



User Manual

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GENERAL CONCEPTS

Introduction to Telephone Network Management Systems

Thousands of calls are made per year to different areas, departments, divisions, etc. These calls deliver information to people but also important information about the call itself is present, for example the duration of the call or destination of the call. The information about the call is lost if no record keeping mechanism is installed or record keeping procedure is performed. The main role of a telephone Network Management System (NMS) is the collection and management of the call information - which is not the voice information in the call.

Network Management Systems are composed of many hardware and software components. Private Access Branch Exchange (PABX) hardware devices distribute and route calls for large enterprises. PABX devices are not visible to telephone users and are only maintained by network administrators, but these devices are also capable of sending call information. A PABX has limited ability to record call information, since their primary purpose is to distribute calls.

A Personal Computer Call Logging Unit (PCCLU) is required to store all the call information that can be retrieved from the PABX. There are many different PABX manufacturers and thus many different signals and formats exist for the call information. Telmax21 is capable of handling the variations on call information since the NMS is equipped with a PABX call information interpreter. The PCCLU, with the Telmax21 interpreter loaded, records the Station Message Details Record (SMDR), it must be sent to a centralised call information database. The process of periodically sending the call information is called polling and call logging devices are usually polled at night, after office hours. The main Telmax21 Rev.2.0 software components are installed into the computer containing the centralised call information database. These components include the SCO UNIX operating system and Dynamic 4GL Informix database management software.

Telmax21 Rev.2.0 offers many hardware configuration options.

Software Modules

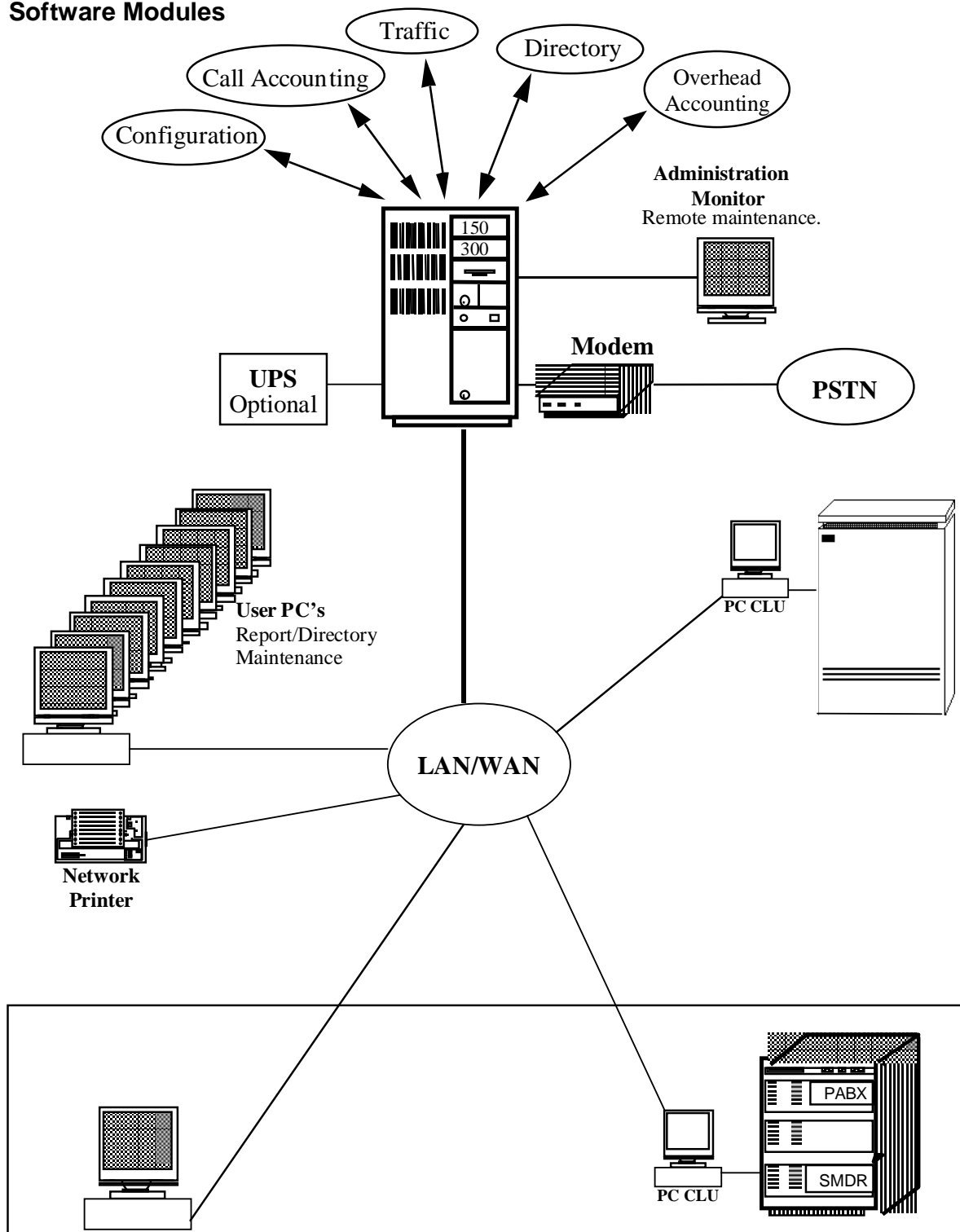
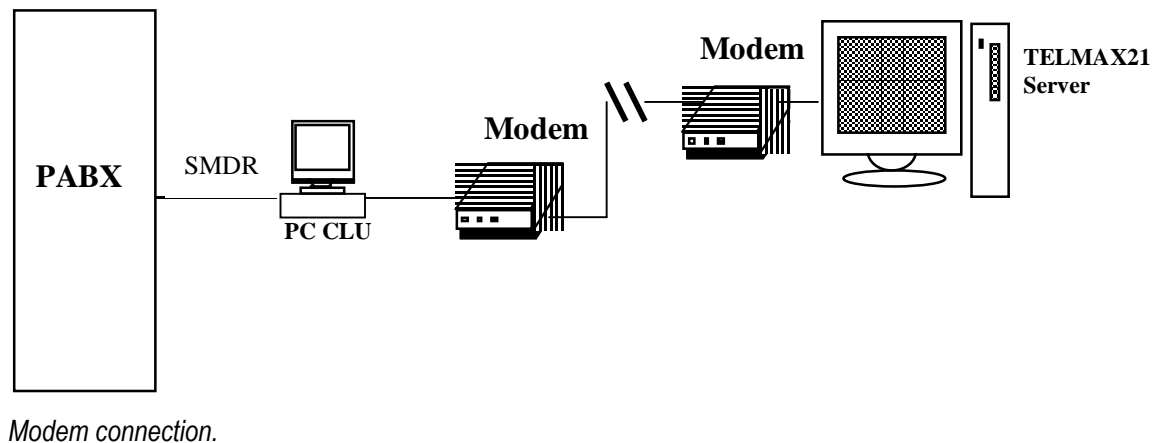
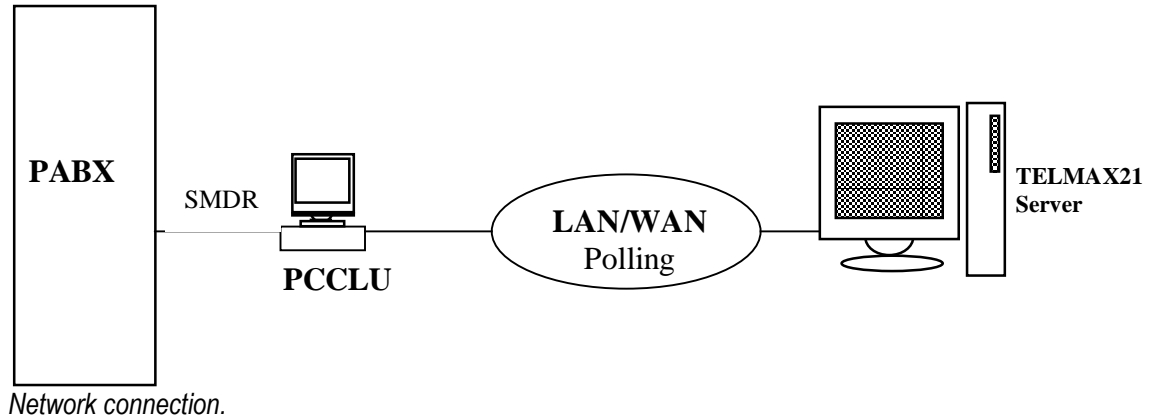


Figure 1.1a: Typical Telmax21 Configuration

Call Record Collection

The call information, ie. SMDR signal from the PABX, can be gathered by a standard PC with the Telmax21 logging software (PCCLU) loaded onto it. The information is translated from the PABX into Telmax21 format. The following diagrams, show the two ways the hardware can be set up.



When the Telmax21 polls the CLU it copies the call data and stores it in files in the Informix database.

When the formatter (the program that converts PABX call information) is enabled normally after hours, it looks at the queue and formats the relevant files, converting the data files to Informix database tables for the relevant day and updating the summary tables. Upon completion the temporary data files are deleted.

TELMAX21 GENERAL OPERATIONS

Telmax21 Server

The Telmax21 server would not normally be accessed directly from the console. Normally, all access will be from a Windows PC through the company network. In the case of a disruption to the network, or a problem with the Telmax21 server itself, remote access may not be possible. In this situation, the system administrator would log in to the Telmax21 directly and carry out any required troubleshooting using remote access via modem by Trans-Mit.

Start Procedure for Windows PC Accessing Telmax21

Upon starting Windows, the user logs in to the Telmax21 with a username and password. This is achieved via a window which appears as shown below in **Figure 2.1a**, with a preset username for the Telmax21 and a flashing cursor in the Password field. The user must type the appropriate password and then click on **Ok** to initiate a connection to the Telmax21 server.



Figure 2.1a. Establish Connection at boot time.

After clicking on **Ok**, another window will pop up stating that a connection has been achieved. Click on **Ok** to continue.

Using Telmax21 Rev 2.0

The various reports and programs available from the Telmax 21 are all accessed from the **Telmax21 Main menu** program group, located by default in the **Start** menu. Shown below in **Figure 2.1b** is how the menu would normally be seen after clicking on **Start** and then **Telmax21 Main menu**.

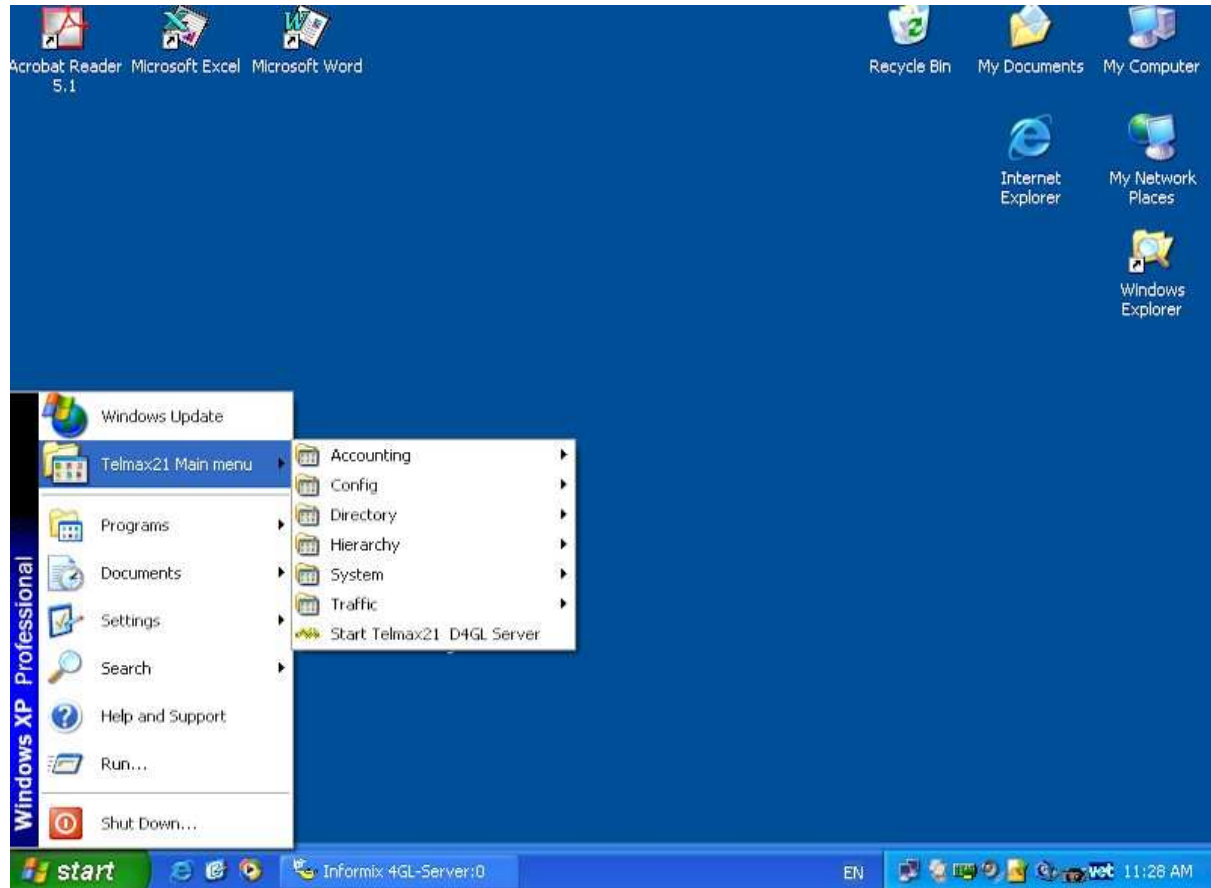


Figure 2.1b. Telmax21 Main menu

The Telmax21 programs are divided into groups as shown above in **Figure 2.1b**. A number of the Telmax21 programs shown in the menu will be as some components are optional. Listed below in **Table 1** are all of the Telmax21 programs and whether they are standard or optional components.

Telmax21 v2.0	Optional/Standard
Accounting (Programs that generate cost reports)	
Call Extension Detail	Standard
Carriers Summary	Standard
Equipment Usage	Optional
Extension Group Exceptions	Standard
Extension Group Summary	Standard
General Group Summary	Standard
Tributary Group Summary	Standard

Directory (Allows information of staff to be manipulated)	
Directory Download	Standard
Directory Enquiry	Standard
Directory Expanded Search	Optional
Directory Maintenance	Standard
ECD Maintenance	Optional
Overheads Associations	Optional
Update Statistics Report	Standard

Hierarchy (Allows creating and editing of the company hierarchy)	
Hierarchy Report	Standard
Move Extension Group	Standard
New & Update Groups	Standard

Traffic (Allows monitoring of telephone traffic and various cost saving functions)	
Alternate Carrier Comparison	Optional
Dialled Numbers	Standard
Extension Usage	Standard
Longest Duration	Optional
Most Expensive	Optional
Multi-Carrier Comparison	Optional
Route Histogram	Standard
Route Occupancy	Standard
Route Summary	Standard
Specify Tie Line	Standard
Trunk Histogram	Standard

System (Allows maintenance of the Telmax21 system)	
Alarm Warning Reset	Standard
Informix Database Information	Standard
Manage Log Files	Standard
Report Output Options	Standard
Reports In Progress	Standard
Restore Archived Backup	Optional
Run Batch Reports	Standard
Standard Query Language	Standard
Terminal Access to Remote CLU	Standard
Unix Administration	Standard
UNIX System SHELL	Standard

Config (Allows the configuration of the Telmax21)	
Configuration Errors Report	Standard
Overheads Definitions	Optional
Route & Trunks	Standard
Speed Dial System	Optional

Table 1: Telmax21 Rev 2.0 Program Listing

Navigating with the Mouse and Keyboard

Often in Telmax21 reports, the user is prompted to select from a number of values shown in a pop up window known as a 'pick list', when filling in a particular field. Such a situation is shown below in Figure 2.1c.

Figure 2.1c: User being prompted to enter Site Id.

In the example in **Figure 2.1c**, a pick list for the **Site Id** is available. Using the Telmax21 standard procedure, this can be selected in one of three ways.

- By pressing <CTRL-F> on the keyboard.
- By clicking on the **Pick From List** button on the right of the screen with the left mouse button.
- By clicking on the **Site ID** field with the right mouse button. Whichever method is used, the pick list appears as shown in **Figure 2.1d**.

The screenshot shows a software window titled "Call Extension Detail Report". At the top, it says "TRANS-MIT" and "21/10/2003". On the right side, there are two buttons: "OK" and "Interrupt". The main area is divided into two sections. The left section, titled "Selection Criteria", contains fields for "Date from : 20/10/2003", "Time from : 00:00", "Site Id :", "Extn Group :", "Report By" (with radio buttons for "Extension :" and "Acct Code :"), and "Exception Parameters :". The right section, titled "The Site must be one of these values ...", contains a table with two columns: "SiteId" and "Description". The table lists the following entries:

SiteId	Description
99	OFF OFFSITE
100	HOB HOBART
101	BRIS BRISBANE
102	SYD SYDNEY
103	MLB MELBOURNE
107	PTH PERTH
108	ADL ADELAIDE
109	DWN DARWIN

Below the table, there are instructions: "Move Cursor using Arrow Keys." and "Press ESC to Select Site Id." At the bottom left, there is a text box with the prompt "Enter Site ID, blank for all sites".

Figure 2.1d: Example of a Pick List.

When the pick list window is opened, using the arrow keys will move the cursor through the list and pressing <ESC> will select the highlighted option. Alternatively, the mouse may be used to achieve the same result in one of two ways.

- By clicking once with the left mouse button on the desired entry in the list and then clicking on **OK**.
- By double clicking the left mouse button on the desired entry.

When the list of entries in the pick list is longer than the actual pick list window, scroll bars will automatically be added to the pick list. The scroll bars can be operated by,

- Clicking on the appropriate arrow with the mouse.
- Use of the Up Arrow and Down Arrow keys as well as the <Page Up> and <Page Down> keys to move backward or forward respectively in the list, one entry at a time.

Shown in **Figure 2.1e** is an example of the pick list for **Route ID**, which includes scroll bars.

The screenshot shows a window titled "Call Extension Detail Report". The main area is a light gray box with a title bar "TRANS-MIT" and a date "21/10/2003". Below this is a "Selection Criteria" section with the following fields:

- Date from : 20/10/2003 To: 201003
- Time from : 00:00 To: 24:00
- Site Id : [text box]
- Extn Group : [text box]
- Report By:
 - ☒ Extension : [text box]
 - ☐ Acct Code : [text box]
- Exception Parameters : ☐

At the bottom of the selection criteria section is a text box with the prompt "Enter Site ID, blank for all sites or <CTRL-F> to find". To the right of the main area is a vertical panel with three buttons: "OK", "Interrupt", and "Pick From List".

Figure 2.1e: Pick List example for Route I.D.

Date and Time Fields

Data that is entered into a date field by the user is automatically converted into a standard format of dd/mm/yyyy once another field is entered. However, the user does not necessarily have to enter the date in the standard format. For quicker entry, the date may be entered without separators and with a two digit year eg. 201003 refers to 20th October 2003.

Similarly, for time fields, it is only necessary to enter the hours and minutes since the colon separating hours and minutes is already inserted by the Telmax21. Thus, typing in 1234 becomes 12:34 in the time field. Note: time fields are in 24 hour format. Shown in Figure 2.1f is an example of the **Extension Detail Report**, which includes both time and date fields. Notice that the start date has been chosen as 20th October 2003, with the end date chosen as 20th October 2003. This example shows the end date entered as the digits without separators, as described above. At this point, the cursor is still in the end date field and hence the data entered by the user has not yet been converted to the standard date format.

Route Histogram Report

TRANS-MIT

Route Histogram Report

21/10/2003

OK

Interrupt

Pick From List

Selection Criteria

Date From : 20/10/2003 To 20/10/2003 Include Weekends : ☐

Site ID :

Local Route Type:

Route ID :

Dialled Prefix :

Time Range for each day is from : 08:30 To 18:00

Occupancy Based On:
☒ Configured
☐ Used

Enter 'Y' to include or 'N' to exclude weekend calls

Figure 2.1f. Date and Time fields

General Menu Buttons and Screen Layouts

In general, there are two main types of screen layouts which will be seen by the Telmax21 user, corresponding to pure reporting modules and configuration modules. An example of a typical reporting module, the General Group Summary Report, is shown in Figure 2.1g.

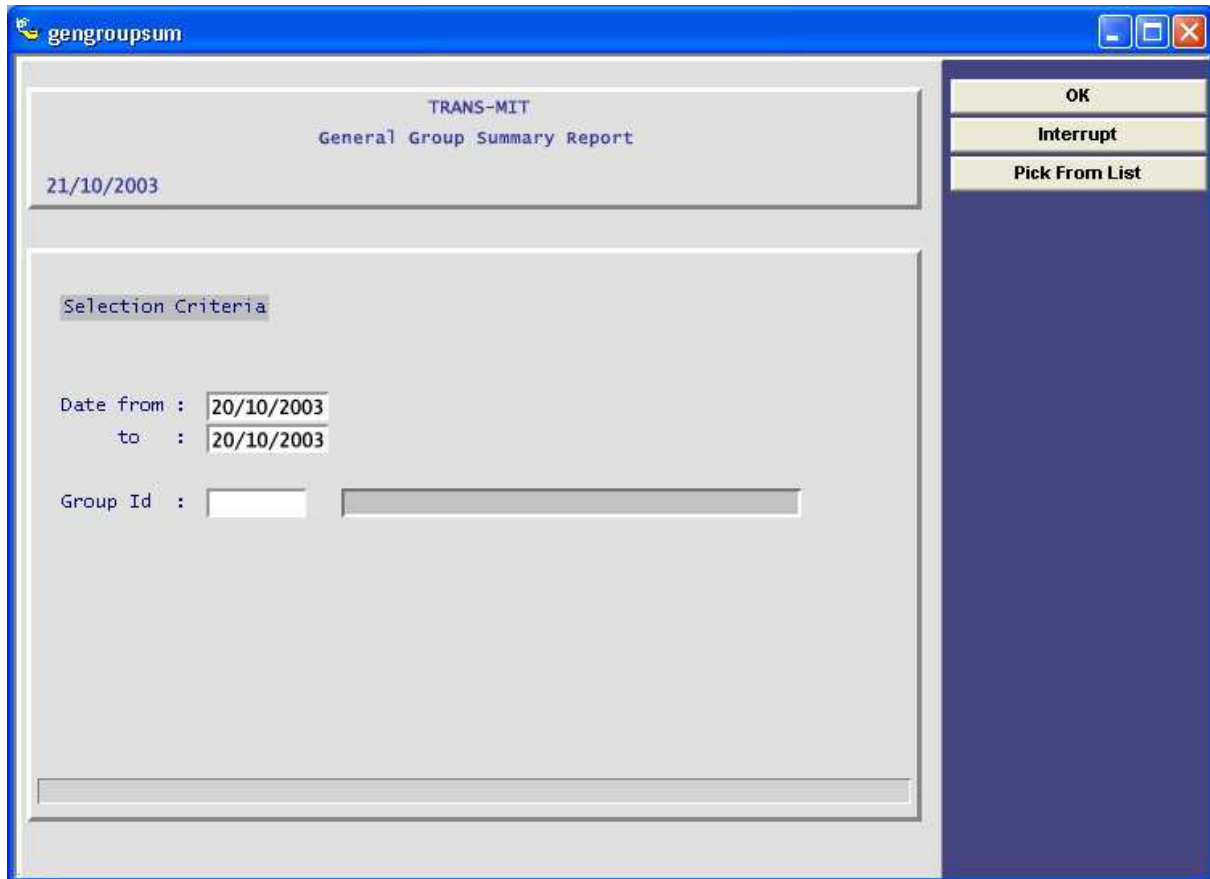


Figure 2.1g. General Group Summary Report.

The buttons on the right hand side of the screen vary from report to report but generally include **OK**, **Interrupt** and **Pick from List**. The functions of these buttons change according to the position of the cursor. For example, in **Figure 2.1g**, the cursor is located in the **Group Id** field. This means that clicking on **OK** will try to run the report, **Interrupt** will cancel the report and **Pick From List** will cause a pick list to appear for the user to pick a General Group from. However, once the pick list appears, the **Pick From List** button is no longer relevant and so is not shown. The **OK** button will now select an entry from the list and the **Interrupt** button will exit from the pick list. For each field shown in a report, a message appears at the bottom of the screen, indicating what sort of input is required. For instance, in **Figure 2.1g**, the user is being told to either directly enter the **Group Id** or to select it from a pick list by pressing <CTRL-F>.

A typical configuration module is shown in **Figure 2.1h**, the main difference in the screen layout being the row of buttons across the top.

Figure 2.1h: Example of a Configuration Module

In general, these configuration types of modules give the user the ability to add, modify or delete records in the Informix database used by Telmax21 to store the details specific to each system. Hence, usually the **View** button must be clicked on first in order to select records from the database to change or delete or else **Add** should be chosen to create new records from scratch. When the mouse pointer is moved over the different buttons, a corresponding description of the button's function is displayed on the screen in the area underneath the buttons themselves. Once the buttons are clicked on, the buttons on the right hand side of the screen appear as in the pure reporting modules and function similarly. Note that once **View** or **Add** has been clicked on, if the user wishes to exit the module, **Interrupt** must be clicked on and then **Exit**.

Executing Reports

When running a report, select the appropriate reporting parameters and left click on the **OK** button. If the pick list selections include more than one extension, a window will appear informing the user that 'Reports will be generated for multiple extensions.' Use the left mouse button to select **OK** unless a single extension report is required, a window appears called **Report Execution Method**, as shown in **Figure 2.1i**. Five options are available, represented by the buttons **Foreground**, **Spool**, **Abort**, **Options** and **Back**. Clicking on these buttons has the following effects:

- Foreground** Commences execution of the report immediately.
- Spool** Places the report into a queue to be executed after any previously queued reports.
- Abort** Exits the program without running the report.
- Output Options** Runs the **Report Output Options** program. See Fig 2.1j
- Back** Allows the user to go back to the input screen and change any parameters.

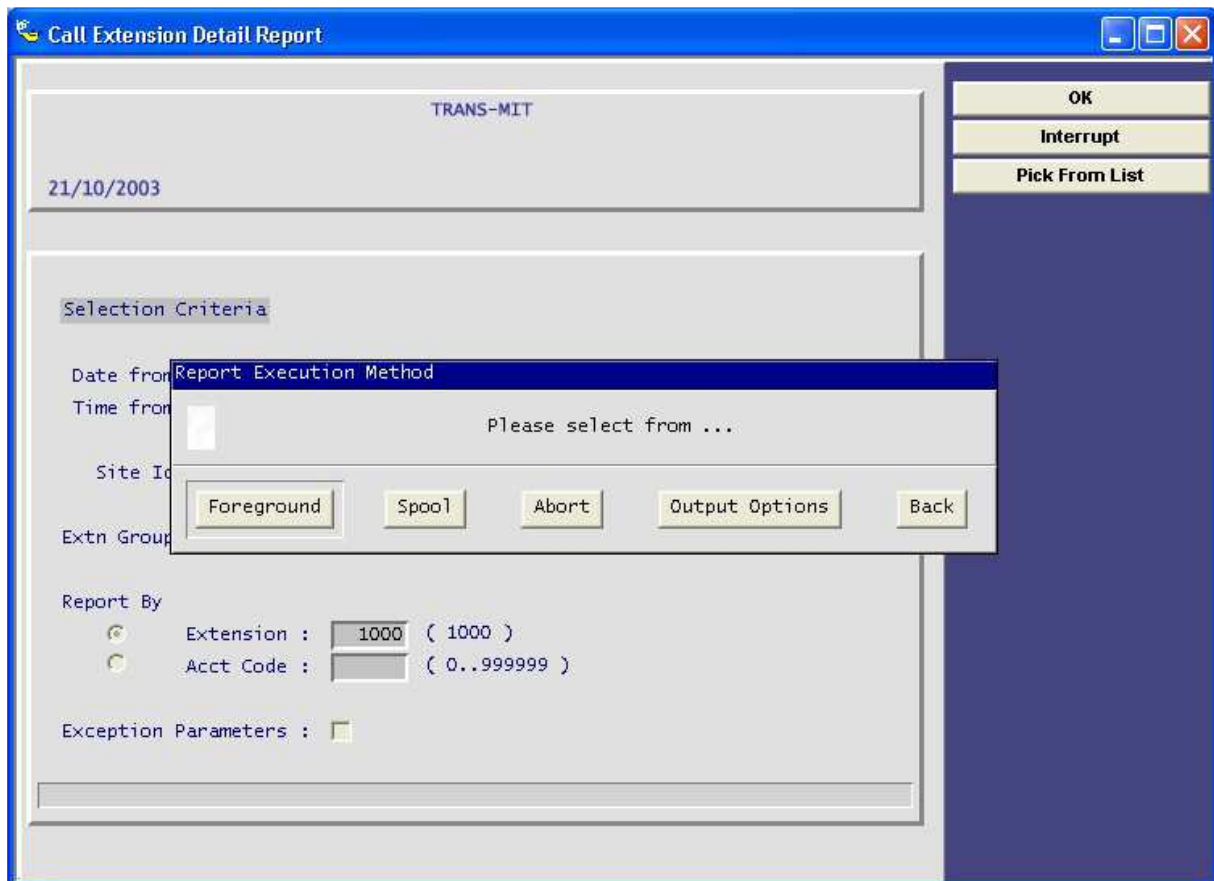


Figure 2.1i: Report Execution Method.

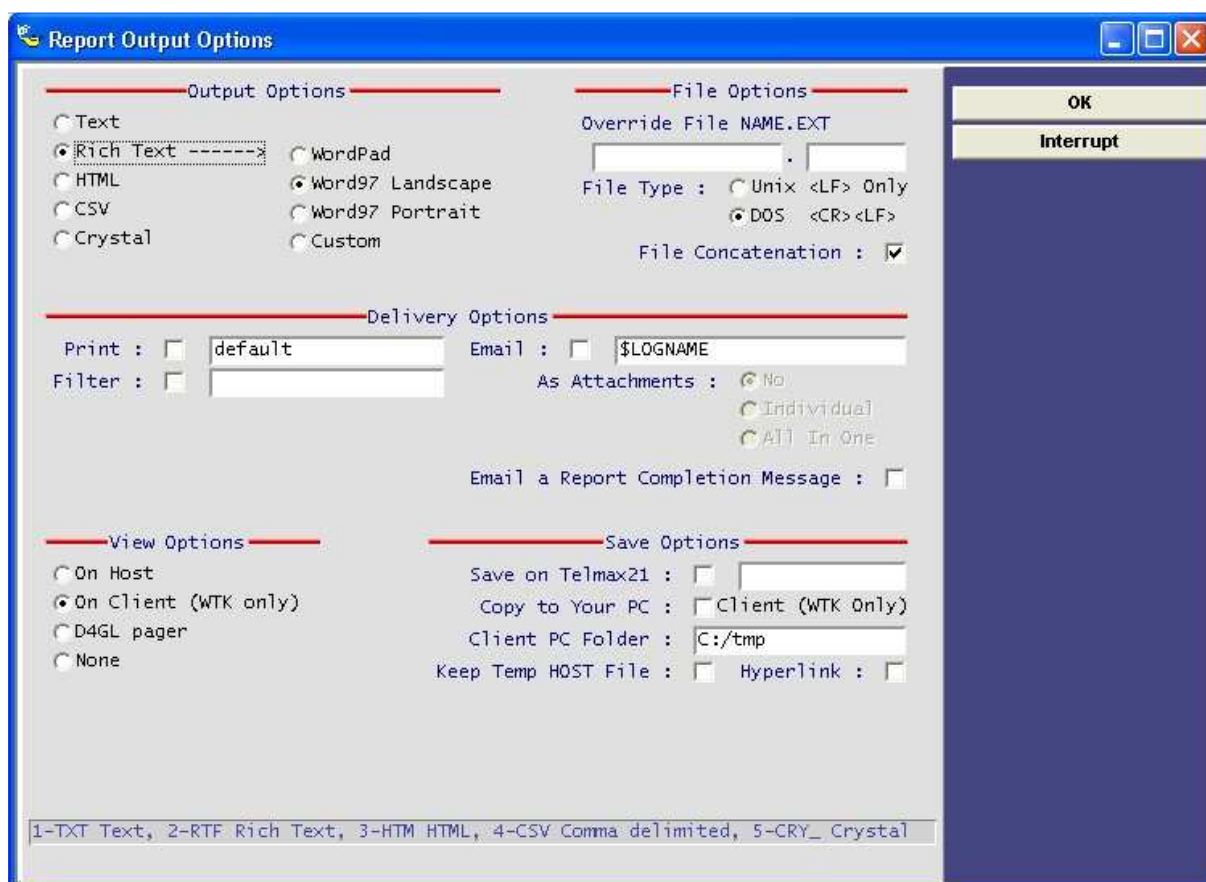


Fig 2.1j: Report Output Options window

Field	Field Characteristics	Comments
Output Options	Radio button	Click on desired file format for output file
Override file NAME	Enter file name as required	Enter name of file to store output in.
.EXT	Enter file name extension as required	Enter extension for name of file to store output in.
File Type	Radio button	Click on desired file type for output file
File Concatenation	Tick box	Click on this box to concatenate a series of linked reports into one output file. (Eg: Reports for all extensions in a group will be created and display as one file.)
View Options	Radio button	Click on the desired destination for the output file display.
Save on Telmax21	Tick box	Click on this box to save a copy of the output file in user folder on the HOST machine.
	Enter as required	Enter override directory pathname for saving output file on HOST.
Copy To Your PC	Tick box	Click on this box to save a copy of the output file to your PC
Client PC Folder	Enter as required	Enter existing folder name on your PC in which to save copy of output file.

Keep Temp HOST file	Tick box	Click on this box to keep the temporary output file.
Hyperlink	Tick box	Click on this box to create a hyperlink to saved HOST temporary and/or client output files.

Left clicking OK will return the user to the **Report Execution Method** window.

Shutdown Procedure for Telmax21 Access via Windows PC

When the user has completed the desired session on Telmax21, left click on the Informix icon on the task bar. The Informix 4GL-Server window will be displayed.



Fig 2.1k: Informix 4GL-Server window

Select the **Abort Informix 4GL-Server** button by clicking on it with the left mouse button. The Telmax21 server session will be terminated.

If the Informix icon is hidden and does not appear on the taskbar, terminate all other applications properly and either shut down or restart the PC. This will terminate the session.

EXTENSION CALL DETAIL REPORT

Report Description

The **Extension Call Detail** report provides detail information regarding the calls to and from an individual extension. It is typically used to identify detailed problem areas of usage and/or misuse highlighted in other reports.

It would not be normal to run **Extension Call Detail** on all extensions as you could receive hundreds if not thousands of reports. The normal method you would use is via a SQL script as it is a more efficient use of system resources, when searching for data or information across the database. (Contact Trans-Mit for details on SQL script enquiries on the Telmax21 database.)

The report can be used to provide Managers with specific details they may want of extensions in their group typically after they have reviewed the summary reports.

The information shown on the report includes the following:

- Date & time
- Call Type
- Dialled number
- Route taken
- Duration
- Cost of all calls
- Error codes

The Exception Parameters available are by:

- Trunk Number
- Call Type
- Dialled Number
- Duration
- Route Select
- Call Cost

The report can be applied in testing the validity of any changes that are made to the call tariff tables. It can be used to substantiate the cost and duration of calls made from an extension against a carrier bill, as well as tracing nuisance calls.

Extension Call Detail Input Screen

The following input screen appears when the Extension Call Detail report is selected from the Accounting menu.

Figure 4.1a: Call Extension Detail Report screen

Field	Field Characteristics	Comments
Date from	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
Date To	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Time from	In the form hh:mm Change as necessary.	Selects the start time of the period to be reported on.
Time To	In the form hh:mm Change as necessary.	Selects the end time of the period to be reported on.
Site Id	Enter Site ID or click on Pick From List to find, then OK to select.	Selects the site to be reported. Not always required.
Extn Group	BLANK or Extension Group. Click on Pick From List to find, then OK to select.	Selects the Extension Group to be reported. If left blank, an extension number or range must be used in the next field.
Extension	Radio button. Select Extension Click on Pick From List to enter multiple extensions.	Records the extension number to be reported on. Multiple extensions can be entered. See Figure 4.1b.

Acct Code	Radio button. Select Account code. Click on Pick From List to enter multiple account codes.	Records the account code to be reported on. Multiple account codes can be entered. See Figure 4.1b.
Exception Parameter	Check box to invoke input window.	A window will appear with the available Exception Parameters. See later in the section for details. See Figure 4.1c.

If you wish to report by extension, the following screen may be accessed by clicking on Pick From List button when in the Extension field.

Figure 4.1.b: Extension Selection window

The table below describes the properties of the various symbols used:

Operator	Name	Example Pattern in quotes
=	Equal to	'=x'
>	Greater than	'>x'
<	Less than	'<x'
>=	Greater than or equal to	'>=x'
<=	Less than or equal to	'<=x'
:	Range	'x:y'
..	Range	'x..y'
*	Wildcard	'*x, x*, *x*'
?	Single-character wildcard	'?x, x?, ?x?, x??'
	Or , and	'a b'

Exception Parameters Window

Exception reporting is the tool of choice where data can be filtered by careful selection of parameters. This is very useful when the volume of call records is large but we can eliminate those relatively unimportant calls from the printed reports. Exception reporting allows many variations including calls that last for less than 60 seconds or cost less than 25 cents.

Shown in **Figure 4.1c** below is the Exception Parameters window with example data:

Figure 4.1c: Exception Parameters Window

The Exception Parameters window in **Figure 4.1c** specify to only report on calls with:

- a 'Trunk Number' from 70100 to 70129
- a 'Call Type' of IDD ('X', for 'eXpanded call type' is used as the code for IDD)
- a 'Dialled Number' starting in 0011
- a 'Duration' in excess of 33 seconds.
- a 'Route Select' of 4
- a 'Call Cost' exceeding \$0.85.
- and an 'Account Code' of 1234.

Extension Call Detail Report Output Example

21 Oct 2003 16:57:03

EXTENSION CALL DETAIL

TCP TRANSMIT

TELMAX21 2.0

Date From: 20/10/2003

To: 20/10/2003

Time From: 00:00

To: 24:00

Extension: 1000

Site ID : 103

Site Name : MLB MELBOURNE

Group ID : SALES

Group Name: MELBOURNE SALES

Exception Parameters:

Exception Parameters: outletno between "70100" and "70129" and calltype="x" and dialledno matches "0011*" and duration>"33" and selectedroute="70" and callcost>"0.85"

Date	Time hh:mm:ss	Call Type - Description	Dialled ECT /CLI Number	Trunk Route /Extn Select	Acct Code	Duration hh:mm:ss	Cost (\$)
20/07/2003	10:19:24	X - O/G direct IDD	0011640262742111	70109	F	00:02:36	1.00
20/07/2003	11:25:36	X - O/G direct IDD	0011640262408980	70085	F	00:00:48	1.04
20/07/2003	11:28:16	X - O/G direct IDD	0011640262405107	70098	F	00:01:04	1.00
20/07/2003	12:01:36	X - O/G direct IDD	0011640262772017	70083	F	00:01:20	1.07
20/07/2003	12:23:00	X - O/G direct IDD	0011441394590946	70080	F	00:00:35	0.86
20/07/2003	12:27:16	X - O/G direct IDD	0011440417334031	70086	F	00:03:56	2.09
20/07/2003	14:14:48	X - O/G direct IDD	0011640262772016	70084	F	00:01:24	1.07
20/07/2003	16:50:20	X - O/G direct IDD	0011441394590946	70087	F	00:03:00	1.11
20/07/2003	17:57:36	X - O/G direct IDD	0011640262742111	70119	F	00:00:52	1.00
Totals							
		No of Calls	O/G Costed	O/G Free	I/C	Duration	Cost (\$)
PUBLIC		9	9	0	0	00:15:35	10.24
NETWORK		0	0	0	0	00:00:00	.00
FREE/MISC		0	0	0	0	00:00:00	.00
ALL		9	9	0	0	00:15:35	10.24
=====							

EXTENSION CALL DETAIL

PAGE 1 END

EXTENSION CALL DETAIL

PAGE 1 END

Figure 4.1d: Extension Call Detail Report with Exception Parameters used

Report Interpretation

The table below gives a description of the information that may be contained under the various report headings:

Label	Description
Date & Time	Date and time of the call appearing in the report.
Call Type And Call Description	A = O/G tandem direct call.
	L = indial.
	B = O/G tandem network call.
	N = O/G tie call.
	C = incoming charged network call.
	O = O/G Tandem Remote call.
	D = O/G direct local PSTN.
	R = O/G tie to remote PSTN.
	E = O/G tandem STD call.
	S = O/G direct STD.
	F = O/G tandem IDD.
	T = incoming (tie) network call.
	G = O/G tandem remote call.
	U = call transfer call.
	H = tandem call.
	W = call forward call.
	J = internal call.
	X = O/G direct IDD.
	K = incoming PSTN.
Dialled ECT/CLI Number	Actual dialled number sent to line, with or without masking of the last two digits.
Trunk/Extn	The real trunk number as used for the call.
Route select	The route the call took. F = first choice route taken A= alternate route chosen.

Acct Code	Extension number when call is allocated from another extension.
Duration	Duration of the call in hours, minutes and seconds.
COST (\$)	The cost of each call.
Error Code	Refer to notes below.
TOTALS	Self explanatory for each heading.

Error Codes As Shown On Report

These codes only appear when a required system configuration parameter has not been defined in the system configuration module, or if short duration calls of less than a predetermined period appear in the data.

