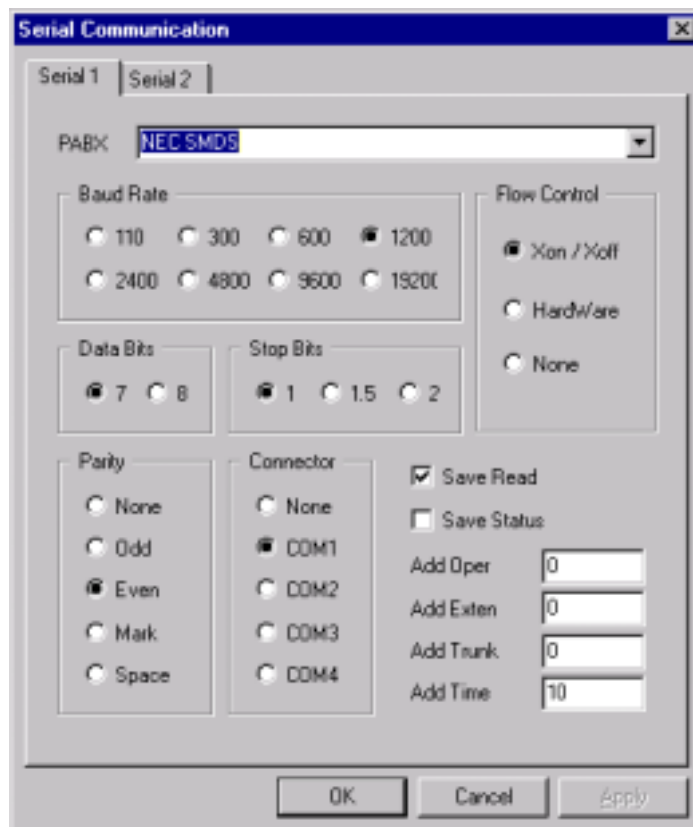
User can assign PABX by number of serial on screen. In each serial is a one PABX. For example if you use 2 PABX is NEC SMDS and OKI COM-G, you can assign NEC SMDS is serial 1 and OKI COM-G is serial 2.

- Select the PABX is using.
- Select the baud rate of the system must equal to the baud rate of PABX.

Baud Rate is a speed of communication. If the system have a high speed, the RS-232 is too short.

Example.   The speed is 1200   the RS-232 is 100 meters.
                  The speed is 9600   the RS-232 is 20 meters.

- Select the data bits of the system must equal to the data bits of PABX.

Data Bits is assign a bit number of communication.

Example.   Set the data bits is 8 bit, the communication is 256 character
                  Set the data bits is 7 bit, the communication is 128 character.

- Select the stop bits of the system must equal to the stop bits of PABX.
- Select the parity of the system must equal to the parity of PABX.
- Select the connector of the system must equal to the connector of PABX.
- Select the flow control of the system must equal to the flow control of PABX.
- ✔ **Save Read** If the user choose **Save Read**, the system is keep the real data from PABX.
- ✔ **Save Status** If the user choose **Save Status**, the system is keep the data to PABX. The analysis of data is from save read option and only PMS system.
- **Add Oper** is add the number for operator.
- **Add Exten** is an **extension number** and send from PABX. The extension number can show by the PABX.

    Example: PABX 1 is serial 1 and Add Exten is A000.
                  Internal number is 125.   The data from PABX is A125.
                  PABX 2 is serial 1 and Add Exten is B000.
                  Internal number is 125.   The data from PABX is B125.

- **Add Trunk** is CO.Line and send from PABX.

    Example:

PABX 1 is serial 1.The Co.Line is 931-5895-9 (5 line).**Add Trunk is A000**

Trunk	931-5895	931-5896	931-5897	931-5898	931-5899
	↓	↓	↓	↓	↓
The data is sent.	A001	A002	A003	A004	A005

PABX 2 is serial 2. The Co.Line is 931-5801-10 (10 line).Add Trunk is B000.

Trunk	931-5801	931-5802	931-5803	...	931-5810
	↓	↓	↓	↓	↓
The data is sent.	B001	B002	B003	...	B010

- **Add Time** is add the time for add a time when you press the button for dial number.
  Add Time = 10

Press button for dial number	Press Number	Call	Talk	Hang up
▶	▶	.....▶...	------------------	▲
│ ←	10 second	→ │ ←	Data from PABX is 50 second	→ │

Total of Time 60 second

Note   Setup in Serial Communication for PABX.
Case single PABX the user can only setup baud rate, data bits, stop bits, parity, flow control.
Case more than PABX the user can setup baud rate, data bits, stop bits, parity, flow control, add exten and add trunk.

2.5 Permission License (Request Password)

- You must request password from Natural Technology. Because of the program can run 3 month from product date and 1 month from setup date. One serial number can request one password.

- After setup the program is complete
  1. Press Ctrl + L for entry name and address of customer, the service and the province.
  2. Send Information By Print Screen or Paper in the Ctrl+L back to Natural Technology to Fax Number (02) 931-5548
  3. Call back to (02) 931-5899 in 5-10 Minute and tell the serial ID and Security to the Natural Technology. The Natural Technology will tell the password to the 9 digit to the customer.
  4. Entry the password and the program is checking the password.
     If the password is correct, the program is keep the name of customer, the service and license to use the program until XX/XX/2037.
     If the password is not correct, the program is only keep the Information in Ctrl+L. and can not close the dialog Ctrl+L

License

ID No.	(Identification Number) is the tax identification number.
Allow to, Address, Tel	Entry the name and address for the license to the customer can use the program in Thai.
License, Address, Tel/Fax	Entry the name and address for the license to the customer can use the program in English.

Service   The part of entry name and address of company and servant.

Security   Entry the password from the Natural Software Co.,Ltd. Per 1 Set 1PC.
 Version   Version of Natural Billing ex. Version 7.
 Serial ID   Product code of Natural Billing ex. 0021-0200-0007
 Security   is code the system and show when setup complete ex. 54308349
 Password   is the password of program. You must checking for every field is correct because
            when you entry the password, you can't modify.
            If you sure, you must set the cursor to the password field and call to 931-5899 for request
            the password.
            If the password is correct, the screen is return to the Natural program. Natural Billing is show
            the company name.
            You can request the password is 1 time. The password is not stable. The password is changed
            if the serial and security is change.

System
 Rate File   is the bill rate of province to setup program ex. Bangkok is RATE-BKK (See in
            Appendix)
 Backup   automatic backup the data after the setup complete. The program is backup to
            drive C in subdirectory billing (C:\BILLING\BACKUP) but the user can change.

2.6 Problem after installation

1. **Computer is remarked**
 Problem   Computer is run over the normal is called "Remark". For example computer
        Pentium 166 MMX is run 200 MMX or Main Board VX is run on 50 MHz but run
        on 66 MHz.
 Result   Computer is decline and cannot on 24 hours. The data is lost.
 Solve   Reduce the clock from 200 MMX to 166 MMX and reduce speed of main board NX,
        VX, FX is run on 50 MHz. The main board HX is run on 60 MHz and adjust the
        temperature to 25 degree.

2. **Install Microsoft Windows 95, 98, NT is not complete.**
 When you install Microsoft Windows 95, 98, NT is complete, you must install more than 1 hour. But the
 technician will install 15 minute, this reason the computer can't run 24 hours.

3. **The voltage between computer and PABX**
 Normally the voltage is 30-70 V(AC) and 1 mA(AC). If the voltage is more than 2 mA, I/O card is
 abnormal and deteriorate. And I/O card , hard disk and printer buffer can't receive the data if the voltage is
 more than 10 mA.

3 Management System

The component of Natural Billing System

1. **Group**

   Group is a set of internal number by department, division or company group. Group can present by name or account code. Group can set a sub department look like subdirectory.

2. **Extension Number (user name)**

   Extension is a number of internal number, authorize, account, access code.

3. **Trunk**

   Trunk is a port number such as a number of TOT, Tie Line, Mobile.

4. **Dial Group**

   Dial group is a set of external number for analysis by province and all, country and all, dealer telephone number and customer.

This component is important for report. You must have a priority for access to this component. You can access by your password. You **choose menu system and password** or press **Ctrl + I** for access the password, if your password is correct. Natural Billing is automatic access the password by the technical when you run the program in first time.

3.1 Password Management

Natural Billing was designed for a security system and protect the user for access program. User can access the program by your priority. Natural Billing is unlimited the priority level. If the level is low, the priority is high. Also the level is high, the priority is low.
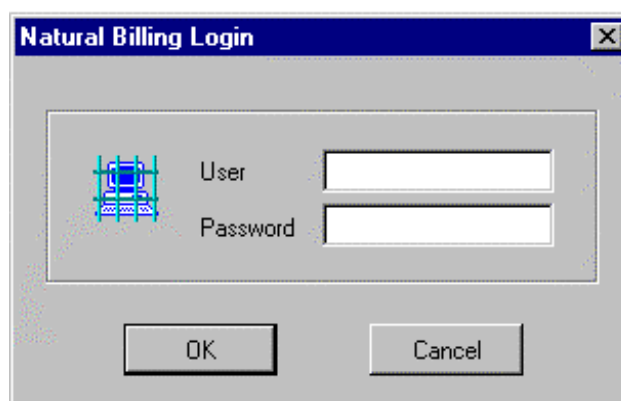
User	Priority	Scope and Performance for access program
Technical	Level = 0	Set up a group, extension, trunk and dial group Set up a communication for PABX and standard RS-232
Admin	Level = 1 Level = 2	Modify a name, password, priority and group of user Set up a service rate and maintenance a system
User	Level = 3 and up	

Password   You can set to a numeric or alphabetic. The priority of password is set from 0 to 8. If you want to change a password, your leadership or administrator or technical must allowed.

If you setup on network system, all user can see your data and also the leadership can see the data under your responsibility. **The user is a user of program**
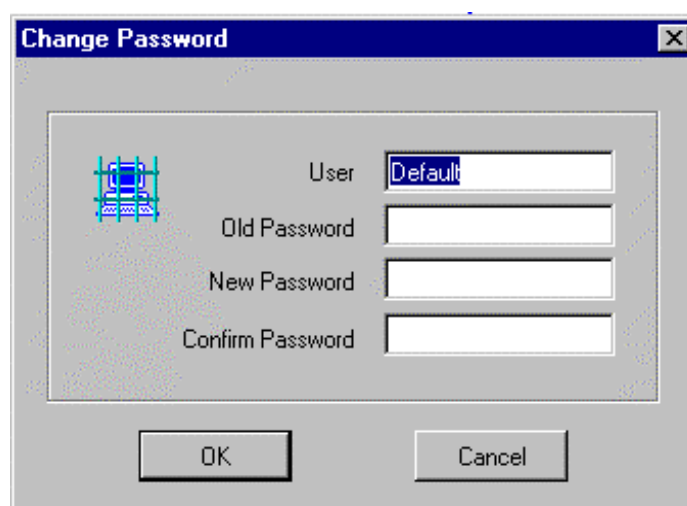
Password or Ctrl + I

1. When you get a password, you can choose menu "System" and "Password" or press **Ctrl + I**.
2. Entry your user name and password press **Enter**.

Change Password

1. Choose menu "Edit", "Change Password" and press **Enter**; Natural Billing show screen "Change Password"
2. Entry old password, new password and verify new password press **Enter**
3. **Technical and Admin** is not necessary to know the old password when they want to change a password.

3.2 Group Management

The group is a set of extension number. The group is easy for measurement, analysis and transfer telephone system. Only the technical can change a department, the technical must have a priority level is 0, 1, 2.

Natural Billing is automatic create an extension and trunk. Natural Billing is automatic verify an extension and trunk data from PABX and add to PABX group. Natural Billing can't automatic create the new group, user must define a group yourself. You can separate unlimited the group or sub group the same with subdirectory of DOS or folder of Windows.