Code	Description	Action Required
N	Short connect call	No problem
R	Route or trunk not specified	Check the route and trunk information in Configuration
F	Route and Dial Prefix Error	Check the route and trunk information in Configuration, as well as the Dial Prefix.
D	Dialled Prefix not specified	Fix in Dialled Prefix tables
E	Extension number not defined	Check extension ranges for the correct range and the Directory for the extension.
A	Incoming (inlet) Extension of an internal call is not defined	Check extension ranges for the correct range and the Directory for the extension.
B	Outgoing (outlet) Extension of an internal call is not defined	Check extension ranges for the correct range and the Directory for the extension.
T	Time band not specified	Check Unit Pulse tables
C	Call type not specified	Fix in Call type definitions and Tariff table

CARRIERS SUMMARY REPORT

Report Description

The **Carriers Summary Report** is designed to provide a management overview of the call counts, duration and costs sorted by carrier for selected site or group(s). It can be used to compare actual carrier Bills with the data collected from the PABX.

Carriers Summary Input Screen

The following input screen appears when the **Carriers Summary Report** is selected from the menu.

The screenshot shows a software window titled "carriers". Inside, the header says "TRANS-MIT Carriers Report" and displays the date "21/10/2003". A "Selection Criteria" section contains several input fields: "Date From" and "Date To" both set to "20/11/2003"; "Site ID" set to "103" with a dropdown menu showing "MLB MELBOURNE"; "General Group ID" with a dropdown menu showing "All General Groups"; "Extension Group ID" set to "SALES" with a dropdown menu showing "TELMAX21 SALES"; and "Extension" set to "1001". On the right side of the window, there are three buttons: "OK", "Interrupt", and "Pick From List". At the bottom of the main area, a text prompt reads "Enter Extension, Leave Blank For All".

Figure 4.2a: Carriers Report selection screen

Field	Field Characteristics	Comments
Date From	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
Date To	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Site ID	Enter Site ID or click on Pick From List to find, then OK to select.	Selects the site to be reported. Not always required.
General Group ID	BLANK for all groups, click on Pick From List to find.	Selects the General Group to be reported on.
Extn Group ID	BLANK or Extension Group. Click on Pick From List to find, then OK to select.	Selects the Extension Group to be reported on.
Extension	Blank for all extensions.	

Carrier Summary Report Output Example

21 Oct 2003 17:15:36

Carrier Report - By Extension

TCP TRANSMIT

TELMAX21 2.0

Date From : 21/10/2003

To : 21/10/2003

Site ID : 103

General Group ID :

Extension Group ID : SALES

Extension : 1001

Report By : X

Site ID : 103

General Group ID : TMS

Extension Group ID : SALES

Extension : 1001

CARRIER|

FREE/MISC		INCOMING CALLS			OUTGOING CALLS					OUTGOING CALL				COSTS (\$)
TOTAL	--- <th>TOTAL</th> <th colspan="3">-----PUBLIC-----</th> <th>TOTAL</th> <th colspan="3">-----PUBLIC-----</th> <th>TOTAL</th>	TOTAL	-----PUBLIC-----			TOTAL	-----PUBLIC-----			TOTAL				
NUMBER	DURATION	PUBLIC	N/W	DURATION	LOCAL	STD	IDD	N/W	DURATION	LOCAL	STD	IDD	N/W	COSTS

I 0 :00:00 3 0 :04:32 0 0 0 0 :00:00 .00 .00 .00 .00 .00

R 0 :00:00 0 0 :00:00 2 4 0 0 :10:40 .17 1.27 .00 .00 1.44

0 :00:00 3 0 :04:32 2 4 0 0 :10:40 .17 1.27 .00 .00 1.44

=====

CARRIERS REPORT

PAGE 1 END

EXTENSION GROUP EXCEPTION REPORT

Report Description

The **Extension Group Exception Report** allows you to produce a summary report on calls that fall outside preset selection criteria - for the extensions belonging to the selected Extension Group(s).

Being a summary report, it is short enough for running periodically and is a valuable tool for a cyclic study of 'out of range' call patterns. Once the call patterns have been analysed, patterns of interest can be studied in more depth by running an **Extension Call Detail Report** with the appropriate exception parameters set.

Extension Group Exception Input Screen

The screenshot shows a Windows-style application window titled 'group_except'. The main area is titled 'TRANS-MIT Extension Group Exception Report' and displays the date '21/10/2003'. Below this, there is a list of input fields for various parameters:

Call Date	:	201003
Site Id	:	103
Extension Number	:	1001
Extension Group ID	:	SALES
Call Type	:	
Call Count	:	
Short Connect Calls	:	
Duration	:	
Meter Pulses	:	

At the bottom of the input area, there is a text box containing the instruction: 'Extension Group ID in the format [x]*x|x*|*x*]'. On the right side of the window, there are two buttons: 'OK' and 'Interrupt'.

Figure 4.3a: Extension Group Exception Report

Input Screen Description

Field Names	Field Characteristics	Comments
Call Date	As required.	A specific date or > dd/mm/yy for a period from a specific date until the date the report is run.
Site Id	Enter a specific Site Id or leave blank for all sites.	More than one if required.
Extension	Enter a specific Extension or leave blank for all extensions.	One or all if left blank.
Extension Group Id	Enter a specific Extension Group Id or leave blank for all Extension Groups.	Add as required.
Call Type	Enter a specific Call Type or leave blank for all Call Types.	X=IDD, S=STD or D=local
Call Count	Enter a specific Call Count or leave blank for all numbers of calls.	
Short Connect Calls	Enter a specific number of Short Connect Calls or leave blank for any number of Short Connect Calls.	Short Connect Calls are defined as calls which have a duration of less than a certain value set in the system. This value is usually about 20 seconds. These calls are assumed not to have been connected and hence have a cost of zero.
Duration	Enter a specific Duration or leave blank for all Durations.	In seconds.
Meter Pulses	Enter a specific number of Meter Pulses or leave blank for any number of Meter Pulses.	

The table below describes the properties of the various symbols used:

Operator	Name	Example Pattern in quotes
=	Equal to	'=x'
>	Greater than	'>x'
<	Less than	'<x'
>=	Greater than or equal to	'>=x'
<=	Less than or equal to	'<=x'
:	Range	'x:y'
..	Range	'x..y'
*	Wildcard	'*x, x*, *x*'
?	Single-character wildcard	'?x, x?, ?x?, x??'
	Or , and	'a b'

Extension Group Exception Output Example

21 Oct 2003 17:51:04 EXTENSION GROUP EXCEPTION REPORT TCP TRANSMIT TELMAX21 2.0

Search Criteria: sumdate="20/10/2003" and siteid="103" and inoutno="1001" and grid="SALES"

SITE	EXTENSION GROUP	EXTENSION	CALL COUNT	CALL COST	DURATION hhhh:mm:ss	AVERAGE DURATION	SHORT CONNECT
103	SALES SALES ADMIN	1001	9	\$1.44	0000:15:12	0000:01:41	0
		Group Totals	9	\$1.44	0000:15:12	0000:01:41	0
		Totals	9	\$1.44	0000:15:12	0000:01:41	0

EXTENSION GROUP EXCEPTION REPORT

PAGE 1 END

Figure 4.3b: Extension Group Exception Report

Report Interpretation

The table below gives a description of the information contained under the various report headings.

Heading	Description
SITE	The site identifier for this report.
EXTENSION GROUP	The Extension Group to which the Extension belongs.
EXTENSION	The extension number referred to in the report.
CALL COUNT	The number of calls that meet the criteria set.
CALL COST	The cost of calls to meet the number as listed.
DURATION	Total duration of the calls.
AVERAGE DURATION	Simply the duration divided by the total number of calls.
SHORT CONNECT	The number of calls included in the total having a duration less than the configured short connect time.
GROUP TOTALS	Totals for each Extension Group if more than one.
TOTALS	Totals for all Extensions and all Extension Groups.

EXTENSION GROUP SUMMARY REPORT

Report Description

The **Extension Group Summary Report** shows summarised details of all calls for each Extension Group over a specified period. Each line in the report represents a single extension of the selected Extension Group. Also shown for each Extension Group is a summary of all calls belonging to it.

This report serves as the basis for substantiation of call costs attributable to an Extension Group. This report is normally run in the first instance to the **Extension Call Detail Report** as the summarised call information provides adequate information about individual extensions. As a rule of thumb, the **Extension Group Summary Report** generates one or two pages for each extension group - *the Extension Call Detail Report, by contrast, generates at least one page per extension.*

Input Screen

extgroupsum

TRANS-MIT
Extension Group Summary Report

21/10/2003

Selection Criteria

Date From : 20/10/2003 Report Format : ☒ Standard
 To : 20/10/2003 ☐ Expanded

Site ID : 103 MLB MELBOURNE

General Group ID : All General Groups

Extension Group ID : SALES TELMAX21 SALES

Include Deleted Extension Groups : ☐

Include Extension Totals in Call Accounting Section of Report : ☒

Equipment

☐ Summary
☐ Detail
☐ Extra Detail
☒ None

Overheads

☐ Summary
☐ Detail
☐ Extra Detail
☒ None

Miscellaneous

☐ Summary
☐ Detail
☐ Extra Detail
☒ None

Enter Extension Group ID, Leave Blank For All, <CTRL-F> To Find

OK
 Interrupt
 Pick From List

Figure 4.4a: Extension Group Summary Report Screen

Input Screen Description

Field	Field Characteristics	Comments
Report Format	Radio button	Selects either a standard report or an expanded report that includes originating and answering internal extension numbers.
Date From	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
Date To	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Report Format	Radio button	Selects the generation of a standard report or an expanded report including details of internal originating and answering extensions.
Site ID	Enter a specific Site ID, or blank for all sites. Otherwise, click on Pick From List to find, then OK to select.	Selects the site to be reported on. Not always required.
General Group ID	Enter a specific General Group ID, or blank for all groups. Otherwise, click on Pick From List to find, then OK to select.	Selects the General Group to be reported on.
Extension Group ID	Enter a specific Extension Group ID, or blank for all groups. Otherwise, click on Pick From List to find, then OK to select.	Selects the Extension Group to be reported on.
Include Deleted Extension Groups	Click in the checkbox for yes, otherwise leave it blank for no.	If the box is checked, any Extension Groups which were children of the selected General Group but were deleted in the past will also be included in the report.
Include Extension Totals in Call Accounting Section of Report	Click in the checkbox for yes, otherwise leave it blank for no.	If the box is checked, a separate line of information is printed for each extension, with totals at the bottom. Otherwise, only the totals are shown.
Equipment Overheads Miscellaneous	Choice of Summary, Detail, Extra Detail or None.	Determines how much detail is put into the report for each of the Equipment, Overheads and Miscellaneous sections at the bottom of the report.

Extension Group Summary Report Output Example

21 Oct 2003 18:09:52		EXTENSION GROUP SUMMARY REPORT										TCP TRANS-MIT			TELMAX21 2.0	
Date From		: 20/10/2003														
To		: 20/10/2003														
Site ID		: 103		MLB MELBOURNE												
General Group ID		:		All General Groups												
Extension Group ID		: SALES		TELMAX21 SALES												
Include Deleted Extension Groups		: N														
Report By		: E N N N										Report Format : 1 - Standard				
Site ID		: 103		MLB MELBOURNE												
Group ID		: SALES		TELMAX21 SALES												
Parent Group ID		: TMS		TRANS-MIT												

EXTENSION GROUP SUMMARY REPORT

PAGE 1 END

Figure 4.4b: Extension Group Summary Report

Report Interpretation

Heading		Description
EXTN NO		Each extension in the selected Extension Group is listed on a separate line of the report.
FREE/MISC	NO	The number of outgoing calls classified as free calls due to the dialled number as well as any calls which are of an unknown type.
	TOTAL DURATION	The total duration of calls in the FREE/MISC category.
INCOMING CALLS	NUMBER-PUBLIC	The total number of incoming calls which originate from the public telephone network.
	NUMBER – N/W	The total number of incoming calls which originate from tie lines in the company's private network.
	TOTAL DURATION	The total duration of incoming calls classed as PUBLIC or N/W.
OUTGOING CALLS	PUBLIC	The total number of outgoing calls to the public telephone network. These calls are made up of all calls classed as LOCAL, STD, and IDD, which are shown in separate columns.
	N/W	The total number of outgoing calls which go out on tie lines in the company's private network.
	TOTAL DURATION	The combined total duration of outgoing calls classed as PUBLIC or NETWORK.
OUTGOING CALL COSTS	PUBLIC	The cost of all outgoing calls classed as PUBLIC ie. LOCAL, STD and IDD as shown.
	N/W	The cost of all outgoing calls which go out on tie lines in the company's private network.
	TOTAL COSTS	The combined total cost of outgoing calls classed as PUBLIC or NETWORK.

GENERAL GROUP SUMMARY REPORT

Report Description

The **General Group Summary Report** shows summarised details of all calls for each child General and Extension Group of a particular General Group over a specified period. Each line in the report represents a single child group or Extension Group of the selected General Group. Also shown is a summary of all calls belonging to that child group.

This report is best printed when substantiation of summarised call information is needed. General Group managers who want to monitor the call patterns of their sub-groups would find this report particularly valuable as a periodically printed report.

Input Screen

Figure 4.5a: General Group Summary Screen

Input Screen Description

Field	Field Characteristics	Comments
Date from	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
Date to	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Group Id	Enter a specific General Group ID, or click on Pick From List to find, then OK to select.	This field sets the cost centre(s) or group(s) to be reported on. This field may not be left blank.

General Group Summary Output Example

21 Oct 2003 18:13:29

GENERAL GROUP SUMMARY REPORT

TCP TRANS-MIT

TELMAX21 2.0

Group ID: TMS

TRANSMIT SALES

Parent ID: TRANSMIT

TRANS-MIT

From: 20/10/2003

To: 20/10/2003

TYPE/ GROUP ID	NUMBER OF CALLS							TOTAL CALLS	OUTGOING CALL COST (\$)				TOTAL COSTS
	FREE	---INCOMING---	-----OUTGOING-----				-----PUBLIC-----						
	MISC	PUBLIC	N/W	LOCAL	STD	IDD	N/W		LOCAL	STD	IDD	N/W	
20586	7	230	0	163	82	1	0	483	16.27	42.82	1.07	.00	60.16
20587	4	124	0	106	53	0	0	287	8.41	6.44	.00	.00	24.85
20588	4	399	0	331	181	0	0	915	24.20	50.32	.00	.00	74.52
20589	0	214	0	207	84	2	0	507	16.97	28.06	10.87	.00	55.90
20590	1	101	0	110	48	8	0	268	7.83	15.55	11.95	.00	35.33
20591	0	15	0	5	2	0	0	22	.55	.05	.00	.00	.60
Totals	16	1083	0	922	450	11	0	2482	74.23	53.24	23.89	.00	251.36
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

GENERAL GROUP SUMMARY REPORT

PAGE 1 END

GENERAL GROUP SUMMARY REPORT

PAGE 1 END

Figure 4.5b: General Group Summary Report

Report Interpretation

Heading		Description
TYPE/GROUP ID		The type and name of the Extension Group or General Group being summarised as a child of the selected General Group. All groups listed in the report share the selected General Group as a parent. The groups are identified as General or Extension by the use of 'G-' or 'E-' inserted before the name of the group.
FREE/MISC		The number of outgoing calls classified as free calls due to the dialled number as well as any calls which are of an unknown type.
INCOMING	PUBLIC	The total number of incoming calls which originate from the public telephone network.
	N/W	The total number of incoming calls which originate from tie lines in the company's private network.
	TOTAL DURATION	The total duration of incoming calls classed as PUBLIC or N/W.
OUTGOING	LOCAL	The total number of outgoing calls classified as being local calls.
	STD	The total number of outgoing calls classified as being STD calls.
	IDD	The total number of outgoing calls classified as being international calls.
	N/W	The total number of outgoing calls which go out on tie lines in the company's private network.
	TOTAL CALLS	The combined total number of incoming and outgoing calls.
OUTGOING CALL COST (\$)	PUBLIC	The cost of all outgoing calls classed as PUBLIC ie. LOCAL, STD and IDD as shown.
	N/W	The cost of all outgoing calls which go out on tie lines in the company's private network.
	TOTAL COSTS	The combined total cost of outgoing calls classed as PUBLIC or NETWORK.

TRIBUTARY GROUP SUMMARY REPORT

Report Description

The **Tributary Group Summary Report** is a specialised report only applicable to networks that have a site where all the traffic is routed through another site and there is no SMDR generated at the site (by reverse engineering the data at the site that the calls are routed through.)

Input Screen

tribgpsum

TRANS-MIT
Tributary Group Summary Report

21/10/2003

Selection Criteria

Date from : 20/10/2003 To : 20/10/2003

Site ID : 103 MLB MELBOURNE

Group ID : All Tributary Groups

Report Execution Method

Please select from ...

Foreground Spool Abort Output Options Back

OK
Interrupt
Pick From List

Figure 4.6a: Tributary Group Summary Report output screen

Input Screen Description

Field	Field Characteristics	Comments
Date from	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
Date To	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Site ID	Enter a specific Site ID, or blank for all sites. Otherwise, click on Pick From List to find, then OK to select.	Selects the site to be reported on. Not always required.
Group ID	Enter a specific Tributary Group ID, or blank for all groups. Otherwise, click on Pick From List to find, then OK to select.	Selects the Tributary Group to be reported on.

Tributary Group Summary Output Example

21 Oct 2003 10:42:43				TRIBUTARY GROUP SUMMARY REPORT						TCP TRANSMIT				T21 2.0	
Date From : 20/10/2003				Date To : 20/10/2003											
Site ID : 104				Site Name : MEL-TRIB											
Group ID : ML-TRIB				Group Name : TRANSMIT TRIBUTARY GROUP											
Route ID : 7				Route Name : MLB MULGRAVE (Total Trunks = 2)											

INCOMING CALLS OUTGOING CALL COUNTS OUTGOING CALL COSTS															
TRUNK ---NUMBER--- TOTAL -----NUMBER----- TOTAL -----PUBLIC----- TOTAL															
NO PUBLIC N/W DURATION FREE LOCAL STD IDD N/W DURATION LOCAL STD IDD N/W COSTS															

7001 0 10 00:08:36 11 0 0 0 15 00:30:44 .00 .00 .00 2.55 2.55															
7002 0 5 00:03:40 7 0 0 0 22 00:49:52 .00 .00 .00 3.74 3.74															

Totals 0 15 00:12:16 18 0 0 0 37 01:20:36 .00 .00 .00 6.29 6.29															

TRIBUTARY GROUP SUMMARY REPORT

PAGE 1 END

Figure 4.6b: Tributary Group Summary Report

Report Interpretation

Heading		Description
TRUNK NO		Each trunk in the selected Tributary Group is listed on a separate line of the report.
INCOMING CALLS	NUMBER-PUBLIC	The total number of incoming calls which originate from the public telephone network.
	NUMBER – N/W	The total number of incoming calls which originate from tie lines in the company's private network.
	TOTAL DURATION	The total duration of incoming calls classed as PUBLIC or N/W.
OUTGOING CALL COUNTS	NUMBER-FREE	The total number of outgoing calls which have no cost due to the dialled number or having a duration of less than the minimum time to be charged.
	NUMBER-LOCAL	The total number of outgoing calls classified as being local calls.
	NUMBER-STD	The total number of outgoing calls classified as being STD calls.
	NUMBER-IDD	The total number of outgoing calls classified as being international calls.
	N/W	The total number of outgoing calls which go out on tie lines in the company's private network.
	TOTAL DURATION	The combined total duration of all outgoing calls.
OUTGOING CALL COSTS	PUBLIC	The cost of all outgoing calls classed as PUBLIC ie. LOCAL, STD and IDD as shown.
	N/W	The cost of all outgoing calls which go out on tie lines in the company's private network.
	TOTAL COSTS	The combined total cost of outgoing calls classed as PUBLIC or NETWORK.

WEB BASED DIRECTORY

Introduction

Trans-Mit is able to offer two methods of providing a Web based directory, a server side and a client side version.

Version 1 – Server Side

The On-line Web Directory uses the standard Windows Internet Explorer® application to access the Telmax21 database. This enables it to search on a number of configurable fields.

The following screens show the look and feel of this version.

The appearance may be customised to suite the corporate standard of each customer.

Telmax21 Directory Search Result - Microsoft Internet Explorer

Address: <http://mon2/t21/webdir/t21webdir.cgi?surname=peters&prefname=&school=&department=&bldg=&mail=&telephone=&rz>

TRANS-MIT

A tie-line operates between most campuses. When dialling from the Hawthorn, Prahran or SAL campuses to the Croydon, Lilydale or Wantirna campuses or vice versa, dial '4' before the four digit extension. The extension is the last four digits of the telephone number.

[New Search](#)

Telmax21 Directory Search Result

(Click on Last Name for further details)

Last Name	First Name	School/Unit	Department	Building	Mail	Telephone
PETERS	ANDREW	INDIGENOUS STUDIES	INDIGENOUS STUD	LILYDALE	LIL	7122
PETERSEN	WENDY	SWINBURNE PRESS	SWINBURNE PRESS	ADHAWTHORN	17	8365
PETERSON	DAVID		AF/CRC MICROTE			6688

3 row(s) unloaded.

Local intranet

Telmax21 Directory Search Result - Microsoft Internet Explorer

Address: <http://mon2/t21/webdir/t21webdirex.cgi?recordno=3491>

TRANS-MIT

A tie-line operates between most campuses. When dialling from the Hawthorn, Prahran or SAL campuses to the Croydon, Lilydale or Wantirna campuses or vice versa, dial '4' before the four digit extension. The extension is the last four digits of the telephone number.

[New Search](#)

Telmax21 Directory Search Result

Last Name	First Name	Position	School/Unit
PETERSEN	WENDY	DESIGNER	SWINBURNE PRESS
Division	Department	Building	Mail
EXTERNALAFFAIRS	SWINBURNE PRESS	ADHAWTHORN	17
Telephone	Speed Dial	Fax	Alternate Location
8365		92145718	
On Leave	Date Returning	Alternate Phone	
E-Mail Address			
wpetersen@swin.edu.au			

If any of the above information is incorrect, [Click Here To Request Update](#)

Done Local intranet

Telmax21 Directory Search - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail W Links

Address http://mon2/t21/webdir/ Go Links

TRANS-MIT

Telmax21 Directory Search

Last Name	First Name	School/Unit	Department	Building	Mail	Telephone
<input type="text" value="smith"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

☐ Display Search Results
☒ Create Telephone Directory Download File
☐ Request a New Entry

Done Local intranet

Telmax21 Directory Search Result - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail W Links

Address http://mon2/t21/webdir/t21webdir.cgi?surname=smith&prefname=&school=&department=&bldg=&mail=&telephone=&rac Go Links

TRANS-MIT

A tie-line operates between most campuses. When dialling from the Hawthorn, Prahran or SAL campuses to the Croydon, Lilydale or Wantirna campuses or vice versa, dial '4' before the four digit extension. The extension is the last four digits of the telephone number.

New Search

Telmax21 Directory Search Result

26 row(s) unloaded.

Done Local intranet

http://mon2/t21/webdir/tmp/TD21102003-191146.rtf - Microsoft Internet Explorer

File Edit View Insert Format Tools Table Go To Favorites Help

Back Forward Stop Home Search Favorites Media

Address http://mon2/t21/webdir/tmp/TD21102003-191146.rtf Go Links

Last Name	First Name	Position	Department	Building	Mail Telephone	Spd	AltPhone
SMITH	ANDREW		CASUAL		8506		
SMITH	BERNADETTE		TAFE STUDENT A		5562		
SMITH	BRADLEY		SCH BIOPHYSSCI		8981		9254 191
SMITH	BRIAN		EASTERN HOUSE		46708		
SMITH	CLINTON		UNKNOWN				
SMITH	DANIEL		CASUAL				
SMITH	DERINDA		BUSINESS & ECO	TD316	46 5382		
SMITH	GARY		CASUAL				
SMITH	GILLIAN		NATSCHEDESIGN	P25	PRA 6960		
SMITH	GLENDA		LIBRARY - HAWT		50 8141		
SMITH	GREGORY		FAM&COMM		P11 6826		
SMITH	IAN	DIVISIONAL ACCOUN	SWINBURNE AT L	LILYDALE	100 7197		
SMITH	JACLYN	DESIGNS AND PROJE	FAC AND SERV	477B209	15 8760		
SMITH	JEFF		PCSS		37 5500		
SMITH	JEFFREY		ITS DESKTOP	LA104	70 7165		
SMITH	JULIANNE		CHILDSUD&HLTH		19 6859		
SMITH	KERRY		CASUAL				
SMITH	LYNETTE		CASUAL		8543		
SMITH	LYNNE		CASUAL				
SMITH	MATTHEW	COMPUTER SYSTEMS	IT	EN305	39 8670	3080	
SMITH	PENNY	TEACHER	ACCESS	TD344	8 8992		
SMITH	ROSLYN		SWINBURNE AT L		100 7050		
SMITH	SHIRLEY	MANAGER	BEC BUS ENT CEN		46 8689		92136853
SMITH	SUSAN		CASUAL				
SMITH	TIM		BIOPHYSSC&ELEC	AS320	8415	3596	
SMITH	WENDY		OFFSITE NUMBER	CRONDON	CRD 46633		

Unknown Zone

Version 2 – Client Side

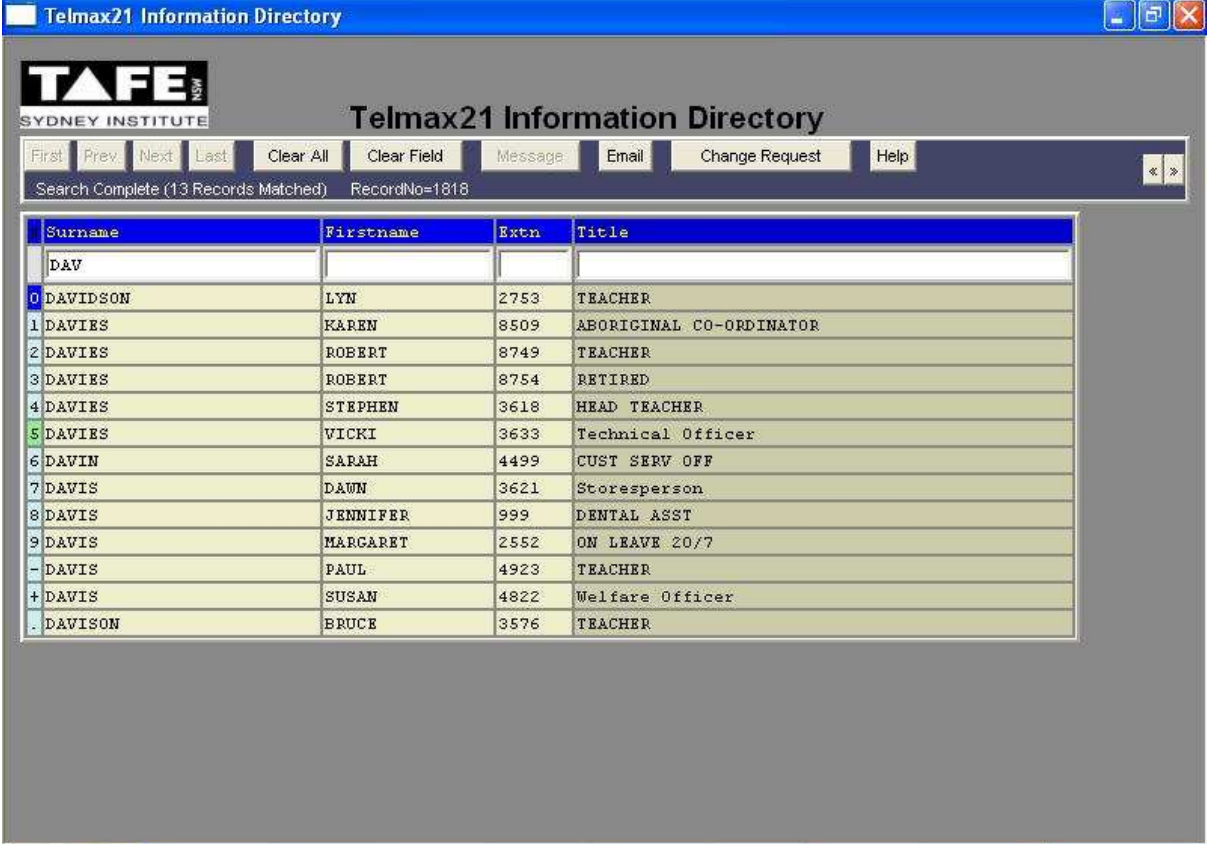
The alternative Web Directory also uses the Windows Internet Explorer® application.

However this version provides a more dynamic and higher speed search function.

Once opened, the search is performed on data held in cache on the Client workstation rather than on the Server. This method provides access to the data even in the event of a network failure and is therefore ideally suited to mission critical environments such as switchboard and help desks.

The following screens show the look and feel of this version.

As with the server side version, this application is highly configurable and includes an option for visually impaired users.



	Surname	Firstname	Extn	Title
	DAV			
0	DAVIDSON	LYN	2753	TEACHER
1	DAVIES	KAREN	8509	ABORIGINAL CO-ORDINATOR
2	DAVIES	ROBERT	8749	TEACHER
3	DAVIES	ROBERT	8754	RETIRED
4	DAVIES	STEPHEN	3618	HEAD TEACHER
5	DAVIES	VICKI	3633	Technical Officer
6	DAVIN	SARAH	4499	CUST SERV OFF
7	DAVIS	DAWN	3621	Storesperson
8	DAVIS	JENNIFER	999	DENTAL ASST
9	DAVIS	MARGARET	2552	ON LEAVE 20/7
-	DAVIS	PAUL	4923	TEACHER
+	DAVIS	SUSAN	4822	Welfare Officer
.	DAVISON	BRUCE	3576	TEACHER

Telmax21 Information Directory

TAFE
SYDNEY INSTITUTE

Telmax21 Information Directory

First Prev Next Last Clear All Clear Field Message Email Change Request Help

Search Complete (1 Records Matched) RecordNo=8192

Surname	Firstname	Extn	Title
DAVIES	VICKI	3633	Technical Officer
DAVIES	VICKI	3633	Technical Officer

Title: Technical Officer Telephone: 9217-3633 TempCasual:

Section: FOOD TECH FaxNumber: 9217-4034 Equip:

College: Class Servicing Division - Scientific Mobile: EmplID: YT

Location: ULTIMO-F Pager:

Comments:

Email: vicki.davies@tafensw.edu.au Site: ULTI GroupID: TECHM UL ParentID:

RM 3-14

Telmax21 Information Directory

TAFE
SYDNEY INSTITUTE

Telmax21 Information Directory

First Prev Next Last Clear All Clear Field Message Email Change Request Help

Search Complete (1 Records Matched) RecordNo=5433

Surname	Firstname	Extn	Title
AND			
ANDERSON	STEVE	3455	HEAD TEACHER

Title: HEAD TEACHER Telephone: 9217-3455 TempCasual: S

Section: SCREEN PRINT FaxNumber: 9217-4011 Equip:

College: ADEP - Jones St, Cluster Mobile: EmplID: YS

Location: ULTIMO-T Pager:

Comments:

Email: steve.anderson@tafensw.edu.au Site: ULTI GroupID: SCRPR UL ParentID:

No Message

DIRECTORY ENQUIRY

The **Directory Enquiry** module enables operators to quickly and easily find details of personnel, such as extension numbers, names etc. by utilising a high speed search of the directory database. In addition to the search capability of the Directory, temporary messages may be associated with personnel details. Permanent messages may also be created, however this is achieved via the **Directory Maintenance** module.

The following examples demonstrate the features of the module.

Directory Enquiry Usage Example 1

TRANS - MIT DIRECTORY (Enquiry)

UP ARROW	- Next Field	DOWN ARROW	- Previous Field
RETURN	- Start of Field	DEL	- Erase Character
TAB	- Next Screen	HOME	- Restart Display
RIGHT ARROW	- Wild Card	PAGE UP	- Clear Current Field
LEFT ARROW B/S	- Backup one character		
PAGE DOWN	- Makes Current Field The Key Field		
CTRL Y	- Messaging (A single record must be selected)		
CTRL E	- Email Message		
CTRL Q / ESC	- Abort And Return To The Main Menu		
END	- Clear All Fields & Return To This Help Menu		

S	F	E	P	L	O	D	S
Surname	space	'	-	.	/		
	A	B	C	D	E	F	G
	H	I	J	K	L	M	N
	O	P	Q	R	S	T	U
	V	W	X	Y	Z		

The above example lists the keys available during the enquiry. Appearing at the bottom of the screen is a list of all the valid characters that can be entered and the current field where the cursor is located.

The information found in the search is presented in columns. The columns in these examples are surname, preferred name, extension number, department, division-section, title, site I.D., building and floor. Note that these fields will vary depending on the customer.

Directory Enquiry Usage Example 2

TRANS-MIT DIRECTORY (Enquiry)

Type S to start looking for David Smith.

S.R.U.GENERAL	NO DICKSON	6969	02	6243	6969	03	DOFA	CORPPOL	CTrans-Act	0
SAASTAMOINEN	MARKUS	7349	03	9285	7349	03	DOFA	FINANCE	ACCNTS	1
SAAVE-FAIRLEY	LOUISE	3866	02	6275	3866	03	DOFA	RMF	CTC EXEC	2
SABLOWSKI	FRANK	7803	02	6275	7803	13	DOFA	AVO		3
SABOL	MARJAN	7722	02	6275	7722	12	KFPW			4
SADAVSKAS	SUE	4368	02	6275	4368	02	DOFA	RMF	REM TRIB	5
SADLIER	CHRIS	4556	02	6263	4556	00	DOFA	ABP	O&O TEAMS	6
SADLIER	DAVID	6225	02	6213	6225	07	DIST	CSD	RMPERSONL	7
SAG	ANDY	0	07	3877	0600	00	DOFA	EQMS		8
SAGA	AURELIA	4600	02	6295	4600	00	OTHER	CANPRIN		9
SAHADEO	MONASH	0	02	6271	4423	00	DOFA	AEC		-
SAKARAS	RAY	4193	03	6220	4193	01	DOFA	SRU	TAS	,
SALALE	SALALE	2193	02	6263	2193	04	DOFA	BUDGET	IND&GOV OC	.

S _____
S _____ F _____ E _____ P _____ L _____ O _____ D _____ S _____

Surname space ' - . /
- More - A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Pressing any valid key starts the search and the screen is updated immediately to display the information found.

Directory Enquiry Usage Example 3

TRANS-MIT DIRECTORY (Enquiry)

Type SMI

SMIGIELSKI	LARA	3978	02	6275	3978	05	DOFA	PCM	PROP POL	0
SMILLIE	IAN	7904	07	3233	7904	11	DOFA	SUPPSER	MANAGER	1
SMITH	ALAN	4001	03	6220	4001	GR	DOFA	DPG	CUSTODIAN	2
SMITH	ALISON	7420	02	6213	7420	06	DIST	AUSIND	RTLEGAL	3
SMITH	ANDREA	6157	08	8237	6157	3	AHS	HEARIN		4
SMITH	ANDREW	2577	02	6263	2577	00	DOFA	CORP	IT SERV	5
SMITH	ANDREW	3670	02	6275	3670	01	DOFA	CORP	BSDU	6
SMITH	ANNA	0	03	6220	8450		TELST	TELSTRA	TELECOM	7
SMITH	ANNE	0	02	6271	4462	00	DOFA	AEC		8
SMITH	ANTHONY	6013	02	6213	6013	04	DIST	CSD	ISTELECM	9
SMITH	ASLEIGH	0	08	8228	6624	10	DOFA	SRU		-
SMITH	BE	6158	03	9285	6158	05	TIGA	PROJECT	ENG/STRUCT	,
SMITH		8201	03	9285	8201	03	H&FS	CORP	REC/MGT	.

SMI _____
S _____ F _____ E _____ P _____ L _____ O _____ D _____ S _____

Surname space ' - . /
- More - A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

The list of entries displayed on the screen is updated to satisfy the search criteria.

Directory Enquiry Usage Example 4

TRANS-MIT DIRECTORY (Enquiry)

SMITH	CATHERINE	2383	02	6263	2383	CTREC-05	DOFA	BUDGET	AGCYACCMAN	0
SMITH	CHRIS	4590	02	6295	4590	CKING-00	OTHER	CANPRIN		1
SMITH	DARREN	6021	03	9285	6021	MSTJM-05	TIGA	PIPING	DESIGNER	2
SMITH	DAVID	1234	02	6243	1234	CDCKN-05	ACCC			3
SMITH	DAVID	7899	03	9285	7899	MCASS-12	TAX	AVO	REG/MGR	4
SMITH	DOUG	6278	02	6243	6278	CDCKN-01	DOFA	CORP	IT SERV	5
SMITH	FIONA	7623	02	6213	7623	C51AL-04	DIST	INDDIVB	AUTOAMANUF	6
SMITH	GARY	3609	02	6263	3609	CTREA-05	DOFA	INAUDIT		7
SMITH	GAYLE	0	08	8377	0305	AMARN	H&FS	NAL		8
SMITH	GILLIAN	5377	03	6220	5377	HCCT-L13	DIEA	IMMIGRA	CORP SERV	9
SMITH	GLEN	6602	08	8237	6602	E-4	DIMA	EXEC	ST DIRECTR	-
SMITH	GORDON	3692	02	6275		AGE-05	DOFA	PCM	DPOG	,
SMITH	GRAEME	7079	02			C33AL-01	DIST	OFFTOUR	TTBDINVES	.

SMI_____E_____P_____L_____O_____D_____S_____

Surname _____ ' _____ - . /

- More - A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Tab to next page when -More- indicated.

The next page can be viewed by pressing the <TAB> key.

Directory Enquiry Usage Example 5

TRANS-MIT DIRECTORY (Enquiry)

SMITH DAVID 1234 02 6243 1234 CDCKN-05 ACCC CDCK

ACC0102 02 6243 1212

Senior Assistant Commissioner,
Mergers & Asset Sales Branch.

Assistant Kes Aziz 6243 1233

Select David Smith by keying ESC 3 as indicated by digit on far right.

Continue searching, or type CTRL Y for messaging

SMI_____F_____E_____P_____L_____O_____D_____S_____

Surname _____ space _____ ' _____ - . /

End of list A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Once the information is found, an individual entry may be selected by pressing the <ESC> key, then the appropriate number. This number appears at the right hand side of the list. Individual entries with associated messages are indicated by highlighted numbers on the right hand side of the list.

Directory Enquiry Usage Example 6

TRANS-MIT DIRECTORY (Enquiry)

SMITH DAVID 1234 02 24 CDCKN-05 ACCC
 ACC0102 02 6243 1212 CDCK

I HAVE JUST HIT CONTROL Y
 THIS PUTS THE SCREEN IN MESSAGE MODE

Insert Message as shown.

Type CTRL Y to enter, Page Up to delete

SMI _____
 S F E P L O D S

Surname space ' - . /
 Messaging A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

After selection, a prompt message will offer the choice of inserting a message.

Directory Enquiry Usage Example 7

TRANS-MIT DIRECTORY (Enquiry)

CAMPBELL	GREG	0	04	1239	3001	HIGHETT	CRS	CRS	MOBILE	0
CAMPBELL	GREG	0	03	9553	3399	HIGHETT	CRS	CRS	UNITADV/SE	1
BALL	GREG	2693	08	8237	2693	ACCW-7	DOFA	SUPPSER	HR-SYS-SER	2
BROWN	GREG	7391	07	3233	7391	BANNE-11	DOFA	SRU		3
BURVILLE	GREG	2283	02	6263	2283	CTREC-00	DOFA	IBMG	IBMGSA	4
FETTERPLACE	GREG	7137	03	9285	7137	MCASS-22	AEC		OPER/MGR	5
GAMBLE	GREG	3042	02	6275	3042	CALGW-01	DOFA		PERSONNEL	6
GURR	GREG	7182	02	6213	7182	C40AL		INDDIVA	INFINDTASK	7
HARVIE	GREG	6512	08	8237	6512	AP	CRS	FLEET		8
HERBERT	GREG	4319	02	6275	4319	CRS	DOFA	PCM	REM AUST	9
JONES	GREG	3552	02	6275		CGW-01	DOFA	CORP	SUPP SERV	-
MARSHALL	GREG	6105	02			MSTJM-05	TIGA	PIPING	DRAFTSMAN	,
MCKEAN	GREG				7262	C33AL-04	DIST	INDDIVA	HC TRADE	.

Cursor across to Preferred name field and type Greg.

GREG _____
 S F E P L O D S

First Name space ' - / 0 1 2 3 4 5 6 7 8 9
 - More - A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Other fields may also be searched on.

Directory Enquiry Usage Example 8

TRANS-MIT DIRECTORY (Enquiry)

HAQ	KHADIJA	2200	02	6263	2200	CTREA-06	DOFA	BUDGET	OPUT PURCH	0
TAYLOR	MARJORIE	2201	02	6263	2201	CTREA-01	DOFA	GACS		1
CITA	FRANK	2202	02	6263	2202	CTREA-05	DOFA	BUDGET	WHL OF GOV	2
ANSWERING	MACHINE	2203	02	6263	2203	CTREE-00	DOFA	ABP	O&O TEAMS	3
BENTLEY	KAREN	2204	02	6263	2204	CTREA-06	DOFA	BUDGET	SOC OCOMES	4
SZOLDRA	PAULINE	2206	02	6263	2206	CTREA-01	DOFA	CORP	FINANCE	5
CHAPLIN	EMMA	2207	02	6263	2207	CTREA-03	DOFA	M&PS	L & PROJ	6
REID	JODI	2208	02	6263	2208	CTREC-01	DOFA		RP CONTR	7
TEDFORD	RAE	2210	02	6263	2210	CTREA-06	DOFA		OPUT PURCH	8
EDMUNDS	ROBIN MR	2211	02	6263	2211	CTREA-06	DOFA		FINANCE	9
MEERT	SARAH	2212	02	6263	2212	CTREA-06	DOFA		SUPPORTSER	-
TO BE ADVISED		2213	02	6263	2213	CTREA-06	DOFA	RMF	GBE UNIT	,
NEWWEY	LOUISE	2216	02	6263	2216	CTREA-06	DOFA	BUDGET	SOC OCOMES	.

S F E P L O D S
 Extension space - / 0 1 2 3 4 5 6 7 8 9
 - More -

Search on Extn. across 2 fields.

Pressing the up arrow twice moves the cursor to the Extension field.

Directory Enquiry Usage Example 9

TRANS-MIT DIRECTORY (Enquiry)

JOHNS	DIANA	6149	08	8237	6149	ACCE-3	AHS	HEARIN		0
JOHNSON	DAN	7700	03	9285	7700	MCASS-24	ESRA	INFOTEC MGR		1
JOHNSON	DAVID	1269	02	6243	1269	CDCKN-05	ACCC	LEGAL		2
JONES	DAVID	2476	02	6263	2476	CTREA-03	DOFA	M&PS	POL & PROJ	3
JONES	DEBBEE	610	08	8946	0610	NT	DOFA	SRU		4
JONES	DIAN	6382	02	6213	6382	NT	DIST	SCITECH	ISTEUROPE	5
JOPLING	DENISE	6876	02	6213	6876	NT	DIST	CSD	RMPROFIN	6
JOSLIN	DIANA	3365	02	6213	3365	CALGW-03	DOFA	RMF	CTC POLPRA	7

JO S D F E P L O D S
 First Name space ' - / 0 1 2 3 4 5 6 7 8 9
 End of list A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Search on two fields.

Pressing the cursor up arrow or down arrow moves to the next field. Multiple field input quickly narrows down the list of entries.

DIRECTORY MAINTENANCE

Overview

The **Directory Maintenance** screen is used to facilitate all additions, deletions or changes to the Informix database which is ultimately downloaded to appear in **Directory Enquiry**. See **Section 5.2**.

New extensions are assigned to predefined cost centres, (see **Hierarchy, Section 6**), for call accounting purposes.

Directory Maintenance is also used for Billing Distribution Maintenance (BDM). It also links to the Mobile Services Maintenance via the **CM** menu option

Directory Maintenance Screen

Option View **Next** Prev Add Update Del Message BDM CM Output Exit

View The Next Extension Details In The List

UWS Campus WRS 16 23651-00000 Extn 5580 *MSG*
 Centre Group ID University Cost Centre LEN 001010 T12R01501
 23651 CP001162 BUSINESS & ADMINISTRATION

Surname First Name Location
 MOONIE CAROL BHG02

Department/School Telephone
 IT BUSINESS & ADMIN 5580

Division/College Non UWS Mobile
 IT BUSINESS & ADMINISTRATION

Title Fax
 MRS 02 9678 7111

Position UWS Mobile(s)
 ADMIN OFFICER ACCOUNTS 0416045703 ☒

StaffID	E-Mail	BDM	IAC	M	Updated
1201020181	c.moonie@uws.edu.au	N	Y	N	19/10/2005

Current RecordNo: 105793 1 Record Retrieved

Figure 5.3a: Directory Maintenance Screen

Directory Maintenance Screen Field Definitions

Field	Definition
Campus (2 fields)	These two fields are used to define the campus code and additional 2 digit code used by the finance department. The values are set in the extension ranges table which also determines the valid range of numbers for a campus. The second field is populated automatically after you select the campus code. Double clicking on the first Campus field will display the first record of the total extension number list in ascending extension number order. Entering a valid campus code and clicking OK will display the first record in a list of extensions for that campus.
Centre	This is linked to the hierarchy configuration and is the first five digits of the cost centre number known as the centre code
Group ID	Is automatically generated in the hierarchy program and is primarily retained for historical reporting reasons. There is a one to one relationship with the eleven digit cost centre number. When Updating or Adding a new entry you can enter the first five digits of the cost centre number with a * and the system will either automatically fill in the unique id code if there is only one project for the centre or if there is more than one project in the centre it will display a pick list of the configured projects for that centre which is typically 3 or 4 entries
Group Name 1	First descriptive field for group. The full Cost Centre number is stored in this field.
Group Name 2	Second descriptive field for group.
Group Name 3	This field is used to give an extended description to a group or department up to 40 characters long and it is automatically displayed when the cost centre id is selected. This field is used on the Bilmax21 reports to display the description of the cost centre.
Extension	You must enter a valid extension number for the campus you have selected, if you try and enter a extension not within the configured range(s) you will be prompted to re-enter one that is.
Message	The Message field located adjacent to the extension field indicates that the record has a message attached to it. In a View you can use this field to search for records with a message by placing a Y or N in the field.
LEN	This field indicates the LEN associated to the extension. There should always be a LEN for assigned and .Vacant extensions. There will also be one in the special LEN2LOC group which is used to track available active LENs with extension number 999999
TEC	The TEC field located adjacent to the LEN field indicates the type of phone on the extension
Surname	30 character field for extension owner's family name.
First Name	20 character field for extension owner's given name.
Location	20 character field to identify geographic location of extension.
Department/ School	This field identifies the Department / School to which the extension belongs and includes a pick list of values currently configured. New descriptions can be added with options to either only update a particular record or update all records of the same value.

Telephone	16 character field to store the telephone number. The extension number is automatically inserted here but can be over written.
Division/ College	This field identifies the Division / College to which the extension belongs and includes a pick list of values currently configured. New descriptions can be added with options to either only update a particular record or update all records of the same value.
Non UWS Mobile	16 character field to store mobile telephone number which is not a UWS supplied phone
Title	30 character alphanumeric field to hold the title by which the extension owner should be addressed.
Fax	16 character field to hold the fax number through which the extension owner can be contacted.
Position	50 character alphanumeric field that holds the position title of the extension owner.
UWS Mobile(s)	Display only field showing mobile number as configured in Mobile Maintenance
Y	Indicates that there is a entry in the Mobile Maintenance for this mobile phone
Emp ID	Employee ID field.
E-Mail	This field holds the email address of the extension owner. It is automatically added from the first name and surname but can be overwritten if required.
BDM (Billing Distribution Maintenance)	This field indicates whether this record has associated information regarding the distribution of the Bilmax21 reports. It can be either Y for Yes or N for No. If set to Y then the additional screens containing the details can be accessed by clicking the BDM button at the top of the screen.
IAC	This field and is used to indicate that the record with be included in the export to the IAC each night. It can be either Y for Yes or N for No.
M	This field is used to indicate that the record is the master record when there are multiple records for the same extension and the details in the master record are used in the Bilmax21 reports. It can be either Y for Yes or N for No.
Updated	Automatically displays the date the record was last updated.

Viewing Directory Entries

Viewing existing entries in the directory can be driven in one of three ways. First click on **View** and then do one of the following:

1. Leave all the fields blank except for inserting a * in the **Surname** field and click on the **OK** button to begin sequentially searching the entire database.
2. Enter specific values for any known fields to gain direct access to the records that match the given values.
3. Enter conditions into the fields to review all the records that comply with the given conditions.

The available conditional operators are:

Example

Operator	Description	Field	Condition	Explanation
	OR	Site	A B	Site A or Site B.
*	Wildcard Word	Surname	P*	All Surnames starting with P.
?	Wildcard Character	Surname	Smit?	All 5 letter Surnames beginning with Smit eg. Smith, Smits etc.
:	Range	Extn	1000:2000	All extensions from 1000 to 2000 inclusive.
<>	Not Equal To	Cost Centre	<> 23456	All Cost Centres that do not have the name of 23456.
!=	Not Equal To	Cost Centre	!= 23456	All Extension Groups that do not have the name of 23456.
>	Greater Than	Extn	> 1999	All extensions greater than but not including 1999 ie 2000 and above.
>=	Greater Than OR Equal To	Extn	>=2000	All extensions greater than or equal to 2000.
<	Less Than	Extn	< 2001	All extensions less than but not equal to 2001 ie. 2000 and below.
<=	Less OR Equal To	Extn	<= 2000	All extensions less than or equal to 2000.

Wildcard Searches

If you are unsure of the exact details of a character field, type in a partial search criterion and the Telmax21 Directory locates all entries that match the partial criterion or wildcard criterion. (You cannot use wildcard criteria in a numeric or key field). You indicate a wildcard criterion by replacing one or more characters of the search criterion with the *character placeholders* query (?) and asterisk (*).

The query (?) replaces a single character in the search criterion. For example, SM?TH finds both SMITH and SMYTH.

The asterisk (*) replaces one or more characters in the search criterion. For example, SM* finds SMALL, SMITH, SMYTH and SMYTHE. Also, S*N finds SEVIN, SHELTON and STAN.

Character placeholders can be mixed in partial search criteria. For example, SM?T* finds SMETANA, SMITH, SMYTH and SMYTHE.

Add / Modify Directory Entries

Directory entries may be edited by either adding completely new entries (by clicking on **Add**), altering existing entries (by clicking on **Update**) or by deleting entries (clicking on **Delete**).

To add a new entry, simply click on **Add** and fill in the fields as appropriate. Use the mouse to move between fields, or press <TAB> to cycle through the fields consecutively.

To select an entry from a list of available entries, use the **Pick From List** button and scroll to the required Cost Centre. Double click to select.

Click on **OK** to actually add the new entry.

To alter an existing entry, first select the entry to be altered, as described in **Viewing Directory Entries** on 5.3.3. Now use the mouse to move the cursor to any fields which need to be changed and then once the changes have been made, click on **OK**.

When you update or add an entry in **Directory Maintenance**, Telmax21 performs checks to ensure data integrity:

- Data is checked for correct *type*. For example, you can enter digits in a field that is meant to hold a number, and letters of the alphabet in a field meant to hold a person's name. With this kind of checking, Telmax21 is not interested in the information entered as long as it matches the type of the field it is entered into.
- In some fields data not only must conform to a particular type but also must be one of several predefined values. For example, in the EXTN field, a valid extension number must be entered from within the range of extension numbers already configured on the system for that particular campus. The system will present a pick list to you with a range of options. If the options are not there or have changed, notify the system administrator. Similarly, if a Group ID which has not been previously configured in the hierarchy of the system is entered in the **Group ID** field, an error message appears on the screen and a pick list of ExtGroups appears to enable the selection of a valid Ext. Group. New groups can be added in the **New & Update Groups** module as necessary.

To delete an entry, select the entry to be deleted and then click on **Delete**. A prompt will appear, asking for confirmation that the directory entry is to be deleted. Type **y** to confirm the delete operation or **n** to cancel it. If the deletion is confirmed, another prompt appears, this time asking if the extension to be deleted has been removed from the PABX itself. Enter **y** to delete the complete record or else type **n** to indicate that the extension is still available on the PABX but is not assigned to a particular person. In this case, the entry is not actually deleted but has the **Surname** field changed to **.VACANT**. The extension will remain assigned to the cost centre and incur the equipment and service charge applicable. There should be no calls associated with it.

If an extension number is no longer in use it can be defined as 'Spare'. To make a extension SPARE select **Update** and either enter **.SPARE** in the surname field or select the SPARE group in Group ID field The Centre and Group ID fields will be automatically updated to 'Spare' and the detail fields cleared including the LEN.

In addition to the .SPARE entry a LEN2LOC entry will be created. The concept of a LEN2LOC entry is to provide a low level of cable management function to track the location of a LEN not associated to an extension but which still retain a physical connection to a location.

The screenshot shows the 'Direc - Telmax21 Directory Maintenance' window. The 'Update' button is highlighted in the menu bar. The form contains the following data:

UWS Campus	KWD	16	20041-00000	Extn	2891
Centre	Group ID	University Cost Centre	LEN	010184	T R S
20041	CP001021	RECORDS & ARCHIVES MANAGEMENT			
Surname		First Name		Location	
SMITH		MICHAEL		KG36	
Department/School				Telephone	
TEST				2891	
Division/College				Non UWS Mobile	
DIVISION OF CORPORATE SERVICES				0404 012714	
Title				Fax	
MR					
Position				UWS Mobile(s)	
MANAGER				0404012714	
StaffID	E-Mail	BDM	IAC	M	Updated
	m.d.smith@uws.edu.au	N	Y	Y	30/11/2005

Current RecordNo: 106125

Figure 5.3b: Directory Entry before making it .SPARE

Direc - Telmax21 Directory Maintenance

Option View Next Prev Add Update Del Message BDM CM Output Exit

Exit To Main Menu

UWS Campus KWD 16 Spare Extensions Extn 2891
 Centre Group ID test LEN
 SPARES SPARE Spare Extensions

Surname First Name Location
 .SPARE

Department/School Telephone
 2891

Division/College Non UWS Mobile

Title Fax

Position UWS Mobile(s) Y
 0404012714

StaffID E-Mail BDM IAC M Updated
 N N Y 28/04/2006

Current RecordNo: 106125

Figure 5.3c: Directory Entry after making it .SPARE

Direc - Telmax21 Directory Maintenance

Option View Next Prev Add Update Del Message BDM CM Output Exit

View The Next Extension Details In The List

UWS Campus KWD LEN TO LOCATION Extn 999999
 Centre Group ID LEN 010184
 UWS LEN2LOC LEN TO LOCATION

Surname First Name Location
 KG36

Department/School Telephone

Division/College Non UWS Mobile

Title Fax

Position UWS Mobile(s) N

StaffID E-Mail BDM IAC M Updated
 N N N 28/04/2006

Current RecordNo: 205073 1 Record Retrieved

Figure 5.3d: The LEN2LOC entry created when making the .SPARE

Change Department/School name

To change the **Department/School** name for an extension, you must either select another existing name from the pick list or edit the one already in the record. To do the latter, you must use one of the processes below to first select the current name from the pick list and then edit it.

- Enter the current Department/School name, by ensuring the cursor is positioned on the **Department/School** field and clicking the **Pick From List** button. This will display a list of valid **Department/School** names.

Select the required name and click **OK**.

Edit the name, entering the changes and click **OK**.

Alternatively, delete the contents of the current field and type in the new **Department/School** name and click **OK**.

A **Change ALL Rows to *New Department/School** box will appear. This accesses a powerful feature with wide ranging effects that should be used with care.

Change ALL Rows to *NEW Department/School Box

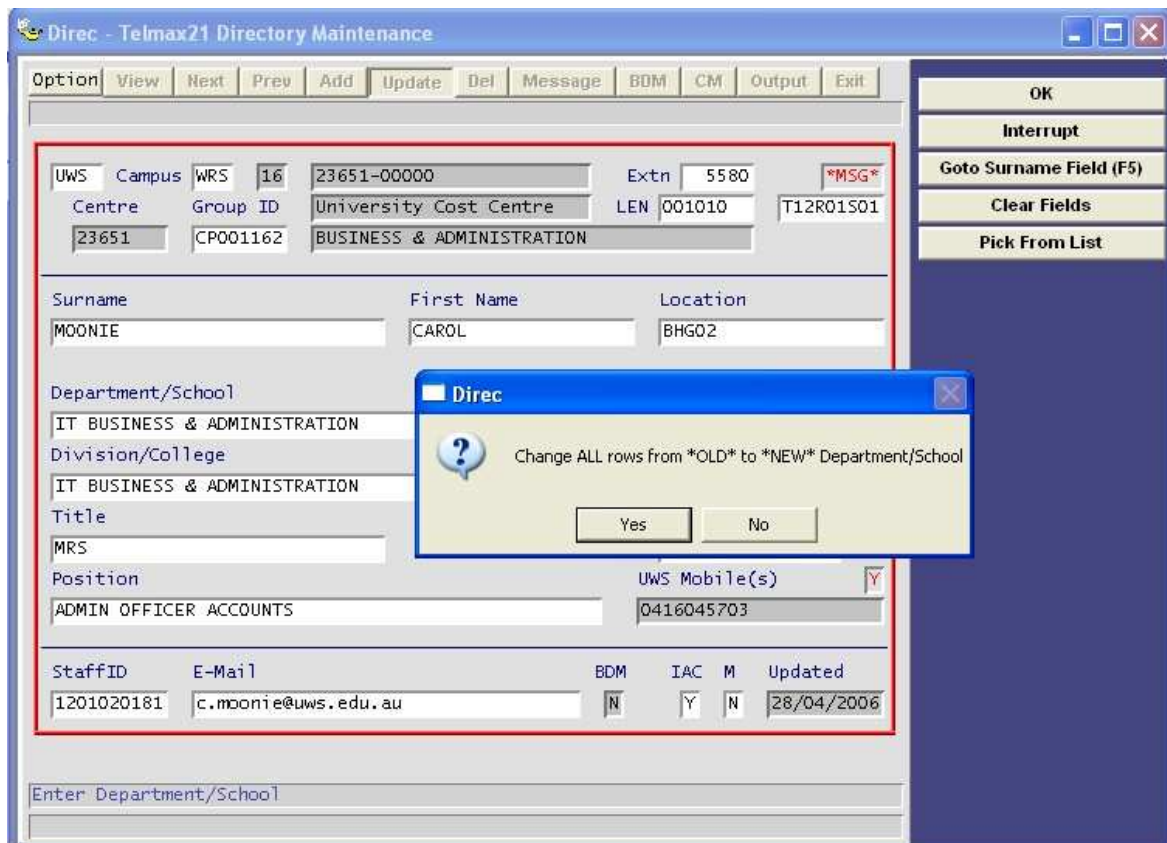


Fig. 5.3e Change ALL Rows to *NEW Department/School Box

This feature enables bulk changes to be made to Department/School names with one action.

In the **Change ALL rows to *NEW* Department/School** box, if the **Yes** button is clicked, all records with the current Department/School name will be changed to include the edited

changes. If **No** is clicked you will be prompted to add new Department/School to this entry only, click **Yes** to change this entry or click **No** to cancel change.

Example 1:

If you wish to change all extension records that relate to IT BUSINESS & ADMIN Department/school:

Ensure the cursor is positioned on the **Department/School** field and click on the **Pick From List** button. This will display a list of valid Department/School names.

Select the required name and click **OK**, or:

Enter the change in the **Department/School** field and click **OK**.

The **Change ALL Rows to *New Department/School** box will appear.

Click **Yes** and all records currently with IT BUSINESS & ADMIN in this field will be changed to IT BUSINESS & ADMINISTRATON WERR STH.

Following the update of the records, the initial Department/School name (Ie: IT BUSINESS & ADMIN) will be permanently removed from the pick list and replaced with the new name (Ie: IT BUSINESS & ADMINISTRATON WERR STH)

Example 2:

If however you currently have 100 records that relate to IT BUSINESS & ADMIN Department/school and wish to change only 70 of them to IT BUSINESS & ADMINISTRATON WERR STH, then a two stage process should be used to minimise manual entry.

Stage 1:

Ensure the cursor is positioned on the Department/School field and click on the Pick From List button. This will display a list of valid Department/School names.

Select the required name and click OK.

Note the Department/School name that you wish to retain. (Ie: IT BUSINESS & ADMIN)

Enter the changes and click OK.

The Change ALL Rows to *New Department/School box will appear.

Click Yes and all 100 records will be changed to IT BUSINESS & ADMINISTRATON WERR STH.

Following the update of the records, the initial Department/School name (Ie: IT BUSINESS & ADMIN) will be permanently removed from the pick list and replaced with the new name (Ie: IT BUSINESS & ADMINISTRATON WERR STH)

Stage 2:

Access one of the 30 records that you wish to continue to be defined in the IT BUSINESS & ADMIN Department/School and key 'IT BUSINESS & ADMIN' into the Department/School field.

Next, individually access each of the other 29 records that you wish to continue to be defined in the IT BUSINESS & ADMIN Department/School using the Pick From List button.

Note: This change process is also applicable to the Division/College field

Change Division/College name

As per Change Department/School Name.

Using Messages

The screenshot shows the 'Direc - Telmax21 Directory Maintenance' window. The 'Message' button is highlighted in the menu bar. The main form contains the following fields:

UWS	Campus	WRS	16	23651-00000	Extn	5580	*MSG*
Centre	Group ID	University Cost Centre		LEN	001010	T12R01S01	
23651	CP001162	BUSINESS & ADMINISTRATION					

Below these fields are three more fields: Surname (MOONIE), First Name (CAROL), and Location (BHG02). A 'Message Input Screen' dialog box is open, showing a list of departments (IT, Divi, IT, Titl, MRS, Posi, ADM, Staf) and a list of message entries. The 'Update' button is highlighted in the dialog box. The 'Update Message' button is also visible at the bottom of the dialog box.

Figure 5.3f: Working with Messages

Click on the **Message** button from the menu options once the correct entry has been selected.

The buttons in the message window have the following functions:

- Update** Update message (for a new message or to change existing messages)
- Clear** Clear message.
- Revert** Return to original message.
- Delete** Delete current message.
- Abort** Abort current input and exit message input.
- Exit** Save current message and exit message input.

Click on **OK** or press <ESC> when finished editing the message.

If adding a new message, ***MESSAGE*** will then appear in the top right hand corner to confirm that a message exists.

LEN Swapping

It is possible to swap LEN's between 2 extensions whilst retaining the other information related to the extension as it was before the swap. Select **Update** and go to the LEN field and type in the LEN you wish to associate with the extension the system will check to see if the LEN already exists and you will then be prompted as in Figure 5.3g. To swap the LEN by clicking yes the LEN will be swapped along with the location information

The screenshot shows the 'Direc - Telmax21 Directory Maintenance' window. The 'Update' button is selected in the menu bar. The main form displays details for a user with Surname 'MOONIE', First Name 'MOONIE', and Location 'MOONIE'. The 'LEN' field is set to '010060'. A dialog box is displayed over the form, asking: 'LEN 010060 exists on extension 5577 Swap with LEN 001010'. The dialog has 'Yes' and 'No' buttons. The right sidebar contains buttons: 'OK', 'Interrupt', 'Goto Surname Field (F5)', 'Clear Fields', and 'Pick From List'.

Option	View	Next	Prev	Add	Update	Del	Message	BDM	CM	Output	Exit
UWS	Campus	WRS	16	23651-00000	Extn	5580					
Centre	Group	ID	University	Cost Centre	LEN	010060	T12R01S01				
23651	CP001162		BUSINESS & ADMINISTRATION								

Surname	First Name	Location
MOONIE	MOONIE	MOONIE

Department/School	Division/College	Title	Fax
IT BUSINESS & ADMINISTRATION	IT BUSINESS & ADMINISTRATION	MRS	02 9678 7111

Position	UWS Mobile(s)
ADMIN OFFICER ACCOUNTS	0416045703

StaffID	E-Mail	BDM	IAC	M	Updated
1201020181	c.moonie@uws.edu.au	N	Y	N	28/04/2006

Enter LEN

Figure 5.3g: The prompt for swapping LENs

Extension moves between Campuses's

Where someone moves between campuses and changes extension number but retains all other information in respect to cost centre, title, Department/School etc. then this can be done by simply changing the campus and extension number on the entry. If there is only one entry on the original extension it will update it and make it .Vacant. If there is already a entry on the new extension and it is not .VACANT then there will be two entries on the extension after the update.

Direc - Telmax21 Directory Maintenance

Option View Next Prev Add Update Del Message BDM CM Output Exit

Message Details

UWS Campus	PTA	15	23651-00000	Extn	9333
Centre	Group ID	University Cost Centre		LEN	000046
23651	CP001162	BUSINESS & ADMINISTRATION			

Surname	First Name	Location
HOULAHAN	MICHAEL	ECG42

Department/School	Telephone
IT BUSINESS & ADMIN	9333
Division/College	Non UWS Mobile
IT BUSINESS & ADMINISTRATION	
Title	Fax
MR	
Position	UWS Mobile(s)
DIRECTOR	N

StaffID	E-Mail	BDM	IAC	M	Updated
	m.houlahan@uws.edu.au	N	Y	Y	28/04/2006

Figure 5.3h: Directory Entry before moving

Direc - Telmax21 Directory Maintenance

Option View Next Prev Add Update Del Message BDM CM Output Exit

Message Details

UWS	Campus	RCH	14	23651-00000	Extn	1141
Centre	Group ID	University Cost Centre		LEN	000144	
23651	CP001162	BUSINESS & ADMINISTRATION				

Surname	First Name	Location
HOULAHAN	MICHAEL	M16 0.012

Department/School	Telephone
IT BUSINESS & ADMIN	1141
Division/College	Non UWS Mobile
IT BUSINESS & ADMINISTRATION	
Title	Fax
MR	
Position	UWS Mobile(s)
DIRECTOR	N

StaffID	E-Mail	BDM	IAC	M	Updated
	m.houlahan@uws.edu.au	N	Y	Y	28/04/2006

Figure 5.3i: Directory Entry after moving

Directory Maintenance – Billing Distribution Maintenance (BDM)

The BDM button activates the function to maintain the distribution parameters for The Bilmax21 billing of cost centres.

Select the appropriate extension from within Directory Maintenance using the **View**, **Prev** and **Next** buttons on the Telmax21 toolbar.

Enter BDM by clicking on the BDM button. A window will appear displaying the distribution details relating to the selected extension.

Figure 5.3j: BDM window.

Click on the **Add** button to enter a new BDM record for the selected extension.

The cursor will move to the **Description** field. An extension may have multiple distribution lists. Each list must have a name unique within the extension billing record.

TAB forward through the fields and enter the **Start** date for distributing this Web Billing report.

Note: The Bilmax21 reports run based on a monthly cycle. Therefore; if you put in the start date, 15th Jan 2004, your first Bilmax21 reports will be for Jan 04.

If you wish to stop distributing this report, enter the date to finish in the **End** date field.

Select the distribution **Method** and **Type** from the pick list using the **Pick From List** button.

For on-line access to Bilmax21 reports, enter a **Username**, followed by a **Password** and **Password Confirmation** in the appropriately labelled fields.

The **LastSent** and **On** fields should be left blank as these will be automatically filled by the system each month after the Bilmax21 reports are run.

If you wish to use an email address other than the one on the main Directory Maintenance Screen, select **Y** in the **AltEmail** field and enter the alternate email address.

With the appropriate fields entered, the screen will appear as in Figure 5.3.g.

Direc - Telmax21 Directory Maintenance

Option View Prev Next Add Update Delete GroupList Exit

Distribution Group List Maintenance

Web Billing User Configuration Maintenance

For VANDA WHITWORTH

Description Web Billing Distribution List

Start 01/01/2004 Method EMAIL UserID whitworthv

End Type STANDARD Passwd

LastSent on Confirm

AltEmail

101278

1045

1 Row Satisfy's Search Criteria

StaffID	E-Mail	BDM	IAC	M	Updated
H980008	v.whitworth@uws.edu.au	Y	Y	N	06/11/2003

Figure 5.3k: Filled fields in BDM window.

When you are satisfied that the correct information has been entered, click **OK** and the **Group List** window will be displayed. This window is used to list the cost centres that the user will have access to. See Fig 5.3l.

StaffID	E-Mail	BDM	IAC	M	Updated
H980008	v.whitworth@uws.edu.au	Y	Y	N	06/11/2003

Figure 5.3l: Group ID window.

Click the **Add** button on the menu tool bar. The cursor will be positioned in the **Group ID** field. Click on the **Pick From List** button to select the correct group/cost centre to specify the group/cost centre that the user will have access to. If you select an upper level group identified by a **G**, then you will get all group/cost centres below that level;

ie: **University Cost Centre** will give you all cost centres but exclude the Tenants, Spare, etc., cost centres. The remaining fields will be automatically updated.

Click on **OK** to actually add the new entry.

Directory Maintenance – CM (Company Mobile)

Clicking on the CM button activates the function to open the Mobile Maintenance screen and in doing so automatically search in the Mobile Maintenance based on the Directory Maintenance record displayed at the time of clicking on the CM button. If you are already logged into the Mobile Maintenance it will pop the screen otherwise it will prompt you to login first before proceeding.

In the event that you make a record which has mobile assigned indicated by a value in the UWS Mobile(s) field to it .VACANT or .SPARE then when you save the changes the program will automatically invoke the CM function as above on the basis that you need to updated the mobile phone details.

Directory Maintenance - Output

To generate a directory report, first select the entries to be reported on by clicking on **View** as described earlier. Now click on **Output** and the **Select Report Format** window will pop up as shown in **Figure 5.3i**.

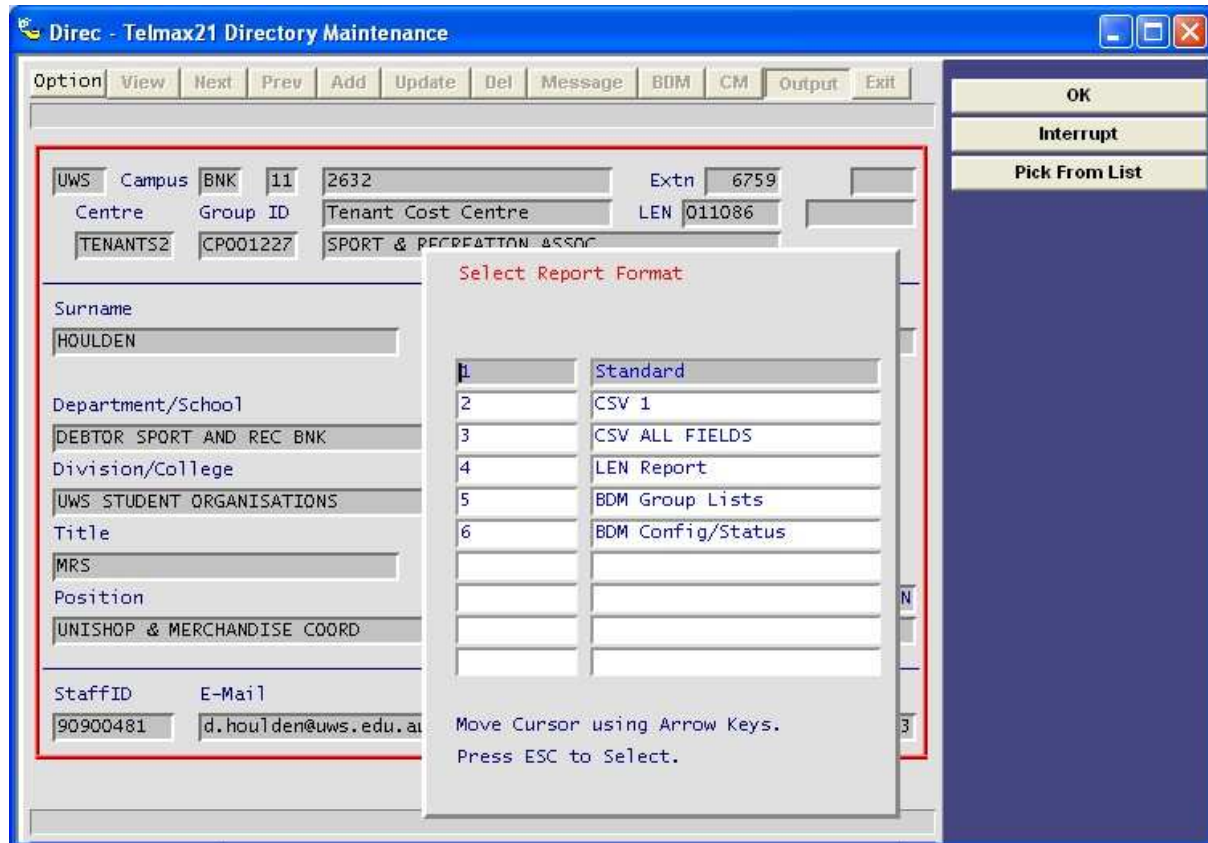


Figure 5.3m: Directory Output format window

The screen shown in **Figure 5.3i** displays an example of searching for all entries with the **Surname** of Smith with the Select Report Format window in the foreground. As can be seen at the bottom of **Figure 5.3i**, 17 records were found to match that condition.

Using the Up and Down arrows or by left clicking with the mouse, highlight the report format option to use and press <ESC>. A sort option window will appear, (Fig: 5.3j).

Report Format Options:

- **Standard** – Produces a formatted report of the following fields from the retrieved records:
 - Surname
 - First Name
 - Department/School
 - Division/College
 - Location
 - Position
 - Extn
- **CSV 1** - Produces an unformatted report of the retrieved records with the following fields separated by commas:
 - Surname
 - First Name
 - Department/School
 - Division/College
 - Location
 - Position
 - Extn

Note: Ensure that all details of the file to save the information in have been entered in Report Output Options before selecting this option. (Ref: *Telmax21 User Manual, System / Report Output Options*, for details.)

- **CSV ALL FIELDS** - Produces an unformatted report of the retrieved records including all fields in the record ,(listed below),separated by commas:
 - RecordNo
 - Site
 - Extgrid
 - Extn
 - Telephone
 - Mobile
 - Fax
 - Surname
 - First Name
 - Location
 - Department
 - Division/School
 - Title
 - Position
 - Email
 - Empid
 - W
 - L
 - P
 - Updated

Note: Ensure that all details of the file to save the information in have been entered in Report Output Options before selecting this option. (Ref: *Telmax21 User Manual, System / Report Output Options*, for details.)

- **LEN Report** - Produces a formatted report of the following fields from the retrieved records:
 - LEN number
 - Extension
 - Campus
 - Location
- **BDM Group Lists** - Produces a formatted report on the group lists for distribution of the reports, sorted by Surname.

The following fields from the retrieved records are included:

- Surname
- First Name
- UserID
- Distribution List Description
- Cost Centre Code
- Cost Centre Description

- **BDM Config/Status** - Produces a formatted report on the configuration details for distribution of the reports, sorted by Surname.

The following fields from the retrieved records are included:

- Surname
- First Name
- UserID
- Distribution List Description
- Start
- End
- Method
- Type
- LastSent
- Last Sent On
- AltEmail
- Email Address:

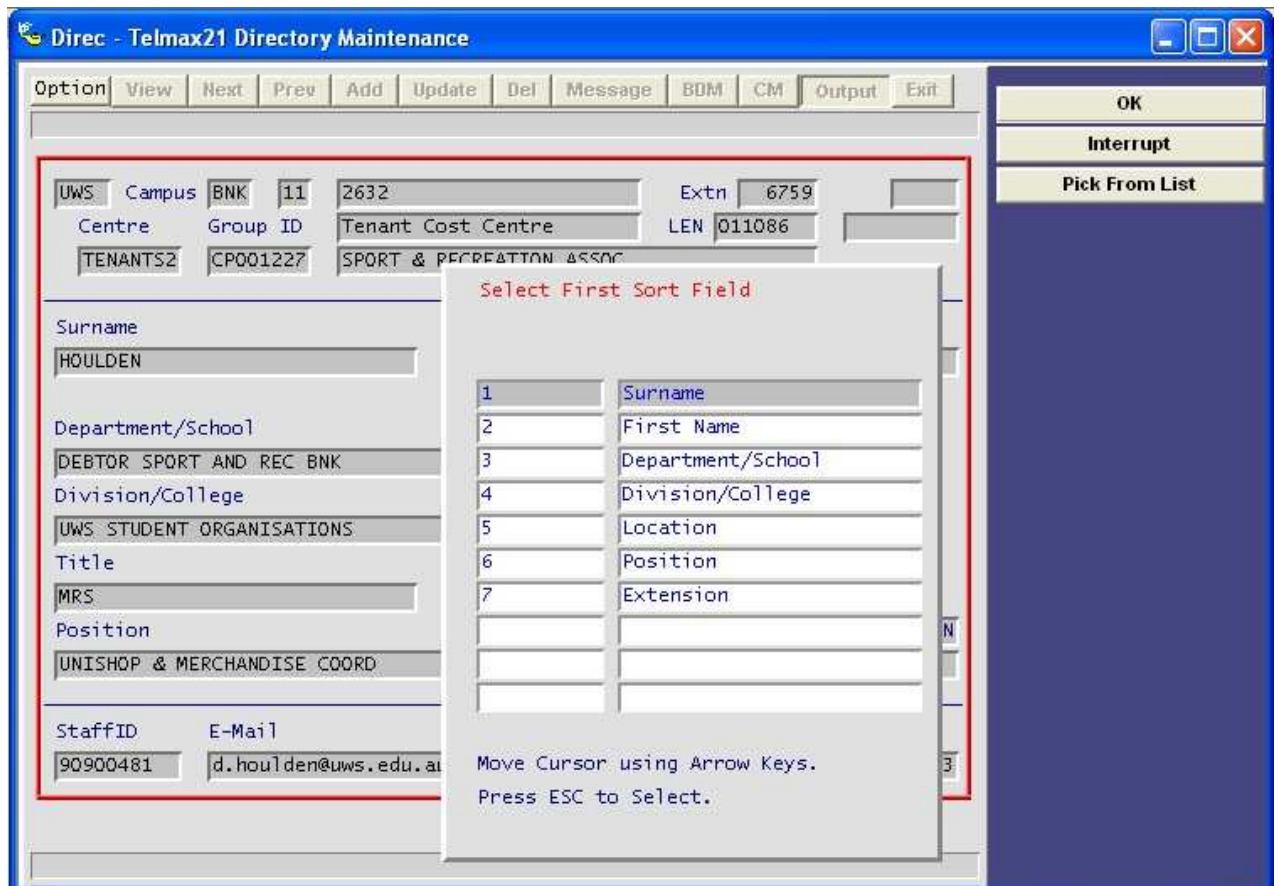


Figure 5.3n: Directory Output Sort window

Using the Up and Down arrows or by left clicking with the mouse, highlight the first field in the **Output Sort** window on which to sort the output data. Press <ESC> to select this field.

Repeat this process for three more fields displayed in the **Output Sort** window. (The report can be sorted on a maximum of four fields.)

When this is complete, the **Directory Report Options** window will appear.

Figure 5.30: Directory Output window

The options are:

- Continue** Generate the directory listing.
- Abort** Go back to the **Directory Maintenance** screen without generating a listing.
- Output Options** Access the Report Output Options. (Ref: Telmax21 User Manual/ System / Report Output Options, for details.)

Shown below is the output which would be displayed once the **Continue** button is clicked on.

21 Oct 2003	09:23:11	Telephone Directory					SALES				
Surname	First Name	Title	Extn	Department	Position/Title	Mobile No.	Ext	Pager No.	Int	Pager No.	Grp
Smith	Lynn	Mrs	6680	Key Accounts NSW	Sales Consultant						C
Smith	Robert	Mr	6566	Key Accounts VIC	Sales Consultant						C
Smith	Sally	Mrs	6100	Sales	Customer Service						C
Smith	Ian	Mr	4324	Others	Technical Officer						A
Smith	Ivan	Mr	3732	Admin NSW	Personnel Officer						A
Smith	Julian	Mr	3208	Key Accounts	Snr Sales Consultant						A
Smith	Harry	Mr	6583	Key Accounts VIC	Sales Consultant						C
Smith	Fiona	Mrs	2258	Admin	Accounts Payable						A
Smith	Mark	Mr	3459	Key Accounts	Sales Support						A
Smith	Neil	Mr	2039	Admin	Reception						A
Smith	Joan	Mrs	2187	Admin	Database Officer						A
Smith	Mark	Mr	2066	Admin	Accounts Receivable						A
Smith	Marty	Mr	2176	Admin	Senior Accountant						A
Smith	Steve	Mr	2344	Admin	Accounts Assistant						A
PAGE 1 E N D											

PAGE 1 END

Figure 5.31 Directory Listing output

NEW AND UPDATE GROUPS

Overviews

This program allows the user to define a hierarchical structure to define each of their cost centres (groups) and sub-cost centres for use in the billing and call accounting applications of Telmax21. This process involves:

- Assigning a unique identifier to each group or cost centre.
- Naming each group or cost centre.
- Positioning the group at the correct level within the organisation hierarchy.

In this way a tree structure representing your organisational structure can be constructed and costs calculated for any sub-tree of that hierarchy. A sample of the organisation hierarchy is given in **Figure 6.1a**.

The Telmax21 group hierarchy maintenance program recognises three valid types of groups.

- General Groups – These are groups which are the parents of other groups including other General Groups. General Groups are used to define the structure of the hierarchy.
- Extension Groups - Extension Groups are the lowest level groups in the system and contain the extensions themselves. They cannot be parent groups. The Extension Group is the link between the directory module of the Telmax21 and this module. Each extension is assigned to only one Extension Group, and therefore the costs incurred by that extension are assigned to that Extension Group and the General Groups it has as parents. An Extension Group must be unique to a site.
- Tributary Groups – These are also the lowest level groups in the system and cannot be parent groups.