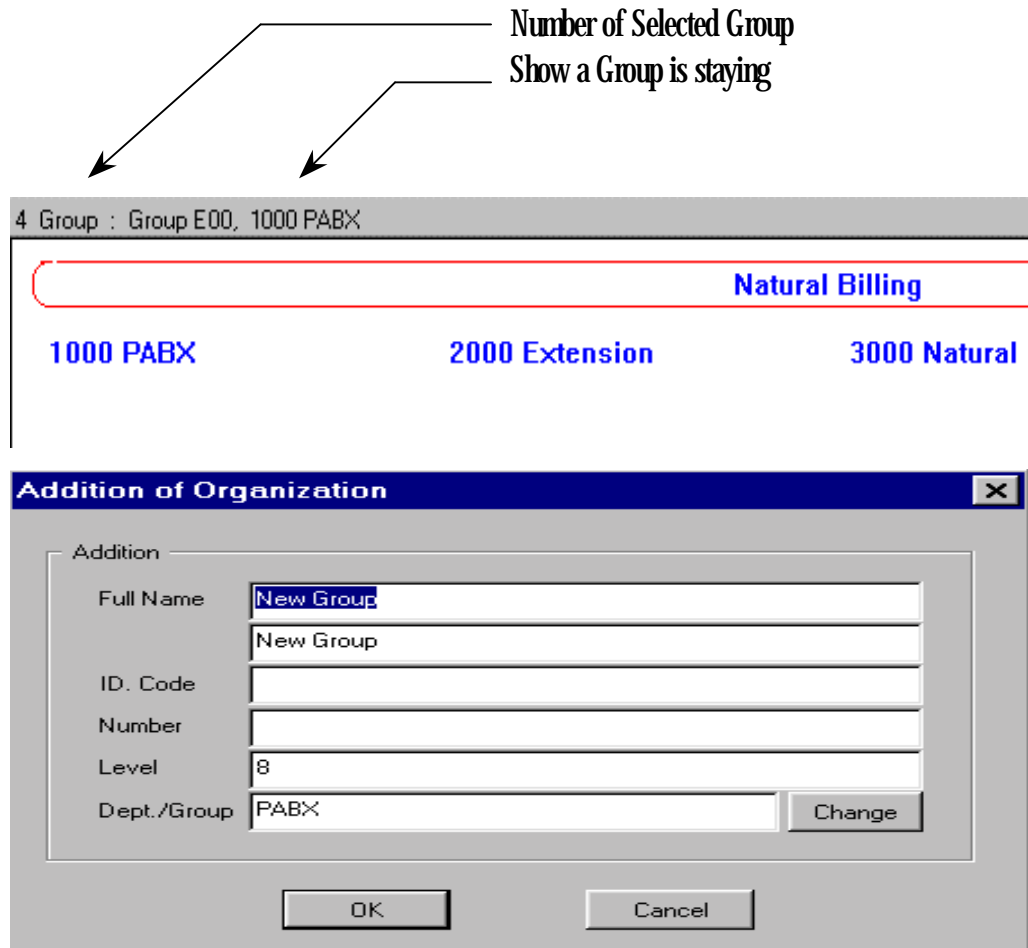| Organization	Name
Natural	Natural
└── Account	Natural/Account
└── FACILITIES	Natural/Account/FACILITIES
└── PREMISES	Natural/Account/FACILITIES/PREMISES

3.2.1 Create a Group

1. Choose menu **"Edit" and "Add name or number"** and press **Enter** or press and press **Ctrl + Alt + C**
2. Entry a group name, member of group, group code and group level

Group Name	Assign a name of group (Thai/English) for separate a group division or department
Member of Group	Assign for member of group
Change a Group	If you want to change a group
Code Center	You can use a group code by group name because of the group name can change anytime.
Level	Level of user can login or modify the program. For example level 8 is only to see a data.

3.2.2 Modify or Change a Name of Group

1. Press [icon] for show all group
2. Select a group by mouse then **Enter** or **Ctrl + Enter**; show an extension of group

Number of Selected Group
Show a Group is staying

3. Press **Delete or Delete Old Name Group** and then entry a new group of name (Thai/English)

3.2.3 Change or Move a Group

1. Press [icon] for show all group
2. **Select a group** by mouse and select a sub group, the selected group is a red highlight
3. Choose menu **"Edit" and " Change Group"**
4. Choose a new group by mouse and press **Enter**
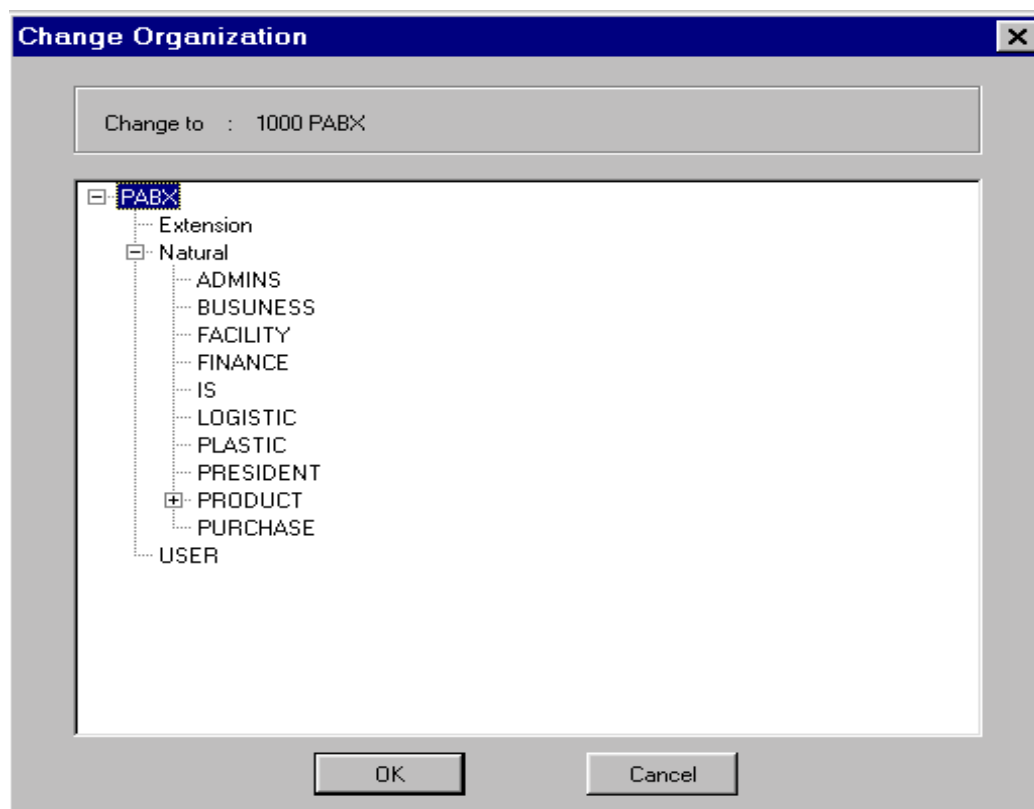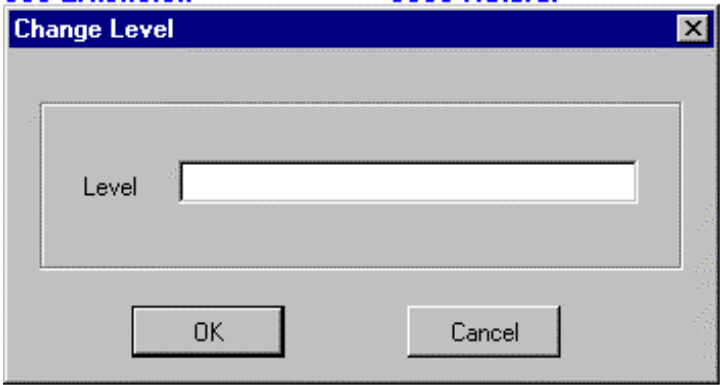
3.2.4 Level of Group and Change Level

Level is a scope of priority of group. Level is start from 0 to 9.

Select a group for change level by mouse and press **Enter or Ctrl + Enter**

Screen is show a extension number for change level

Or select a group for change level by mouse and choose menu **"Edit" and "Change Level"**

3.2.5 Delete a Group

1. Press [icon] for show all group
2. **Choose a group for delete** by mouse, the selected group is a red highlight
3. Choose **menu "Edit" and "Delete Name and Number"** and press **Enter or press Ctrl + Alt +D**
4. Program is show a message "Are you sure deletion?" and press **Yes** if you are sure, press **No** if you aren't sure.

If the group is deleting have a sub group or extension, Natural Billing is show a message **"PREMISES is not empty!"** you can't delete this group. You must delete a sub group or extension before a group.
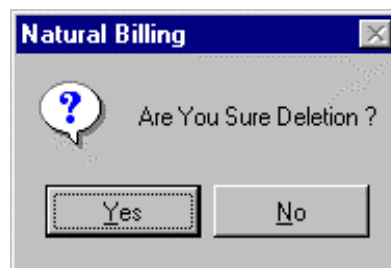
3.2.6 Arrange and Add Column of Group to Screen

1. Press [icon] and press **telephone command** or press **Shift + Enter**
2. Entry a width and column number then press **Enter**
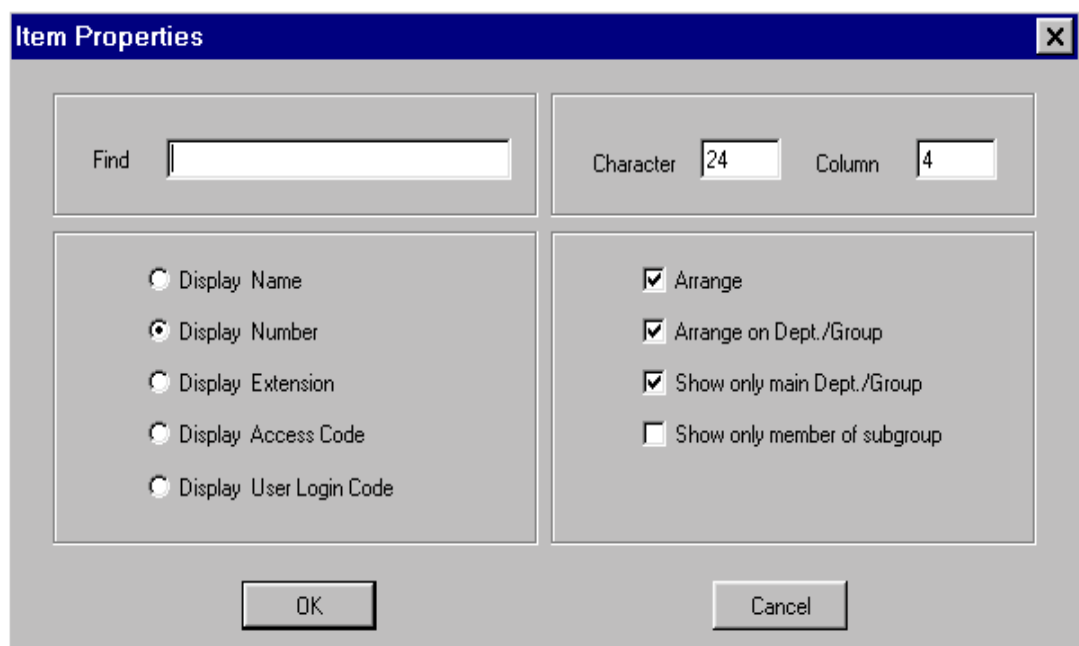
3.3 Extension Management

A group is a set of extension. If you want to access the extension in the group, you must **select a group** and only **the technical** can modify the group. The technical have a priority level is 0, 1, 2.

The environment and performance of PABX is important for set up an extension. User can set a number of extension and assign by a telephone. For example you assign a 3 number for a telephone number, set 0 for operator and set 100 for a meeting room.

3.3.1 Create an Extension

1. Press [icon] then choose a group for create an extension

2. Press [icon] then show a highlight

3. Choose **menu "Edit" and "Add Name and Number or press Ctrl + Alt + C** then press **Enter**
   Screen is show "**Addition of Extension**"

4. Addition

    Ex. Station   For assign a new extension by start number

        For Example   Enter 100   is add a number 100

                          Enter 101–120   is add a number 101 to 120

                          Enter 222 333 444   is add a number 222, 333 and 444

    Group   The Group of Extension number

    Change   Change to new Group

    Level   Set the priority level for the extension. Priority Level have 9 level (0-8)

    Billing Set   Define a Billing Charge of Extension and your can define a 8 set of service charge in each billing charge

    Start Date   You have normally to move an extension in the medium and large organization. Natural Billing can set a range of date. Your can create an extension in many group and the range of date in each group is not available.

    Status   Set up the status of extension by check list ✔

        - Operator   For Telephone Transfer
        - Station   For Telephone Transfer
        - Trunk   For Telephone Transfer from trunk to another trunk
        - Room   For Apartment/Hotel
        - Slip File/Print   For print Slip or keep the data to file slip
        - Emulated Line Reverse Set use or not use by extension

Table: Number of Extension by Serial Number from Natural Technology

Number of Extension	Serial Number
32	Xxxx0-xxxxx-xxxx
64	Xxxx1-xxxxx-xxxx
128	Xxxx2-xxxxx-xxxx
256	Xxxx3-xxxxx-xxxx
512	Xxxx4-xxxxx-xxxx
1024	Xxxx5-xxxxx-xxxx
2500	Xxxx6-xxxxx-xxxx
5000	Xxxx7-xxxxx-xxxx
Unlimited	Xxxx8-xxxxx-xxxx

Exsample => **71058-032000-0001**

            => **41057-012000-0035**

            => **3208-012000-0035**

3.3.2 Modify and Add a Name of Extension

1. Press [icon] for show a group by mouse and then select a group

2. Press [icon] for show an extension by mouse and select an extension press **Enter** or **Ctrl + Enter**, **Entry data** then press **Enter**

|	
Name	is a name of user (Thai/English)
Station	is a extension number of employee number
Access	is an authorize code or account code
Group	Define a group of extension
Change	Change to new group
Private	Set a private number for calculate a bill
Start Date – Transfer Date	You have normally to move an extension in the medium and large organization. Natural Billing can set a range of date. Your can create an extension in many group and the range of date in each group is not available.

3.3.3 Change a Group of Extension
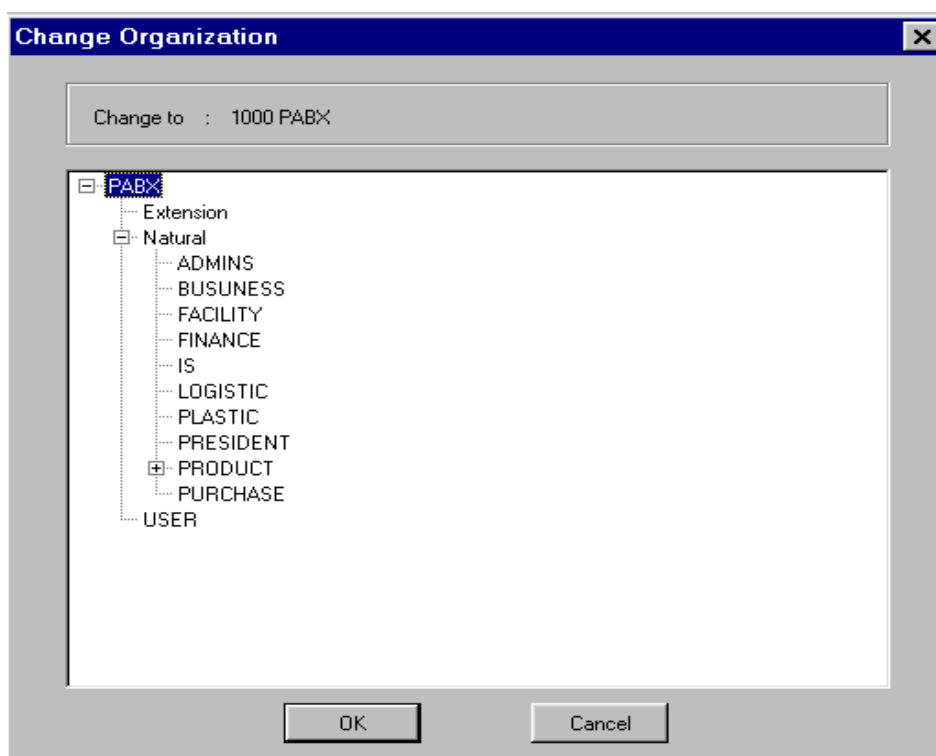
1. Press [icon] for show a group by mouse and then select a group
2. Press [icon] for show an extension in group
3. Choose menu **"Edit" and "Change Group"** then press **Enter**
4. Select a new group and press **Enter**

3.3.4 Change an Extension Level
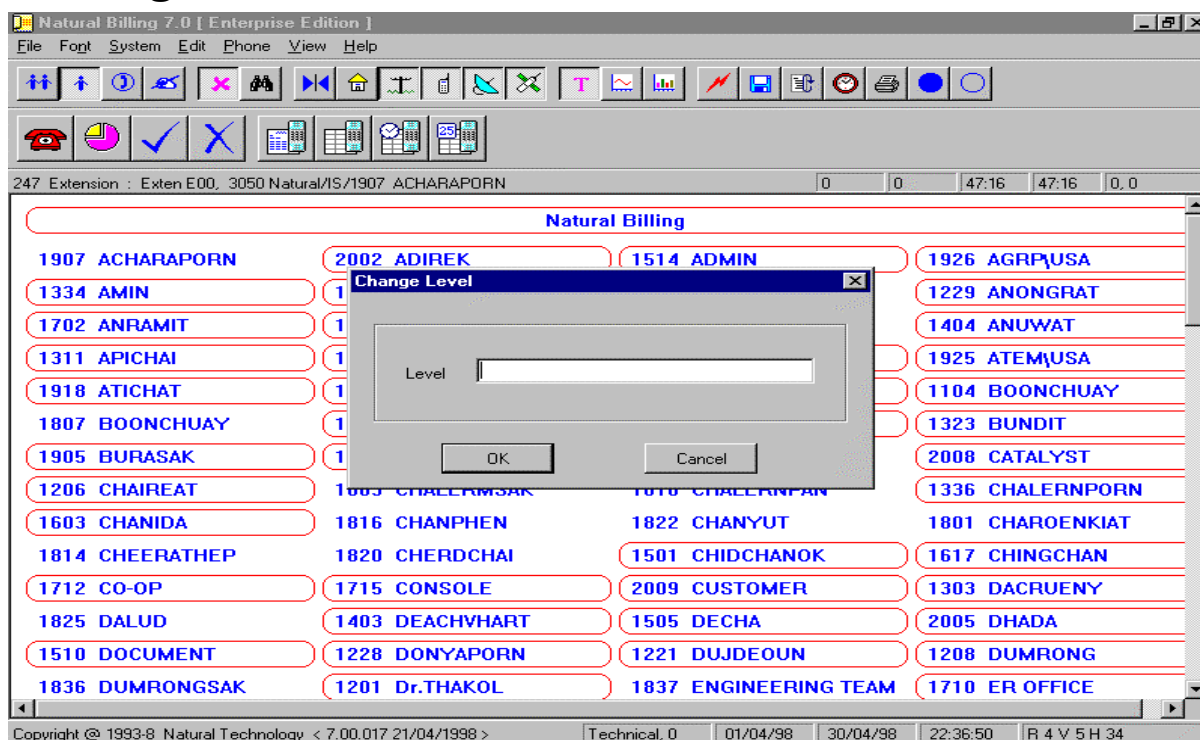
1. Press [icon] for show a group by mouse and select a group

2. Press [icon] for show an extension and select an extension

3. Choose menu **"Edit" and "Change Level"** press **Enter**

3.3.5 Delete an Extension

1. Press [icon] for show a group, select a group by mouse

2. Press [icon] for show an extension and select an extension

3. Choose menu **"Edit" and "Delete Number and Name"** then press Enter
   Program is show a message "Are you sure deletion?" and press **Yes** if you are sure, press **No** if you aren't sure.
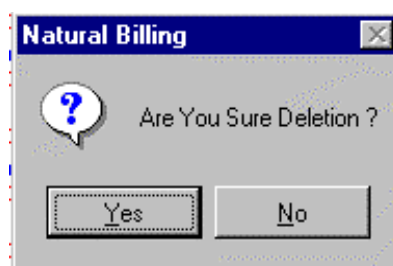
3.4 Trunk Management

Trunk is a set of telephone for compare a bill of TOT and CAT. Your can set a trunk code the same with PABX and set trunk to Line Reverse System.

3.4.1 Create a Trunk

Addition of Trunk

Addition

Port No.   9000 9002-12 9014-20

Level   8

Statement

- ⦿ Trunk is not Revers
- ◯ Trunk is Revers
- ◯ Trunk is Tie Line
- ◯ Trunk is Tel Net

Access Code

[OK]   [Cancel]

1. Press [⟩] and press **Ctrl + Alt + C** or choose menu **"Edit" and "Add Number and Name"**
2. Entry data and press **Enter**

Port No.   Define port number of trunk

For Example: Enter 1001   is add a number 1001

Enter 2001-64   is add a number 2001 to 20064

Enter 3333 4444   is add a number 3333 and 4444

Level   Priority Level of Trunk

Status   Define a status of Trunk such as Line Reverse, Tie Line or Telnet

3.4.2 Delete a Trunk

1. Press [icon] for select a trunk
2. Choose menu **"Edit" and "Delete Number and Name"** then press **Enter**

Program is show a message "Are you sure deletion?" and press **Yes** if you are sure, press **No** if you aren't sure.

3.4.3 Define a Status of Trunk

1. Press [icon] for select a trunk or define a status and then press **Enter or Ctrl + Enter**
2. Entry a data and press **Entry**

Name	Name of user (Thai/English)
Port No	Define port number of trunk
Level	Priority Level of Trunk
Status	Status of Trunk such as Line Reverse, Tie Line or Telnet

3.5 Dial Group Management

Dial Group Management is a performance of program for show the target number or extension number by user defining. When you already set up dial group, the system is automatic display the target number. Normally user will define for mobile, packlink, long Dx, oversea.

1. Press
2. Choose menu **"Edit" and "Add Number and Name"**
3. Press **Enter or Ctrl + Enter**
4. Entry a data and press **Entry**

Name	Group of Dial Group (Thai/English)
Code	Dial Group Code
Level	Priority Level of Dial Group
Telephone Number	Start of Telephone number of dial group such as 654321 is 6543210-9

3.4.4 Delete a Trunk

3.   Press [icon] for select a trunk

4.   Choose menu **"Edit" and "Delete Number and Name"** then press **Enter**

   Program is show a message "Are you sure deletion?" and press **Yes** if you are sure, press **No** if you aren't sure.

3.4.5 Define a Status of Trunk

3.   Press [icon] for select a trunk or define a status and then press **Enter or Ctrl + Enter**

4.   Entry a data and press **Entry**

Name	Name of user (Thai/English)
Port No	Define port number of trunk
Level	Priority Level of Trunk
Status	Status of Trunk such as Line Reverse, Tie Line or Telnet

3.6 Dial Group Management

Dial Group Management is a performance of program for show the target number or extension number by user defining. When you already set up dial group, the system is automatic display the target number. Normally user will define for mobile, packlink, long Dx, oversea.
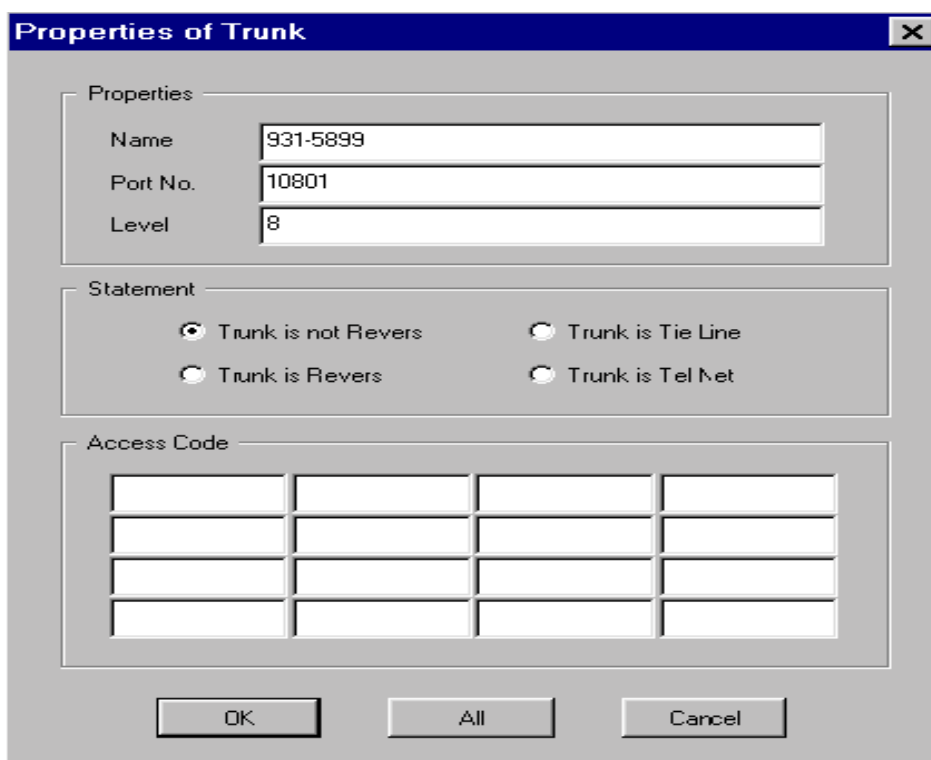

5. Press
6. Choose menu **"Edit"** and **"Add Number and Name"**
7. Press **Enter or Ctrl + Enter**
8. Entry a data and press **Entry**

Name	Group of Dial Group (Thai/English)
Code	Dial Group Code
Level	Priority Level of Dial Group
Telephone Number	Start of Telephone number of dial group such as 654321 is 6543210-9