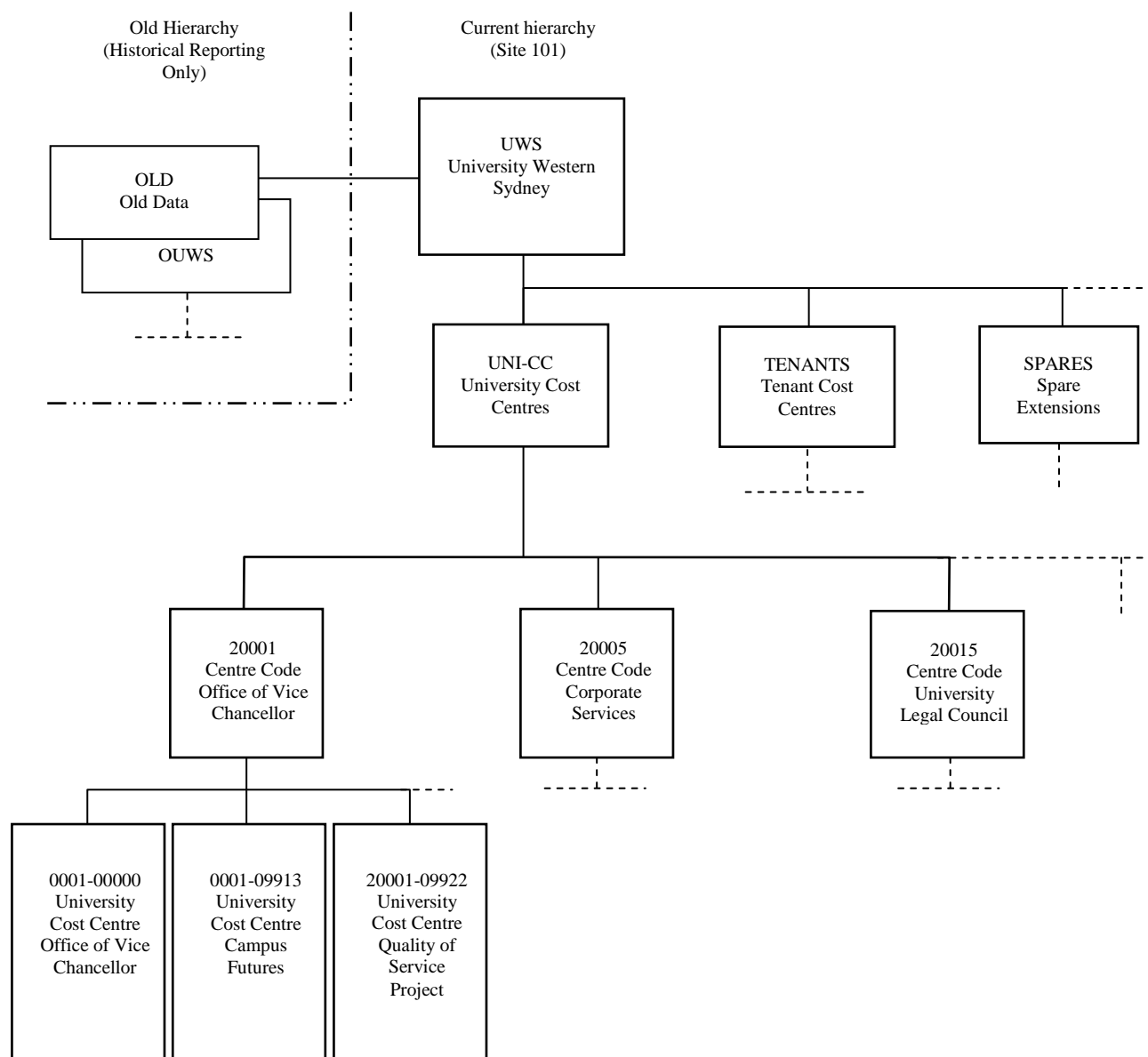


Figure 6.1a: Example of UWS organisational hierarchy tree

```
21 Dec 2003  15:31:29                GROUP HIERARCHY REPORT                HOBO
```

PARENT GROUP= UWS : University Western Sydney (Levels Reported: 4)
: University Western Sydney

Organisational Structure

```

|-----|-----|-----|-----|-----|-----|-----|-----|
UWS      : University Western Sydney
          : University Western Sydney
SPARES   : Spare Groups
          : Spare Groups
          SPARE   : Spare Extensions
          : Spare Extensions
TENANTS  : Tenant Cost Centres
          : Tenant Cost Centres
          CP001212: 1327
          : STEPHEN CLARKE
          CP001213: 1329
          : HAWKESBURY STUDENT ASSOCIATION
          CP001214: 1330
          : HAWKESBURY STUDENT UNION
          CP001215: 1336
          : PENNY TREVOR-JONES
          CP001216: 13481

```

$$\vec{v}$$

```

CP001242: 76717
          : EUREST (AUST) PTY LTD
CP001243: 73620
          : NATIONAL CAR PARKS
CP001244: 76718
          : CATERING (WEST) PTY LTD
CP001247: 77777
UNI-CC   : University Cost Centres
          : University Cost Centres
20001    : 20001 Centre Code
          : OFFICE OF VICE CHANCELLOR
CP001013: 20001-00000
          : OFFICE OF VICE CHANCELLOR
CP001014: 20001-09913
          : CAMPUS FUTURES
CP001015: 20001-09922
          : QUALITY OF SERVICE PROJECT
20005    : 20005 Centre Code
          : CORPORATE SERVICES
CP001016: 20005-00000
          : CORPORATE SERVICES
20015    : 20015 Centre Code
          : UNIVERSITY LEGAL COUNSEL
CP001017: 20015-00000
          : UNIVERSITY LEGAL COUNSEL
20021    : 20021 Centre Code
          : OFFICE OF UWS SECRETARY

```

GROUP HIERARCHY REPORT

PAGE 1

Figure 6.1b: UWS organisational hierarchy report

The Hierarchy Maintenance Screen

Orgstruct - Hierarchy Maintenance

Display Next Group In List

Type	Group ID	Name1	Name2	Level
G	UWS	University Western Sydney		0
G	UNI-CC	University Cost Centres		1

G 20001 20001 Centre Code 2

OFFICE OF VICE CHANCELLOR

Site :

Tariff:

Route :

No Selected Destination

128 Groups Selected

Hierarchy Maintenance

View

Up

Down

Previous

Next

First

Last

Add

Modify

Insert

Remove

Select Destination

Report

Exit

Figure 6.1c: Hierarchy Maintenance Screen

Input Fields

Field	Field Characteristics	Comments
Type	Character (G, E or T)	Specify the group as being General, Extension or Tributary. See Overview for more information on these group types.
I.D.	Alphanumeric	Unique identifier of the group. Automatically filled and validated against existing cost centres to prevent duplication.
Name 1	Alphanumeric	25 character field which is used to record the full cost centre code or group name depending on the system configuration.
Name 2	Alphanumeric	25 character field with a description that relates to the type of cost centre it belongs to.
Description	Alphanumeric	Cost Centre Description 40 character field to record descriptive group name to be displayed in Directory Maintenance and reports.
Level	Numeric (0-9)	User definition of the level of the group within the hierarchy. See Further Information .

Site	Numeric	Entered only for Extension or Tributary groups. Defines which site the group is assigned to.
Tariff	Character	Entered only for Extension or Tributary groups. Defines the tariff type associated with the group. Normally set at 'T', but can be set with 'A', for Administration, or 'G' for guest, enabling a different costing structure to be defined for calls made by extensions in that group.
Route	Numeric	Entered only for Tributary groups. Defines the route id of the tie-line connected to the site with no CLU. The cost of all incoming transit calls on this route will then be assigned to the Tributary group.

Menu Options

Menu Item	Comments
View	Allows the user to query the database and construct a view list which can then be browsed.
Up/Down	Move up or down one level in the hierarchy. Moving up a level will make the currently selected group's parent the selected group. Moving down one level will make the first child (sorted alphabetically) of the currently selected group the selected group.
Previous/Next	This will either display the next or previous group in the browse list constructed by querying the database with the view option, or will display the next/previous group which exists on the same level as the currently selected group. See Further Information .
First/Last	Display the first or last entry from the current level or view list.
Add	Adds a new group at the same level as the currently selected group. See Overview for more information on the types of groups that may be added.
Modify	Modify the currently selected group. The I.D. field is the only one which may not be modified.
Insert	Insert a group at the current level. See Further Information .
Remove	Remove the currently selected group from the hierarchy. A more detailed explanation of this option is provided in Further Information .
Select Destination	The currently selected general group will become the destination for any subsequent group move operations.
Clear Destination	Clear the currently displayed destination group. This option is mutually exclusive with the 'Select Destination' option.
Group Move	Move the currently selected group beneath the group displayed in the 'Selected Destination' box.
Report	Produce a group hierarchy report, using the currently selected group as the root group from which to commence the report. See the Print Hierarchy Report manual section for further details.
Exit	Exit the Group Hierarchy Maintenance Menu.

Further Information

‘Insert’ Menu Option

There are two ways to insert a new group into the existing hierarchy.

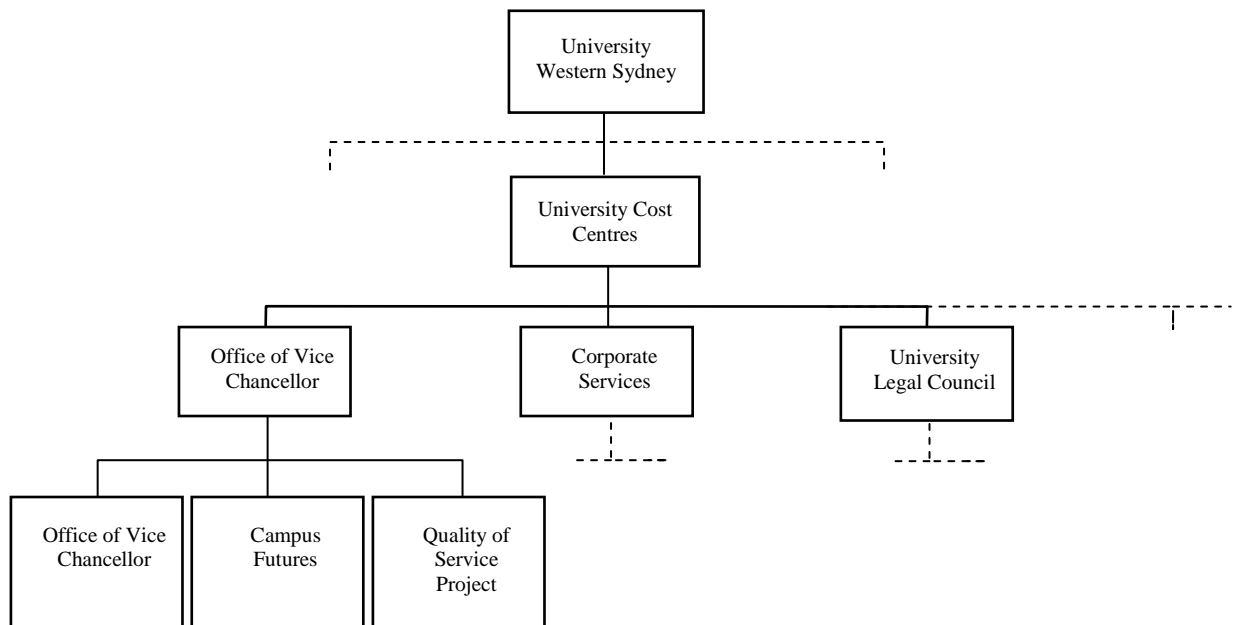


Figure 6.1d: Example hierarchy configuration

If you had selected group Office of Vice Chancellor, using the example configuration given in **Figure 6.1d**, and wished to insert a group named Phone Services, you would be prompted to specify whether you wished to insert the group above group Office of Vice Chancellor or below University Cost Centres.

If you chose to insert Phone Services above Office of Vice Chancellor it would insert it between the University Cost Centres group and Office of Vice Chancellor only, as is demonstrated by **Figure 6.1e** below.

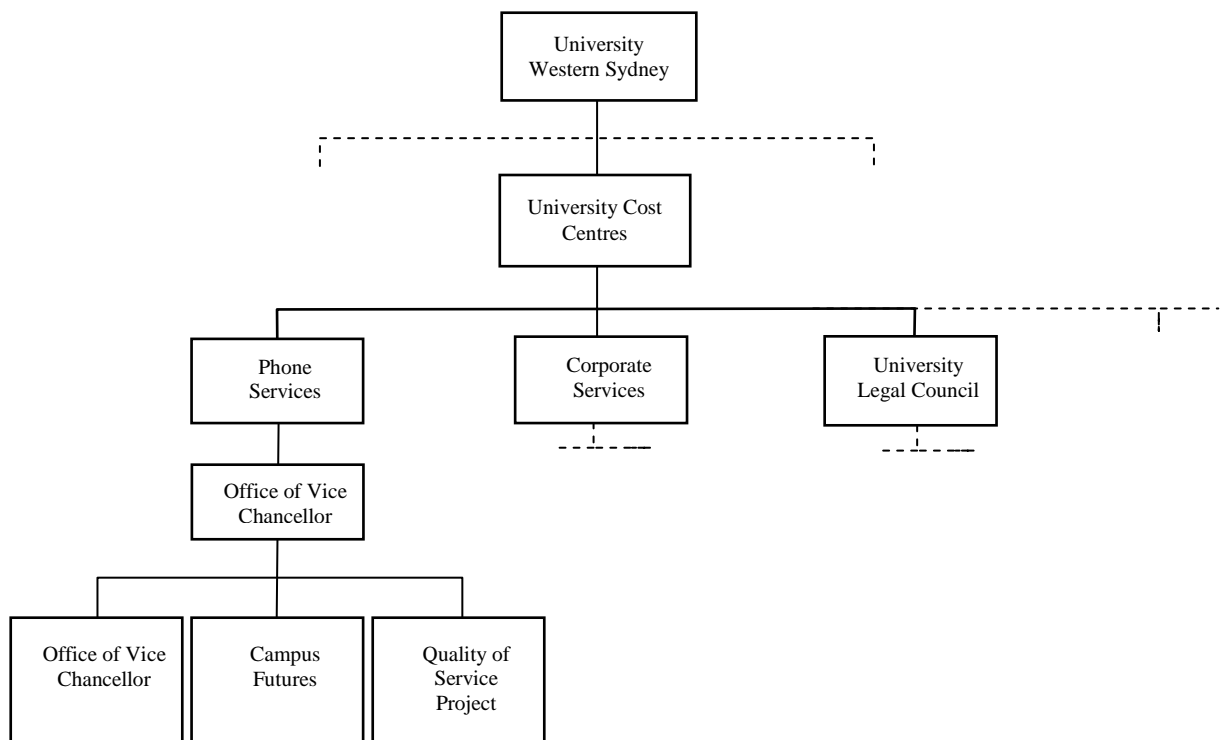


Figure 6.1e: Insert Phone Services above Office of Vice Chancellor

If you chose to insert the group below University Cost Centres it would insert it between University Cost Centres and every child of University Cost Centres, ie. every group on the same level and with the same parent as Office of Vice Chancellor. This is demonstrated in **Figure 6.1f**.

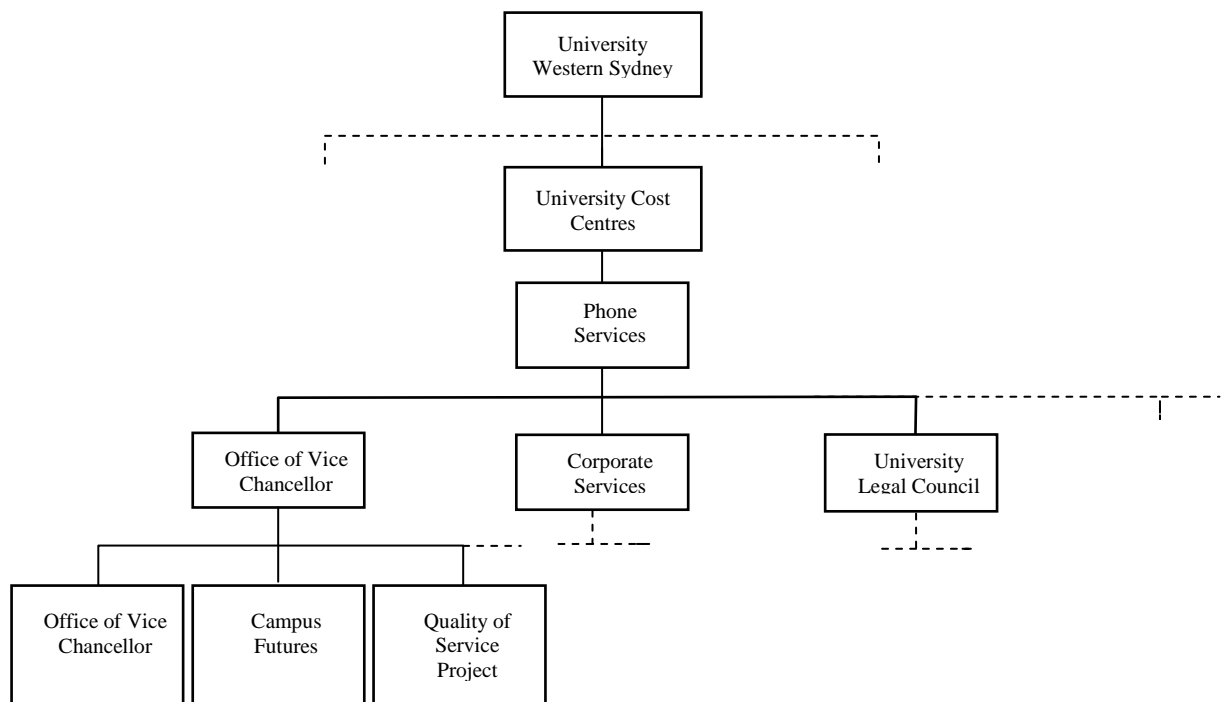


Figure 6.1f: Insert Phone Services below University Cost Centres

'Remove' Menu Item

When you attempt to remove a group from the hierarchy there are three alternative actions that may occur.

If you attempt to remove an Extension Group that still has at least one extension listed against it, an error message will be displayed informing you that it is not possible to remove the group. The reason for this is that allowing removal of the group would result in these extensions still being assigned to a group that no longer exists. If you do wish to remove an Extension Group, you must first ensure that no extensions are allocated to that group by using the Directory Maintenance program.

If you choose to remove a group that can be removed (ie. has no extensions listed against it) you will be asked to confirm the action before the removal takes place. Once you confirm it by pressing 'y', the group is removed.

Figure 6.1g demonstrates what occurs when you remove a group which has children. As you can see, when group Phone Services was removed all of its children were shifted up one level.

If you attempt to remove a general group which has, as children:

- General groups with no children, or
- Extension groups with no extensions allocated to them

the confirmation prompt will give you the extra option of deleting these groups automatically by pressing 'r' rather than 'y' at the confirmation prompt. **Figure 6.1g** demonstrates the results of using the 'y' response at the confirmation prompt when removing the Phone Services group.

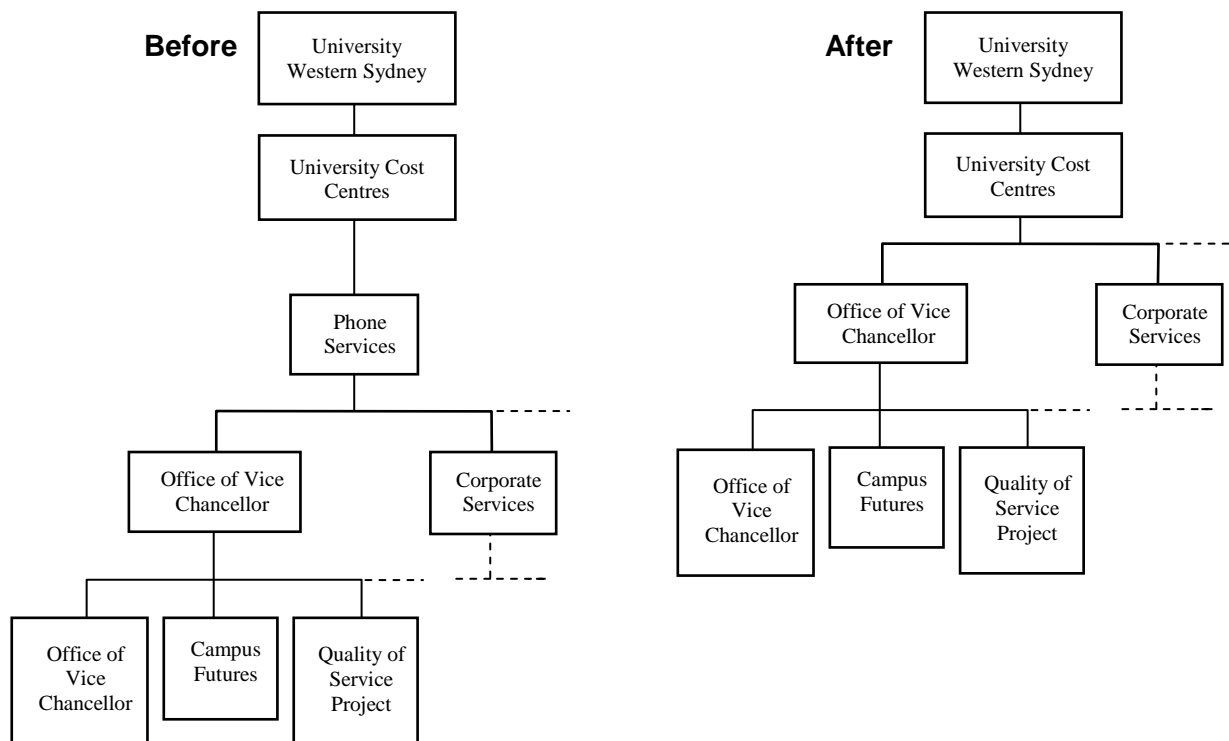


Figure 6.1g: Effect of removing the 'Phone Services' group using the 'y' option.

Figure 6.1h demonstrates the results of removing the Phone Services group when using the 'r' response at the confirmation prompt, assuming in this instance that the Corporate Services and other groups on the same level are Extension Groups with no extensions allocated to them.

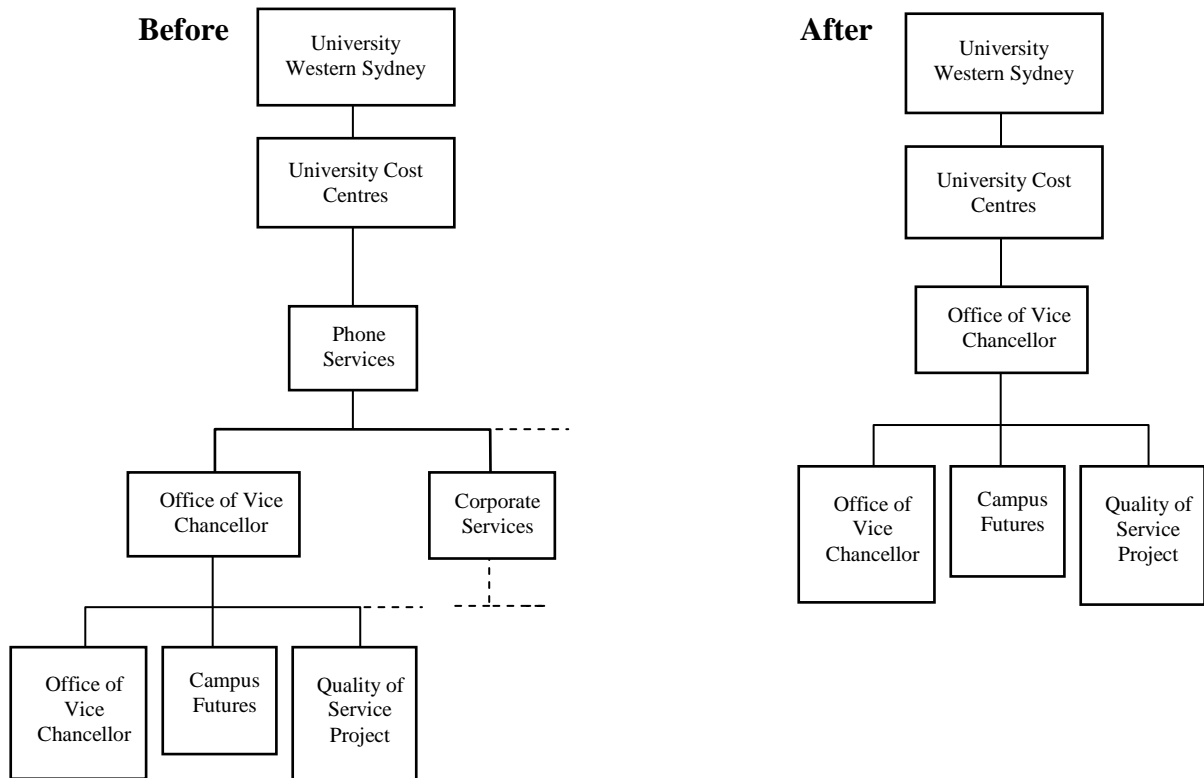


Figure 6.1h : Effect of removing the Phone Services group using the 'r' option.

Group Levels

Each group should be thought of as having two distinct levels.

The actual level of the group determines the group's relative position within the hierarchy. It can be calculated by counting the number of groups any group has above it in the hierarchy. Thus the top group of any hierarchy will have an actual level of 0, all of its children groups will have an actual level of 1, and so on. **The actual level of a group is not shown anywhere on the screen, but rather is implied by the group's position in the hierarchy.**

The level field which is displayed on the screen is a user defined level. The default value for this field is the actual level of the group, although this default can be overridden. **Figure 6.1i** displays part of the UWS hierarchy that has been constructed using the actual level of every group as the user defined level.

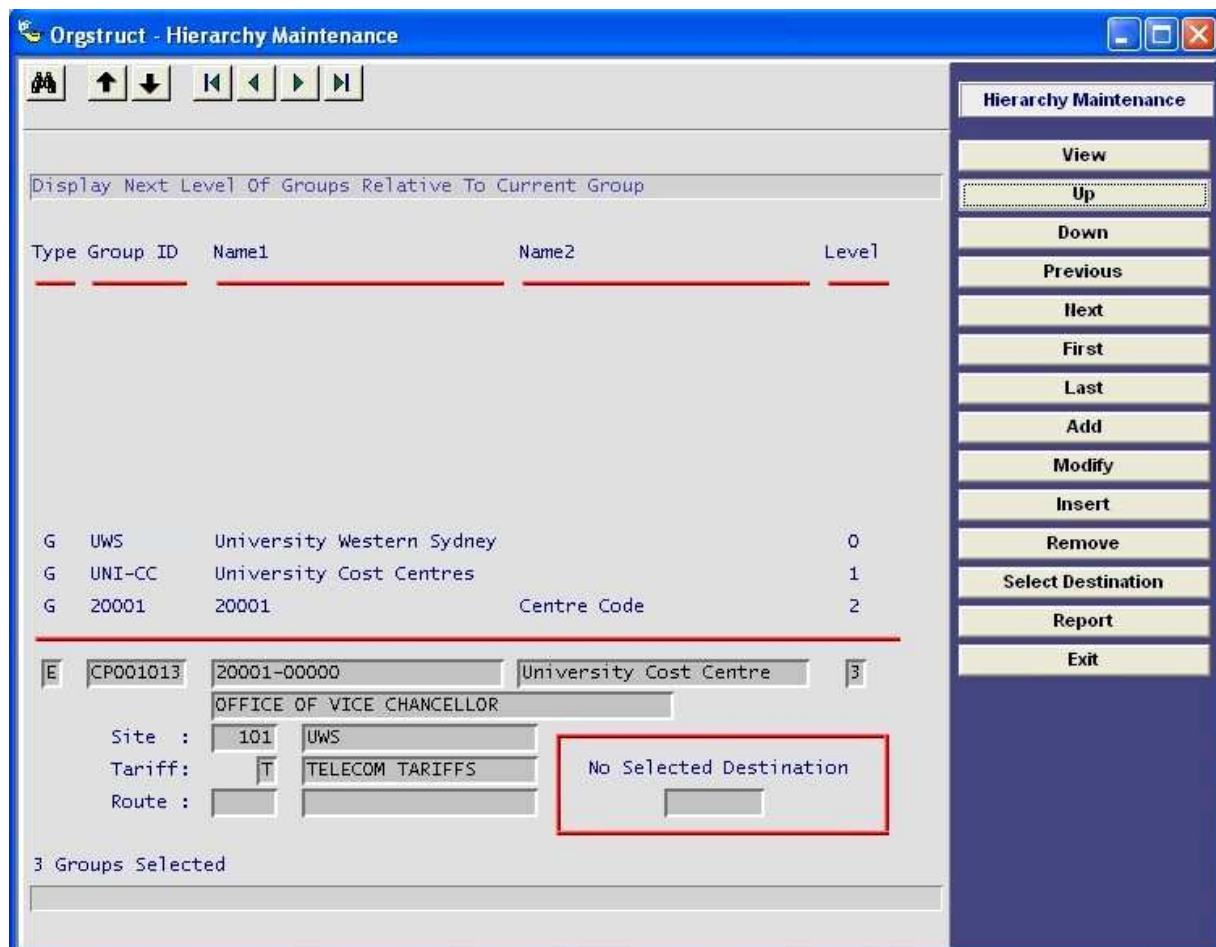


Fig.6.1i: UWS Hierarchy Example

Figure 6.1j demonstrates what the same hierarchy might look like if the default group level was overridden. It is UWS policy to use the default, (actual), levels to define the hierarchy. As such the level number should not be changed.

(Unless an organisation has a specific need to use the level field to represent something other than the actual level of the group, it is best to leave it set at the default value.)

Navigating around the hierarchy

‘Previous’, ‘Next’, ‘First’, ‘Last’, ‘Up’ and ‘Down’ Menu Buttons

The **Next**, **Previous**, **First** and **Last** menu buttons operate in two different ways. How they operate at any given time depends on the sequence of actions before you select them.

If you have just constructed a view list by clicking on **View**, selecting **Previous** or **Next** will take you to the previous or next item in the view list, regardless of its position in the hierarchy. Selecting **First** or **Last** will take you to the first or last item in the view list, regardless of its position in the hierarchy.

Moving **Up** or **Down** within the hierarchy signals to the program that you wish to work with the currently selected hierarchy. From this point on the functionality of the **Previous**, **Next**, **First** and **Last** menu items changes. Any view list previously selected will no longer be current. Selecting **Previous** or **Next** will now cause the previous or next group on the current level of the hierarchy to be selected while selecting **First** or **Last** will cause the first or last group on the current level of the hierarchy to be selected. See Figure 6.11 below.

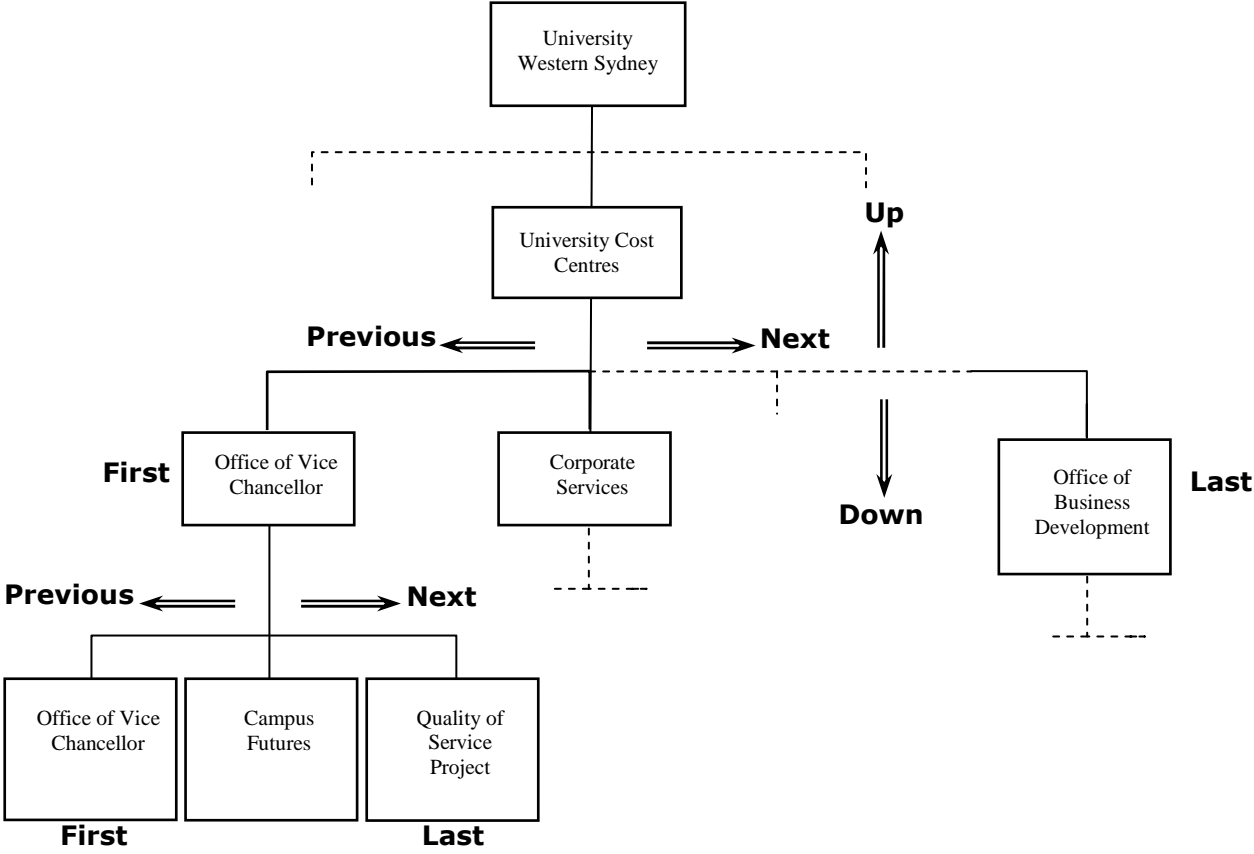


Figure 6.11: Navigating around the hierarchy

Moving Groups within the Hierarchy

Groups may be moved within the hierarchy so as to connect to different branches of the hierarchy tree, including rising or descending through the levels. This should be done with great care and forethought.

Orgstruct - Hierarchy Maintenance

Display Previous Group In List

Type	Group ID	Name1	Name2	Level
G	UWS	University Western Sydney		0
G	UNI-CC	University Cost Centres		1
G	20001	20001	Centre Code	2

E CP001015 20001-09922 University Cost Centre 3

QUALITY OF SERVICE PROJECT

Site : 101 UWS

Tariff: T TELECOM TARIFFS

Route :

Selected Destination Group

UNI-CC

3 Groups Selected

Hierarchy Maintenance

View

Up

Down

Previous

Next

First

Last

Add

Modify

Insert

Remove

Clear Destination

Group Move

Report

Exit

Figure 6.1m: Hierarchy before moving group '200001-09922' to destination 'UNI-CC'.

Select Destination

This option will place the currently selected General Group into the 'Selected Destination Group' box thus defining under which group the group to be moved will reside following the move.

Clear Destination

Use this option to remove the currently selected destination from the 'Selected Destination Group' box. The heading in the box will revert to 'No Selected Destination' until another destination group is selected.

Group Move

This option will move the currently selected group beneath the group displayed in the 'Selected Destination Group' box. The result of performing the group move as shown in **Fig 6.1m** is displayed in **Fig 6.1n** along with the corresponding hierarchy report.

The screenshot shows the 'Orgstruct - Hierarchy Maintenance' window. The main area displays a table with columns: Type, Group ID, Name1, Name2, and Level. The table contains two rows: 'G UWS University Western Sydney 0' and 'G UNI-CC University Cost Centres 1'. Below the table, a selected group is shown: 'E CP001015 20001-09922 University Cost Centre 3'. The 'QUALITY OF SERVICE PROJECT' field is also visible. A red box highlights the 'No Selected Destination' message. The bottom status bar indicates '129 Groups Selected'. On the right, a 'Hierarchy Maintenance' panel contains buttons: View, Up, Down, Previous, Next, First, Last, Add, Modify, Insert, Remove, Select Destination, Report, and Exit.

Type	Group ID	Name1	Name2	Level
G	UWS	University Western Sydney		0
G	UNI-CC	University Cost Centres		1

E	CP001015	20001-09922	University Cost Centre	3
---	----------	-------------	------------------------	---

QUALITY OF SERVICE PROJECT

Site : 101 UWS

Tariff: T TELECOM TARIFFS

Route :

No Selected Destination

129 Groups Selected

Fig 6.1n: Results of moving group '200001-09922' to destination 'UNI-CC'.

Note: The value in the level field displayed on the screen is the same as it was before the group was moved. This is because it is a user-defined field and is not updated automatically during the move. Care must be taken to either; not move groups between levels, or to update the level field manually with the correct new level number following the move.

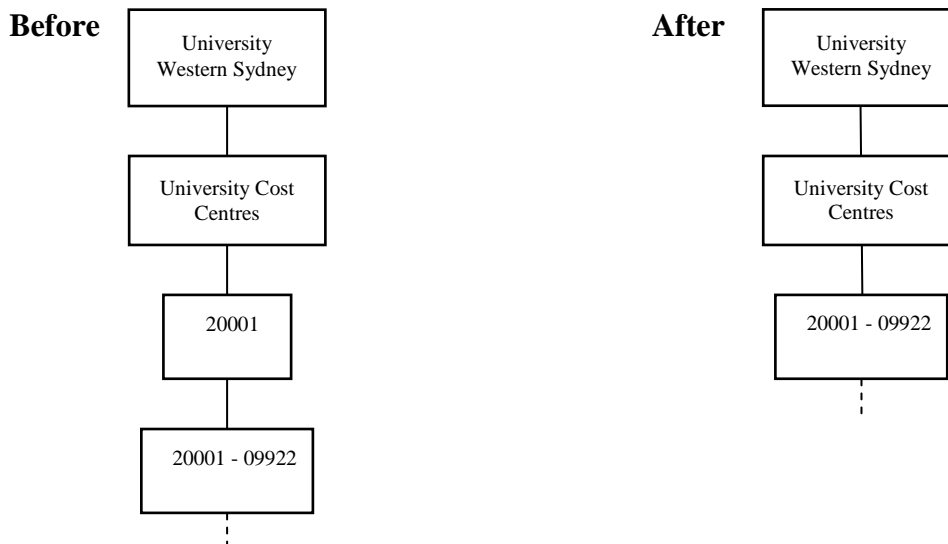


Fig 6.1o: Results of moving group '200001-09922' to destination 'UNI-CC'.

Group Hierarchy Report

21 Dec 2003 16:25:39 GROUP HIERARCHY REPORT HOB0

PARENT GROUP= UWS : University Western Sydney (Levels Reported: 4)
: University Western Sydney

Organisational Structure

```

UWS : University Western Sydney
: University Western Sydney
SPARES : Spare Groups
: Spare Groups
SPARE : Spare Extensions
: Spare Extensions
TENANTS : Tenant Cost Centres
: Tenant Cost Centres
CP001212: 1327
: STEPHEN CLARKE
      |
      v
CP001247: 77777
UNI-CC : University Cost Centres
: University Cost Centres
20001 : 20001 Centre Code
: OFFICE OF VICE CHANCELLOR
CP001013: 20001-00000
: OFFICE OF VICE CHANCELLOR
CP001014: 20001-09913
: CAMPUS FUTURES
20005 : 20005 Centre Code
: CORPORATE SERVICES
CP001016: 20005-00000
: CORPORATE SERVICES
20015 : 20015 Centre Code
: UNIVERSITY LEGAL COUNSEL
CP001017: 20015-00000
: UNIVERSITY LEGAL COUNSEL
20021 : 20021 Centre Code
: OFFICE OF UWS SECRETARY
CP001018: 20021-00000
: OFFICE OF UWS SECRETARY
      |
      v
30855 : 30855 Centre Code
: OFFICE OF BUSINESS DEVELOPMENT
CP001211: 30855-10083
: ENGLISH LANGUAGE CENTRE
CP001015: 20001-09922
: QUALITY OF SERVICE PROJECT
    
```

GROUP HIERARCHY REPORT

Fig 6.1p Sample of the Group Hierarchy Report following the Group Move

HIERARCHY REPORT

The **Hierarchy Report** generates a report containing the hierarchical structure of the organisation.

The following input screen appears when the **Hierarchy** report is selected from the **Hierarchy** menu.

Input Screen

Figure 6.2a Group Hierarchy Report screen

Input Screen Description

Field	Field Characteristics	Comments
Group Id	Enter a specific General Group name or click on Pick From List to find, then OK to select.	Selects the General Group to be reported on.
Levels Reported	Enter a specific number of levels to report on or click on Pick From List to find, then OK to select.	Selects the number of levels underneath the selected General Group to be reported on. Specifying a higher number will produce more groups in the report.

Hierarchy Report Output Example

```

-----
08 Jan 2004   14:46:00                GROUP HIERARCHY REPORT                TCP HOB0                T21 2.00
-----

PARENT GROUP= 20001: 20001 Centre Code (Levels Reported: 4)
                  : OFFICE OF VICE CHANCELLOR

Organisational Structure
20001  : 20001 Centre Code
       : OFFICE OF VICE CHANCELLOR
       CP001013: 20001-00000
       : OFFICE OF VICE CHANCELLOR
       CP001014: 20001-09913
       : CAMPUS FUTURES
       CP001015: 20001-09922
       : QUALITY OF SERVICE PROJECT

GROUP HIERARCHY REPORT                PAGE    1    END

```

Figure 6.2b: Group Hierarchy Report

Report Interpretation

The table below gives a description of the information that is contained under the various report headings:

Label	Description
Organisational structure	Extension Group ID, followed by the Group name.

Each left indent represents a level in the hierarchy.

All groups with a similar left indent are on the same level in the hierarchy.

All groups are sub-groups (child groups) of the closest group above it with the next shortest left indent.

DIALLED NUMBER REPORT

Report Description

The **Dialled Number Report** is useful to determine the most frequently dialled numbers, the most expensive numbers, or simply calls per route.

This in turn provides useful information to allow a tie-line route to be dimensioned to allocate telephone numbers into a speed dial group and provide carriers a snapshot of the usage and determine the best call charge option.

All calls made from many different extensions and booked to one Account Code can also be reported on using this report.

Dialled Number Input Screen

Stage 1

Select reporting period, site and route. All sites and all routes can be selected.

The screenshot shows a software window titled "Dialled Number Report". Inside, the header area says "TRANS-MIT" and "Dialled number Report" with the date "21/10/2003". The main configuration area includes:

- Report Type:** Radio buttons for "Standard" (selected) and "Extended - Carrier Comparison".
- Date Range:** "Date From" and "To" both set to "20/10/2003".
- Site and Route:** "Site ID" is "103", "RtTyp/ID" is empty, and a dropdown menu shows "MLB MELBOURNE" and "All Routes".
- Account Code:** An empty text field.
- Filters:** Checkboxes for "Ignore Transit Calls", "Remove Access/Strip Digits", "Exclude Original Short Hold and Configuration Errors", "Overflow Calls", "Non Overflow Calls", and "Overflow + NonOverflow Calls".
- Buttons:** "Enter Account Code" at the bottom and "OK", "Interrupt", "Pick From List" on the right sidebar.

Figure 7.1a: Dialled Number Report Input screen

Field	Field Characteristics	Comments
Report Type	Radio button	Select whether a standard report or an extended report that includes carrier comparisons is required.
Date from:	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
Date to:	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Site Id:	Enter a specific Site ID, or click on Pick From List to find, then OK to select.	This field sets the ID of the site to be reported on. This field may not be left blank.
Rt Type/ID:	Enter a specific Route type or ID, or click on Pick From List to find, then OK to select.	This field sets the ID of the route to be reported on. Leaving this field blank selects all routes.
Account Code:	Enter a specific Account code to report on.	Leaving this field blank selects all accounts.
Ignore Transit calls	Checkbox	Do not report on transit calls.
Remove Access/Strip digits	Checkbox	Removes any access codes or leading digits to the actual dialled number as set in the route configuration tables.
Exclude Original Short Hold and Configuration errors	Checkbox	Do not report on original Short Hold and any Configuration errors
Overflow calls Non Overflow calls Overflow + Non Overflow calls	Radio buttons	Include overflow calls in report.
		Include non overflow calls in report.
		Include both overflow and non overflow calls in report.

Click **OK** when this screen is complete.

If Carrier comparison has been selected, the Carrier Comparison Report Parameters window appears.

Carrier Comparison Report Parameters Window

TRANS-MIT
Dialled Number Report

21/10/2003

Carrier Comparison Report Parameters

Apply Exclude
Tariff Short Hold
Markup No Cost Calls

Actual Carrier : I ISDN
Recost As : R PowerTel
Alternate Carriers : T

Enter Y/N to Include or Not, the tariff markup for Alternate Carriers

OK
Interrupt
Pick From List

Field	Field Characteristics	Comments
Actual Carrier	Enter a specific Carrier ID, or click on Pick From List to find, then OK to select.	This field sets the ID of the Carrier to be reported on. This field may not be left blank.
Recost as	Enter a specific Carrier ID, or click on Pick From List to find, then OK to select.	This field sets the ID of the carrier to re-cost the calls as in the report.
Alternate carriers	Enter a specific Carrier ID, or click on Pick From List to find, then OK to select.	This field sets the ID of an alternate carrier.
Apply Tariff Markup	Check box	This excludes any tariff markups set in the tariff tables.
Exclude Short Hold No Cost Calls	Check box	Do not report on original Short Hold and No Cost Calls

Stage 2

Select an existing list by clicking on **Choose** or create a new one by clicking on **New**. If **Choose** is selected, a list of already set up dialled number lists is displayed, from which one may be selected. Once such a selection has been made, changes to the existing list may be made if desired by clicking on **Edit**.

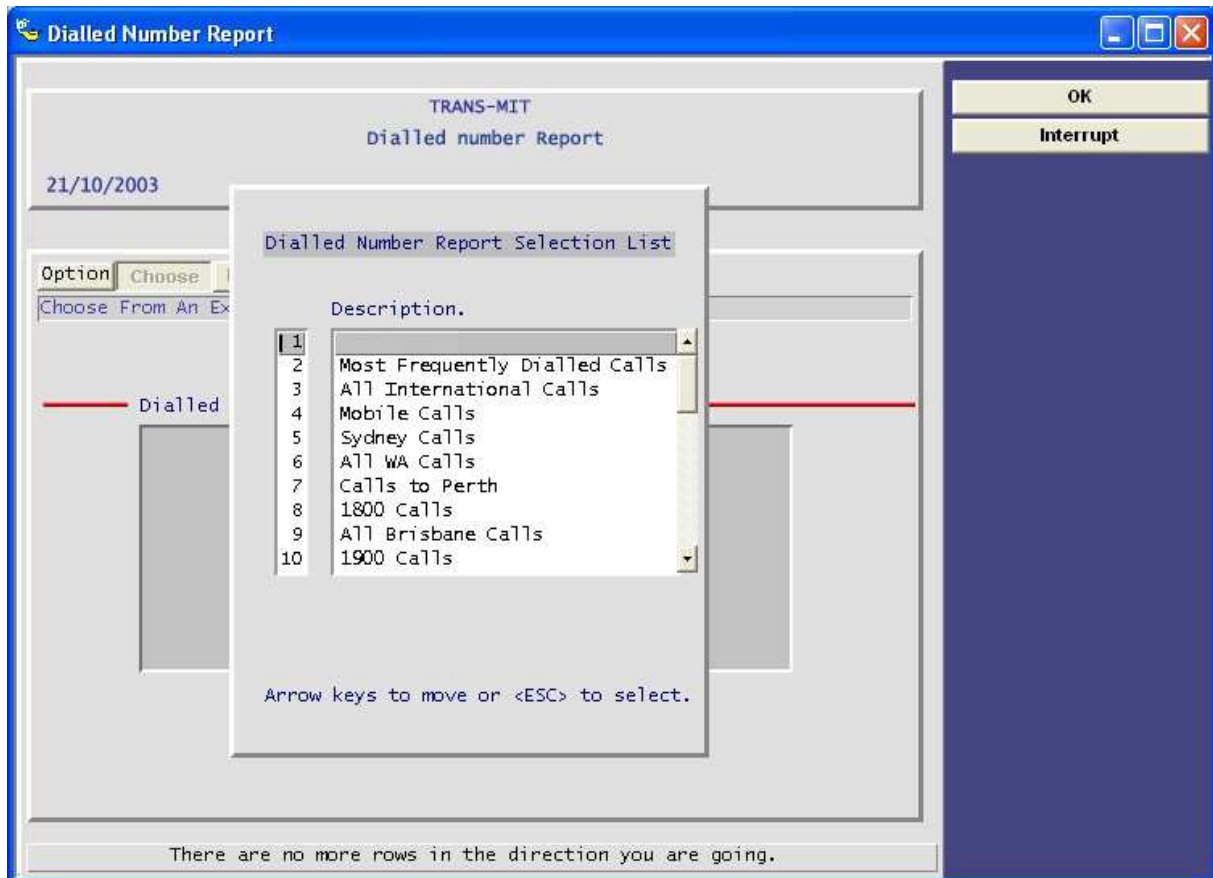


Figure 7.1b: Dialled Number Report Selection List Window

Stage 3

If **New** is selected, a list of dialled numbers may now be entered. Each entry in the list may cover a range of numbers. Simply type in the dialled number to report on, using ‘*’ to represent any number of digits and ‘?’ to match a single digit. Press **Enter** to move to the next field and type in the number of digits to be analysed. This can be from 0 to 20, where 0 means analyse all numbers. Press **Enter** again and enter a short description for the dialled number. Click on **OK** to finish or press **Enter** to type in more dialled numbers.

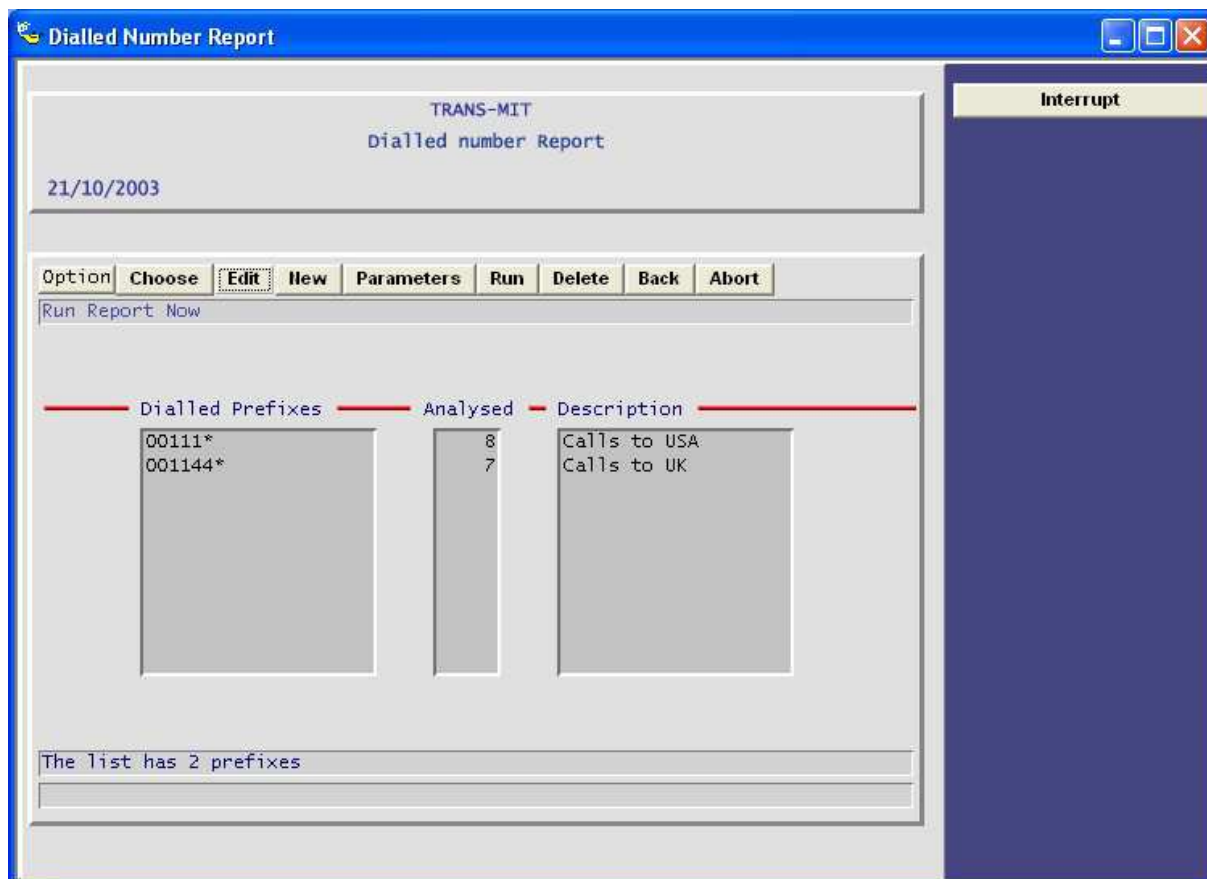


Figure 7.1c: Dialled Number Report prefix selection window

To use the Account Code feature, select the two dates required along with one account code. The site ID and Route ID are not required. You may create a new list and name it 'Account Codes' with ‘*’ in the dialled number field and ‘0’ in the number of digits to be analysed field. Alternatively you can re-use the most frequently dialled number field.

Stage 4

The report parameters may now be modified. The Dialed Number List Report Parameters window appears automatically after creating a new list or after clicking on **Parameters** after choosing an existing list.

Enter the report parameters as shown in the diagram below and then click on **OK** to continue.

Figure 7.1d: Dialed Number Report Parameters window.

Stage 5

Choose whether the report is to be sorted by frequency (number of calls), dialled number, cost or if no sorting is to be carried out.

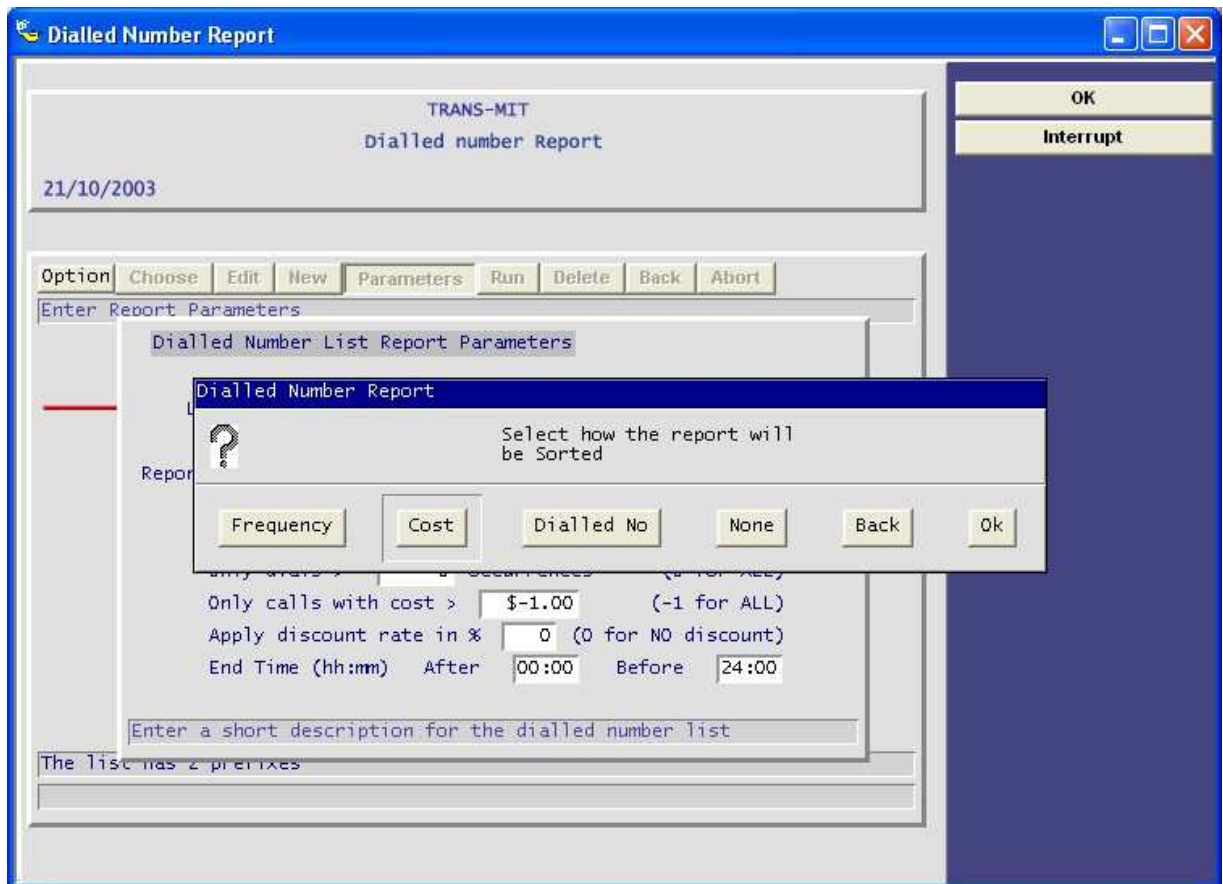


Figure 7.1e: Dialled Number Report Sort Selection window

Stage 6

Now run the report by clicking on **Run**.

Dialled Number Report Output Example

```

-----
20 Oct 2003   17:10:40                DIALLED NUMBER REPORT                TCP TRANSMIT                TELMAX21 2.0
-----
Date From: 21/10/2003 To: 21/10/2003
Report Type: STANDARD
Both Overflow and Non Overflow Calls: B
Site ID: 103      Site Name: MLB MELBOURNE      Ignore Transit Calls: Y
Route ID:         Route Name: All Routes        Remove Access/Strip Digits: Y
Account Code:     Exclude Original Short Hold & Configuration Errors: Y

List# 35 -- International - USA & UK -- has 2 prefixes (Sort = C, Top 33 dials)

For the Actual Carrier, the Original call cost is used if recost errors occur
For the Alternate Carriers, the Actual Carrier call cost is used if recost errors occur
-----
|          | TOTAL NUMBER | ----- DURATION ----- |          |          |          |
| DIALLED  | OF CALLS    | TOTAL   AVERAGE         | COST     |          |          |
| NUMBER   |             | hhhhhh:mm:ss   hh:mm:ss | TOTALS   | AVERAGE |          |
|-----|-----|-----|-----|-----|-----|
0011441*      1      00:24:20   00:24:20      31.03      31.03
00111800*     1      00:05:48   00:05:48       7.31       7.31
00111630*     1      00:00:52   00:00:52       1.00       1.00
00111301*     1      00:00:48   00:00:48       .91        .91
00111212*     1      00:00:32   00:00:32       .57        .57
Totals        5      00:32:20   00:06:28      40.82       8.16
=====
DIALLED NUMBER REPORT                PAGE 1 END

```

Figure 7.1f: Dialled Number Report

Report Interpretation

Heading	Description
DIALLED NUMBER	The actual number which was dialled.
TOTAL NUMBER OF CALLS	The number of calls made to the specific dialled number.
DURATION - TOTAL	The total duration of calls to the specific dialled number.
DURATION - AVERAGE	The total duration of the calls divided by the number of calls.
COST - TOTALS	The total cost of calls to the specific dialled number.
COST - AVERAGE	The total cost of the calls divided by the number of calls.

EXTENSION USAGE REPORT

Report Description

The **Extension Usage** Report is useful when determining particular usage patterns. The report produces information on one extension or an Extension Group. The histogram represents the telephone traffic of incoming and outgoing calls on an hourly basis. A typical use of this report would be for a manager to identify peak periods of telephone usage and thus allows correct staffing patterns.

Extension Usage Input Screen

Figure 7.2a: Extension Usage report screen.

Input Screen Description

Field	Field Characteristics	Comments
Date from	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
Date to	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Site ID	Enter Site ID or click on Pick From List to find, then OK to select.	Selects the site to be reported. Must use one site.
Extn Group	Enter a specific Extension Group ID, or blank for a single extension. Otherwise, click on Pick From List to find, then OK to select.	Selects the Extension Group to be reported on. If left blank, an extension number must be used in the next field.
Extension	Used if Extension Group not selected.	Records the extension number to be reported on.

Extension Usage Report Output Example

In the report below CALLS IN INTERVAL are the actual calls in progress in the hour shown, some calls may overlap into the next time band and hence be shown twice.

21 Oct 2003 18:18:34		EXTENSION USAGE REPORT				TCP TRANS-MIT				TELMAX21 2.0					
Date From: 20/10/2003 To: 20/10/2003															
Site ID: 103 MLB MELBOURNE															
Extn Grp: SALES															
Extension: 1001															
INTERVAL		ERLANG	CALLS IN	TOT.OCCUPANCY	PERCENTAGE	AVERAGE DAILY OCCUPANCY/EXTENSION HISTOGRAM									
hh:mm-hh:mm			INTERVAL	PER INTERVAL	0	10	20	30	40	50	60	70	80	90	100
00:00-01:00		.00	0	00:00:00	.0	.									
01:00-02:00		.00	0	00:00:00	.0	.									
02:00-03:00		.00	0	00:00:00	.0	.									
03:00-04:00		.00	0	00:00:00	.0	.									
04:00-05:00		.00	0	00:00:00	.0	.									
05:00-06:00		.00	0	00:00:00	.0	.									
06:00-07:00		.00	0	00:00:00	.0	.									
07:00-08:00		.00	0	00:00:00	.0	.									
08:00-09:00		.00	0	00:00:00	.0	.									
09:00-10:00		.00	0	00:00:00	.0	.									
10:00-11:00		.04	1	00:02:36	4.3	.	>>								
11:00-12:00		.03	2	00:01:52	3.1	.	>								
12:00-13:00		.09	3	00:05:28	9.1	.	>>>>								
13:00-14:00		.00	0	00:00:00	.0	.									
14:00-15:00		.02	1	00:01:24	2.3	.	>								
15:00-16:00		.00	0	00:00:00	.0	.									
16:00-17:00		.05	1	00:03:00	5.0	.	>>								
17:00-18:00		.01	1	00:00:52	1.4	.									
18:00-19:00		.00	0	00:00:00	.0	.									
19:00-20:00		.00	0	00:00:00	.0	.									
20:00-21:00		.00	0	00:00:00	.0	.									
21:00-22:00		.00	0	00:00:00	.0	.									
22:00-23:00		.00	0	00:00:00	.0	.									
23:00-24:00		.00	0	00:00:00	.0	.									
			INTERNAL	INCOMING	OUTGOING	TOTAL									
Total Number of Calls for Period:			0	3	6	9									
Total Occupancy for Period:			00:00:00	00:04:32	00:10:40	00:15:12									
EXTENSION USAGE REPORT												PAGE 1 END			

Figure 7.2b: Extension Usage report

Report Interpretation

Heading	Description
Date From	Start date of the report.
Date To	End date of the report.
Extn Grp	Identifies the Extension Group.
TIME INTERVAL	Lists the one hour time intervals included in the time range selected.
ERLANG	The amount of telephone traffic for each one hour time interval. It is calculated by dividing the Total Occupancy Per Interval by the Time Interval ie. 60 minutes.
CALLS IN INTERVAL	Lists the number of calls occurring within each one hour interval.
TOTAL OCCUPANCY PER INTERVAL	The total duration of all of the calls which have been made within the one hour interval.
PERCENTAGE	The average percentage occupancy per extension (of the Extension Group selected) for each one hour interval. It is calculated by dividing the Total Occupancy Per Interval by the Time Interval and dividing the result by the number of extensions in the Extension Group (and then multiplying by 100 to convert to percentage). Note that if a single extension is selected, the number of extensions in its Extension Group is not included in the calculation, since only one extension is being reported on instead of a whole group.
AV. DAILY OCCUPANCY / EXTENSION HISTOGRAM	A pictorial representation of the previous column.

ROUTE HISTOGRAM REPORT

Report Description

The **Route Histogram Report** summarises the traffic carried on a selected route during each 15 minute time interval over a specified period. This allows you to produce a report showing which trunks are busy or overloaded on a selected route. The recommendation is that this report be run for one day at a time, to produce an even and accurate result.

When weekends and holidays are included in multiple days the results (which are averaged) are hence lower and possibly misleading results are shown.

Using 24 hour clock notation, the report automatically gives you call information for the selected route between the hours of 8:30 a.m. and 6:00 p.m. These times can be changed to suit any situation.

The report is produced with a graphic representation (histogram) of the peak periods on the selected route.

This report serves to assist in the analysis of traffic patterns over a selected route. By referring to this report it is possible to assess whether or not additional trunks are necessary on a route. Similarly it may be possible to use this report in determining whether a route may operate satisfactorily with fewer leased trunks.

This report is also useful to verify if a leased line or PSTN line are out of action or malfunctioning for a time.

A more sophisticated use of this report may be to use it as the basis for implementing policies that specify the periods of a day that calls should be kept to a minimum so as to avoid route overloads.

Route Histogram Input Screen

Route Histogram Report

TRANS-MIT
Route Histogram Report

21/10/2003

Selection Criteria

Date From : 20/10/2003 To 20/10/2003 Include Weekends : ☐

Site ID : 103 MLB MELBOURNE

Local Route Type:

Route ID : 2 ISDN O/G

Dialled Prefix :

Time Range for each day is from : 08:30 To 18:00

Occupancy Based On: ☒ Configured ☐ Used

Enter a Route ID or <CTRL-F> to find.

OK
Interrupt
Pick From List

Figure 7.3: Route Histogram Input Screen

Input Screen Description

Field	Field Characteristics	Comments
Date From:	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
Date To:	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Include Weekends:	Check box	Select to include dates within selected reporting range that fall on weekends
Site ID:	Enter Site ID or click on Pick From List to find, then OK to select.	Selects the site to be reported on.
Local Route Type:	Enter Route Type ID or click on Pick From List to find, then OK to select.	This number sets the type of routes to report on. Selecting a Route Type disables the Route ID selection box.
Route ID:	Enter Route ID or click on Pick From List to find, then OK to select.	This number sets the route number to be reported on. Selecting a Route ID disables the Route Type selection box.
Dialled Prefix:	Enter using standard number selection format.	Selects the prefix of dialled numbers that are to be reported on.
Time Range for each day is from:	In the form hh:mm. Change as necessary.	Selects the start time of the period to be reported on.
To:	In the form hh:mm. Change as necessary.	Selects the end time of the period to be reported on.
Occupancy Based On:	Radio button	Select from 'Configured' or 'Used' trunks in the route to alter the output.

Route Histogram Report Output Example

21 Oct 2003 19:05:40 ROUTE HISTOGRAM REPORT TCP TRANS-MIT TELMAX21 2.0

Date From: 20/10/2003 To 20/10/2003

Include Weekends: N

Site ID: 103

Site Name: MLB MELBOURNE

Trunk Range: 20561 - 20590

Route ID: 2

Route Name: ISDN OUTGOING

Configured Trunks: 30

Time Range From: 08:30 To 18:00

Used Trunks: 30

Occupancy Based On: C (Configured Trunks)

TIME		CALLS IN		TOTAL OCCUPANCY		AVERAGE DAILY OCCUPANCY/TRUNK HISTOGRAM													
INTERVAL		INTERVAL		PER INTERVAL															
hh:mm-hh:mm	ERLANG	PEAK	TOTAL	hh:mm:ss	PERCENTAGE	0	10	20	30	40	50	60	70	80	90	100			
08:30-08:45	2.31	8	34	00:34:40	7.7	.>>>													
08:45-09:00	1.48	5	23	00:22:12	4.9	.>>													
09:00-09:15	4.76	10	41	01:11:24	15.9	.>>>>>>													
09:15-09:30	5.83	12	45	01:27:28	19.4	.>>>>>>>													
09:30-09:45	9.96	18	62	02:29:28	33.2	.>>>>>>>>>>>													
09:45-10:00	6.48	13	64	01:37:12	21.6	.>>>>>>>													
10:00-10:15	10.33	26	132	02:35:00	34.4	.>>>>>>>>>>>													
10:15-10:30	7.04	16	70	01:45:40	23.5	.>>>>>>>>													
10:30-10:45	6.50	17	63	01:37:32	21.7	.>>>>>>>													
10:45-11:00	12.30	27	129	03:04:32	41.0	.>>>>>>>>>>>>>													
11:00-11:15	14.10	24	94	03:31:28	47.0	.>>>>>>>>>>>>>>>													
11:15-11:30	10.46	19	64	02:36:52	34.9	.>>>>>>>>>>>													
11:30-11:45	9.61	19	76	02:24:12	32.0	.>>>>>>>>>>>													
11:45-12:00	9.18	15	48	02:17:44	30.6	.>>>>>>>>>>													
12:00-12:15	7.06	19	64	01:45:56	23.5	.>>>>>>>>													
12:15-12:30	6.93	17	61	01:43:56	23.1	.>>>>>>>>													
12:30-12:45	5.33	13	53	01:19:56	17.8	.>>>>>>>													
12:45-13:00	8.76	15	49	02:11:28	29.2	.>>>>>>>>>													
13:00-13:15	11.19	24	63	02:47:52	37.3	.>>>>>>>>>>>													
13:15-13:30	9.27	17	49	02:19:00	30.9	.>>>>>>>>>>													
13:30-13:45	10.84	21	74	02:42:36	36.1	.>>>>>>>>>>>>>													
13:45-14:00	9.04	16	57	02:15:36	30.1	.>>>>>>>>>>													
14:00-14:15	8.54	18	60	02:08:04	28.5	.>>>>>>>>>													
14:15-14:30	8.31	18	49	02:04:36	27.7	.>>>>>>>>>													
14:30-14:45	5.35	13	50	01:20:12	17.8	.>>>>>>>													
14:45-15:00	11.52	22	73	02:52:48	38.4	.>>>>>>>>>>>>>													
15:00-15:15	9.30	17	57	02:19:32	31.0	.>>>>>>>>>>													
15:15-15:30	9.56	18	67	02:23:28	31.9	.>>>>>>>>>>													
15:30-15:45	11.77	26	153	02:56:32	39.2	.>>>>>>>>>>>>>													
15:45-16:00	15.03	32	161	03:45:28	50.1	.>>>>>>>>>>>>>>>>>													
16:00-16:15	9.63	26	112	02:24:24	32.1	.>>>>>>>>>>>													
16:15-16:30	11.15	27	103	02:47:12	37.2	.>>>>>>>>>>>>>													
16:30-16:45	10.86	24	85	02:42:52	36.2	.>>>>>>>>>>>>>													
16:45-17:00	12.83	30	95	03:12:24	42.8	.>>>>>>>>>>>>>>>													
17:00-17:15	8.26	21	67	02:03:56	27.5	.>>>>>>>>>>													
17:15-17:30	6.06	15	54	01:30:56	20.2	.>>>>>>>>>													
17:30-17:45	3.72	12	37	00:55:52	12.4	.>>>>>>>													
17:45-18:00	3.29	10	34	00:49:20	11.0	.>>>>>													

TOTAL OCCUPANCY - over complete date range 91:28:28; over specified time range 80:59:20

BUSIEST MINUTE - 32 calls during 15:52-15:53 on the 20/10/2003

BUSY HOUR - averaged over date range is 15:30-16:30 with a total occupancy for the hour of 11:53:36 (11.89 erlang)

Unused Trunks -

ROUTE HISTOGRAM REPORT

PAGE 1

Report Interpretation

Heading		Description
TIME INTERVAL		Lists the quarter hour time intervals included in the time range selected.
ERLANG		The amount of telephone traffic for each quarter hour time interval. It is calculated by dividing the Total Occupancy Per Interval by the Time Interval ie. 15 minutes.
CALLS IN INTERVAL	PEAK	Lists the highest number of calls occurring at the same time within each quarter hour interval.
	TOTAL	Lists the total number of calls which have been made within the quarter hour interval.
TOTAL OCCUPANCY PER INTERVAL		The total duration of all of the calls which have been made within the quarter hour interval.
PERCENTAGE		The average percentage occupancy per trunk (of the route) for each quarter-hour interval. It is calculated by dividing the Total Occupancy Per Interval by the Time Interval and dividing the result by the No. of Trunks in the route (and then multiplying by 100 to convert to percentage).
AV. DAILY OCCUPANCY / TRUNK HISTOGRAM		A pictorial representation of the previous column.

ROUTE OCCUPANCY

Report Description

The Route Occupancy report is used to provide the network manager with information designed to identify problem Routes' and allow for optimisation of the network. Although as with any dimensioning type of reports the period selected should be representative of normal operating conditions of the network and consider the seasonal swings in usage that vary from organisation to organisation.

Input Screen

Route Occupancy Report

TRANS-MIT
Route Occupancy Report

21/10/2003

Selection Criteria

Date From: 20/10/2003 To: 20/10/2003 Include Weekends: ☐

Time From: 08:00 To: 17:00

Site ID: 103 MLB MELBOURNE

Local Route Type: ☐

Local Route ID: 2 ISDN O/G

Trunk Occupancy Outside Range From: % To: %

OK
Interrupt
Pick From List

Figure 7.4a: Traffic Route Occupancy Report Screen

Input Screen Description

Field	Field Characteristics	Comments
Date From	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
Date To	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Time From	Entered as shown. Change as necessary.	Selects the start time of the period to be reported on.
Time To	Entered as shown. Change as necessary.	Selects the end time of the period to be reported on.
Site ID	Enter a specific Site ID, or blank for all sites. Otherwise, click on Pick From List to find, then OK to select.	Selects the site to be reported on.
Local Route Type	Enter a specific Route Type, or blank for all types. Otherwise, click on Pick From List to find, then OK to select.	Selects the types of routes to be reported on.
Local Route ID	Enter a specific Route ID, or blank for all routes. Otherwise, click on Pick From List to find, then OK to select.	This number selects the route to be reported on.
Trunk Occupancy Outside Range From	A percentage value from 0 to 100.	Trunks with occupancies below this value will be reported on. Set at 20% for normal usage. Lower value implies fault on circuit or simply not being used.
Trunk Occupancy Outside Range To	A percentage value from 0 to 100.	Trunks with occupancies above this value will be reported on. Set at 80% for normal usage. Very heavy usage, perhaps indicating a need for more trunks. * If the 'Range From' parameter is set at 20% and the 'Range To' parameter is set to 80% then no trunks with usage between 20% and 80% will be reported on.

Route Occupancy Report Output Example

21 Oct 2003	20:12:37	ROUTE OCCUPANCY REPORT		TCP TRANSMIT	TELMAX21 2.0
Date From: 20/10/2003 To 20/10/2003			Site ID: 103		
Time Range From: 08:00 To 17:00			Route Type:		
Trunk Occupancy Outside Range: No Range Specified			Route ID: 2		Include Weekends: N
Site ID	: 103				
Description	: MLB MELBOURNE				
Route ID	: 2				
Destination	: ISDN O/G				
Type	: 'K'				
Number Of Trunks	: 30				
TRUNK	DURATION	AVERAGE		CALL	OCCUPANCY
NUMBER	hh:mm:ss	hh:mm:ss		COUNT	PERCENTAGE
20561	2:29:28	0:02:52		52	27.7
20562	6:41:52	0:30:54		13	74.4
20563	4:00:04	0:03:52		62	44.5
20564	1:59:56	0:02:01		59	22.2
20565	2:07:04	0:01:55		66	23.5
20566	2:30:12	0:02:35		58	27.8
20567	2:49:28	0:02:55		58	31.4
20568	2:46:00	0:02:38		63	30.7
20569	1:59:48	0:01:48		66	22.2
20570	2:24:32	0:02:43		53	26.8
20571	2:13:28	0:02:23		56	24.7
20572	2:11:48	0:01:59		66	24.4
20573	1:35:48	0:01:32		62	17.7
20574	1:56:48	0:01:51		63	21.6
20575	2:15:04	0:02:10		62	25.0
20576	2:14:20	0:02:14		60	24.9
20577	2:50:48	0:02:35		66	31.6
20578	3:13:56	0:02:59		65	35.9
20579	2:08:16	0:02:06		61	23.8
20580	2:05:16	0:01:52		67	23.2
20581	2:25:48	0:02:28		59	27.0
20582	2:50:24	0:02:30		68	31.6
20583	2:43:36	0:02:43		60	30.3
20584	2:27:16	0:02:35		57	27.3
20585	2:00:00	0:01:49		66	22.2
20586	1:58:24	0:01:38		72	21.9
20587	1:59:16	0:02:12		54	22.1
20588	2:25:16	0:02:30		58	26.9
20589	2:05:24	0:02:12		57	23.2
20590	3:17:56	0:03:32		56	36.7
=====					
Route Totals :	76:47:16	0:02:34		1785	28.4

ROUTE OCCUPANCY REPORT

PAGE 1 END

Figure 7.4b: Route Occupancy Report

Report Interpretation

Heading	Description
TRUNK NUMBER	Each trunk in the selected route is listed on a separate line of the report.
DURATION	The total time used by all of the calls on the specific trunk.
AVERAGE DURATION	The average time each trunk is occupied per call. Calculated by dividing the total duration of the calls by the number of calls.
CALL COUNT	The number of calls on the trunk.
OCCUPANCY PERCENTAGE	The percentage of the time period specified that the trunk is occupied. Calculated by dividing the total duration by the total amount of time in the time period and then multiplying by 100.

ROUTE SUMMARY REPORT

Report Description

The **Route Summary Report** selects each trunk within a specified route and shows the costs incurred during the selected time period. This can then be used to compare with a particular carrier bill.

Input Screen

Route Summary Report

TRANS-MIT
Route Summary Report

21/10/2003

Selection Criteria

Date From: 20/10/2003 To: 20/10/2003

Site ID: 103 MLB MELBOURNE

Local Route ID: 2 ISDN O/G

Report By

☒ Trunk
☐ Route
☐ Site

Report Type

☐ Overflow Calls
☐ Non Overflow Calls
☒ Overflow + Non Overflow Calls

[T]runk [R]oute [S]ite

OK
Interrupt
Pick From List

Figure 7.5a: Route Summary Report Input Screen

Input Screen Description

Field	Field Characteristics	Comments
Date From:	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
To:	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Site ID:	Enter Site ID or click on Pick From List to find, then OK to select.	Selects the site to be reported on.
Local Route ID	Enter Route ID or click on Pick From List to find, then OK to select.	This number sets the route number to be reported on.
Report by	Radio button	Select system entity on which to report. Choose from 'Trunk', 'Route' or 'Site'.
Report type	Radio button.	Select inclusion or exclusion of overflow and non-overflow calls. (Overflow calls are calls carried by this route that were unable to be carried by the route originally intended. These can be selectively included or excluded from reports on selected routes.)

Route Summary Report Output Example

21 Oct 2003 10:07:31		ROUTE SUMMARY REPORT					TCP TRANSMIT			TELMAX21 2.0	
Site ID		:	103	MLB	MELBOURNE	Report By		:	T	[Trunk]	
Route ID		:	2	ISDN	O/G	Report Type		:	B	[Overflow + Non	
Overflow Calls]											
Date From		:	20/10/2003 To 20/10/2003			Number of trunks =		30			
TRUNK NO		FREE/MISC	TOTAL	INCOMING CALLS		TOTAL	OUTGOING CALLS			OUTGOING CALL	COSTS
		NUMBER	DURATION	-----NUMBER-----	N/W	DURATION	-----NUMBER-----	N/W	TOTAL	PUBLIC NETWORK	TOTAL COSTS
20001	1	0:04:52	0	0	0	0:00:00	67	0	3:34:44	14.91	.00 14.91
20002	2	0:07:12	0	0	0	0:00:00	72	0	2:47:56	10.62	.00 10.62
20003	2	0:00:08	0	0	0	0:00:00	75	0	2:11:32	9.85	.00 9.85
20004	0	0:00:00	0	0	0	0:00:00	81	0	2:49:44	10.87	.00 10.87
20005	0	0:00:00	0	0	0	0:00:00	61	0	2:41:12	11.29	.00 11.29
20006	0	0:00:00	0	0	0	0:00:00	63	0	7:54:28	10.71	.00 10.71
20007	3	0:05:12	0	0	0	0:00:00	75	0	3:07:04	12.18	.00 12.18
20008	0	0:00:00	0	0	0	0:00:00	78	0	3:03:32	12.92	.00 12.92
20009	0	0:00:00	0	0	0	0:00:00	71	0	3:07:12	12.44	.00 12.44
20010	1	0:00:04	0	0	0	0:00:00	76	0	2:55:32	12.79	.00 12.79
20011	1	0:00:04	0	0	0	0:00:00	61	0	2:39:12	8.30	.00 8.30
20012	0	0:00:00	0	0	0	0:00:00	78	0	2:56:32	14.95	.00 14.95
20013	0	0:00:00	0	0	0	0:00:00	70	0	3:24:16	16.38	.00 16.38
20014	1	0:17:08	0	0	0	0:00:00	71	0	2:28:36	9.54	.00 9.54
20015	1	0:00:04	0	0	0	0:00:00	68	0	3:34:28	15.89	.00 15.89
20016	0	0:00:00	0	0	0	0:00:00	73	0	3:12:00	12.22	.00 12.22
20017	0	0:00:00	0	0	0	0:00:00	83	0	3:23:03	9.73	.00 9.73
20018	1	0:09:20	0	0	0	0:00:00	60	0	4:09:12	10.87	.00 10.87
20019	1	0:01:04	0	0	0	0:00:00	78	0	2:09:00	8.79	.00 8.79
20020	0	0:00:00	0	0	0	0:00:00	76	0	3:06:16	14.91	.00 14.91
20021	1	0:00:04	0	0	0	0:00:00	78	0	2:42:44	12.07	.00 12.07
20022	0	0:00:00	0	0	0	0:00:00	72	0	2:43:56	10.71	.00 10.71
20023	2	0:00:48	0	0	0	0:00:00	53	0	5:08:52	13.41	.00 13.41
20024	0	0:00:00	0	0	0	0:00:00	79	0	2:51:28	9.22	.00 9.22
20025	1	0:00:52	0	0	0	0:00:00	59	0	3:14:24	14.15	.00 14.15
20586	2	0:01:12	0	0	0	0:00:00	68	0	6:43:24	7.94	.00 7.94
20027	1	0:02:12	0	0	0	0:00:00	70	0	4:14:48	12.18	.00 12.18
20028	1	0:00:12	0	0	0	0:00:00	62	0	2:17:36	11.99	.00 11.99
20029	1	0:05:40	0	0	0	0:00:00	83	0	2:44:32	12.35	.00 2.35
20030	1	0:00:56	0	0	0	0:00:00	74	0	3:33:32	19.49	.00 19.49
Report Totals		24	0:57:04	0	0	0:00:00	2135	0	01:30:47	363.67	.00 363.67

ROUTE SUMMARY REPORT

PAGE 1 END

Figure 7.5b: Route Summary Report

Report Interpretation

Heading		Description
TRUNK NO		Each trunk in the selected route is listed on a separate line of the report.
FREE/MISC	NUMBER	The number of outgoing calls classified as free calls due to the dialled number as well as any calls which are of an unknown type.
	TOTAL DURATION	The total duration of calls in the FREE/MISC category.
INCOMING CALLS	NUMBER- PUBLIC	The total number of incoming calls which originate from the public telephone network.
	NUMBER – N/W	The total number of incoming calls which originate from tie lines in the company's private network.
	TOTAL DURATION	The total duration of incoming calls classed as PUBLIC or N/W.
OUTGOING CALLS	NUMBER – PUBLIC	The total number of outgoing calls to the public telephone network.
	NUMBER – NETWORK	The total number of outgoing calls which go out on tie lines in the company's private network.
	TOTAL DURATION	The combined total duration of outgoing calls classed as PUBLIC or NETWORK.
OUTGOING CALL COSTS	PUBLIC	The cost of all outgoing calls classed as PUBLIC.
	NETWORK	The cost of all outgoing calls classed as NETWORK.
	TOTAL COSTS	The combined total cost of outgoing calls classed as PUBLIC or NETWORK.

SPECIFY A TIE LINE REPORT

Report Description

The Specify a Tie Line report is used when contemplating a tie line to a specific destination, possibly an interstate office. It should be run over a period that will give a time representation of the typical traffic and one must take into consideration any seasonal highs or lows.