4 Telephone Billing System

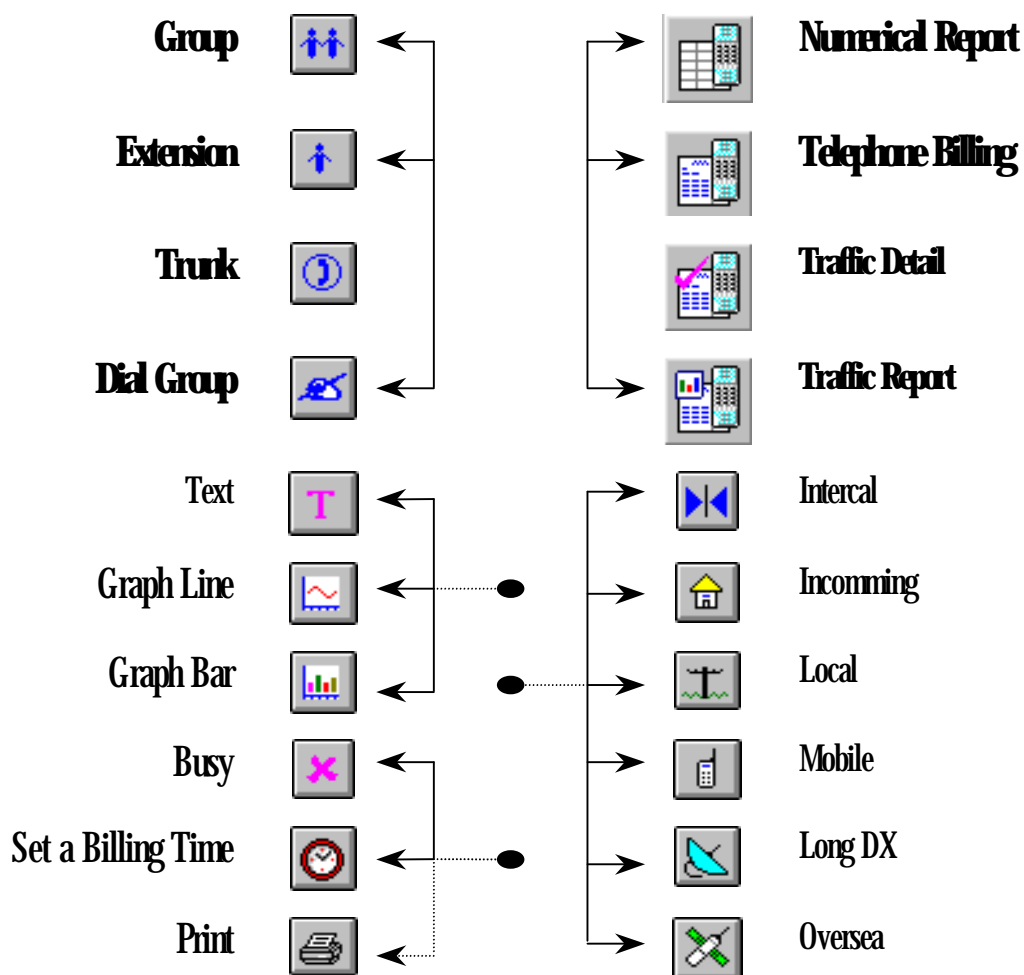Natural Billing is a different from the other the telephone billing system. The other telephone billing system is only the time metering program such as the system is set the line is ok when user is hold a line more than 30 second. Natural Billing have a high performance. Natural Billing is verify the probability of call such as the system is set the line is ok when you call PhoneLink 151 and hold a line more than 10 seconds. The system is set the line is ok when you call PhoneLink 152 and hold a line more than 15 seconds. Natural Billing can verify the detail traffic of user. For example if user always call busy, user will call again or etc. Natural Billing is verify for a call is busy or not. And this reason the apartment, hotel can reduce an argument with customer about the telephone billing. The telephone date is a high reliability.

Natural Billing have a many report types and easy for user. Natural Billing have a relationship between item, report, call type, text/graphic and condition for present.

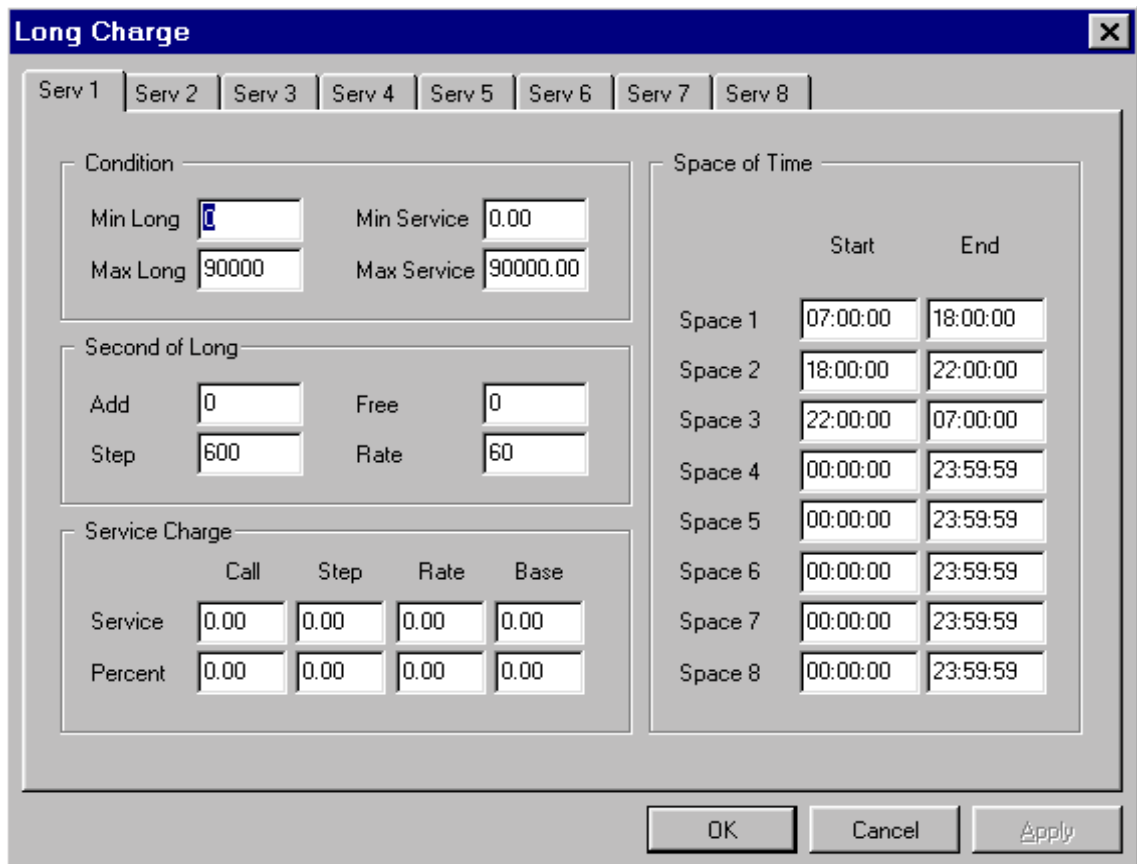| Group | Numerical Report |
Extension	Telephone Billing
Trunk	Traffic Detail
Dial Group	Traffic Report
Text	Intercal
Graph Line	Incomming
Graph Bar	Local
Busy	Mobile
Set a Billing Time	Long DX
Print	Oversea

4.1 Defining Rate of Telephone Billing

Normally Natural Billing is calculating the telephone billing by TOT, CAT in each province and not including vat. You can modify a telephone billing rate as follow:

1. Login your password and your password must have priority in level **0, 1 or 2**
2. Select menu "Phone" and "Rate of Billing"
3. Select menu "Phone" and choose "type of telephone"

For example: select "Long Dx" or Press

Long Charge

Serv 1 | Serv 2 | Serv 3 | Serv 4 | Serv 5 | Serv 6 | Serv 7 | Serv 8

Condition

Min Long	0	Min Service	0.00
Max Long	90000	Max Service	90000.00

Second of Long

Add	0	Free	0
Step	600	Rate	60

Service Charge

	Call	Step	Rate	Base
Service	0.00	0.00	0.00	0.00
Percent	0.00	0.00	0.00	0.00

Space of Time

	Start	End
Space 1	07:00:00	18:00:00
Space 2	18:00:00	22:00:00
Space 3	22:00:00	07:00:00
Space 4	00:00:00	23:59:59
Space 5	00:00:00	23:59:59
Space 6	00:00:00	23:59:59
Space 7	00:00:00	23:59:59
Space 8	00:00:00	23:59:59

OK | Cancel | Apply

Set 1 - 8   Natural Billing can define 8 telephone billing method for telephone type. You can start from every set in apartment version but you must start from set 1 for another version.

Range of Billing   Natural Billing is automatic calculate in next set if your data is out of range.

Min – Max Time   Range of time (in second)
Min – Max Money   Range of telephone billing

Set a Billing time (in second)   Define a format of time for calculate telephone billing

Add Time   Add for using time
               For Example: Using time is 01:40 have 2 minute charge if you set add time is
                               30 second
                               Using time is 02:10 have 3 minute charge and user don't know for
                               the add time.
Free Time   Set a time for no service charge per range or per rate
Range of time Calculate billing by range of time per time
Per Rate   Calculate billing by range of time per rate

Service Rate   Define a service charge in the same time per call, range, rate in baht and
                   percent of old rate.
Per Call   Calculate billing when telephone line is connect
Per Range   Calculate billing in each range
               For Example: Calculate a service charge in every range and set 5 baht per minute
                               for each range (range of time is 600 second)
Per Rate   Calculate billing in each range
               -   Natural Billing is calculate billing in every minute (per rate is 60 second) for
                   LongDx.
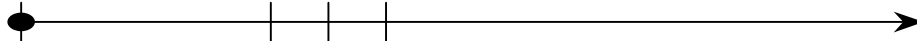   -   Natural Billing is calculate billing in every 6 second and minimum is 1 minute (free
                   rate is 60 second, per rate is 6 second, per call is 100 percent and per rate is –90
                   percent (100 –90 = 10 percent).

Range of reduce time   TOT and CAT billing is calculate by range of time and Natural
                           Billing is also calculate by TOT and CAT.

For Example: Defining of Rate of Billing

1. Calculate by CAT Bill

Free Time is 60 second Per Rate is 6 second

Per Call is 100% Per Rate is –90% (100 –90 = 10 % of old service rate per minute)
Calculate

-   Per call is 100% of old service rate per minute when the telephone is connect.
-   Stop for calculate billing in 1 minute or 60 second (Free time is 60 second)
-   After that if you still use a telephone more than 1 minute, the system is calculate billing in every 6 second (time per rate is 6 second) and calculate billing is 10% of old service rate per minute (per rate is –90%)

2. Calculate Billing including VAT by set additional 10% of old service rate, Natural Billing is compare with old service rate per minute and including 10% of VAT. But you must calculate excluding VAT if you want to calculate in baht such as you want to calculate bill in Bankgok area (3 baht per call), you must set service rate is 3.3 baht per call.

3. Change service rate method is Bangkok area to **Time Zone Metering System**
    Time Zone Metering System is change from 3 baht per call to 3 minute is 3 baht and next minuter is one baht per minute.

    Service Change   – Per Call is 3 baht when telephone is connect
                         – Stop for calculate billing in 3 minute or 180 second (Free time is 180 second)
                         – After that if you still use a telephone more than 3 minute, the system is calculate one baht per minute (per rate is 60 second, 1 baht)

Free time is 180 second Per Rate is 60 second
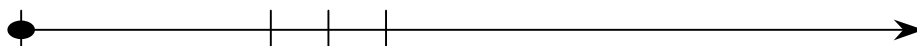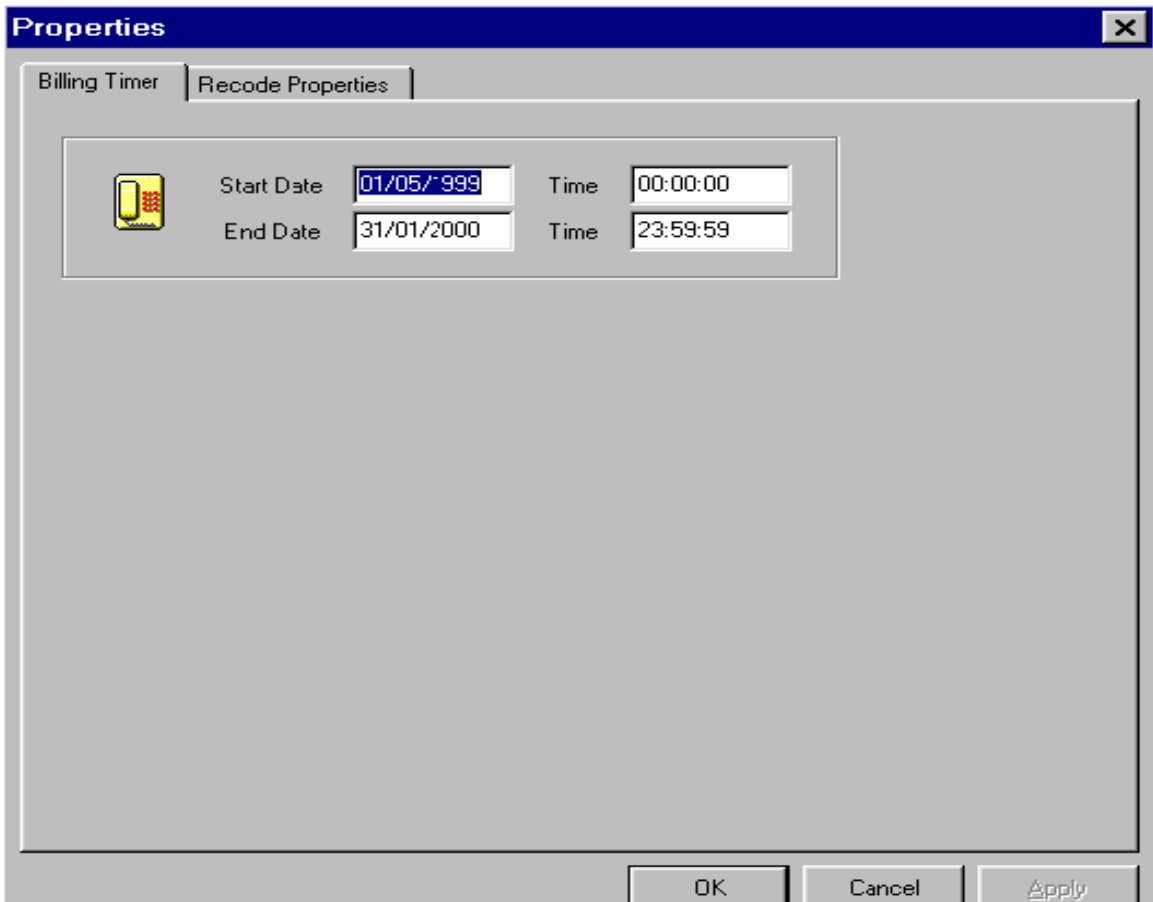
Per Call is 3 baht Per Rate is one baht

4.2   Set a Billing Time

Press every time when you want to change a time for present the data or **Zoom Record** The Zoom Record is affect with **telephone data** for the telephone billing report in every report.

Set a scope of data for present the data by set a start and end date but you must set not greather than the system date.

4.3 Zoom Record (Property of data)

Press every time when you want to change a time for present the data or **Zoom Record** The Zoom Record is affect with **telephone data** for the telephone billing report in every report.

Start Date   Set the start date for telephone data
- **User Define**   Set a start date by 4.1.1
- **From stayed date**   Set a start date when the customer went in the hotel or apartment
- **Balance Amount**   Set a start date when the customer didn't pay. (for Hotel, Apartment)

Between a Time Set a range of time in Zoom Record every day. For example: From 1st to end of month by defining in 4.1.1 but set from 17:00 to 08:00 in Zoom Record every day.

Transfer   Natural Billing is supported some data such as

- **Normal Call**   Only not transfer of data
- **Start Transfer**   Only the first call of data before transfer
- **Receive Transfer**   Only the receive transfer data
- **Scope of Date**   Only selected the telephone data

Minimum Time (mm:ss)   Set the minimum time for selected data
Maximum Time (mm:ss)   Set the maximum time for selected data

Minimum Money (baht)   Set the minimum amount for selected data
Maximum Money (baht)   Set the maximum amount for selected data

Authorize/Account   Set a special performance for Professional Version
- **Normal Call**   Only don't use **Authorize/Account** for select a data
- **Private Call**   Only your **Authorize/Account** for select a data
- **Other Call**   Verify the telephone data for the extension is use **Authorize/Account**

Only External Call   Only select the start number of data record. You can define 8 starting number.

4.4   Telephone Traffic Summary Report

The Telephone Traffic Summary Report by group, extension, trunk and dial group can separate or total by busy, time, long and money.
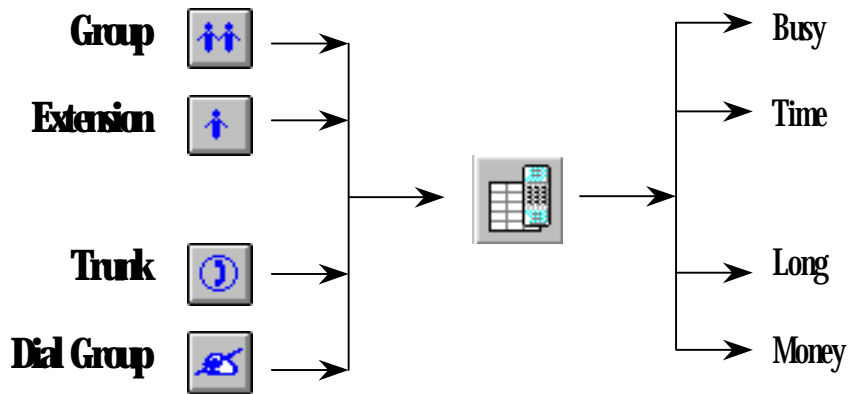
Press Enter or press double left mouse the system is show screen

Report   You can select the main item for sort the data. You can select 3 sub item and define the minimum in each item as follow
- Busy
- Time
- Call
- Money

Percent   Start when you want the percent report.
- Normal   Only show the data from "Report"
- NAT & INT   Summary the data in NATIONAL & INTERNATIONAL Report
- Item Percent Compare the percent data by item
- Sum Percent Compare the percent data by summary item

Sort   Natural Billing can sort in 3 types as follow:
- Normal   Sort by group, extension, trunk and dial group
- Ascending   Sort by compare record from maximum to minimum
- Descending   Sort by compare record from minimum to maximum
- Old Name   Show the name and group of record

Group   **Only the Report by Group**
- Normal   Show report by group to extension
- Sub Group   Show the smallest group
- Member   Show the member of group or extension
- Total Amount   Show the selected group

Example 1. Summary Report for Organization

1. Set a Billing Time **(From 4.2 Page 47)**

2. Select **Organization or Group** By Press [icon] and select a group

Billing System

3000 Natural	3010 Natural/ADMINS	3020 Natural/BUSUNESS
3030 Natural/FACILITY	3040 Natural/FINANCE	3050 Natural/IS
3060 Natural/LOGISTIC	3070 Natural/PLASTIC	3080 Natural/PRESIDENT
3090 Natural/PRODUCT	3100 Natural/PURCHASE	

3. Make a Summary Traffic Report by press [icon]

3. Sort by ascending and show the data of NAT and INT

Summery Properties

Tabs: Summery Properties | Allocation Properties | Recode Properties

Report
- ○ Busy Numerical Report — ☐ Show — Minimum [0]
- ○ Timely Numerical Report — ☐ Show — Minimum [0]
- ○ Lengthy Numerical Report — ☐ Show — Minimum [00:00]
- ⦿ Monetary Numerical Report — ☐ Show — Minimum [00.00]

Item
- ☑ Normal
- ☐ NAT & INT
- ☐ Item. Percent
- ☐ Sum. Percent

Sort
- ⦿ Normal
- ○ Max -> Min
- ○ Min -> Max
- ☐ Show Full Name

Dept./Group
- ○ Normal
- ○ Element
- ○ Member
- ⦿ Net Total

[OK] [Cancel] [Apply]

SHOW TEXT

SUMMARY REPORT

Printed Date : 06/09/1999 13:19:43

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

Item	TOT	CAT	Total
3010 ADMINS	3,172.00	9,389.00	12,561.00
3020 BUSUNESS	5,605.50	38,612.00	44,217.50
3030 FACILITY	8,476.00	-	8,476.00
3040 FINANCE	2,979.00	8,976.00	11,955.00
3080 PRESIDENT	186.00	1,151.00	1,337.00
3090 PRODUCT	19,539.00	25,139.00	44,678.00
3100 PURCHASE	6,102.00	18,399.00	24,501.00
Total	7	46,059.50	101,666.00	147,725.50

Show Line Graph

SUMMARY REPORT

Printed Date : 06/09/1999 11:20:46

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

Item	Money	TOT + CAT
3010 Natural/ADMINS	12,561.00	
3020 Natural/BUSUNESS	44,217.50	
3030 Natural/FACILITY	8,476.00	
3040 Natural/FINANCE	11,955.00	
3091 Natural/PRODUCT/QA	12,626.00	
3092 Natural/PRODUCT/QC	32,052.00	
3100 Natural/PURCHASE	24,501.00	
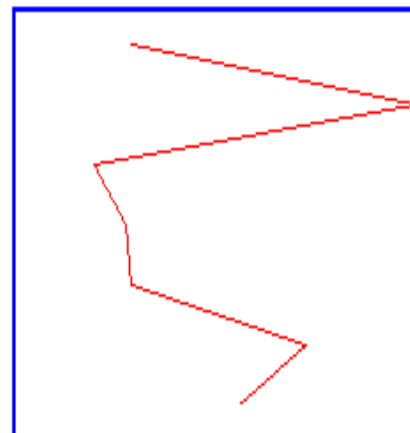
SHOW BAR GRAPH
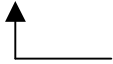
SUMMARY REPORT

Printed Date : 06/09/1999 11:22:23

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

Item	Money	TOT + CAT
3010 Natural/ADMINS	12,561.00	
3020 Natural/BUSUNESS	44,217.50	
3030 Natural/FACILITY	8,476.00	
3040 Natural/FINANCE	11,955.00	
3091 Natural/PRODUCT/QA	12,626.00	
3092 Natural/PRODUCT/QC	32,052.00	
3100 Natural/PURCHASE	24,501.00	
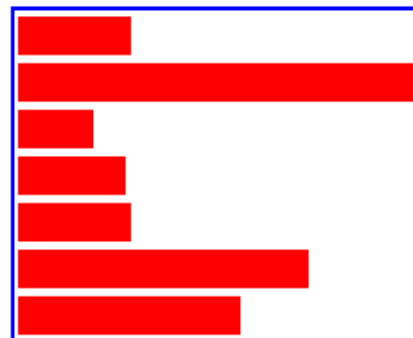
Example 2. Allocation Summary Report for Organization

TOT and CAT bill is addition the service charge and the depreciation. From the summary report the internal call is 75,995.50 baht and oversea call is 196,137.00 baht but the additional reason make the internal call is 80,000.00 baht and oversea call is 200,000.00 baht. Because of the addition charge Natural Billing must average the telephone billing by check ✓ average billing.

The Average Billing Method

- check ✓ average billing
- Tax is a vat such as –**10%** the telephone billing is include vat +**10%** is exclude vat.
- Refund is refund a vat. The refund is up to the business type such as the bank can refund 11.02%.

Show Average the Telephone Traffic

SUMMARY REPORT

Printed Date : 06/09/1999 13:19:43

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

Item	TOT	CAT	Total
3010 ADMINS	3,172.00	9,389.00	12,561.00
3020 BUSUNESS	5,605.50	38,612.00	44,217.50
3030 FACILITY	8,476.00	-	8,476.00
3040 FINANCE	2,979.00	8,976.00	11,955.00
3080 PRESIDENT	186.00	1,151.00	1,337.00
3090 PRODUCT	19,539.00	25,139.00	44,678.00
3100 PURCHASE	6,102.00	18,399.00	24,501.00
Total 7	46,059.50	101,666.00	147,725.50

The Method of average the telephone traffic is calculate the total amount.

For Example: The Total Amount of CAT Bill is 196,137 baht. The Natural/BUSINESS group have 44,628 baht but the CAT Bill have amount 200,000 baht. The Natural/BUSINESS group have 45,506.97 baht when compare with CAT bill.