Input Screen

req_trunks

TRANS-MIT
Specify A Tie Line Report

21/10/2003

Selection Criteria

Date From : 20/10/2003 To 20/10/2003 Include Weekends : ☐

Site ID : 3 MLB MELBOURNE

Route Type/ID : 69 SYDNEY TIMELINE

Carrier : All Carriers

Dialled Prefix : 029*
Can enter more than one number separated by spaces

Time Range for each day is from : 08:30 to 18:00

Report Heading Comments:

Enter Whole Number or Prefix Terminated with '*' or '????' (eg. 039562*)

OK
Interrupt
Pick From List

Figure 7.6a: Specify A Tie Line

Input Screen Description

Field	Field Characteristics	Comments
Date From:	Entered as required.	The start date for calls to be reported from.
To	Entered as required.	The end date for calls to be reported up till.
Include Weekends:	Check box	Selects whether to include weekends within the date range, in the report.
Site ID:	Enter a specific Site ID, or blank for all sites. Otherwise, click on Pick From List to find, then OK to select.	Selects the site to be reported on.
Route Type/ID:	Enter a specific Route ID, or blank for all Routes. Otherwise, click on Pick From List to find, then OK to select.	Selects the route to be reported on.
Carrier:	Enter a specific Carrier ID, or blank for all Carriers. Otherwise, click on Pick From List to find, then OK to select.	Selects the carrier to be reported on.
Dialled Prefix:	Enter whole or part of number, eg. 029*.	Calls to these numbers or range of numbers will be reported on. The * wildcard symbol is acceptable. Separate individual number prefixes using spaces.
Time range for each day is from:	Time field	The time of day for each selected date, from which calls will be reported. Standard Telmax21 time field formats may be used.
to	Time field	The time of day for each selected date, up to which calls will be reported. Standard Telmax21 time field formats may be used.
Report Heading Comments:	Enter a comment.	This will appear in the header of the report.

Report Interpretation

Heading	Description
TIME INTERVAL	Lists the quarter hour time intervals included in the time range selected.
ERLANG	The amount of telephone traffic for each one hour time interval. It is calculated by dividing the Total Occupancy Per Interval by the Time Interval ie. 60 minutes
PEAK CALLS IN INTERVAL	Lists the highest number of calls occurring at the same time within each quarter hour interval.
TOTAL CALLS IN INTERVAL	Lists the total number of calls which have been made within the quarter hour interval.
TOTAL OCCUPANCY PER INTERVAL	The total duration of all of the calls which have been made within the quarter hour interval.
PERCENTAGE	This column displays the average percentage occupancy per trunk (of the theoretical tie line route) for each quarter-hour interval. It is calculated by dividing the Total Occupancy Per Interval by the Time Interval and dividing the result by the number of trunks calculated as being needed to cater for the average occupancy for the busy hour (and then multiplying by 100 to convert to percentage).
AVERAGE DAILY OCCUPANCY/TRUNK HISTOGRAM	A pictorial representation of the previous column.

TRUNK HISTOGRAM REPORT

Overview

The **Trunk Histogram Report** generates report summaries of the traffic carried on a selected trunk during each 15 minute time interval over a specified period. This allows you to produce a report showing which trunks are busy or overloaded on a selected route. The recommendation is that this report be run for one day at a time, to produce an even and accurate result.

When weekends and holidays are included in multiple days the results are averaged are hence lower and possibly misleading results are shown.

Using 24 hour clock notation, the report automatically gives you call information for the selected route between the hours of 8:30 am and 6:00 pm. These times can be changed to suit any situation.

The report is produced with a graphic representation (histogram) of the peak periods on the selected trunk.

Usage

This report serves to assist in the analysis of traffic patterns over a selected trunk. By referring to this report it is possible to assess whether or not additional trunks are necessary on a route. Similarly it may be possible to use this report in determining whether a route may operate satisfactorily with fewer trunks.

This report is also useful to verify trunks or trunk lines out of action or malfunctioning.

A more sophisticated use of this report may be to use it as the basis for implementing policies that specify the periods of a day that calls should be kept to a minimum so as to avoid route overloads.

Trunk Histogram Report

TRANS-MIT
Trunk Histogram Report

21/10/2003

Selection Criteria

Date From : 20/10/2003 To : 20/10/2003 Include Weekends : ☐

Site ID : 103 MLB MELBOURNE
Local Route ID : 10 MELB PSTN OUTGOING
Trunk ID : 1 MELB PSTN OU

Dialled Prefix :

Time Range for each day is from : 08:30 to 18:00

Enter 'Y' to include or 'N' to exclude weekend calls

OK
Interrupt
Pick From List

Figure 7.7a: Trunk Histogram Report screen

Input Screen Description

Field	Field Characteristics	Comments
Date From:	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
To	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Include Weekends:	Check box	Selects whether to include weekends within the date range, in the report
Site ID:	Enter Site ID or click on Pick From List to find, then OK to select.	Selects the site to be reported on.
Local Route ID:	Enter Route ID or click on Pick From List to find, then OK to select.	This number sets the route number to be reported on.
Trunk ID:	Enter Trunk ID or click on Pick From List to find, then OK to select.	This number sets the trunk number to be reported on.
Dialled prefix:	Numeric. Enter as required.	Select prefix of calls to report on. Optional.
Time Range for each day is from	Time field	Selects the start time of the period to be reported on.
to	Time field	Selects the end time of the period to be reported on.

Report Interpretation

Heading		Description
TIME INTERVAL		Lists the quarter hour time intervals included in the time range selected.
ERLANG		The amount of telephone traffic for each quarter hour time interval. It is calculated by dividing the Total Occupancy Per Interval by the Time Interval ie. 15 minutes.
CALLS IN INTERVAL	PEAK	Lists the highest number of calls occurring at the same time within each quarter hour interval.
	TOTAL	Lists the total number of calls which have been made within the quarter hour interval.
TOTAL OCCUPANCY PER INTERVAL		The total duration of all of the calls which have been made within the quarter hour interval.
PERCENTAGE		The percentage occupancy of the selected trunk for each quarter-hour interval. It is calculated by dividing the Total Occupancy Per Interval by the Time Interval (and then multiplying by 100 to convert to percentage).
AVERAGE DAILY TRUNK OCCUPANCY HISTOGRAM		A pictorial representation of the previous column.

MOST EXPENSIVE CALL REPORT

** This is included with the optional Equipment Usage Module.

Report Description

The **Most Expensive Call Report** is useful to determine the **top 150** most expensive calls over a specified period. The call category or a specific call type can be specified.

You may also filter with equipment type if this feature has been integrated into the custom Directory Maintenance Module.

Also transit call records may be ignored, as these are not used for billing.

Most Expensive Call Input Screen

Select reporting period and site. All sites can be selected by leaving it blank. You can also optionally specify the call category, or a specific call type, Equipment Type, and if transit calls are to be ignored.

The screenshot shows a software window titled "mostexp". Inside, the header area displays "MON2" and "MOST EXPENSIVE CALL REPORT" above a date field containing "27/04/2011". The main input section contains the following fields and controls:

- Date From:** 01/04/2011
- To:** 30/04/2011
- Site ID:** A text box followed by a dropdown menu showing "All Sites".
- Call Category:** A dropdown menu showing "All Categories".
- Type:** An empty text box.
- Equipment Type:** An empty text box.
- Ignore Transit Calls:** A checkbox that is checked.

At the bottom of the main area, a status bar contains the text "Enter 'Y' to ignore transit calls". To the right of the main area is a vertical sidebar with three buttons: "OK", "Interrupt", and "Pick From List".

Figure 7.8a: Most Expensive Call Input screen

Field	Field Characteristics	Comments
Date from:	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
Date to:	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Site Id:	Enter a specific Site ID, or click on Pick From List to find, and then OK to select.	This field sets the ID of the site to be reported on. This field may be left blank to allow the selection of All Sites.
Call Category:	Enter a Call Category, or click on Pick From List to find, and then OK to select.	This field sets the Call Category to be reported on (i.e. Local/STD/IDD/Mobile). Leaving this field blank selects all Call Categories.
Call Type:	Enter a specific Call Type to report on.	This field allows you to set a specific Call Type to report on. (i.e. ISDN STD) Leaving this field blank selects all Call Types.
Equipment Type:	Enter a specific Equipment Type to report on.	This fields allows you to set a specific Equipment Type to report on Leaving this field blank selects all Call Types. This field can only be used if the Customized Directory Maintenance screen allows the entry of equipment type against an extension.
Ignore Transit calls	Checkbox	Do not report on transit calls.

Click **OK** when this screen is complete.

Most Expensive Call Report Output Example

27 Apr 2011 19:51:02		MOST EXPENSIVE CALL REPORT				TCP PCSTATS				TELMAX21 2.0	
Date From: 01/04/2011		Call Category: All Categories									
To: 30/04/2011		Type:									
Site ID: All Sites		Equipment Type:		Ignore Transit Calls: Y							
SiteID	Date	Time	Call	Dialled	InLet	OutLet	Equipment	Duration	Cost	(\$)	
		hh:mm:ss	Type - Description	Number	No.	Type	No. Type	hh:mm:ss			
107	15/04/2011	15:38:48	c - ISDN IDD	001163999028681	2201	E	1102 K	00:54:40	86.76		
103	13/04/2011	15:40:46	6 - PowerTel IDD	0011870773155312	4157	E	1030002 K	00:09:47	81.93		
107	15/04/2011	14:18:40	b - ISDN STD	0396694834	2237	E	1101 K	02:15:16	55.19		
107	14/04/2011	14:06:56	b - ISDN STD	0396694000	2284	E	1109 K	02:07:28	52.01		
107	12/04/2011	11:08:32	b - ISDN STD	0280149491	2289	E	1107 K	01:49:20	44.61		
107	18/04/2011	14:47:04	b - ISDN STD	0386381164	2232	E	1104 K	01:43:32	42.25		
107	19/04/2011	13:40:48	b - ISDN STD	0396694000	2232	E	1121 K	01:35:20	38.90		
103	11/04/2011	16:11:27	6 - PowerTel IDD	0011870773155312	4157	E	1030002 K	00:04:39	38.20		
107	05/04/2011	13:39:24	b - ISDN STD	0396694000	2296	E	1103 K	01:31:44	37.44		
107	14/04/2011	16:00:08	b - ISDN STD	0395970323	2201	E	1111 K	01:23:52	34.23		
103	06/04/2011	10:06:39	c - ISDN IDD	00116444700789	4203	E	1030003 K	00:33:09	34.07		
107	14/04/2011	10:22:36	b - ISDN STD	0395970323	2221	E	1105 K	01:19:16	32.35		
103	11/04/2011	14:05:48	6 - PowerTel IDD	0011870773155312	4157	E	1030002 K	00:03:44	30.39		
109	06/04/2011	16:55:48	S - O/G direct STD	0396694000	3801	E	13 K	01:26:52	30.16		
107	20/04/2011	17:09:20	b - ISDN STD	0396694510	2240	E	1102 K	01:11:04	29.01		
102	11/04/2011	16:20:10	S - O/G direct STD	401164	1511	E	1030028 K	01:45:41	27.62		
107	14/04/2011	11:44:00	b - ISDN STD	0395970323	2221	E	1109 K	01:05:36	26.78		
109	07/04/2011	13:33:40	S - O/G direct STD	89010008	3841	E	9 K	01:04:12	25.41		
107	14/04/2011	14:04:04	b - ISDN STD	0395970323	2201	E	1104 K	00:59:52	24.44		
109	05/04/2011	15:37:08	S - O/G direct STD	0396694000	3831	E	2 K	01:09:40	24.20		
107	08/04/2011	14:03:44	b - ISDN STD	0396694317	2214	E	1110 K	00:58:56	24.06		
100	27/04/2011	15:13:56	S - O/G direct STD	0883662626	2063	E	6 K	01:07:04	23.90		
107	15/04/2011	11:30:08	b - ISDN STD	0398422196	2201	E	1111 K	00:57:36	23.52		
102	14/04/2011	11:55:03	S - O/G direct STD	00747788728	8023	E	1020002 K	00:58:14	23.06		
100	20/04/2011	11:40:52	S - O/G direct STD	86388219	2063	E	1 K	01:10:44	23.05		
103	07/04/2011	15:47:20	M - Mobile Phone	0419786965	4510	E	1030002 K	01:27:11	22.62		
100	27/04/2011	16:46:20	S - O/G direct STD	0396694000	2032	E	4 K	01:17:04	22.61		
102	14/04/2011	10:55:03	S - O/G direct STD	00747788728	8020	E	1020002 K	00:56:32	22.38		
102	14/04/2011	12:55:02	S - O/G direct STD	00747788728	8020	E	1020002 K	00:55:51	22.11		
100	27/04/2011	16:46:16	S - O/G direct STD	0396694000	2061	E	5 K	01:15:08	22.05		
109	21/04/2011	13:19:08	S - O/G direct STD	89010008	3841	E	3 K	00:55:04	21.81		
107	15/04/2011	09:54:12	b - ISDN STD	0398422196	2201	E	1110 K	00:51:08	20.88		
102	15/04/2011	07:55:03	S - O/G direct STD	00747788728	8021	E	1020002 K	00:52:34	20.82		
102	14/04/2011	14:55:03	S - O/G direct STD	00747788728	8021	E	1020002 K	00:58:14	20.76		
102	27/04/2011	16:46:42	S - O/G direct STD	00396694000	8050	E	1020002 K	01:19:01	20.70		
103	20/04/2011	10:51:32	M - Mobile Phone	0417397988	8114	E	1030002 K	01:17:57	20.22		
107	15/04/2011	13:53:04	b - ISDN STD	0398422196	2201	E	1112 K	00:49:04	20.04		
102	08/04/2011	12:15:33	S - O/G direct STD	00889844048	8023	E	1020002 K	00:51:16	19.79		
103	07/04/2011	18:35:44	M - Mobile Phone	0417392076	8368	E	1030002 K	01:15:03	19.47		
102	13/04/2011	14:15:02	S - O/G direct STD	00889844048	8024	E	1020002 K	00:55:16	19.21		
100	19/04/2011	11:10:24	S - O/G direct STD	86388237	2063	E	5 K	00:58:52	19.20		
102	07/04/2011	08:50:56	M - Mobile Phone	00400043998	1524	E	1020002 K	00:31:30	19.00		
100	15/04/2011	15:24:56	X - O/G direct IDD	0011672139930	2075	E	2 K	00:21:00	18.87		
102	14/04/2011	09:55:03	S - O/G direct STD	00747788728	8022	E	1020002 K	00:45:12	17.91		

MOST EXPENSIVE CALL REPORT

PAGE 1

27 Apr 2011 19:51:02		MOST EXPENSIVE CALL REPORT				TCP PCSTATS				TELMAX21 2.0	
Date From: 01/04/2011				Call Category: All Categories							
To: 30/04/2011				Type:							
Site ID: All Sites				Equipment Type:		Ignore Transit Calls: Y					
SiteID	Date	Time hh:mm:ss	Call Type - Description	Dialled Number	InLet No. Type	OutLet No. Type	Equipment Type	Duration hh:mm:ss	Cost (\$)		
103	20/04/2011	12:16:26	M - Mobile Phone	0417508051	4839 E	1030002 K		01:09:00	17.90		
109	15/04/2011	10:45:52	S - O/G direct STD	89555115	3831 E	9 K		00:44:20	17.57		
109	14/04/2011	11:14:16	M - Mobile Phone	0411112950	3813 E	2 K		00:29:12	17.50		
102	14/04/2011	13:55:03	S - O/G direct STD	00747788728	8023 E	1020002 K		00:47:49	17.06		
107	20/04/2011	13:57:00	b - ISDN STD	0396694173	2279 E	1102 K		00:40:16	16.45		
103	20/04/2011	12:41:31	6 - PowerTel IDD	00116804881034	4529 E	1030002 K		00:21:07	16.34		
100	20/04/2011	12:24:16	S - O/G direct STD	0732247892	2063 E	4 K		00:41:08	16.30		
103	08/04/2011	14:43:34	6 - PowerTel IDD	0011672322079	4734 E	1030002 K		00:20:30	16.27		
109	12/04/2011	15:45:00	S - O/G direct STD	0883662688	3817 E	2 K		00:45:56	15.98		
102	04/04/2011	12:30:08	S - O/G direct STD	00889844048	8023 E	1020002 K		00:40:49	15.77		
102	14/04/2011	17:55:02	S - O/G direct STD	00747788728	8021 E	1020002 K		00:43:41	15.59		
102	04/04/2011	15:42:35	M - Mobile Phone	00403756219	1543 E	1020002 K		00:25:44	15.50		
102	18/04/2011	11:48:36	M - Mobile Phone	00408428392	1510 E	1020002 K		00:25:37	15.50		
100	12/04/2011	12:27:16	S - O/G direct STD	86388237	2063 E	1 K		00:47:16	15.43		
100	04/04/2011	14:18:52	S - O/G direct STD	0262323516	2009 E	7 K		00:42:36	15.21		
107	04/04/2011	15:01:32	b - ISDN STD	0396694101	2247 E	1103 K		00:37:08	15.17		
100	18/04/2011	15:50:48	S - O/G direct STD	0889203810	2067 E	7 K		00:42:24	15.13		
103	11/04/2011	21:52:22	M - Mobile Phone	0431453639	4053 E	1030002 K		00:57:32	14.92		
100	27/04/2011	14:26:52	X - O/G direct IDD	0011672117730	2047 E	1 K		00:16:24	14.73		
103	15/04/2011	09:27:13	M - Mobile Phone	0448868007	8382 E	1030002 K		00:56:44	14.71		
109	06/04/2011	18:03:44	M - Mobile Phone	0448483204	3831 E	1 K		00:24:16	14.50		
102	14/04/2011	15:55:03	S - O/G direct STD	00747788728	8021 E	1020002 K		00:40:36	14.49		
103	19/04/2011	12:53:01	M - Mobile Phone	0418370445	4938 E	1030002 K		00:55:31	14.39		
102	14/04/2011	16:55:03	S - O/G direct STD	00747788728	8023 E	1020002 K		00:40:08	14.33		
106	02/04/2011	15:46:25	M - Mobile Phone	0417670276	3462 E	1060005 K		00:23:40	14.25		
107	12/04/2011	14:01:16	b - ISDN STD	0386388284	2281 E	1101 K		00:34:52	14.25		
100	01/04/2011	16:08:44	X - O/G direct IDD	0011672128830	2091 E	3 K		00:15:44	14.13		
103	12/04/2011	10:52:54	M - Mobile Phone	0409233405	4361 E	1030002 K		00:53:52	13.96		
107	04/04/2011	11:12:20	b - ISDN STD	0386388239	2281 E	1120 K		00:32:40	13.35		
103	19/04/2011	16:48:27	M - Mobile Phone	0418214681	4490 E	1030002 K		00:51:14	13.28		
102	15/04/2011	16:49:47	S - O/G direct STD	00396694444	8050 E	1020002 K		00:50:34	13.27		
107	13/04/2011	11:57:48	b - ISDN STD	0396694510	2240 E	1120 K		00:32:16	13.19		
109	14/04/2011	12:57:36	M - Mobile Phone	0417875451	3856 E	2 K		00:21:40	13.00		
103	08/04/2011	12:24:49	M - Mobile Phone	0457542342	4445 E	1030002 K		00:49:51	12.92		
107	15/04/2011	13:44:32	b - ISDN STD	0396694537	2273 E	1105 K		00:31:20	12.81		
100	14/04/2011	12:18:20	S - O/G direct STD	0889203940	2063 E	3 K		00:31:56	12.67		
100	01/04/2011	12:03:04	S - O/G direct STD	0396694186	2091 E	1 K		00:38:44	12.65		
103	20/04/2011	08:37:07	6 - PowerTel IDD	00116926257944	4529 E	1030002 K		00:18:22	12.38		
107	14/04/2011	10:58:52	b - ISDN STD	0396694057	2279 E	1102 K		00:30:12	12.35		
109	14/04/2011	11:18:04	S - O/G direct STD	0396694212	3821 E	3 K		00:31:56	12.35		
103	20/04/2011	16:22:25	M - Mobile Phone	0488409446	4352 E	1030002 K		00:47:32	12.32		
100	14/04/2011	12:26:00	S - O/G direct STD	0396694186	2091 E	4 K		00:37:40	12.31		
100	07/04/2011	16:42:40	S - O/G direct STD	0396168333	2009 E	2 K		00:41:40	12.26		
100	05/04/2011	12:15:12	M - Mobile Phone	0419127989	2091 E	1 K		00:20:12	12.25		

27 Apr 2011 19:51:02 MOST EXPENSIVE CALL REPORT TCP PCSTATS TELMAX21 2.0

Date From: 01/04/2011 Call Category: All Categories

To: 30/04/2011

Type:

Site ID: All Sites

Equipment Type:

Ignore Transit Calls: Y

SiteID	Date	Time hh:mm:ss	Call Type - Description	Dialled Number	InLet No. Type	OutLet No. Type	Equipment Type	Duration hh:mm:ss	Cost (\$)
103	16/04/2011	19:06:11	M - Mobile Phone	0405165460	4969	E 1030002	K	00:47:09	12.22
107	06/04/2011	17:06:40	b - ISDN STD	0396694510	2240	E 1111	K	00:29:52	12.21
103	15/04/2011	12:32:48	5 - PowerTel STD	0262766622	4214	E 1030002	K	04:04:06	12.20
100	05/04/2011	16:11:40	S - O/G direct STD	0396694000	2091	E 2	K	00:41:12	12.12
109	12/04/2011	09:34:00	S - O/G direct STD	89521943	3817	E 15	K	00:30:12	11.98
103	20/04/2011	15:48:24	M - Mobile Phone	0407401269	4843	E 1030002	K	00:45:48	11.86
100	15/04/2011	11:04:12	X - O/G direct IDD	0011870773150850	2081	E 1	K	00:01:28	11.82
103	13/04/2011	13:59:28	5 - PowerTel STD	0262323590	8206	E 1030002	K	03:55:46	11.78
109	07/04/2011	12:08:24	S - O/G direct STD	89555115	3831	E 6	K	00:29:36	11.75
100	27/04/2011	15:35:48	S - O/G direct STD	0396694538	2023	E 1	K	00:39:20	11.58
102	14/04/2011	23:55:03	S - O/G direct STD	00747788728	8023	E 1020002	K	00:57:52	11.52
100	04/04/2011	16:46:28	M - Mobile Phone	0400764605	2081	E 6	K	00:19:20	11.50
100	12/04/2011	10:46:16	M - Mobile Phone	0437966106	2075	E 4	K	00:19:12	11.50
107	12/04/2011	09:23:20	b - ISDN STD	0386388239	2281	E 1104	K	00:28:08	11.50
102	14/04/2011	09:33:45	X - O/G direct IDD	00011672139935	8040	E 1020002	K	00:12:44	11.43
103	15/04/2011	14:57:44	M - Mobile Phone	0418370445	4938	E 1030002	K	00:44:01	11.40
100	27/04/2011	16:33:24	S - O/G direct STD	0396694538	2038	E 1	K	00:38:36	11.36
102	18/04/2011	11:46:15	S - O/G direct STD	067521655	1550	E 1020002	K	00:34:41	11.34
103	15/04/2011	14:08:22	M - Mobile Phone	0429340211	4620	E 1030002	K	00:43:42	11.32
102	11/04/2011	11:53:58	M - Mobile Phone	00428257071	1502	E 1020002	K	00:18:54	11.25
102	14/04/2011	21:55:03	S - O/G direct STD	00747788728	8020	E 1020002	K	00:56:08	11.17
102	15/04/2011	03:55:03	S - O/G direct STD	00747788728	8020	E 1020002	K	00:55:45	11.10
109	14/04/2011	12:53:20	S - O/G direct STD	0386388219	3939	E 7	K	00:28:40	11.09
102	04/04/2011	14:39:23	S - O/G direct STD	00899491472	8004	E 1020002	K	00:30:56	11.06
100	04/04/2011	16:26:12	X - O/G direct IDD	0011672106630	2091	E 4	K	00:12:16	11.01
103	20/04/2011	17:25:41	M - Mobile Phone	0418370445	4938	E 1030002	K	00:41:55	10.85
102	14/04/2011	20:55:03	S - O/G direct STD	00747788728	8022	E 1020002	K	00:54:22	10.82
109	08/04/2011	11:23:32	S - O/G direct STD	0396694207	3810	E 6	K	00:27:48	10.76
100	13/04/2011	12:50:16	M - Mobile Phone	0438784832	2071	E 4	K	00:18:00	10.75
100	15/04/2011	14:49:48	S - O/G direct STD	86388237	2063	E 7	K	00:36:24	10.72
103	16/04/2011	09:21:30	M - Mobile Phone	0406076929	4996	E 1030002	K	00:41:04	10.63
103	21/04/2011	11:02:40	M - Mobile Phone	0411142737	4923	E 1030002	K	00:40:47	10.56
208	05/04/2011	16:29:31	M - Mobile Phone	0428815827	2755	E 1030002	K	00:17:38	10.50
100	08/04/2011	15:42:44	X - O/G direct IDD	0011672106630	2091	E 4	K	00:11:40	10.47
103	27/04/2011	11:31:11	M - Mobile Phone	0459840907	8274	E 1030002	K	00:40:27	10.47
100	13/04/2011	14:28:40	S - O/G direct STD	86388219	2063	E 3	K	00:35:24	10.43
100	27/04/2011	13:51:36	S - O/G direct STD	0732247892	2063	E 1	K	00:29:08	10.42
107	13/04/2011	10:11:08	b - ISDN STD	91686029	2296	E 1111	K	00:23:28	10.36
107	01/04/2011	08:16:44	b - ISDN STD	0386388239	2281	E 1101	K	00:31:28	10.30
100	12/04/2011	18:27:36	S - O/G direct STD	0892632203	2091	E 6	K	00:28:44	10.28
102	14/04/2011	22:55:02	S - O/G direct STD	00747788728	8023	E 1020002	K	00:51:26	10.24
107	15/04/2011	14:41:36	c - ISDN IDD	0011639999028681	2201	E 1121	K	00:06:32	10.22
100	05/04/2011	14:02:28	S - O/G direct STD	86388219	2063	E 5	K	00:34:40	10.21
102	15/04/2011	09:51:04	M - Mobile Phone	00410756141	1560	E 1020001	K	00:39:05	10.12

MOST EXPENSIVE CALL REPORT

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27 Apr 2011		19:51:02		MOST EXPENSIVE CALL REPORT				TCP PCSTATS				TELMAX21 2.0	
Date From:		01/04/2011		Call Category:		All Categories							
To:		30/04/2011		Type:									
Site ID:		All Sites		Equipment Type:		Ignore Transit Calls: Y							
SiteID	Date	Time	Call	Dialled	InLet	OutLet	Equipment	Duration	Cost	(\$)			
		hh:mm:ss	Type - Description	Number	No. Type	No. Type	Type	hh:mm:ss					
109	04/04/2011	08:51:36	M - Mobile Phone	0414308487	3803	E 5	K	00:16:44	10.00				
102	13/04/2011	20:15:34	S - O/G direct STD	00889844048	8020	E 1020002	K	00:51:13	9.95				
100	21/04/2011	14:58:08	S - O/G direct STD	86388219	2063	E 1	K	00:33:36	9.90				
106	21/04/2011	18:30:38	S - O/G direct STD	0296863659	3462	E 1060004	K	00:37:32	9.87				
109	21/04/2011	13:01:24	S - O/G direct STD	0396694048	3828	E 13	K	00:25:28	9.86				
103	22/04/2011	20:55:26	M - Mobile Phone	0405165460	4961	E 1030002	K	00:38:00	9.84				
103	27/04/2011	11:33:49	M - Mobile Phone	0409933936	4581	E 1030002	K	00:37:58	9.83				
103	12/04/2011	14:47:19	M - Mobile Phone	0406256006	8206	E 1030002	K	00:37:45	9.77				
109	07/04/2011	10:10:20	S - O/G direct STD	0396694522	3838	E 5	K	00:24:56	9.66				
102	14/04/2011	19:55:03	S - O/G direct STD	00747788728	8023	E 1020002	K	00:48:02	9.57				
100	20/04/2011	11:36:52	M - Mobile Phone	0409992642	2091	E 4	K	00:15:48	9.50				
100	04/04/2011	11:27:20	S - O/G direct STD	0262323513	2063	E 7	K	00:23:52	9.48				
107	13/04/2011	14:08:16	b - ISDN STD	89872477	2206	E 1117	K	00:23:04	9.44				
100	14/04/2011	14:50:36	S - O/G direct STD	0889203940	2063	E 8	K	00:26:20	9.42				
103	15/04/2011	15:30:57	M - Mobile Phone	0401684342	4959	E 1030002	K	00:36:19	9.40				
100	21/04/2011	16:25:00	S - O/G direct STD	86388237	2063	E 1	K	00:31:48	9.37				
102	21/04/2011	16:17:32	S - O/G direct STD	00889844048	8021	E 1020002	K	00:26:45	9.33				
106	05/04/2011	17:46:25	M - Mobile Phone	0414802367	3465	E 1060004	K	00:15:26	9.25				
...													
MOST EXPENSIVE CALL REPORT													
PAGE 4 END													

Figure 7.8b: Dialed Number Report

Report Interpretation

Heading	Description
SiteID	The actual SiteID for the call.
Date	The Call End Date dd/mm/yyyy
Time	The Call End time hh:mm:ss.
Call Type - Description	The Call Type Description of the expensive call.
Dialled Number	The Dialled Number for the expensive call.
InLet No.	The Extension or Route/Trunk origination the call.
InLet Type	The Type (i.e. E for Extension K for public route/trunk)
OutLet No.	The outgoing route/trunk of the expensive call.
OutLet Type	The outgoing route/trunk type.
Equipment Type	The equipment type (if. Exists in the Directory)
Duration	The Call Duration hh:mm:ss
COST	The cost of the expensive call.

LONGEST DURATION CALL REPORT

** This is included with the optional Equipment Usage Module.

Report Description

The **Longest Duration Call Report** is useful to determine the **top 150** longest duration calls over a specified period. The call category or a specific call type can be specified.

You may also filter with equipment type if this feature has been integrated into the custom Directory Maintenance Module.

Also transit call records may be ignored, as these are not used for billing.

Longest Duration Call Input Screen

Select reporting period and site. All sites can be selected by leaving it blank. You can also optionally specify the call category, or a specific call type, Equipment Type, and if transit calls are to be ignored.

The screenshot shows a software window titled "longdur". Inside the window, the title bar says "MON2" and "LONGEST DURATION CALL REPORT". Below this, there is a date field showing "27/04/2011". The main input area contains the following fields:

- Date From: 01/04/2011
- To: 30/04/2011
- Site ID: [] All Sites
- Call Category: [] All Categories
- Type: []
- Equipment Type: []
- Ignore Transit Calls: ☐

At the bottom of the input area, there is a text box with the instruction: "Enter Site ID, Leave Blank For All, CTRL-F To Find". On the right side of the window, there is a vertical panel with three buttons: "OK", "Interrupt", and "Pick From List".

Figure 7.9a: Longest Duration Call Input screen

Field	Field Characteristics	Comments
Date from:	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
Date to:	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Site Id:	Enter a specific Site ID, or click on Pick From List to find, and then OK to select.	This field sets the ID of the site to be reported on. This field may be left blank. to allow the selection of All Sites.
Call Category:	Enter a Call Category, or click on Pick From List to find, and then OK to select.	This field sets the Call Category to be reported on (i.e. Local/STD/IDD/Mobile). Leaving this field blank selects all Call Categories.
Call Type:	Enter a specific Call Type to report on.	This field allows you to set a specific Call Type to report on. (i.e. ISDN STD) Leaving this field blank selects all Call Types.
Equipment Type:	Enter a specific Equipment Type to report on.	This fields allows you to set a specific Equipment Type to report on Leaving this field blank selects all Call Types. This field can only be used if the Customized Directory Maintenance screen allows the entry of equipment type against an extension.
Ignore Transit calls	Checkbox	Do not report on transit calls.

Click **OK** when this screen is complete.

Longest Duration Call Report Output Example

27 Apr 2011 20:50:10		LONGEST DURATION CALL REPORT				TCP PCSTATS				TELMAX21 2.0	
Date From:	01/04/2011	Call Category:		All Categories							
To:	30/04/2011	Type:									
Site ID:	All Sites	Equipment Type:		Ignore Transit Calls: N							
SiteID	Date	Time hh:mm:ss	Call Type - Description	Dialled Number	InLet No.	Type	OutLet No.	Type	Equipment Type	Duration hh:mm:ss	Cost (\$)
103	06/04/2011	21:48:55	K - I/C PSIN		1030001	B	5712	E		09:48:59	0.00
109	19/04/2011	09:44:00	O - O/G no detail		3831	E	6	K		09:41:48	0.00
106	19/04/2011	14:27:17	K - I/C PSIN	0362325017	1060008	B	3592	E		04:14:11	0.00
103	15/04/2011	12:32:48	5 - PowerTel STD	0262766622	4214	E	1030002	K		04:04:06	12.20
103	13/04/2011	13:59:28	5 - PowerTel STD	0262323590	8206	E	1030002	K		03:55:46	11.78
106	13/04/2011	13:59:28	K - I/C PSIN	0396694000	1060008	B	3590	E		03:55:46	0.00
103	19/04/2011	17:23:03	4 - PowerTel Local	0398422196	8396	E	1030002	K		03:51:16	0.08
103	18/04/2011	17:01:47	4 - PowerTel Local	0398422196	8396	E	1030002	K		03:32:43	0.08
100	08/04/2011	12:25:52	S - O/G direct STD	86381169	2001	E	2	K		03:31:36	0.25
103	05/04/2011	16:42:10	K - I/C PSIN	00362243876	1030003	B	5710	E		03:10:31	0.00
103	05/04/2011	16:42:13	K - I/C PSIN	00362243873	1030003	B	5711	E		03:10:20	0.00
100	05/04/2011	16:41:44	S - O/G direct STD	0396694000	2021	E	6	K		03:10:12	0.50
100	05/04/2011	16:41:48	S - O/G direct STD	0396694000	2031	E	7	K		03:09:52	1.00
102	20/04/2011	15:23:56	D - O/G direct local PSIN	0132861	1518	E	1020002	K		03:02:47	0.25
103	20/04/2011	12:34:55	4 - PowerTel Local	0398422196	8396	E	1030002	K		02:55:38	0.08
103	07/04/2011	12:52:18	f - FREE Call	1800804245	4518	E	1030002	K		02:23:23	0.00
103	12/04/2011	13:04:33	5 - PowerTel STD	0280149491	4924	E	1030002	K		02:16:12	6.80
103	15/04/2011	16:13:56	K - I/C PSIN	00892632237	1030001	B	4834	E		02:15:18	0.00
107	15/04/2011	14:18:40	b - ISDN STD	0396694834	2237	E	1101	K		02:15:16	55.19
107	14/04/2011	14:06:56	b - ISDN STD	0396694000	2284	E	1109	K		02:07:28	52.01
103	14/04/2011	16:02:14	K - I/C PSIN	00892632284	1030003	B	5719	E		02:07:22	0.00
103	12/04/2011	13:03:54	5 - PowerTel STD	0280149491	8179	E	1030002	K		02:05:46	6.28
103	06/04/2011	00:03:08	4 - PowerTel Local	90107757	4073	E	1030002	K		02:05:24	0.08
103	20/04/2011	11:32:18	K - I/C PSIN		1030003	B	4224	E		02:00:35	0.00
103	19/04/2011	12:31:19	5 - PowerTel STD	0262766622	4124	E	1030002	K		02:00:33	6.02
109	14/04/2011	15:28:40	S - O/G direct STD	0396694000	3821	E	15	K		01:59:12	0.50
103	14/04/2011	16:02:17	K - I/C PSIN		1030003	B	5702	E		01:59:11	0.00
103	19/04/2011	16:59:31	5 - PowerTel STD	0262766622	4409	E	1030002	K		01:57:58	5.89
103	12/04/2011	13:04:37	5 - PowerTel STD	0280149491	4586	E	1030002	K		01:57:17	5.86
102	12/04/2011	13:03:50	4 - PowerTel Local	080149491	1528	E	1020001	K		01:57:07	0.08
103	19/04/2011	16:56:52	5 - PowerTel STD	0262766622	4085	E	1030002	K		01:54:58	5.74
106	12/04/2011	11:54:01	f - FREE Call	1800701193	3551	E	1060008	K		01:54:44	0.00
103	27/04/2011	15:27:37	4 - PowerTel Local	93177485	4834	E	1030002	K		01:52:26	0.08
103	22/04/2011	02:09:50	K - I/C PSIN	00397235514	1030001	B	4006	E		01:50:44	0.00
106	13/04/2011	16:52:17	K - I/C PSIN	0293253122	1060008	B	3522	E		01:50:07	0.00
109	20/04/2011	15:20:00	K - I/C PSIN	396694252	10247	B	3801	E		01:49:52	0.00
103	19/04/2011	14:24:54	K - I/C PSIN	00262465577	1030003	B	5710	E		01:49:22	0.00
107	12/04/2011	11:08:32	b - ISDN STD	0280149491	2289	E	1107	K		01:49:20	44.61
103	20/04/2011	15:53:35	K - I/C PSIN	0889203801	1030002	B	4252	E		01:49:20	0.00
103	20/04/2011	15:53:35	K - I/C PSIN	0746385451	1030002	B	4252	E		01:49:20	0.00
103	15/04/2011	09:57:19	6 - PowerTel IDD	001116094858102	4584	E	1030002	K		01:49:05	8.71
103	08/04/2011	12:28:00	K - I/C PSIN	0892260191	1030002	B	8114	E		01:48:41	0.00
103	08/04/2011	12:28:00	K - I/C PSIN	0262499685	1030002	B	8114	E		01:48:41	0.00
106	13/04/2011	11:18:33	K - I/C PSIN	0396694000	1060008	B	3553	E		01:47:25	0.00

LONGEST DURATION CALL REPORT

PAGE 1

27 Apr 2011 20:50:10		LONGEST DURATION CALL REPORT				TCP PCSTATS				TELMAX21 2.0	
Date From: 01/04/2011		Call Category: All Categories Type: Equipment Type:				Ignore Transit Calls: N					
To: 30/04/2011											
Site ID: All Sites											
SiteID	Date	Time	Call	Dialled	Inlet	Outlet	Equipment	Duration	Cost (\$)		
		hh:mm:ss	Type - Description	Number	No. Type	No. Type	Type	hh:mm:ss			
103	13/04/2011	11:18:33	5 - PowerTel SID	0262323553	8285 E	1030002 K		01:47:24	5.36		
103	18/04/2011	11:36:40	K - I/C PSIN	00262766622	1030001 B	4349 E		01:46:56	0.00		
103	06/04/2011	13:43:27	K - I/C PSIN	00296679384	1030003 B	5711 E		01:46:49	0.00		
102	11/04/2011	16:20:10	S - O/G direct SID	401164	1511 E	1030028 K		01:45:41	27.62		
100	01/04/2011	13:47:32	D - O/G direct local PSIN	62734377	2091 E	5 K		01:44:00	0.25		
107	18/04/2011	14:47:04	b - ISDN SID	0386381164	2232 E	1104 K		01:43:32	42.25		
103	06/04/2011	13:43:25	K - I/C PSIN	00265632083	1030001 B	6653 E		01:42:18	0.00		
103	06/04/2011	13:43:27	K - I/C PSIN	00269213185	1030001 B	5713 E		01:41:55	0.00		
109	13/04/2011	11:41:56	K - I/C PSIN	396694637	10253 B	3828 E		01:41:20	0.00		
103	01/04/2011	12:58:29	K - I/C PSIN		1030001 B	4932 E		01:40:49	0.00		
103	06/04/2011	13:43:23	K - I/C PSIN	00267521655	1030003 B	5714 E		01:39:59	0.00		
103	13/04/2011	12:15:33	K - I/C PSIN	0889203828	1030002 B	4637 E		01:39:38	0.00		
103	13/04/2011	12:15:33	K - I/C PSIN	90183388	1030002 B	4637 E		01:39:38	0.00		
103	19/04/2011	12:39:07	4 - PowerTel Local	0398422196	8396 E	1030002 K		01:39:18	0.08		
106	21/04/2011	11:17:13	K - I/C PSIN		1060006 B	6089 E		01:38:51	0.00		
103	13/04/2011	17:09:13	5 - PowerTel SID	59402087	4713 E	1030002 K		01:37:36	4.87		
103	06/04/2011	13:43:29	K - I/C PSIN	00266523485	1030003 B	6653 E		01:37:16	0.00		
103	06/04/2011	13:43:28	K - I/C PSIN	00268362149	1030003 B	5719 E		01:36:22	0.00		
103	12/04/2011	14:58:11	5 - PowerTel SID	0261250533	8182 E	1030002 K		01:36:13	4.80		
107	12/04/2011	14:44:12	K - I/C PSIN	0396694273	1121 B	2266 E		01:35:28	0.00		
103	12/04/2011	16:39:30	K - I/C PSIN	0740349204	1030002 B	4273 E		01:35:21	0.00		
103	12/04/2011	16:39:30	K - I/C PSIN	0892632266	1030002 B	4273 E		01:35:21	0.00		
107	19/04/2011	13:40:48	b - ISDN SID	0396694000	2232 E	1121 K		01:35:20	38.90		
103	19/04/2011	15:35:56	K - I/C PSIN	00892632232	1030003 B	5717 E		01:35:11	0.00		
103	13/04/2011	13:24:53	K - I/C PSIN	00392394620	1030003 B	4529 E		01:34:35	0.00		
103	05/04/2011	16:31:23	f - FREE Call	1800735510	4300 E	1030002 K		01:32:45	0.00		
103	21/04/2011	12:44:41	K - I/C PSIN	00392526231	1030003 B	4518 E		01:32:15	0.00		
107	05/04/2011	13:39:24	b - ISDN SID	0396694000	2296 E	1103 K		01:31:44	37.44		
103	19/04/2011	11:28:07	4 - PowerTel Local	86870516	8337 E	1030002 K		01:31:39	0.08		
103	05/04/2011	15:34:53	K - I/C PSIN	00892632296	1030001 B	5715 E		01:31:38	0.00		
103	12/04/2011	16:39:30	K - I/C PSIN	0363339999	1030002 B	4273 E		01:31:36	0.00		
103	18/04/2011	12:23:45	4 - PowerTel Local	0398422196	8396 E	1030002 K		01:31:11	0.08		
100	12/04/2011	16:32:36	S - O/G direct SID	0883662626	2063 E	7 K		01:31:08	0.25		
208	12/04/2011	16:33:00	K - I/C PSIN	0362243873	2080002 B	2626 E		01:31:06	0.00		
103	01/04/2011	16:06:23	K - I/C PSIN	00396945400	1030001 B	4583 E		01:30:35	0.00		
109	15/04/2011	11:58:44	K - I/C PSIN	863646833	10247 B	3939 E		01:30:20	0.00		
103	11/04/2011	11:34:16	f - FREE Call	1800063705	4376 E	1030002 K		01:29:57	0.00		
102	12/04/2011	16:33:23	D - O/G direct local PSIN	094203015	1558 E	1020002 K		01:29:54	0.25		
106	21/04/2011	14:38:49	f - FREE Call	1800093897	3590 E	1060008 K		01:29:23	0.00		
103	06/04/2011	16:28:44	K - I/C PSIN	00262323589	1030001 B	4713 E		01:29:07	0.00		
106	06/04/2011	16:28:44	4 - PowerTel Local	0396694713	3589 E	1060008 K		01:29:07	0.08		
103	19/04/2011	12:30:36	5 - PowerTel SID	0262766622	4574 E	1030002 K		01:29:03	4.44		
102	14/04/2011	15:41:10	D - O/G direct local PSIN	098588919	1518 E	1020002 K		01:29:01	0.25		
103	20/04/2011	14:07:48	K - I/C PSIN	00395439105	1030001 B	4669 E		01:28:51	0.00		