CAT 196,137 Baht -> Natural/BUSUNEES 44,628

CAT 200,000 Baht -> Natural/BUSUNEES (44,628 * 200,000) / 196,137

Natural/BUSUNEES group have the amount when compare with CAT bill = 45,506.97 baht
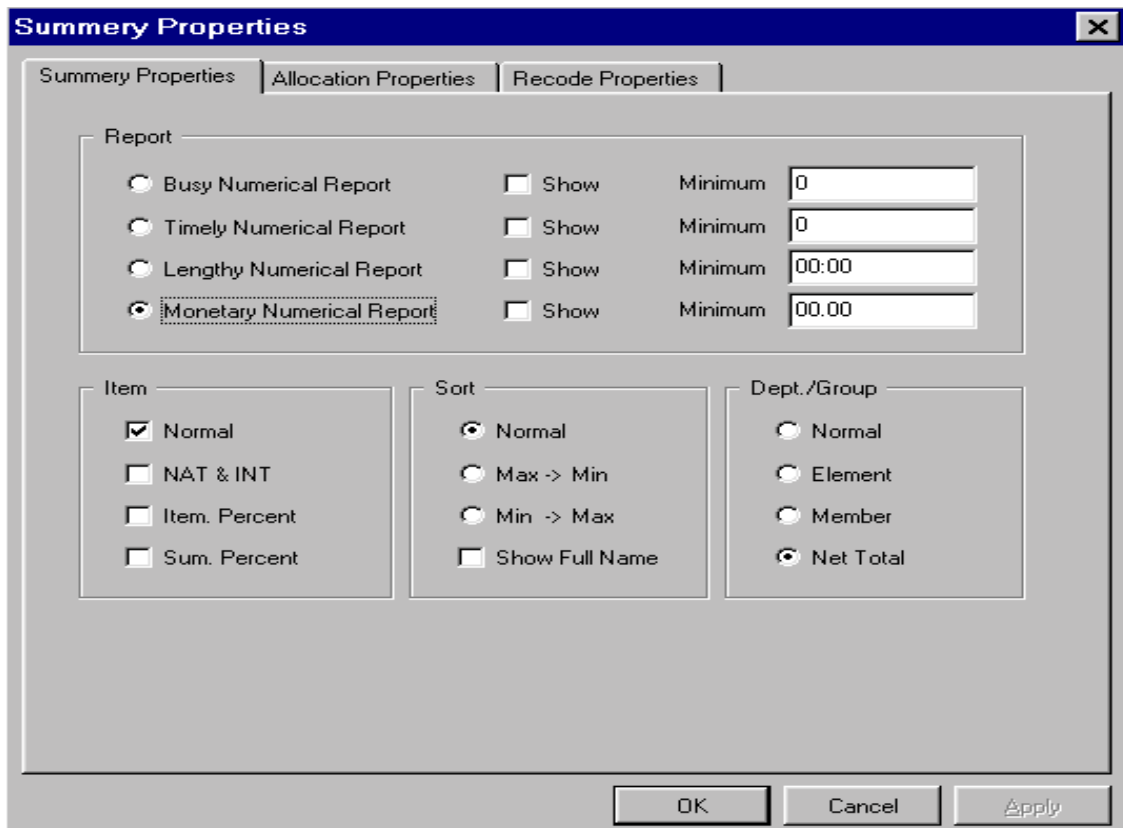
Example 3. Summary Report for Extension

1. Set a Billing Time **(From 4.2 Page 47)**

2. Select **Extension** by Press [icon] and select extension or user

Billing System		
1801 CHAROENKIAT	1802 MARINA	1803 CHALERMSAK
1804 NAN	1805 MANOCH	1806 RACHADA
1807 BOONCHUAY	1808 VORANUCH	1809 KANITTA
1810 SAKUNRAT	1811 SUPAPORN	1812 SARAVUTH

3. Make a Summary Traffic Report by press [icon]

4. Set the extension data have a billing amount more than 700 baht.

Summery Properties

Summery Properties | Allocation Properties | Recode Properties

Report
- ○ Busy Numerical Report ☐ Show Minimum [0]
- ○ Timely Numerical Report ☐ Show Minimum [0]
- ○ Lengthy Numerical Report ☐ Show Minimum [00:00]
- ◉ Monetary Numerical Report ☐ Show Minimum [00.00]

Item
- ☑ Normal
- ☐ NAT & INT
- ☐ Item. Percent
- ☐ Sum. Percent

Sort
- ◉ Normal
- ○ Max -> Min
- ○ Min -> Max
- ☐ Show Full Name

Dept./Group
- ○ Normal
- ○ Element
- ○ Member
- ◉ Net Total

OK   Cancel   Apply

Only Set to Local, Mobile, Long Dx and Oversea
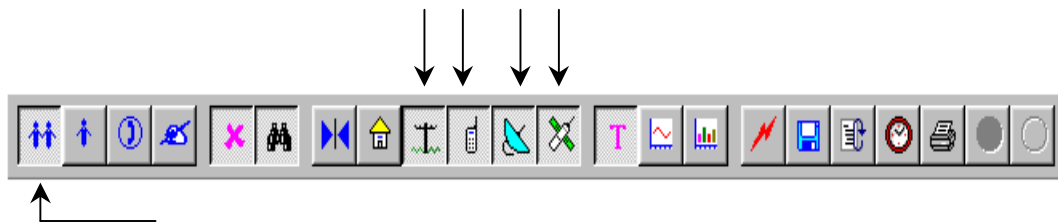
SUMMARY REPORT

Printed Date : 06/09/1999 14:08:12

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

Item			Local	Mobile	Long Dx	Oversea	Total
3010 ADMINS			2,142.00	270.00	760.00	9,389.00	12,561.00
3020 BUSUNESS			3,687.00	594.00	1,324.50	38,612.00	44,217.50
3030 FACILITY			6,312.00	2,164.00	-	-	8,476.00
3040 FINANCE			2,475.00	450.00	54.00	8,976.00	11,955.00
3090 PRODUCT			12,840.00	4,105.00	2,594.00	25,139.00	44,678.00
	Total	5	27,456.00	7,583.00	4,732.50	82,116.00	121,887.50

Press Shift + Enter for Expand the Column in each item

Set for not show the same area and the full name of Extension

SUMMARY REPORT

Dept./Group : 3070 Natural/PLASTIC

Printed Date : 06/09/1999 14:54:15

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

Item		Mobile	Long Dx	Oversea	Total
1803 CHALERMSAK	01/04/1999	30.00	237.00	1,292.00	1,559.00
1810 SAKUNRAT	01/04/1999	168.00	-	13,935.00	14,103.00
1811 SUPAPORN	01/04/1999	417.00	-	3,096.00	3,513.00
1819 SOMSAKDI	01/04/1999	48.00	-	-	48.00
1820 CHERDCHAI	01/04/1999	66.00	-	-	66.00
Total	0	729.00	237.00	18,323.00	19,289.00

Show Separate by Trunk of TOT & CAT and Show by Call, Time, Money

Summery Properties

| Summery Properties | Allocation Properties | Recode Properties |

Report

- ○ Busy Numerical Report   □ Show   Minimum [0]
- ○ Timely Numerical Report   ☑ Show   Minimum [0]
- ○ Lengthy Numerical Report   ☑ Show   Minimum [00:00]
- ⊙ Monetary Numerical Report   □ Show   Minimum [00.00]

SUMMARY REPORT

Printed Date : 06/09/1999 15:04:37

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

Item		TOT			CAT		
		Call	Duration	Money	Call	Duration	Money
931-5548		1,411	4,216:58	5,019.00	76	273:28	9,706.00
931-5896		1,547	4,664:38	5,979.00	83	305:50	9,810.00
931-5898		1,492	4,616:16	6,449.50	90	309:12	11,091.00
931-5899		1,534	4,650:34	5,901.00	93	397:48	14,133.00
931-5897		1,440	4,460:54	5,758.00	78	397:42	14,591.00
	Total 5	7,424	22,609:20	29,106.50	420	1,684:00	59,331.00

Show Dial Group

SUMMARY REPORT

Printed Date : 06/09/1999 15:18:21

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

Item	Mobile	Long Dx	Oversea	Total
422 CELLULAR 900-2	192.00	-	-	192.00
431 CELLULAR 900-1 GSM	990.00	-	-	990.00
509 AYUTTHAYA	-	300.00	-	300.00
737 BRAZIL	-	-	-	0.00
741 AUSTRALIA	-	-	1,700.00	1,700.00
749 CHINA	-	-	41,016.00	41,016.00
758 ARMENIA OR BELARUS	-	-	46.00	46.00
Total 7	1,182.00	300.00	42,762.00	44,244.00

4.5   Detail Traffic Report / Detail Dial Report

The detail traffic report and detail dial report by group, extension, trunk and dial group. This report is present in each group or extension. But if you want to select the other group or extension, previous or next record as follow:

- Select the previous record of group or extension by press Ctrl + ← or press ◀
- Select the next record of group or extension by press Ctrl + → or press ▶

Group	Extension	Trunk	Dial Group

Intercal
Incomming
Local
Mobile
Long Dx
Oversea

Telephone Billing System
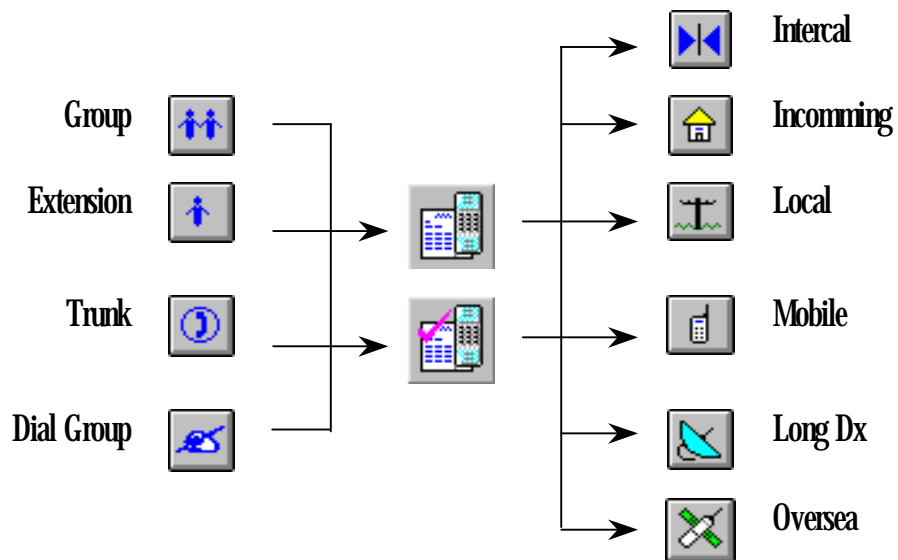
Example 4.   Detail Traffic Report / Detail Dial Report by Group

Command :   Press [icon]   and Press [icon]   or [icon]

1.   Set a Billing Time **(From 4.2 Page 47)**

2.   Press [icon]   and select a group

Billing System

3000 Natural	3010 Natural/ADMINS	3020 Natural/BUSUNESS
3030 Natural/FACILITY	3040 Natural/FINANCE	3050 Natural/IS
3060 Natural/LOGISTIC	3070 Natural/PLASTIC	3080 Natural/PRESIDENT
3090 Natural/PRODUCT	3100 Natural/PURCHASE	

3. Press [icon] or **Ctrl + Shift + F2** for a traffic detail report such as the Natural/Admin group is sort the call item (call to, time and total time)

OR

Press [icon] or **Ctrl + Shift + F3** for a dial detail report such as the Natural/Admin group is sort the telephone number, total call, total time and total amount.

4. Select the previous record of group or extension by press Ctrl + ← or press [icon]
   Select the next record of group or extension by press Ctrl + → or press [icon] only the selected record

--64

Natural Billing

Dept./Group : 3010 ADMINS

Printed Date : 08/09/1999 09:26:29

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

No.	Dial Number	Date	Time	Access	Extension	Trunk	Min	Amount	Destination
1	2564251	01/04/1999	07:17:44	SATHIT	341	931-5897	3:16	3.00	Bangkok
2	3215343	01/04/1999	07:22:14	SAKCHAI	245	931-5896	99:46	3.00	Bangkok
3	3986885	01/04/1999	07:51:56	ER OFFICE	313	931-5899	1:04	3.00	Bangkok
4	2771734	01/04/1999	07:58:38	CO-OP	124	10106	0:22	3.00	Bangkok
5	2580320	01/04/1999	08:54:02	SATHIT	341	10113	1:58	3.00	Bangkok
6	2580320	01/04/1999	09:30:14	ANRAMIT	226	10112	1:46	3.00	Bangkok

(Detail Traffic Report)

Natural Billing

Dept./Group : 3010 ADMINS

Printed Date : 08/09/1999 09:28:27

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

No.	Dial Number	Call	Duration	Amount	Destination
1	3944293	22	24:52	66.00	Bangkok
2	3981454	16	23:04	48.00	Bangkok
3	3215343	14	701:56	42.00	Bangkok
4	2564323	13	34:34	39.00	Bangkok
5	2460061	13	21:34	39.00	Bangkok
6	2454101	11	14:14	33.00	Bangkok

(Detail Dial Report)

Example 5.   Detail Traffic Report / Detail Dial Report by <u>User or extension</u>

Command :   Press [icon] and press [icon] or [icon]
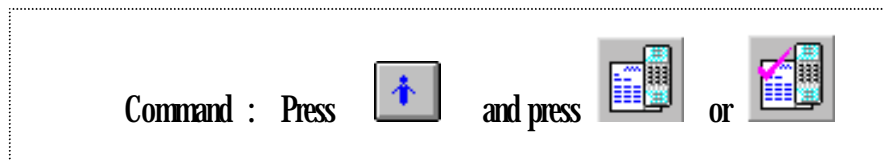
1.   Set the Billing Time **(From 4.2 Page 47)**

2.   Press [icon]   Select the user or extension

Billing System

1701 TAWATCHAI	1702 ANRAMIT	1703 VANIDA
1704 SOMSRI	1705 SOPA	1706 KUEPORN
1707 PEERANUCH	1708 SATHIT	1709 SAKCHAI
1710 ER OFFICE	1711 CANTEEN	1712 CO-OP
1713 PHILIPIN	1714 SHANGHAI	1715 CONSOLE

2.   Press [icon] or **Ctrl + Shift + F2** for detail traffic report such as the extension 1701 TAWATCHAI is sort the telephone number, total call, total time and total amount.

OR

3.   Press [icon] or **Ctrl + Shift + F3** for detail dial report such as the extension 1701 TAWATCHAI is sort the telephone number, total call, total time and total amount.

4.   Select the previous record of group or extension by press Ctrl + ← or press [icon]
Select the next record of group or extension by press Ctrl + → or press [icon] only the selected record

Natural Billing

User : 1702 ANRAMIT

Dept./Group : 3010 Natural/ADMINS

Printed Date : 08/09/1999 09:36:39

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

No.	Dial Number	Date	Time	Access	Extension	Trunk	Min	Amount	Destination
1	2580320	01/04/1999	09:30:14	ANRAMIT	226	10112	1:46	3.00	Bangkok
2	9123070	01/04/1999	10:05:32	ANRAMIT	226	10114	2:28	3.00	Bangkok
3	7542204	01/04/1999	11:20:14	ANRAMIT	226	931-5898	6:46	3.00	Bangkok
4	7566303	01/04/1999	11:46:32	ANRAMIT	202	10106	2:28	3.00	Bangkok
5	6438040	01/04/1999	12:24:38	ANRAMIT	202	10114	0:22	3.00	Bangkok

(Detail Traffic Report)

Natural Billing

User : 1702 ANRAMIT

Dept./Group : 3010 Natural/ADMINS

Printed Date : 08/09/1999 09:38:03

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

No.	Dial Number	Call	Duration	Amount	Destination
1	2761040	7	11:34	21.00	Bangkok
2	2580320	6	13:36	18.00	Bangkok
3	6421500	5	9:38	15.00	Bangkok
4	7542204	4	20:10	12.00	Bangkok
5	6426911	4	18:22	12.00	Bangkok
6	3960179	4	10:22	12.00	Bangkok

(Detail Dial Report)

Example 6.   Detail Traffic Report / Detail Dial Report by Trunk

Command :   Press   and Press   or

1.   Set a Billing Time (**From 4.2 Page 47**)

2.   Press   and select a trunk

3.   Press   or   **Ctrl + Shift + F2**   for detail traffic report such as the trunk 931-4957 is sort the telephone number, total call, total time and total amount.

OR

Press   or **Ctrl + Shift + F3** for detail dial report such as the trunk 931-4957 is sort the telephone number, total call, total time and total amount.

4.   Select the previous record of group or extension by press Ctrl + ← or Press
Select the next record of group or extension by press Ctrl + → or Press   only the selected record

Natural Billing

Trunk : 931-4957

Printed Date : 08/09/1999 10:16:3a

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

No.	Dial Number	Date	Time	Access	Extension	Trunk	Min	Amount	Destination
1	5322146	01/04/1999	05:55:02	PROM	390	931-4957	0:58	3.00	Bangkok
2	7492799	01/04/1999	06:46:20	NAN	373	931-4957	0:40	3.00	Bangkok
3	7499042	01/04/1999	08:13:38	FOI-PACK SUP.	385	931-4957	1:22	3.00	Bangkok
4	7490340	01/04/1999	08:58:26	NAN	316	931-4957	0:34	3.00	Bangkok
5	2351340	01/04/1999	09:00:38		340	931-4957	0:22	3.00	Bangkok

(Detail Traffic Report)

Natural Billing

Trunk : 931-4957

Printed Date : 08/09/1999 10:20:00

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

No.	Dial Number	Call	Duration	Amount	Destination
1	152	29	16:02	87.00	PhoneLink
2	5352733	15	31:42	45.00	Bangkok
3	3960171	14	20:08	42.00	Bangkok
4	2029555	12	32:42	36.00	Bangkok
5	7492799	11	25:38	33.00	Bangkok
6	2351340	10	25:04	30.00	Bangkok
7	3987135	9	46:54	24.00	Bangkok

(Detail Dial Report)

Example 7.   Detail Traffic Report / Detail Dial Report by Dial Group

Command :   Press   and Press   or
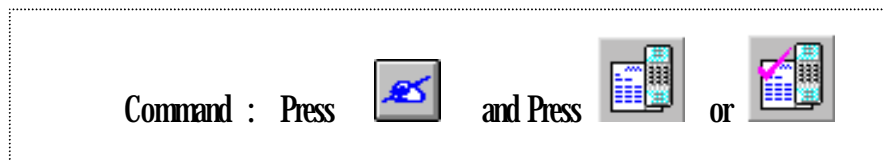
1.   Set a Billing Time **(From 4.2 Page 47)**

2.   Press   and select **Dial Group**

Natural Billing

747 KOREA REP.OF	748 VIETNAM	749 CHINA
750 TURKEY	751 INDIA	752 PAKISTAN
753 SRILANKA	754 MYANMAR	755 IRAN
756 U.S.A OR CANADA	757 ASTELIT	758 ARMENIA OR BELARUS
759 MEMBER OF ETI CARD	760 MEMBER OF ETI CARD	761 International
762 MALAYSIA	763 LAOS	800 Tie Line
880 Tie Line (JWT)	900 Telenet	999 No Asign

3.   Press   Or **Ctrl + Shift + F2** for detail traffic report such as the dial number 931-4957 is sort the telephone number, total call, total time and total amount.

Or

Press   Or **Ctrl + Shift + F3** for detail traffic report such as the dial number 931-4957 is sort the telephone number, total call, total time and total amount.

4. Select the previous record of group or extension by press Ctrl + ← or Press
    Select the next record of group or extension by press Ctrl + → or Press   only the selected record

Natural Billing

Dial Group : 756 U.S.A OR CANADA

Printed Date : 08/09/1999 11:04:51

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

No.	Dial Number	Date	Time	Extension	Trunk	Min	Amount	Destination
1	00114089800923#	01/04/1999	08:14:38	496	10501	2:22	111.00	U.S.A OR CANADA
2	00114089800923#	01/04/1999	10:25:20	496	10501	1:40	74.00	U.S.A OR CANADA
3	00114089800923#	01/04/1999	10:54:32	496	10501	2:28	111.00	U.S.A OR CANADA
4	00114089800923#	01/04/1999	10:57:32	496	10501	1:28	74.00	U.S.A OR CANADA
5	00114089800923#	01/04/1999	11:00:08	496	10501	2:52	111.00	U.S.A OR CANADA
6	00114084960591#	01/04/1999	11:42:08	496	10401	1:52	74.00	U.S.A OR CANADA

(Detail Traffic Report)

Natural Billing

Dial Group : 756 U.S.A OR CANADA

Printed Date : 08/09/1999 12:01:40

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

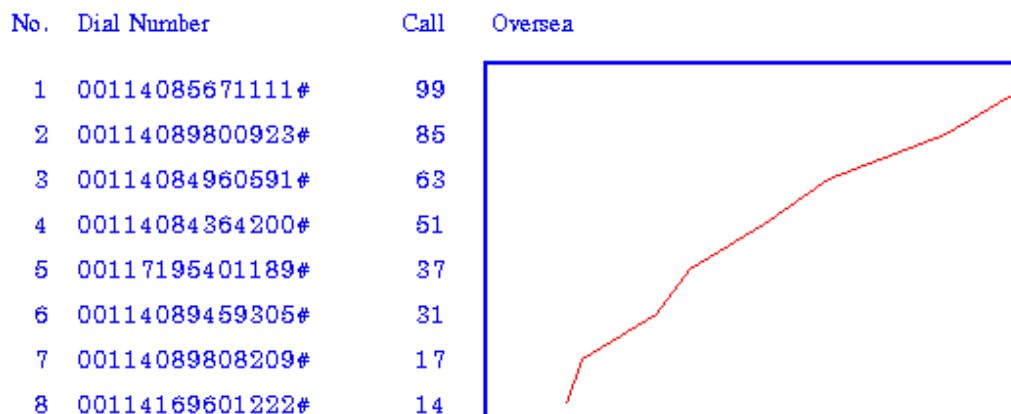| No.	Dial Number	Call	Duration	Amount	Destination
1	00114085671111#	99	308:12	13,072.00	U.S.A OR CANADA
2	00114089800923#	85	254:22	10,137.00	U.S.A OR CANADA
3	00114084960591#	63	119:42	5,499.00	U.S.A OR CANADA
4	00114084364200#	51	123:06	5,217.00	U.S.A OR CANADA
5	00117195401189#	37	76:52	3,515.00	U.S.A OR CANADA
6	00114089459305#	31	61:10	2,886.00	U.S.A OR CANADA
7	00114089808209#	17	53:38	2,189.00	U.S.A OR CANADA

(Detail Dial Report)

Natural Billing

Dial Group : 756 U.S.A OR CANADA

Printed Date : 08/09/1999 13:12:55

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

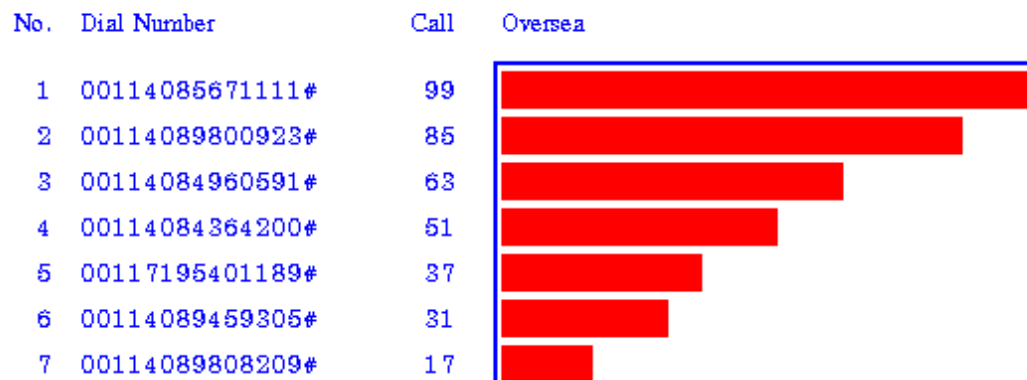| No.	Dial Number	Call	Oversea
1	00114085671111#	99	
2	00114089800923#	85	
3	00114084960591#	63	
4	00114084364200#	51	
5	00117195401189#	37	
6	00114089459305#	31	
7	00114089808209#	17	
8	00114169601222#	14	

(Detail Traffic Report by Line Graph)

Natural Billing

Dial Group : 756 U.S.A OR CANADA

Printed Date : 08/09/1999 13:14:04

Start From : 01/04/1999 00:00:00 To 30/04/1999 23:59:59

No.	Dial Number	Call	Oversea
1	00114085671111#	99	
2	00114089800923#	85	
3	00114084960591#	63	
4	00114084364200#	51	
5	00117195401189#	37	
6	00114089459305#	31	
7	00114089808209#	17	

(Detail Traffic Report by Bar Graph)

4.5.1 Format of Detail Traffic Report

By press or again or Press **Shift + Enter** and select wanted page by mouse

Telephone Page

Choose the wanted item for show in detail traffic report and set the width of column and size of font.

Summary Page

Choose the wanted item for show in the summary part of detail traffic report and set the width of column and size of font
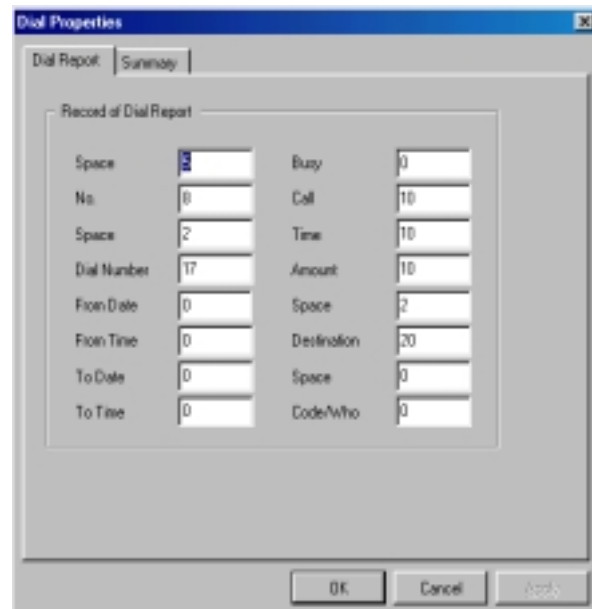
Form Page

The format of report have 4 type. You can set the format of report for sorting the item in report.