27 Apr 2011 20:50:10 LONGEST DURATION CALL REPORT TCP PCSTATS TELMAX21 2.0

Date From: 01/04/2011 Call Category: All Categories

To: 30/04/2011

Type:

Site ID: All Sites

Equipment Type:

Ignore Transit Calls: N

SiteID	Date	Time hh:mm:ss	Call Type - Description	Dialled Number	InLet No. Type	OutLet No. Type	Equipment Type	Duration hh:mm:ss	Cost (\$)
103	21/04/2011	14:39:06	f - FREE Call	1800093897	8245 E	1030002 K		01:28:30	0.00
106	20/04/2011	16:36:41	K - I/C PSIN	0293253122	1060008 B	3522 E		01:27:55	0.00
101	11/04/2011	13:38:20	5 - PowerTel STD	0280149491	8623 E	1010002 K		01:27:54	4.39
103	07/04/2011	15:47:20	M - Mobile Phone	0419786965	4510 E	1030002 K		01:27:11	22.62
109	06/04/2011	16:55:48	S - O/G direct STD	0396694000	3801 E	13 K		01:26:52	30.16
109	05/04/2011	15:01:20	S - O/G direct STD	03966940000	3817 E	11 K		01:26:44	0.25
103	06/04/2011	17:29:19	K - I/C PSIN		1030001 B	5718 E		01:26:31	0.00
102	27/04/2011	13:46:19	5 - PowerTel STD	00386381161	1529 E	1020001 K		01:26:18	4.31
103	05/04/2011	15:34:51	K - I/C PSIN		1030001 B	5717 E		01:25:49	0.00
106	18/04/2011	15:55:00	5 - PowerTel STD	62766622	3522 E	1060008 K		01:25:19	4.26
103	12/04/2011	10:47:27	K - I/C PSIN	0731200105	1030002 B	8182 E		01:25:11	0.00
103	12/04/2011	10:47:27	K - I/C PSIN	0261250533	1030002 B	8182 E		01:25:11	0.00
103	17/04/2011	13:15:44	5 - PowerTel STD	57991821	8324 E	1030002 K		01:24:58	4.24
103	21/04/2011	11:27:12	6 - PowerTel IDD	001112104065767	4553 E	1030002 K		01:24:42	6.76
103	11/04/2011	13:38:16	5 - PowerTel STD	0280149491	4924 E	1030002 K		01:24:34	4.22
103	20/04/2011	10:55:32	K - I/C PSIN	00747815434	1030001 B	4492 E		01:24:16	0.00
103	01/04/2011	11:32:00	K - I/C PSIN		1030001 B	6653 E		01:24:14	0.00
107	14/04/2011	16:00:08	b - ISDN STD	0395970323	2201 E	1111 K		01:23:52	34.23
109	01/04/2011	10:58:00	M - Mobile Phone	0427975725	10248 L	5 K		01:23:16	50.00
103	21/04/2011	12:25:12	5 - PowerTel STD	0889203828	4537 E	1030002 K		01:23:11	4.15
109	21/04/2011	11:51:36	K - I/C PSIN	396694537	10252 B	3828 E		01:23:04	0.00
103	01/04/2011	11:31:54	K - I/C PSIN	00262766616	1030001 B	5709 E		01:22:36	0.00
103	12/04/2011	10:24:00	5 - PowerTel STD	0280149491	4838 E	1030002 K		01:21:38	4.07
106	20/04/2011	13:30:55	K - I/C PSIN		1060008 B	3518 E		01:20:58	0.00
103	19/04/2011	10:48:10	4 - PowerTel Local	0398422196	8396 E	1030002 K		01:20:37	0.08
103	06/04/2011	15:52:39	5 - PowerTel STD	0262766622	4252 E	1030002 K		01:19:48	3.98
103	20/04/2011	22:17:16	K - I/C PSIN	00397235514	1030001 B	4010 E		01:19:25	0.00
103	14/04/2011	10:48:25	f - FREE Call	1800700198	8337 E	1030002 K		01:19:17	0.00
107	14/04/2011	10:22:36	b - ISDN STD	0395970323	2221 E	1105 K		01:19:16	32.35
102	27/04/2011	16:46:42	S - O/G direct STD	00396694000	8050 E	1020002 K		01:19:01	20.70
103	12/04/2011	15:20:26	5 - PowerTel STD	59402087	4669 E	1030002 K		01:18:56	3.94
103	27/04/2011	16:46:43	K - I/C PSIN	00292961555	1030001 B	6653 E		01:18:49	0.00
103	21/04/2011	12:16:18	5 - PowerTel STD	0262766622	4490 E	1030002 K		01:18:10	3.90
103	20/04/2011	10:51:32	M - Mobile Phone	0417397988	8114 E	1030002 K		01:17:57	20.22
103	19/04/2011	15:43:07	5 - PowerTel STD	0754716427	4195 E	1030002 K		01:17:19	3.86
103	27/04/2011	16:46:45	K - I/C PSIN	00362243875	1030003 B	5713 E		01:17:05	0.00
100	27/04/2011	16:46:20	S - O/G direct STD	0396694000	2032 E	4 K		01:17:04	22.61
103	11/04/2011	18:16:27	4 - PowerTel Local	87797440	8271 E	1030002 K		01:16:53	0.08
102	01/04/2011	11:29:27	K - I/C PSIN		1020002 B	1507 E		01:16:17	0.00
103	01/04/2011	15:22:45	K - I/C PSIN	0362212051	1030002 B	5717 E		01:16:09	0.00
100	01/04/2011	15:22:24	K - I/C PSIN	396694000	10023 B	2051 E		01:16:04	0.00
106	21/04/2011	16:58:20	5 - PowerTel STD	0243444613	3518 E	1060008 K		01:15:46	3.78
103	07/04/2011	12:33:49	4 - PowerTel Local	93051099	4356 E	1030002 K		01:15:29	0.08
103	07/04/2011	12:33:47	K - I/C PSIN		1030008 B	6099 E		01:15:17	0.00

LONGEST DURATION CALL REPORT

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27 Apr 2011	20:50:10	LONGEST DURATION CALL REPORT					TCP PCSTATS			TELMAX21 2.0	
Date From: 01/04/2011		Call Category:		All Categories							
To: 30/04/2011		Type:									
Site ID: All Sites		Equipment Type:		Ignore Transit Calls: N							
SiteID	Date	Time	Call	Dialled	InLet	OutLet	Equipment	Duration	Cost	(\$)	
		hh:mm:ss	Type - Description	Number	No.	Type	No.	Type	Type	hh:mm:ss	
100	27/04/2011	16:46:16	S - O/G direct STD	0396694000	2061	E 5	K		01:15:08	22.05	
103	27/04/2011	16:46:42	K - I/C PSIN	00362243872	1030001	B 5714	E		01:15:08	0.00	
103	07/04/2011	18:35:44	M - Mobile Phone	0417392076	8368	E 1030002	K		01:15:03	19.47	
208	12/04/2011	12:31:08	5 - PowerTel STD	0280149491	2723	E 2080002	K		01:14:17	3.71	
103	12/04/2011	15:15:09	4 - PowerTel Local	92394620	4529	E 1030002	K		01:13:23	0.08	
103	04/04/2011	14:18:30	4 - PowerTel Local	90183388	4310	E 1030002	K		01:13:15	0.08	
100	01/04/2011	15:19:48	K - I/C PSIN	396694000	10025	B 2021	E		01:13:12	0.00	
103	01/04/2011	15:20:09	K - I/C PSIN	0362212021	1030002	B 5718	E		01:13:10	0.00	
101	01/04/2011	14:25:39	K - I/C PSIN	0418253117	1010002	B 8765	E		01:12:58	0.00	
103	07/04/2011	11:12:31	f - FREE Call	1800420354	4857	E 1030002	K		01:12:47	0.00	
103	15/04/2011	11:57:46	4 - PowerTel Local	98767225	4560	E 1030002	K		01:12:41	0.08	
103	27/04/2011	13:57:14	K - I/C PSIN	00392394687	1030003	B 4520	E		01:12:39	0.00	
103	27/04/2011	16:46:47	K - I/C PSIN		1030001	B 5715	E		01:12:26	0.00	
103	13/04/2011	15:42:37	5 - PowerTel STD	0262766622	4433	E 1030002	K		01:11:09	3.55	
103	20/04/2011	19:04:27	K - I/C PSIN	00892632240	1030003	B 4510	E		01:11:04	0.00	
107	20/04/2011	17:09:20	b - ISDN STD	0396694510	2240	E 1102	K		01:11:04	29.01	
103	08/04/2011	11:43:34	5 - PowerTel STD	0262766622	4490	E 1030002	K		01:11:00	3.54	
103	20/04/2011	11:41:17	K - I/C PSIN	00362244175	1030004	B 8219	E		01:10:49	0.00	

...

LONGEST DURATION CALL REPORT

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Figure 7.8b: Dialed Number Report

Report Interpretation

Heading	Description
SiteID	The actual SiteID for the call.
Date	The Call End Date dd/mm/yyyy
Time	The Call End time hh:mm:ss.
Call Type - Description	The Call Type Description of the longest call.
Dialled Number	The Dialled Number for the longest call.
InLet No.	The Extension or Route/Trunk origination the call.
InLet Type	The Type (i.e. E for Extension K for public route/trunk)
OutLet No.	The outgoing route/trunk of the longest call.
OutLet Type	The outgoing route/trunk type.
Equipment Type	The equipment type (if. Exists in the Directory)
Duration	The Call Duration hh:mm:ss
COST	The cost of the longest call.

INFORMIX DATABASE INFORMATION

Function Description

The 'Informix' option allows users to enter the Informix 4GL product and use it to extend the range of operations that can be performed on stored data.

Usage

Because there are many cases of users needing to have their data reported in a manner specific to their special environment it would make it prohibitively expensive to customise systems that cater for each user.

The cheaper and much more flexible alternative is to provide the user with the means to generate reports at will. This is achieved by making the full facilities of the powerful 4GL language, Informix, available to the user. **Please note anyone with access to the functionality must consider the potential impact upon the operation of the system if they modify or remove data.**

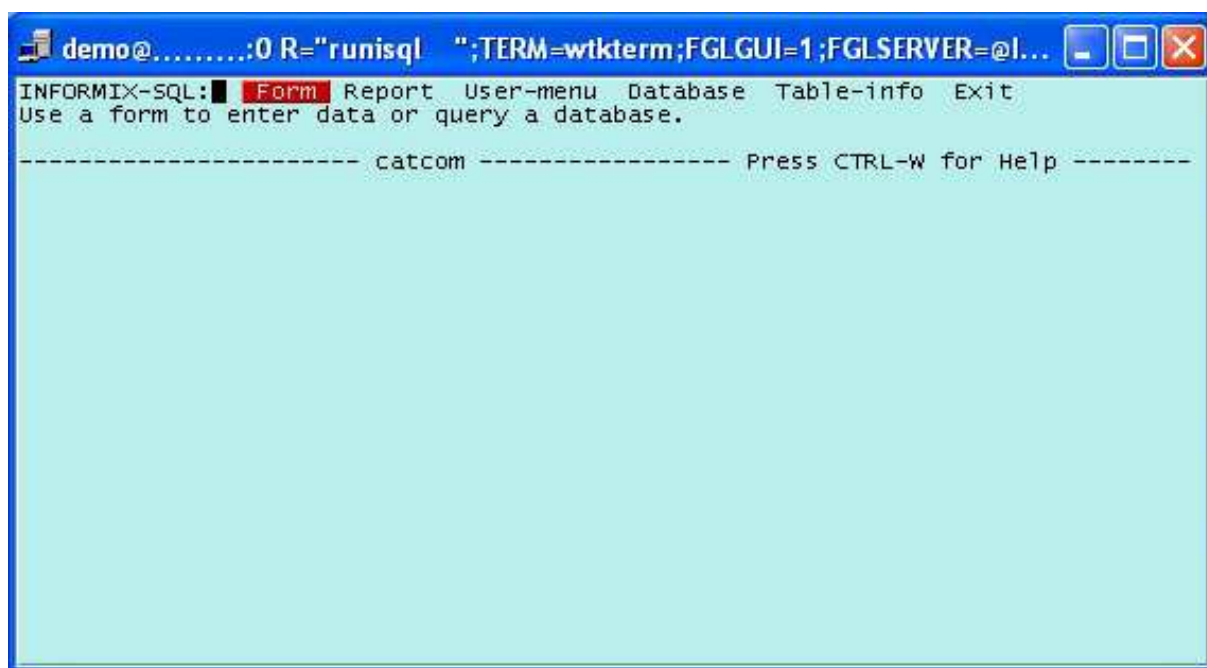


Figure 8.2a: Informix Menu

This is the standard Informix menu. Each item in the menu offers an option.

Menu Item	Comment
Form	Use a form to enter data or query a database.
Report	Display or print a report.
User-menu	Use a custom-built menu.
Database	Choose a database to work with.
Table-info	Retrieve information about the tables in the current database.

Now for a quick lesson in using this information.

With **Form** highlighted, press **Enter**.

A number of forms (tables) will be presented.

Use arrow key to select **dialled**, then press **Enter**.

A new screen will be presented to you.

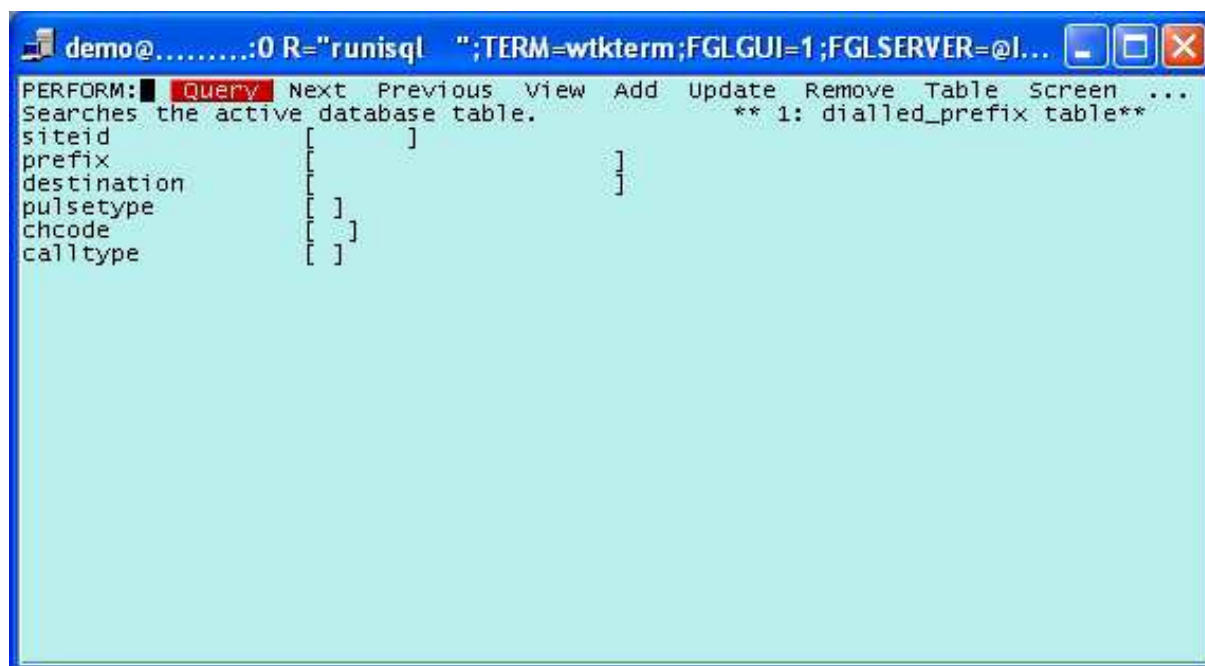


Figure 8.2b: Informix Query Screen

Press **Q** (Query), cursor goes to 'Siteid' field.

Arrow down to 'Prefix' field.

Type in **00111***, then press **<Escape>**.

The tables are searched, possibly 18 rows are found, with the first row being displayed.

siteid	[32767]	A default value for all sites.
prefix	[00111801]	International dialling code for USA/Area.
destination	[00111801]	Could be actual Country/State.
route id	[32765]	A default value for all PSTN routes.
Chcode	[i]	One charge code, refer also the Unitpulse table.
Calltype	[X]	Call type X is International.

Press **N** (Next) to see next row, continue as necessary.

Press **E** (Exit) when finished.

Follow screen instructions.

MANAGE LOG FILES

Description

The **Manage Log Files** option allows the administrators to view special files which gather information on various key operational features on the system. These are stored until viewed and cleared by the user.

The options are:

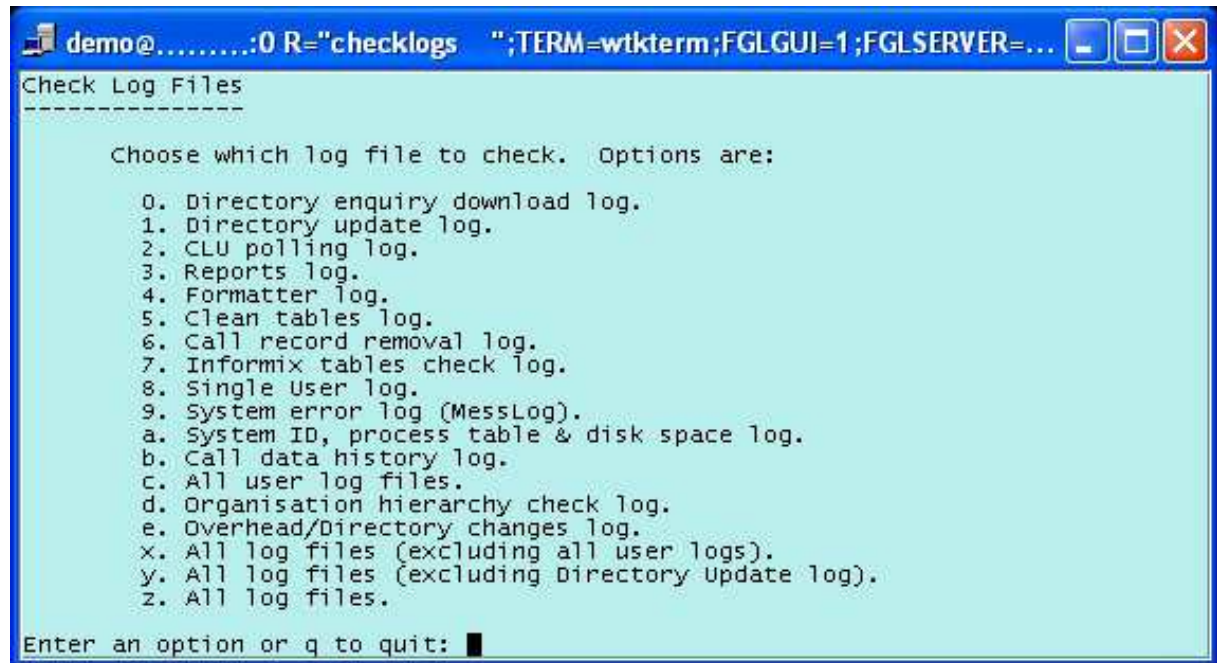


Figure 8.3a Log file selection screen

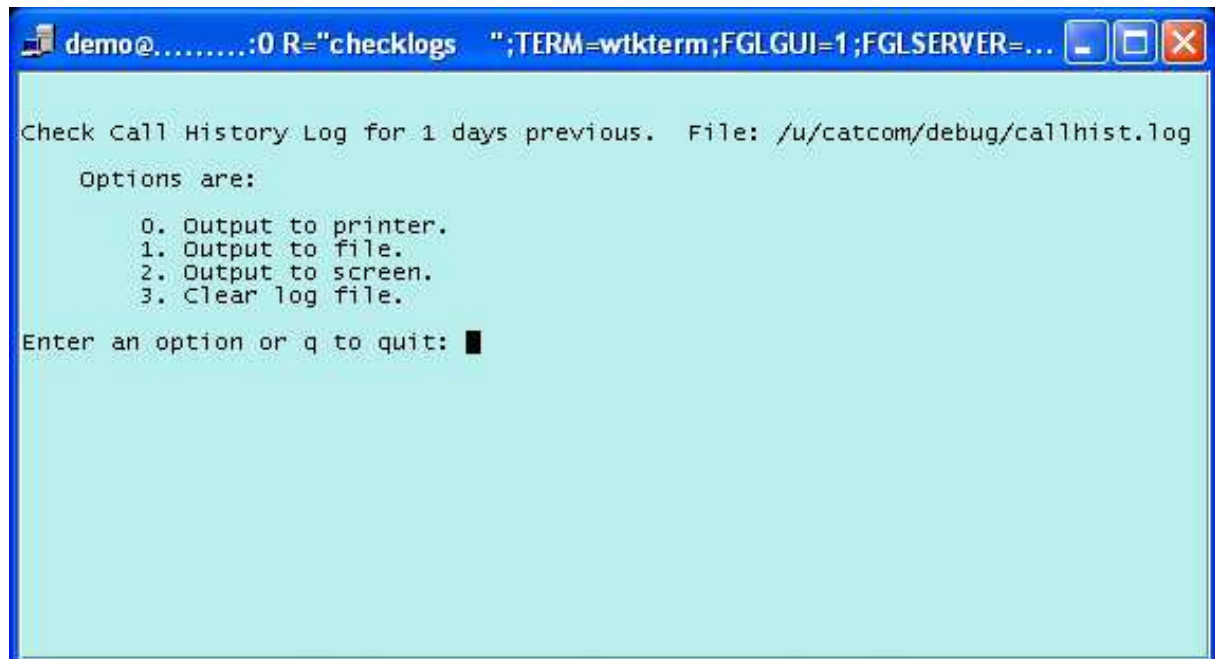
EXPLANATION

0. This shows if and when any errors occurred during the routine Directory download process and the date or time of the next scheduled one.
1. Provides an audit trail of changes made by users to the information customised in the directory database.
2. Date of latest poll per site.
3. Provide audit trail of reports run on the system.
4. Record of calls formatted, with number completed and rejected
5. This log shows the automatic deletion of old Informix call data tables.
6. This shows whether the system has removed call records due to the preset limit (typically 90%) being resolved.
7. Automatic system check of relational database.
8. Provides a list of where users login and logout giving date and time.
9. Displays any errors in hierarchy.
 - a. System disk space shows the available disk space in each of the partition.
 - b. No. of calls polled per site per day.
 - c. Display each user's login and logout date and time.

- d. Displays changes which have been made to the organisation hierarchy.
- e. Displays modifications to overhead charges.
- x. Will display all log files except user logs.
- y. Will display all log files except Directory update logs.
- z. Will display all log files.

Enter the number or letter from the list corresponding to the required log file or **Q** to quit the report.

Once an option from choice 0-z has been selected you are presented with the following screen:

A screenshot of a terminal window titled 'demo@.....:0 R="checklogs ";TERM=wtterm;FGLGUI=1;FGLSERVER=...'. The terminal displays the following text:

```
Check Call History Log for 1 days previous. File: /u/catcom/debug/callhist.log
Options are:
    0. Output to printer.
    1. Output to file.
    2. Output to screen.
    3. Clear log file.
Enter an option or q to quit: █
```

Options are:

- 0. Output to printer.
- 1. Output to file.
- 2. Output to screen.
- 3. Clear log file.

Enter the number or letter from the list corresponding to the required output format or **Q** to quit the report.

REPORT OUTPUT OPTIONS

Overview

The **Report Output Options** module is accessed either from the **System** menu in **Telmax21 Main menu** or by clicking on **Options** in the **Report Execution Method** window (see **Report Execution Method** in **Chapter 3**). Whichever method is used, the screen shown in **Figure 8.4a** appears.

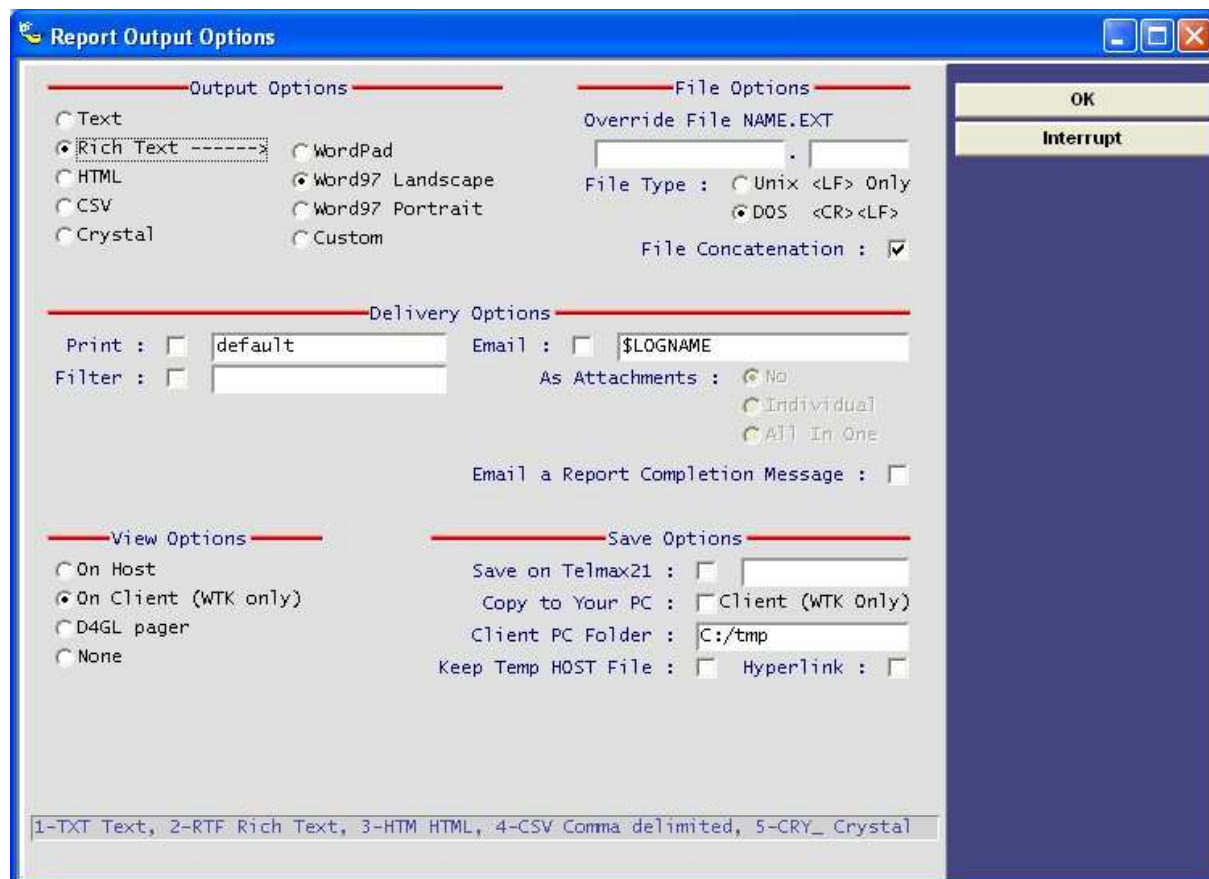


Figure 8.4a: Report Output Options Screen

Screen Description

Field	Field Characteristics	Comments
Output Options	Radio button. Click on one button only.	<p>This setting determines the way that the report is formatted. Options are: Text, Rich Text, HTML, CSV or Crystal.</p> <p>Choosing Text will output a file in plain ASCII text. Choosing Rich Text will give the option to select an output file in Rich Text Format, which allows more complex formatting such as margin information and font size. This selection also activates radio buttons allowing a more refined choice of formats, (Wordpad, Word97 Landscape, Word97 Portrait or Custom). Choosing HTML will output a file in HTML, which may be displayed in a web browser. Choosing CSV will output a file in comma delimited format. Choosing Crystal will</p>

		output crystal reports.
File Options	Override FileName.EXT —Type in a filename and a filename extension.	If left blank, the file generated will follow the naming conventions of the Telmax21, as described in Managing Reports in Chapter 3. In addition, the extension of the filename will depend on whether Text (.txt), Rich Text (.rtf), HTML (.htm) or Crystal has been selected. If a filename is entered by the user, this will overwrite the default filename as well as adding on any filename extension which is entered after the ‘.’.
File Type	Radio buttons - Click on either Unix or DOS .	For normal viewing of reports on a Windows PC, the DOS option is appropriate. If the file is to be viewed on a Unix machine such as the Telmax21, Unix should be clicked on.
File Concatenation	Checkbox – Click to concatenate report output files.	Some Telmax21 reports generate more than one file as the output eg. running a Call Extension Detail Report on an Extension Group will generate separate reports for each extension in the group. If the File Concatenation checkbox is ticked, the separate reports are concatenated, meaning the second report is added on to the end of the first report, the third report is added on to the second report etc. so that a single file is the end result.
Delivery Options	Print --Click on the checkbox to output to a printer, otherwise leave it blank.	Click on the checkbox to output directly to a printer. Leave as default to print to the default printer configured on the Telmax21. Alternatively, a different printer name can be specified. Note that these printers are those set up on the Telmax21 Unix system, not the local Windows PC.
	Filter --Click on the checkbox and enter a Unix command to perform additional text processing on the output.	This option allows the filtering of the report output via Unix commands. It should only be chosen by advanced users with a knowledge of Unix commands and would not be necessary in most situations.
	E-Mail --Click on the checkbox to e- mail the report to an e-mail address, otherwise leave it blank.	To automatically e-mail a report to an e-mail address, click on the checkbox and enter the address of the person to e-mail the report to.

	As attachment --choose NO, Individual, or All In One	
	E-Mail a Report Completion Message --Click on the checkbox to e-mail notification of completion of the report to an e-mail address.	If the checkbox is ticked, an e-mail message informing the recipient that the report has been completed will be sent to whatever e-mail address is specified in the E-Mail field.
View Options	Click on On Host , On Client , D4GL pager or None .	This setting determines the physical location of the file being viewed. If it is set to On Host , the file is actually created in the tmp folder in the home directory of the user running the report. The file is displayed using the Windows application associated with files of that extension eg. Notepad for files with a .txt extension. On Client means that the output is viewed the same way as On Host but the file being viewed is on the local Windows PC. D4GL pager displays the generated report in a specific viewing application designed for viewing text files. The actual location of the file is the same as the On Host option. Picking the None option causes any output not to be displayed on the screen.
Save Options	Save on Telmax 21 --Click to save output on the Telmax 21 machine. Type in a path to a folder on the Telmax 21 to override the default location.	If this checkbox is ticked, the file generated by running the report is saved in the appropriate location on the Telmax21, according to the type of report being run. If a new path is specified, the report will be saved there instead. Note that a forward slash (/) must be used in the directory path, not a backslash (\). For example, data/reports is a valid pathname whereas data\reports is not. Also, whichever directory is specified must exist prior to the report being run.
	Copy to your PC --Click to copy the output file to the local Windows PC.	If this checkbox is ticked, the file generated by running the report is saved on the local Windows PC, in the location specified in the field below, Client PC Folder .

	Client PC Folder --Leave as the default or type in a new location to save the output there instead.	By default, this field is set to C:/tmp, which is normally the hard disk on the local Windows PC. Note that a forward slash (/) must be used in the directory path, not a backslash (\). For example, C:/tmp is a valid pathname whereas C:\tmp is not. Also, whichever directory is specified must exist prior to the report being run.
	Keep Temp File --Click the checkbox to keep the temporary file generated by the report.	When a report is run, the output generated exists only temporarily, unless this checkbox is ticked. If it is ticked, the temporary file will remain on the local Windows PC or the Telmax21, depending on the View option selected.

Once all of the desired options have been set, click on **Ok** to proceed or **Interrupt** to go back to the previous screen. If **Ok** is clicked, a window will pop up as shown in **Figure 8.4b**, asking whether the changes made to the previous settings are permanent. Click on **Yes** to make the current settings the new default settings. Otherwise, click on **No** to change the settings for the current report only.

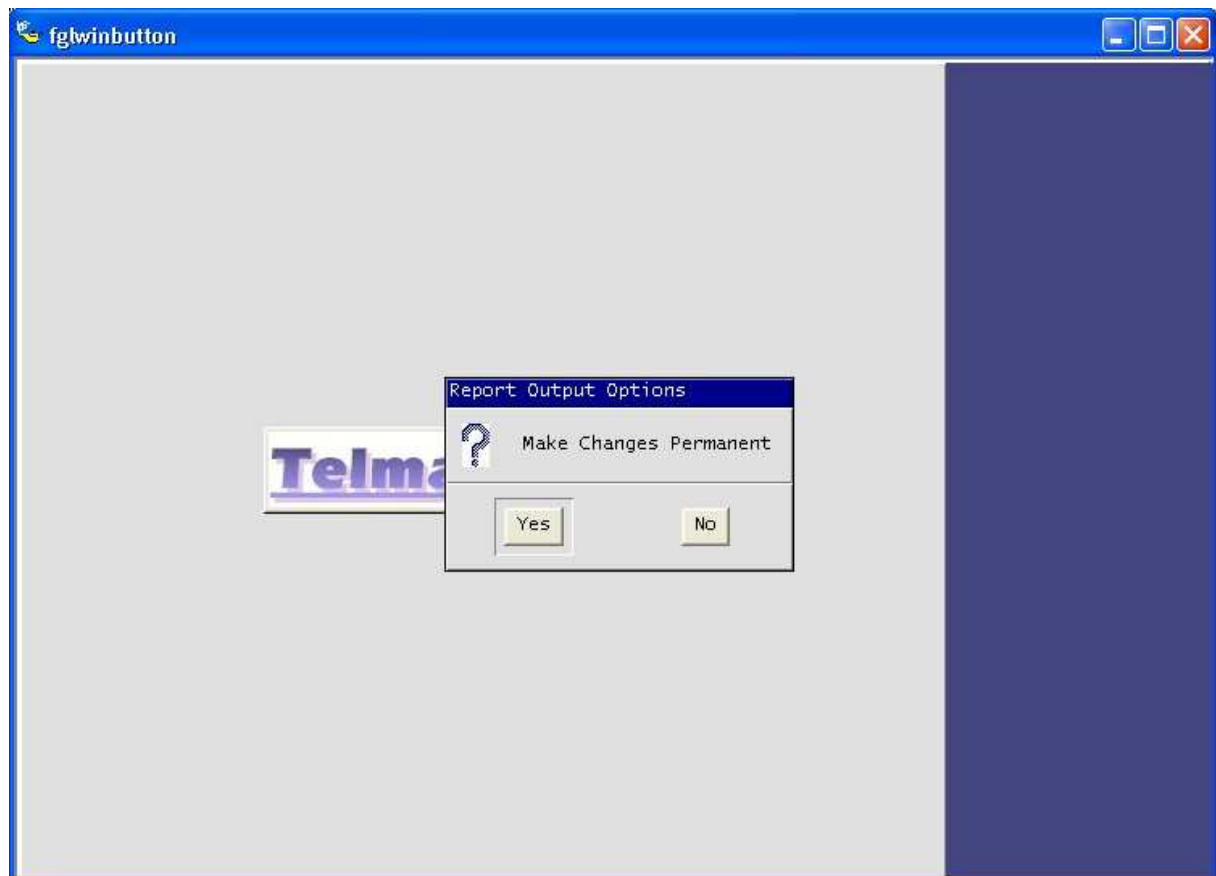


Figure 8.4b: Changing Default Settings

STANDARD QUERY LANGUAGE (SQL)

Overview

Standard Query Language (SQL) is a recognised query language, allowing powerful searches on the tables, which make up, a particular database, such as that used by the Telmax21. Those users who are familiar with this language will find this of great benefit. Others may need to either undertake a training course or you can contact Trans-Mit for assistance.

Function Description

To run a SQL query, follow these steps:

1. Click on **Standard Query Language** in the **System** menu of **Telmax21 Main menu**.
2. Select Edit and press enter.
3. Enter the SQL statements and then save the file with **sql** or **t21sql** as the file extension. An example filename might be **std.t21sql** or **std.sql**.
4. Press enter on Run and the SQL statements will be executed and the output will appear.

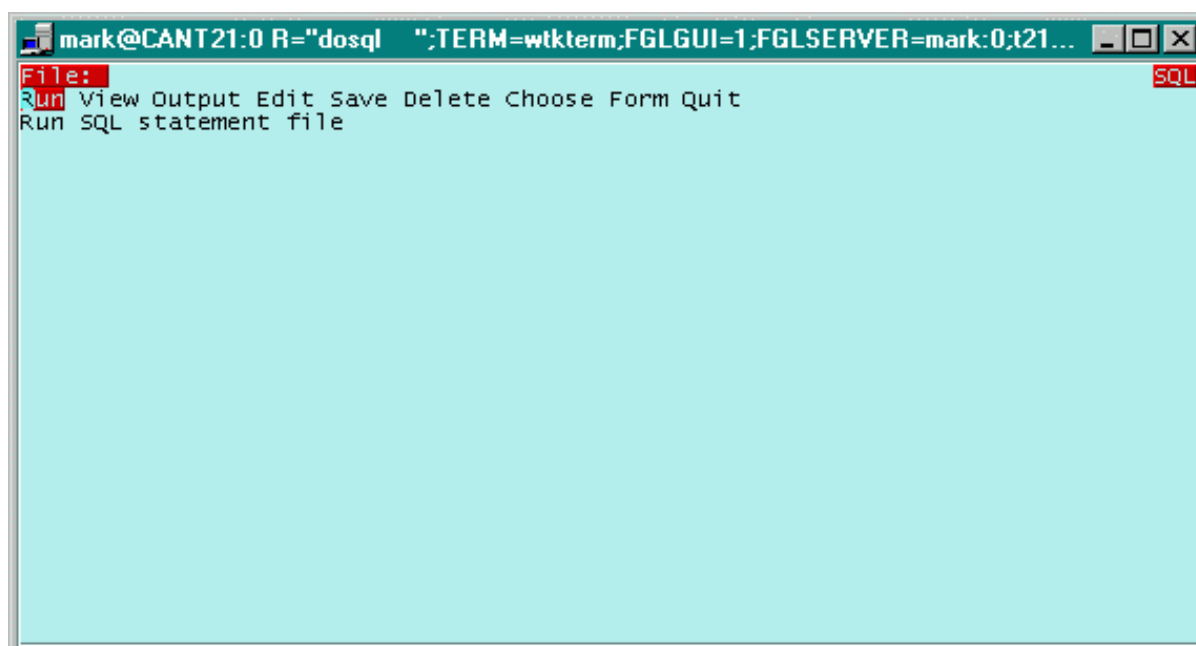


Figure 8.5a: SQL Screen

Menu Item	Comment
Run	Run the selected SQL statement file.
View	View a previously saved output file.
Output	Save the current output to a file.
Edit	Edit the selected SQL statement file.
Save	Save the selected SQL statement file.
Delete	Delete the selected SQL statement file.
Choose	Select a SQL statement file from those which have been saved.
Form	Run an Informix form.
Quit	Exit from the Standard Query Language program.

Example of the Use of Standard Query Language

The following steps will create a new SQL statement file to find all calls from the 8th March 1999 where the dialled number started with 00111 (ie. calls to the US) and the output will be sorted by extension number.

1. Press **E** (or use the left or right arrow keys to highlight **Edit** and press <ENTER>) to edit a SQL file.
2. The screen shown in **Figure 8.5b** will be seen.