Detail Traffic Report

Detail Dial Report

4.5.2 Sorting
1. Sort Property

- Sort By   Min to Max or Max to Min
- Type of Data   Natural Billing can set 10 type of data such as end time, start time, amount, duration, dial group, trunk, station number, authorize/account, access code, dial number and press Enter

For example: Sorting By

Sort Type 1	------------------	Sort by station number
Sort Type 2	------------------	Sort by start time
Sort Type 3	------------------	Sort by duration

For Example : Sort Property

ลำดับ	เบอร์โทร	วัน	เวลา	หมายเลข	นาที	ต่อนาที	รวมเงิน	ปลายทาง
1	7490823	04/04/97	18:19	100	0:46	-	3.00	กรุงเทพฯ
2	2029555	04/04/97	08:15	101	5:34	-	3.00	กรุงเทพฯ
3	4350043	04/04/97	09:20	101	0:28	-	3.00	กรุงเทพฯ
4	5511052	04/04/97	10:23	101	1:16	-	3.00	กรุงเทพฯ
5	5511052	04/04/97	11:17	101	2:52	-	3.00	กรุงเทพฯ
6	3226137	04/04/97	11:37	101	3:40	-	3.00	กรุงเทพฯ
7	3660505	04/04/97	12:05	101	1:22	-	3.00	กรุงเทพฯ
8	2679363	04/04/97	12:20	101	1:52	-	3.00	กรุงเทพฯ
9	3854350	04/04/97	12:23	101	1:58	-	3.00	กรุงเทพฯ
10	2596048	04/04/97	14:18	101	1:28	-	3.00	กรุงเทพฯ
11	3987135	04/04/97	13:38	104	8:34	-	3.00	กรุงเทพฯ
12	3946058	04/04/97	14:41	104	0:52	-	3.00	กรุงเทพฯ
13	3945421	04/04/97	14:42	104	2:34	-	3.00	กรุงเทพฯ
14	3945421	04/04/97	14:42	104	2:34	-	3.00	กรุงเทพฯ

2. Data Property or Zoom Record

You can define the data property or Zoom Record by select the **Recode Properties** page by mouse.

2.1 Start Time Set a time for the reprot format
- **Start-End** Set for a user requirement
- **Check-in** Show the total amount from the check-in date
  (For Hotel, Hospital and Apartment)
- **Invoice** Show the data from invoice date
  (For Hotel, Hospital and Apartment)

2.2 Time Set time is hh : mm : ss for the report format
For example: show the data between 17:30:00 to 08:00:00 in every day

2.3 Transfer You can transfer to another person when you want to talk with another person and no need to call again. Transfer is calculate as follow:
- Normal Using a telephone and no transfer
- First Transfer Start calculate when the first transfer
- Next Transfer Start calculate when receive transfer

2.4 Min/Max

Set a range of time and money (from minimum to maximum) for the report

Time [Min (mm: ss)   – Show the data is minimum time   00:10   (10 seconds)
        Max   – Show the data is maximum time   300:00   (5 hours)]

Money [Min (Baht)   – Show the data is minimum money 3.00   baht
        Max   – Show the data is maximum money 10,000   baht]

2.5 Authorize / Account   is a special performance for report (for Professional Version)

                        Normal   Show the normal data or the own Authorize/Account

The Code   Show the data for the own Authorize/Account call from the another number

Other Code   Show the data for the Authorize/Account is called from this number

2.6 Find The Dial Number

For find the dial number or define the system to show the dial number, for show the some the dial number. You can set 8 dial number for finding.

For Example Natural Billing is automatic show the some dial number have a maximum amount in bill and print the wanted number.

Example Show the start number of dial number is 246, 943,01925, 001314, 001632

Find the Dial Number

01925	943
001314	
246	
001632	

No.	Dial Number	Date	Time	Extension	Trunk	Min	Amount	Destination
1	2465428	22/04/1999	10:50:38	262	931-5897	0:22	3.00	Bangkok
2	2465428	23/04/1999	08:39:26	262	10118	0:34	3.00	Bangkok
1	019254376	01/04/1999	14:51:20	262	931-5896	0:40	3.00	CELLULAR 900
1	0016328288654#	09/04/1999	08:18:14	262	10118	2:46	102.00	PHILIPPINES

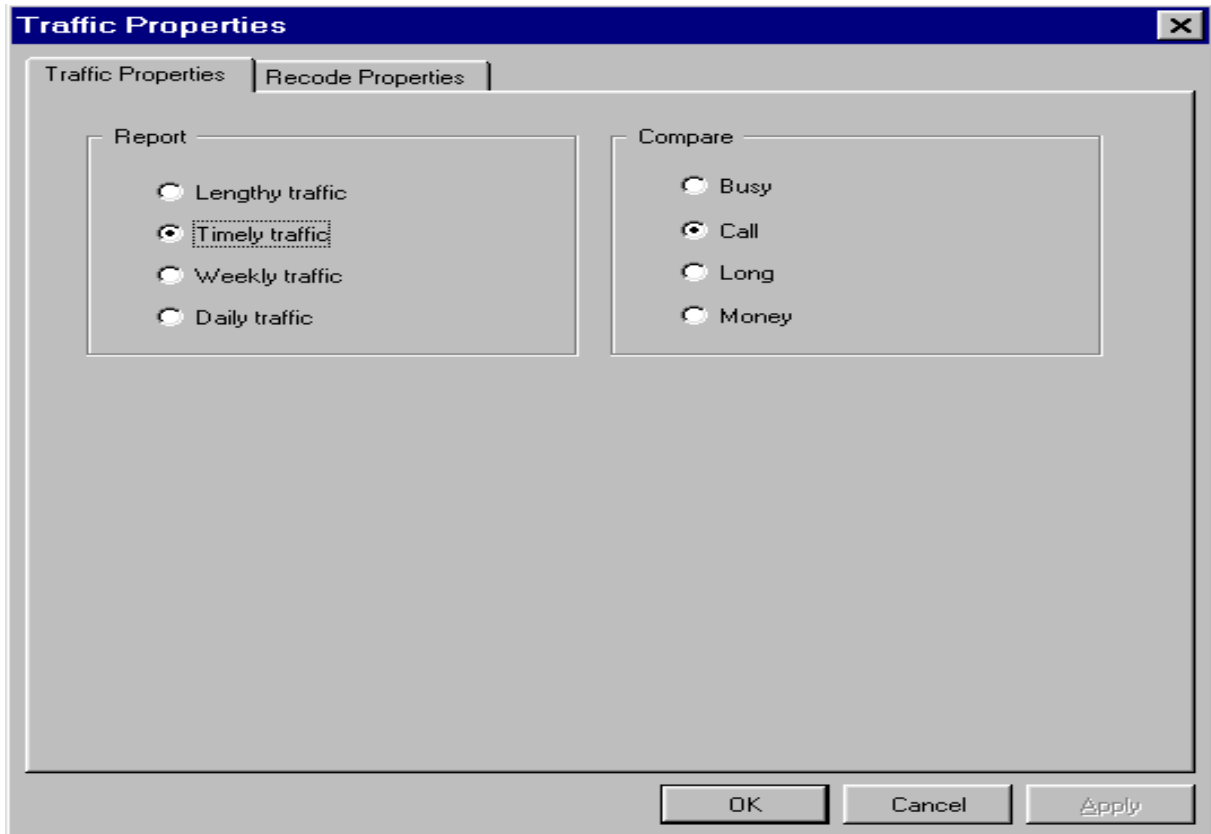| Phone	Busy	Call	Time	Amount	
Local	1	2	0:56	6.00	
Mobile	0	1	0:40	3.00	
Long Dx	0	0	0:00	0.00	
Oversea	0	1	2:46	102.00	
Total	1	4	4:22	111.00	Baht

4.6 The Traffic Report (Only Professional Version)

The traffic report and detail dial report by group, extension, trunk and dial group. This report is present in each group or extension. But if you want to select the other group or extension, previous or next record as follow:

- Select the previous record of group or extension by press Ctrl + ← or press ◀
- Select the next record of group or extension by press Ctrl + → or press ▶

Group

Extension

Trunk

Dial Group

Intercal

Incomming

Local

Mobile

Long Dx

Oversea

Compare With

- **Lengthy Traffic**
- **Timely Traffic**
- **Weekly Traffic**
- **Diary Traffic**

- **Busy**
- **Time**
- **Long**
- **Money**

Text / Line Graph / Bar Graph

Traffic Properties ✕

Traffic Properties | Recode Properties

Report
- ○ Lengthy traffic
- ◉ Timely traffic
- ○ Weekly traffic
- ○ Daily traffic

Compare
- ○ Busy
- ◉ Call
- ○ Long
- ○ Money

OK | Cancel | Apply
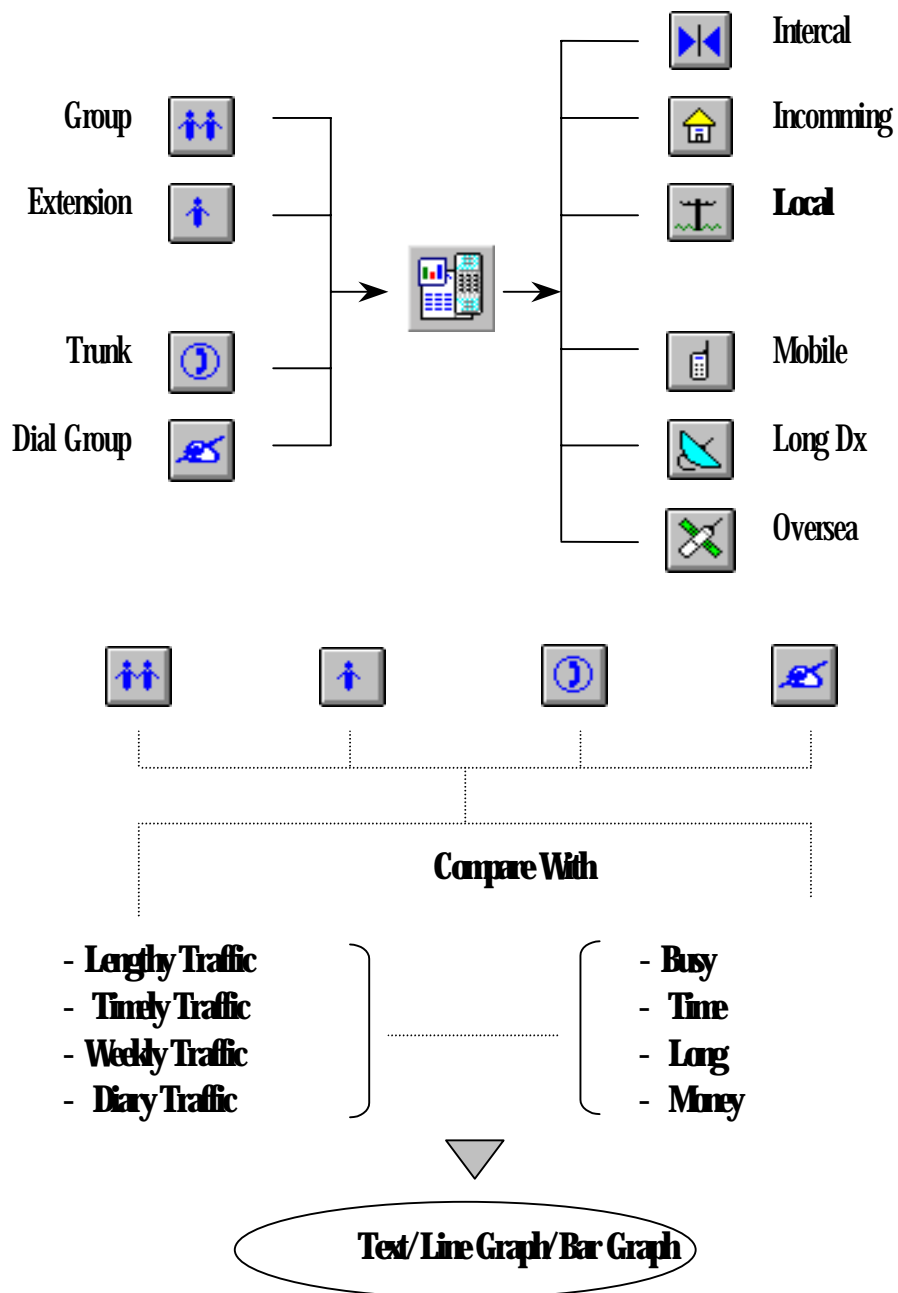
Press Enter or Press double click from left Mouse display screen

Traffic Telphone ✕

Recode of Traffic

Space	12
Compare	15
Other	12

OK | Cancel

Press Shift + Enter for display screen