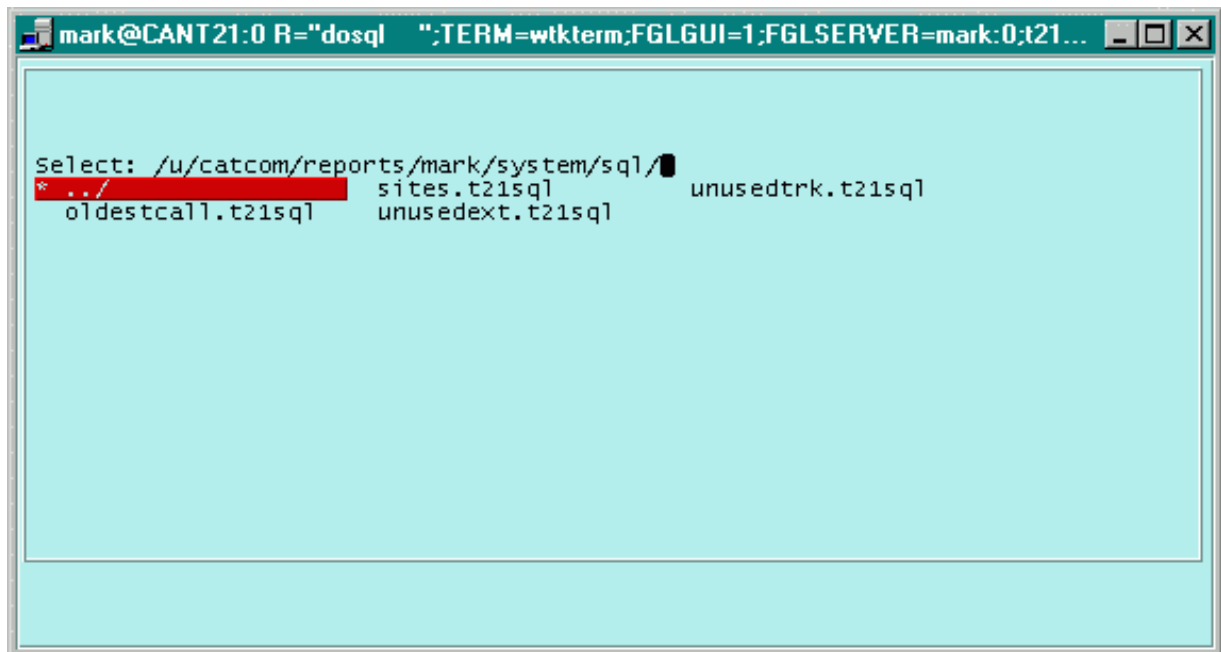


Figure 8.5b: Creating a New SQL File

3. The cursor will be in the correct position to allow the name of the new SQL file to be added. Type in "uscalls", then press <ENTER>.
4. File /u/catcom/reports/demo/systems/sql/uscalls is now created. The screen is blank with the cursor in the top left hand corner.
5. Type in the select statement as below:

```
select * from c08_03_1999
where dialledno matches "00111*"
order by inletno
```
6. Press <ESC>. Press **R** to run the query (or use the arrow keys to highlight **Run** and press <ENTER>).
7. The results if any will now be displayed on the screen. Press <ESC> to return to edit mode.
8. Press **E** (or use the left or right arrow keys to highlight **Edit** and press <ENTER>). The original statement appears.

We will now edit this to make it more readable on the screen:

1. Use the arrow keys to move the cursor one position to the right of the *. Press the backspace key to delete the asterisk and then type in a new statement so that the new query is as shown below:

```
select inletno, outletno, dialledno from  
c08_03_1999  
where dialledno matches "00111*"  
order by inletno
```

2. The statement has been modified. Press <ESC> and then press **R** to run the query (or use the arrow keys to highlight **Run** and press <ENTER>).
3. The result (if any) will appear in a clear form. Press <ESC> to return to the main menu.

CONFIGURATION ERRORS REPORT

The **Configuration Errors Report** is used to identify a parameter in the Telmax21, which has not either been configured correctly or not at all. Once a new system has been bedded down then this report should have very little output. It is particular useful in the early phases after installation or following a major change or update to the network.

Figure 9.1a: Configuration Errors Report Input Screen

Input Screen Description

Field	Field Characteristics	Comments
Date From	Entered as shown. Change as necessary.	Selects the start date of the period to be reported on.
Date To	Entered as shown. Change as necessary.	Selects the end date of the period to be reported on.
Site ID	Enter a specific Site ID, or blank for all sites. Otherwise, click on Pick From List to find, then OK to select.	Selects the site to be reported on. Not always required.
Detail/Summary	Highlight either the Summary or Detail.	Selects the report output format and gives a summary report of all error types.

Error Type	Highlights the particular error type you wish to report on.	Provides a listing of errors depending upon which one is selected, only available if Detail is selected.
------------	---	--

Report Output

```

-----
21 Oct 2003   10:51:58           CONFIGURATION ERRORS SUMMARY REPORT           TCP TRANSMIT           T21 2.0
-----
Date From: 20/10/2003 To: 20/10/2003
-----
              Date              Error Code      Error Description              Error Count
-----
Site ID: 103   MLB   MELBOURNE
              20/10/2003          D          Dialed Prefix Not Defined          6
              20/10/2003          E          Incoming & Outgoing Extn Error      5
-----

CONFIGURATION ERRORS SUMMARY REPORT                                     PAGE 1 END

```

Figure 9.1b: Configuration Errors Summary Report

Error types

Error Type	Meaning
O	No error.
D	Dialed prefix not defined.
F	Dialed prefix and route error.
C	Wrong call type.
T	Time band error.
N	Short duration call.
A	Incoming extension error.
B	Outgoing extension error.
E	Extension (A & B) error.
R	Route not defined.

Detail: Run the detail report for each error type to determine precise configuration error.

For extensions not loaded, run **Extension Group Summary Report** on UNK-‘Site No’. Note: this group name may be different for some systems.

EXTENSION RANGES

Entry Screen Description

Extension Ranges must be added before extensions can be inserted into the directory module and have call accounting reports printed.

Enter via the **Telmax21 Main Menu**. Select **Extension Ranges** from the **Config drop down menu**.

The Extensions Ranges screen will be displayed. Fig 9.2a

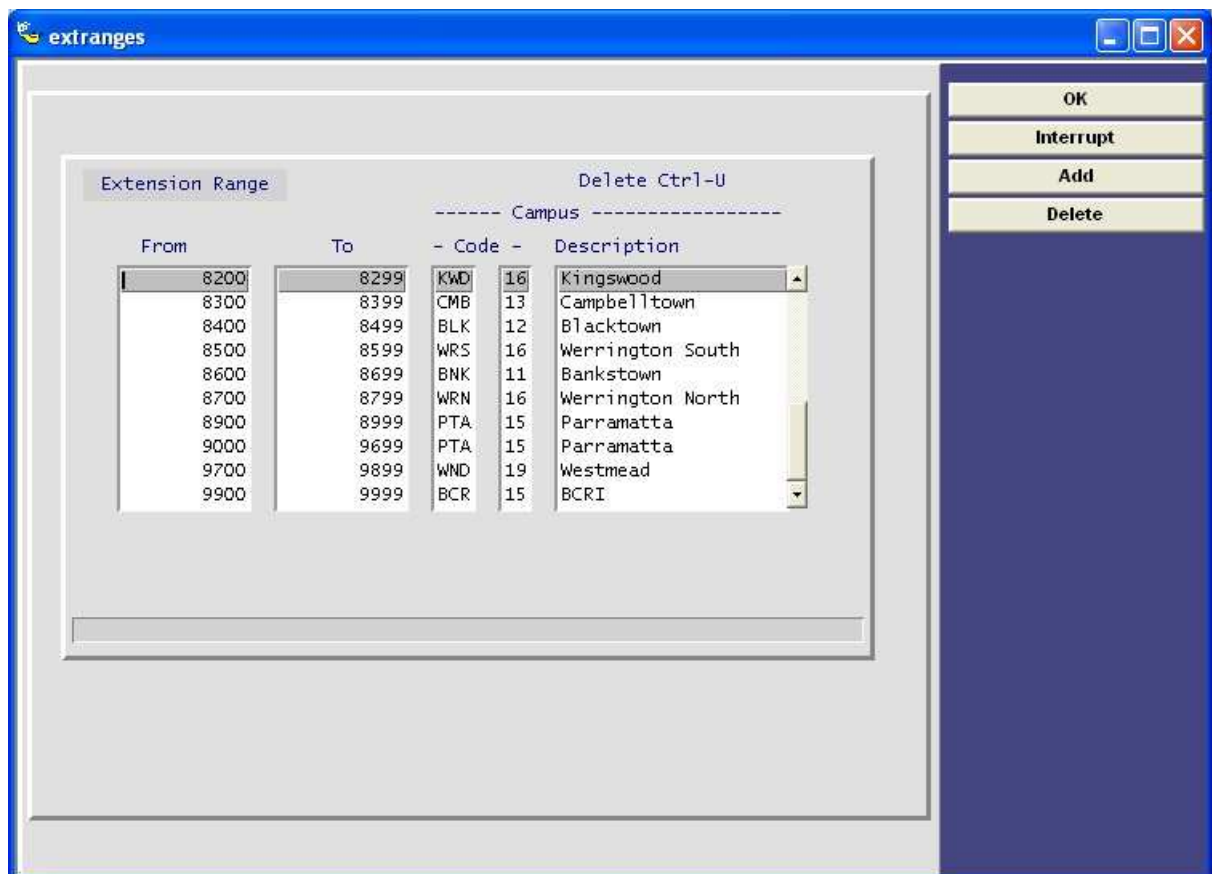


Fig. 9.2a Extension Ranges Entry Screen

Note : Additions or deletions to extension number ranges affect the Directory package.

Screen Description

Field Characteristics		Comments
From	Entered as Numeric Extension ranges must not overlap When the From field is entered so must To field be entered.	Paired with the To field, configures a sequential set of extension numbers for the menu line. eg: for an extension range '308 to 811' enter 308 for the From field
To	Entered as Numeric Extension ranges must not overlap When the From is entered so must the high range be entered	Paired with the To field configures a sequential set of extension numbers for the menu line. eg: for an extension range '308 to 811' enter 811 for the To field
- Code -	Alphabetic	Alphabetic Campus ID.
- Code -	Numeric	Numeric Campus ID.
Description	Alphanumeric	Description of the group to which this range of extension numbers has been allocated.

Operating Procedures

Add Extension Range

Click on the **ADD** button. The cursor will appear in the **From** field.

Enter the lowest valid extension number for the range and press Enter. The cursor will move to the **To** field.

Enter the highest valid extension number for the range and press Enter. The cursor will move to the first **Code** field.

Enter the alphabetic **Campus ID** and press Enter. The cursor will move to the second **Code** field.

Enter the numeric **Campus ID** and press Enter. The cursor will move to the second **Description** field.

Enter a description for the extension range and click **OK**.

NETWORK & CLIENT NODE

Entry Screen Description

Network data is a prerequisite to every system to ensure its proper operation.

Application – Configure – Network

Node : **Network** Client Node Quit

Network Details

Network Maintenance

Network Name : [TELMAX21]

Network Owner : [TRANSMIT]

Short Holding Time : [10]

Call Storage Days : [9999]

Automatic Commit Nbr : [1]

Fig. 9.3a: Network Configuration Screen

	Characteristics	Comments
Network Name	Any	Sets the name by which a network is identified
Network Owner	Any	Sets the identity of the entity responsible for the network
Short Holding Time	Numeric	Sets the number of seconds at the beginning of each call that is not charged in call accounting. In this example calls less than 20 seconds will not be costed. They will appear in the reports as FREE calls.
Call Storage Days	Numeric	Sets the number of days to store fully detailed call records before discarding them from the database No longer used. Default to 9999.
Automatic Commit Nbr	Numeric	Sets the number of automatic updates when doing Directory changes.

NETWORK & CLIENT NODE

Entry Screen Description

Client Node data is a prerequisite to every system to ensure its proper operation.

Application - Configure - Network (ACN)

Node : Network Client Node Quit	
Client Node Details	
Node Name	: [TRANSMIT]
Node Type	: [CLP]
Network Name	: [TELMAX21]
Parent Node Name	: [TMIT0]
Node Description	: [TRANS-MIT TEST CLU]
Street	: [MILES ST]
City	: [MULGRAVE]
State	: [VIC]
Postcode	: [3170]
Country	: [AUSTRALIA]
Product Name	: [T21]
Product Revision	: [2.0] Phone Number []
Commission Date	: [01/04/2003]
Access Code	: [TRANSMIT]
Prefix Suppression	: [0] Retries [4]
Suffix Suppression	: [2] Last poll Date [2110030800]

Fig. 9.3b Client Node Entry Screen

Field Characteristics		Comments
Node Name	Any	Sets the name of the node in the network
Node Type	TCP or CLU or CLP	Must be the main site TCP, or the CLU or CLP
Network Name	See previous screen.	Same name as defined in Network screen.
Parent Node Name	Alphanumeric	Must be a CNP, RNP or TCP.
Node Description	Any	Describes the node being configured here.
Street	Any	The name of the street
City	Any	The name of the city
State	Any	The name of the State
Postcode	Numeric	The Postcode
Country	Any	The country
Product Name	T21	Telmax21
Product Rev.	2.0	

Commission Date	01/04/2003	Actual date of commissioning
Prefix Suppression		Default 0.
Suffix Suppression	2 .	telephone numbers now appear as 957489xx
Phone Number	351	Extn number of CLU modem or full telephone number.
Access Code	TRANSMIT	Password for the modem on CLU
Retries	4	Attempts to poll CLU or PCCLU
Last Poll Date	2110030800	DDMMYYHHMMSS

Configuration

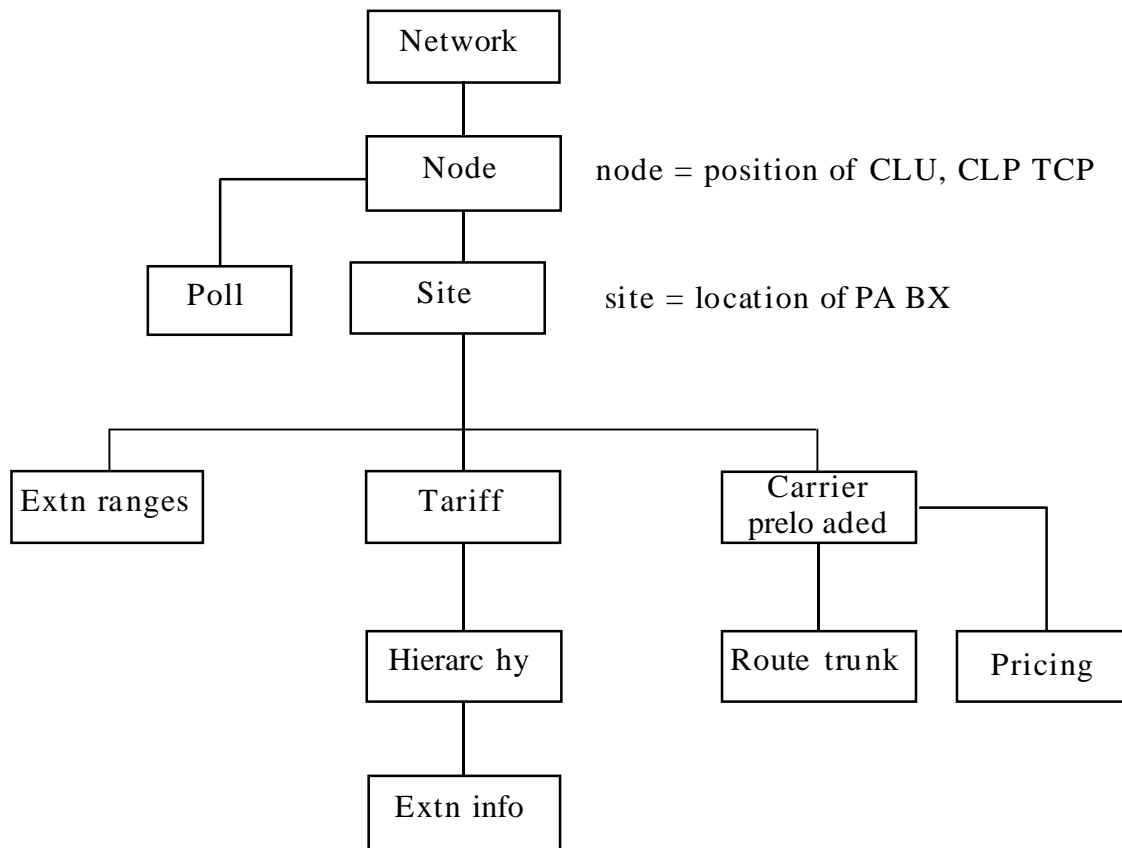


Fig. 9.3c Telmax21 Network Software diagram

PABX SITES - CLIENT

Entry Screen Description

PABX Client information data is a prerequisite to every system to ensure its proper operation.

Application - Configure - PABX sites

NETWORK: **Client** Quit
 Clients Company details

 PABX Details

 Site Id : [100]
 Site Code : [TMIT]

 Node Name : [TRANS-MIT]
 Parent Site ID : [100]
 Site Owner : [SUPPORT]
 Site Name : [TMIT]
 : []
 Street : [MILES ST]
 City : [MULGRAVE]
 State : [VIC] Postcode : [3170]
 Country : [AUST]

 PABX Type : [NEAX7400]
 Formatter Type : [TELCAPCLU]
 Site Dial Prefix : [03]
 Site Type (S, M) : [S]

Figure 9.4a PABX Client data input screen

NOTE WELL!!!:

The Node Name must be preconfigured on the Nodes file before Sites can be configured

Nodes will be preconfigured by Trans-Mit.

Characteristics		Comments
Site ID	1 to 32767	This field configures the PABX Site identifier - will always be used when referring to the PABX
Site Code	4 Letters	Sets the identifier of the Site for all user interfaces.
Node Name	Do in Client Node first	This field names the system to which the PABX (referred to by ,Site ID above) forwards its data
Parent Site ID	1- 32767	Carries the identifier of the parent PABX to which this PABX is being linked.
Site Owner	Any	Names the owner of the PABX..
Site Name	Any	The system offers a short (20 character) and a long (60 character) field to be entered.
Street	Any	The street name
City	Any	The city name
State	Any	The state name
Postcode	Alpha-Numeric	Post Code
Country	Any	The country name
PABX Type	Any	Information only
Formatter Type	Any	TELCAPCLU is normal
Site Dial Prefix	Numeric	Area code of Site in question
Site Type	S or M	S = Single site, M = Multiplex Composite SMDR

CALL PRICING - TARIFF

Application - Configure - Update (ACU)

Tariff Maintenance	
Tariff - Type	: [T]
- Description	: [Standard Charging]

Fig. 9.4b Tariff configuration input screen

	Field Characteristics	Comments
Tariff - Type	T Standard Charging A Admin G Guest	Configures the Tariff - Type that is used for its call charging
- Description	ANY	Configures the description of Tariff - Type for use in reports. eg: 'Administration Rate' or 'Guest Rate'

ROUTES & TRUNKS

Overview

It is a prerequisite that the route and trunk data is entered into the Telmax21 at the initial configuration stage and that this data is maintained on an ongoing basis to ensure the accuracy of the system for the various reports that access the call data.

Data Input and Maintenance

The input and maintenance of the route trunk data is via the standard Telmax21 input screen format. These screens are accessed via the Config → Routes & Trunks menu options.

The layout of the input screens is shown below. Most of the fields have a brief description displayed on-line to aid the input of data.

Route and Trunk Add

Figure 9.5a: Route Trunk Input screen

Use the **Pick From List** button, on the **Site ID** field to enter the ID of the appropriate site from the selection list. The Site name will be displayed in the field to the right.

Route Input Screen Description

Field	Field Characteristics	Comments
Site ID	Enter a specific Site ID, Otherwise, click on Pick From List to find, then OK to select.	Selects the site the route or trunk is to be configured on.
Route ID	Enter a specific Route ID. Otherwise, click on Pick From List to find, then OK to select.	Selects the Route or adds new one.
Route Type	Select a specific Route type from the window that appears.	Selects the Route type. Options are: PSTN, Tie, Indial or Tributary. See fig. 9.5b
Route Destination	Allows for a description of the route.	Add up to 20 characters description eg. Melb to Syd Tie
Route Local ID	Enter the Route ID for local end of Route.	
Default Pulse Type	Enter a single character for the carrier costing or pick from list.	
Short Holding Time	Enter a value in seconds	Default value is 10 seconds. The value determines the grace period for a call before it will be costed.
Strip Digits	Enter a value equivalent to the number of digits required to be stripped leaving the real, dialled number.	If there is an access code in front of the dialled number this allows for them to be removed and allow the costing to be done on the actual dialled number.
Trunk Type	From the window that pops up select the description that describes the Trunk type.	See fig. 9.5c
Route Remark	Enter extended route description details	
Exch_A_End	Exchange name and codes	Eg WERR STH PC 1
Exch_B_End	Exchange name and codes	Eg WERR NTH PC 10
Route Code	Code name for route	Eg TIE, 2M, VoIP
Alternate site ID	Enter a specific site ID or pick from list.	You can select an alternative site to be used for Dialled prefix searching this minimisers the need to load a dialled prefix table for each site within the same area code.
Override Carrier	You can enter up to two other carriers that may use the route by the inclusion of access codes.	This feature allows different costing dependant on the actual carrier used.
Access Digits	Numeric	Stores the digits required to be entered to route calls through the override carriers
Pulse Type	Alphabetic character	Code for the pulse type used by the override carrier.

Site ID	Enter a specific Site ID, Otherwise, click on Pick From List to find, then OK to select.	Override Site Id to be used for Dialed prefix searching. ID of the site through which the override carrier is accessed.
Trunk Local Call	Display only	Shows the Trunk Local ID allocated to the route.
Count	Display only	Shows the number of Trunk Local IDs allocated to the route.

Route Add

At the **Route Type** entry field the **Select Route Type** box will be displayed.

The screenshot shows the 'routetrunk - Route and Trunk Data Maintenance' application window. The 'Add Route Trunk Details' form is open, displaying various fields for route configuration. A 'Select Route Type' dialog box is overlaid on the form, showing a list of route types: PSTN, Tie, Indial, Tributary, and Back. The dialog box has a question mark icon and the title 'Routes & Trunks'.

Figure 9.5b: Route Type Input box

Select the correct Route Type.

At the **Trunk Type** entry field the **Select Trunk Type** box will be displayed as shown on 9.5c.

The screenshot shows the 'routetrunk - Route and Trunk Data Maintenance' window. The 'ADD ROUTE TRUNK DETAILS' form is displayed with the following fields and values:

- Site ID: 101
- Route ID: 50
- Route Type: K
- Route Destination: ISDN B/W
- Route Local: 50
- Default Pulse Type: I
- Short Holding Time: 10
- Strip Digits: 0
- Trunk Type: (empty)

A 'Select Trunk Type' dialog box is open, showing the following options:

- Bothway
- Incoming
- Outgoing
- Back

The dialog box also has a 'Pick From List' button. The main window has buttons for View, Nxt, Prv, Frst, Last, Add, RtMod, TkMod, Del, and rpOrt. The right side of the window has buttons for OK, Interrupt, and Pick From List.

Figure 9.5c: Trunk Type Input box

Select the correct Trunk Type for the route.

The **Route Remark** field is available for comments relating to the current route to be entered.

When all required fields on the **Route Add** screen are complete:

Click **OK**

The **Trunk Add** screen will be displayed.

Modify Route

Select **RtMod** from the **Route and Trunk Data Maintenance** screen and enter the new data.
(See fig 9.5a.)

Trunk Add

Click the **Add** box and enter the correct **Trunk Range** as per the example in Figure 9.5d.

The screenshot shows the 'routetrunk' application window. The main menu bar includes 'ROUTE TRUNK', 'View', 'Nxt', 'Prv', 'Frst', 'Last', 'Add', 'RlMod', 'TkMod', 'Del', 'rnOrt', and 'Exit'. A secondary menu bar for 'TRUNK LOCAL ID' includes 'View', 'Add', 'Del', 'Nxt', 'Prv', and 'Exit'. The central panel is titled 'View Trunk Local ID Details List' and 'TRUNK LOCAL ID SELECTION CRITERIA'. It features input fields for 'Site ID' (value: 101), 'Route ID' (value: 50), and 'Trunk Local ID Range' (FROM: 50001, TO: 50020). Below these is a 'Trunk Local ID List' section with three columns of input boxes. At the bottom, there are fields for 'MINIMUM', 'MAXIMUM', and 'COUNT' (value: 0). A status bar at the bottom reads 'To Range: ID allocated to Local (Site) Trunk'. On the right side, there are buttons for 'OK' and 'Interrupt'.

Figure 9.5d: Trunk Local Details Input screen

When the **Trunk Local ID Range** is entered, click the **OK** button.

The **Route Trunk Input** screen will reappear.

(To add more information on trunks, select **TkMod** from the **Route Trunk** screen and click on the **Modify** button.. See fig 9.5e)

Modify Trunk

Select **TkMod** from the **Route and Trunk Data Maintenance** screen and click on the **Modify** button.. Enter the new data.

Figure 9.5e: Trunk Local ID Range Modify screen

Enter required information in fields and click **OK**

Trunk Details Input Screen Description

Field	Field Characteristics	Comments
Trunk Number	Numeric	Trunk ID number
Trunk	3 Alphanumeric	Editable unique trunk ID.
LEN Number	LEN number assigned to the trunk	Unique Identifier for a trunk.
Nail Down LEN		Assigned trunk connection
CCT TYPE		
Trunk Remarks	Alphanumeric	Trunk description
Trunk Status	'A' for active 'I' for inactive	Active status of trunk.

ROUTES & TRUNKS

Overview

It is a prerequisite that the route and trunk data is entered into the Telmax21 at the initial configuration stage and that this data is maintained on an ongoing basis to ensure the accuracy of the system for the various reports that access the data.

Data Input and Maintenance

The input and maintenance of the route and trunk data is via the standard Telmax21 input screen format. The layout of the input screens is shown below. Most of the fields have a brief description displayed online to aid the data input.

Route and Trunk Input Screen

route

ROUTE TRUNK View Nxt Prv Frst Last Add RtMod TkMod Del rpOrt Exit

Add Route Trunk Details

ADD ROUTE TRUNK DETAILS

Site ID : 103 MLB MELBOURNE

Route ID : 80 Default Pulse Type: T

Route Type : K Short Holding Time: 10

Route Destination: MELB PSTN OUTGOING Strip Digits : 0

Route Local ID : 80 Trunk Type : B

Alternate Site ID:

Override Carrier : Access Digits Pulse Type Site ID

COUNT

Trunk Local ID :

5 Rows Satisfy Search Criteria

Alternate Siteid to be used for Dialled Prefix searching; <CTRL-F> for List

OK

Interrupt

Pick From List

Figure 9.5a: Route Trunk Input screen

Input Screen Description

Field	Field Characteristics	Comments
Site ID	Enter a specific Site ID, Otherwise, click on Pick From List to find, then OK to select.	Selects the site the route or trunk is to be configured on.
Route ID	Enter a specific Route ID. Otherwise, click on Pick From List to find, then OK to select.	Selects the Route or adds new one.
Route Type	Select a specific Route type from the window that appears.	Selects the Route type from PSTN, Tie, Indial or Tributary.
Route Destination	Allows for a description of the route.	Add up to 20 characters description eg. Melb to Syd Tie
Route Local ID	Enter the Route ID for local end of Route.	
Default Pulse Type	Enter a single character for the carrier costing or pick from list.	
Short Holding Time	Enter a value in seconds	Default value is 20 seconds. The value determines the maximum duration for a call that will not be costed.
Strip Digits	Enter a value equivalent to the number of digits required to be stripped leaving the real number.	If there is an access code in front of the dialled number this allows for them to be removed and allow the costing to be done on the actual dialled number.
Trunk Type	From the window that pops up select the description that describes the Trunk type.	
Alternate site ID	Enter a specific site ID or pick from list.	You can select an alternative site to be used for Dialled prefix searching this minimisers the need to load a dialled prefix table for each site within the same area code.
Override Carrier	You can enter up to two other carriers that may use the route by the inclusion of access codes.	This feature allows different costing dependant on the actual carrier used.

Trunks Assigned to a Route

Once you have added the details of a new route you will get a new window where you can enter the detail of the trunks.

The screenshot shows the 'routetrunk' application window. The main menu bar includes 'ROUTE', 'TRUNK', 'View', 'Add', 'Del', 'Nxt', 'Prev', 'Exit', 'RMMod', 'TkMod', 'Del', 'mOrd', and 'Exit'. The 'TRUNK LOCAL ID' sub-menu is active, showing 'View', 'Add', 'Del', 'Nxt', 'Prev', and 'Exit'. Below the menu is a 'View Trunk Local ID Details List' button. The main area is titled 'TRUNK LOCAL ID SELECTION CRITERIA'. It contains the following fields:

- Site ID: 103 (with a dropdown menu showing 'MLB MELBOURNE')
- Route ID: 80
- Trunk Local ID Range: FROM 80001 TO 80030
- Trunk Local ID List: A table with 3 columns and 5 rows of empty input boxes.
- Trunk Local ID Details: MINIMUM 80001, MAXIMUM 80030, COUNT 30

At the bottom, a status bar reads 'From Range: ID allocated to Local (Site) Trunk'. On the right side of the window, there are 'OK' and 'Interrupt' buttons.

Figure 9.5b:

Input Screen Description

Field	Field Characteristics	Comments
Site ID	Enter a specific Site ID, Otherwise, click on Pick From List to find, then OK to select.	Selects the site to be reported on.
Route ID	Enter a specific Route ID, or blank for all groups. Otherwise, click on Pick From List to find, then OK to select.	Selects the General Group to be reported on.
Trunk Local ID range	Enter a number range for valid Trunks in route.	
Trunk Local ID List	You enter the specific number for each Trunk.	
Trunk Local ID Details	Displays lowest and highest trunk numbers plus trunk count.	

Report Input

The Route Trunk Detail Master List Report gives the administrator the ability to analyse and check the route and trunk configuration of the system. Reports can be generated by selecting the data using the view menu options and then outputting the data using the report menu option.

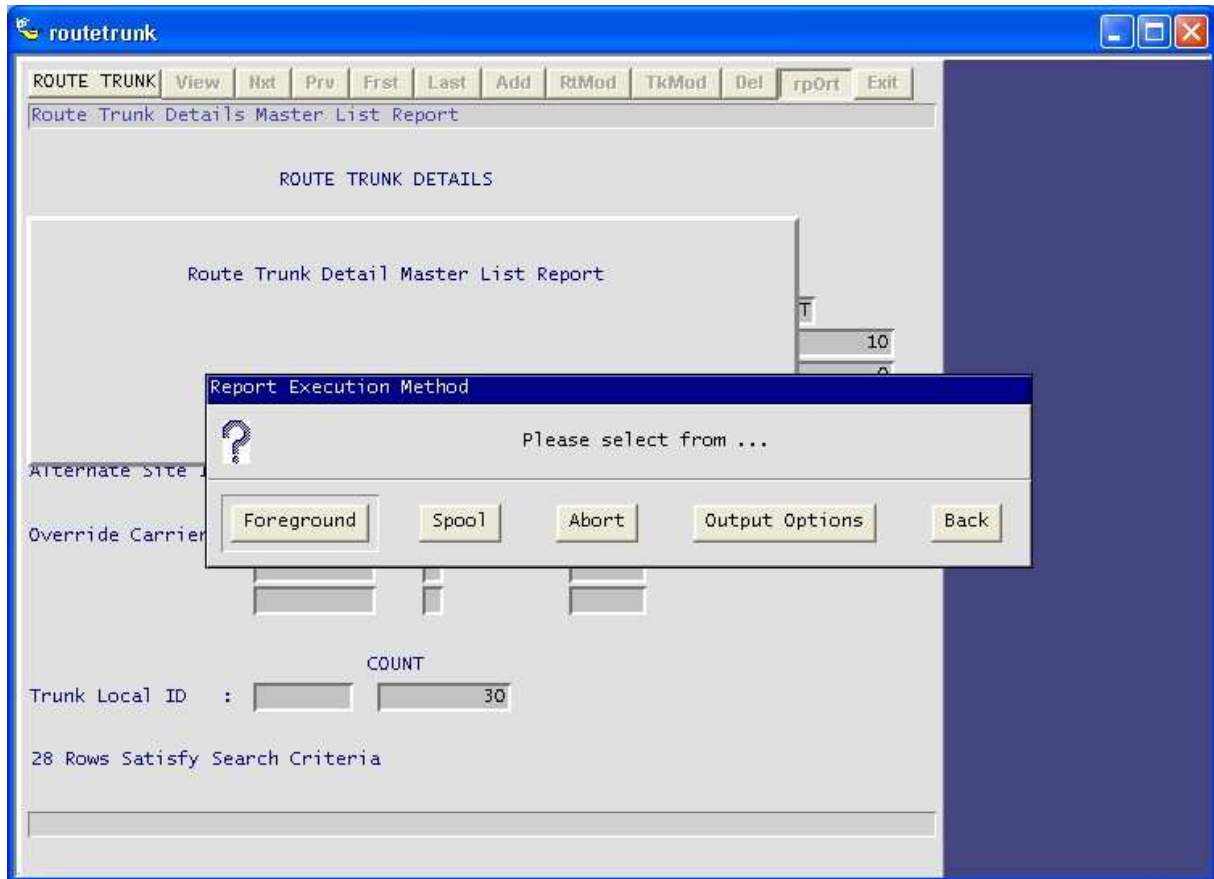


Fig 9.5c: Route Trunk Master List Report screen

Report Output Example with sample data.

```
-----
21 Oct 2003   14:39:51      ROUTE TRUNK DETAILS MASTER LIST      REPORT TCP TRANSMIT      TELMAX21 2.0
-----

Site ID:           103           MLB   MELBOURNE
Route ID:          80
Trunk Local ID Range: 1 TO 99999999
-----

Site ID:           103           MLB   MELBOURNE

Route ID:          80
Route Type:        K
Route Destination: MELB PST OUTGOING
Route Local ID:    80
Default Pulse Type: T
Short Holding Time: 10
Strip Digits:      0
Trunk Type:        B

Alternate Site ID:

Override Carrier:   AccessDigits  PulseType  SiteID

Trunk Local ID:

80001 TO 80030

ROUTE TRUNK DETAILS MASTER LIST REPORT      PAGE 1
```

Figure 9.5d: Route Trunk Details Master List Report

OVERHEAD COSTS

General Description

The organisation's **Overhead** costs are allocated to Extension Groups in order to charge each user with their share of the **Overhead** costs. An equal amount is charged to each Extension Group pro rata to the number of Extensions in the Group. The annual **Overhead** charges per Extension would normally be set once each year but can be changed more frequently if required. It is possible to enter a 'credit' **Overhead** charge that would apply only for a reporting period (eg. annual rebate from a carrier).

It is possible to disassociate certain Extensions which will not be charged the **Overhead** cost due to the fact that the lines are not used or are rarely used (eg. vacant extensions, telephones in lifts etc.).

When an Extension Group Summary Report is run, the **Overhead** cost will be calculated and shown as a specific charge at the end of the report.

Configuration

Firstly, it is necessary to determine the **Overhead** charge per extension per annum. This is done by calculating the total annual costs to be included such as salaries, rent, maintenance, consultancy fees, etc. The total annual costs are then divided by the number of active Extensions in the organisation to determine the **Overhead** charge per extension per annum.

To then enter an **Overhead** cost select the **Overheads Definition and Costs** option from the **Configuration** menu to reach the input screen below:

The screenshot shows a software window titled 'odmain' with a menu bar containing 'Option', 'View', 'Next', 'Prev', 'Add', 'Update', 'Delete', 'Cost', and 'Exit'. Below the menu bar is a status bar that says 'Delete Displayed Definition Details'. The main area is titled 'EQUIPMENT AND OVERHEAD DEFINITION' and contains the following fields:

- Type: 0 OVERHEAD CHARGES
- Code: MONTHLY CHARGE
- Item: Service and Equipment
- Reference: Standard charge
- Description: Service & Equipment charge
- Print Order: 10
- Current Cost: \$360.00
- Date: 14/10/2003

At the bottom of the window, there is a status bar that says '4 Rows Satisfy Search Criteria'.

Figure 10.1a: Equipment & Overhead Definition screen

Input Screen Description

Field	Field Characteristics	Comments
Type	Click on Pick From List to find, then OK to select	Select charge type.
Code	Entered as shown. Change as necessary.	Telmax21 charge identifier.
Item	Entered as shown. Change as necessary.	Telmax21 charge description. Appears in column on reports.
Reference	Entered as shown. Change as necessary.	Reference code of charge. Not mandatory
Description	Entered as shown. Change as necessary.	Long description of charge. Not Mandatory
Print Order	Numeric	Defines the hierarchical position of the charge figures in reports. The lower the number the higher in the report.
Current Cost	Entered as shown. Change as necessary.	Current charge value
Date	Entered as shown. Change as necessary.	Date charge definition entered

Associating an Overhead Cost

When the **Overhead** type code and costs have been defined, it is necessary to 'associate' the relevant **Overhead** to an Extension Group or a Site. To do this, select the **Overhead Associations** option from the Directory menu to reach the input screen below:

The screenshot shows the 'oamaint' application window with the 'Add Association Details' screen. The title bar reads 'oamaint'. Below the title bar is a menu bar with 'Option', 'View', 'Next', 'Prev', 'Add', 'Update', 'Delete', and 'Exit'. The main area is titled 'Add Association Details' and contains the following fields:

- EQUIPMENT - OVERHEAD - MISCELLANEOUS ASSOCIATION** (Title)
- Type:** 0 OVERHEAD CHARGES
- Code:** MONTHLY CHARGE
- Item:** Service and Equipment
- Reference:** Standard charge
- Description:** Service & Equipment charge
- Print Order:** 10
- Current Cost:** \$360.00
- Date:** 14/10/2003
- Disassociate:** N
- Site ID:** All Sites
- Extension Group ID:** All Extension Groups
- Extension:** All Extensions
- Applicable Start Date:** 14/10/2003
- Applicable End Date:** 01/01/2005

A red box highlights the area containing the Type, Code, Item, Reference, Description, Print Order, Current Cost, Date, Disassociate, Site ID, Extension Group ID, Extension, and Applicable Start/End Date fields. At the bottom, it says '1 Row Satisfy's Search Criteria'.

Figure 10.1b: Equipment - Overhead Miscellaneous Association

Click **Add** and insert 'O' in the Type field. Type the **Overhead** code or click the **Pick From List** for a list of valid **Overhead** codes. This will then fill the remaining fields from the **Equipment and Overhead Definition** table.

Enter the Site or Extension Group number as appropriate -

- The Site may be left blank. If it is left blank, this will allocate the **Overhead** charge to every Extension in the network.
- The Extension Group may be left blank. If it is left blank, this will allocate the **Overhead** charge to every Extension on the Site.
- The Extension Group may be entered. This will allocate the **Overhead** charge to every Extension in that Extension Group.

The **Overhead** charge cannot be associated with individual extensions.

Click **OK** to enter the record.

Bulk Disassociation of an Overhead Cost

To end the application of an Overhead charge to an extension group (while retaining the association for future use), select the original association record and, using the **Update** menu option, insert the applicable (future) 'end date'. The applicable 'end date' field cannot be entered for individual extensions.

Note: 'Applicable Start Date' and 'Applicable End Date' may be reset to either past or future dates. Use this feature with caution, as subsequent reports will be inconsistent with previous reports. Also ensure that the 'Applicable Start Date' is prior to the 'Applicable End Date'.

Selectively Disassociating an Overhead Cost

If there are Sites, Extension Groups or individual extensions which are not to receive the **Overhead** charge, these must be 'disassociated'.

Enter the **Equipment - Overhead - Miscellaneous Association** screen by selecting the **Overhead Association** option from the Directory menu and select the required **Overhead** Type and Code. Change the Disassociation field from the default of 'N' to 'Y' and enter the Site, Extension Group or Extension to be disassociated together with the Applicable Start Date from which the disassociation applies. The Site, Extension Group or Extension concerned will have the **Overhead** cost effectively cancelled when reports are run.

Note that the disassociation does not delete the original **Overhead** association but adds a new record creating a negative charge against the Extension, Extension Group or Site concerned.

Reports

The **Overhead** charge will appear when a Extension Group Summary Report is run. The monthly **Overhead** charge will be a fixed amount per Extension, regardless of the selected reporting period. If an Extension is 'associated' for part of the month, it will still be charged at a full month's **Overhead** charge.

The report will show an average charge for each Extension in the Extension Group based on the number of Extensions actually receiving the **Overhead** charge. (I.e. disassociated Extensions will be excluded from the calculation of the average.)

EQUIPMENT COSTS

General Description

The organisation can charge the capital cost of telecommunications **Equipment** to the relevant user of those services. The annual cost can be described as 'depreciation', 'service charge', 'rental' etc. The Equipment can include individual handsets, modems, PABXs etc.

The types of **Equipment** to be charged are defined in advance together with their cost per extension per annum. This **Equipment** list can be modified or added to at any time and the cost of each type of **Equipment** can also be changed or updated with the applicable start and end date.

When an Extension Group Summary Report is run, the **Equipment** charge belonging to that Extension Group will be calculated based on the annual **Equipment** charge and the period of the report. The **Equipment** charge is printed at the end of the Extension Group Summary Report and can be shown in summary, detail or extra detail form.

Configuration

The organisation must firstly define the types of **Equipment** to be charged, the cost per extension per annum and the date from which their cost applies. These are then entered by selecting **Equipment and Overheads** Definition option from the Configuration menu to reach the input screen below:

Figure 10.1c: Equipment & Overhead Definition screen

Click **Add** and then insert 'E' in the Type field. The required information is entered and when complete, click **OK** to add the **Equipment and Overhead** Definition record.

odmaint

Option View Next Prev Add Update Delete Cost Exit

Cost Maintenance

EQUIPMENT AND OVERHEAD DEFINITION

Type: E EQUIPMENT CHARGES

Code: DHANDSET

Item: Digital handset

Reference: D55667

Description: NEC digital handset

Print Order: 10

Current Cost: \$50.00 Date: 14/10/2003

1 Row Satisfy's Search Criteria

Figure 10.1d: Equipment and Overhead Definition screen

Associating Equipment Costs

When the **Equipment** type code and costs have been defined, it is necessary to 'associate' the relevant **Equipment** charge to an Extension, Extension Group or a Site. To do this, select the **Equipment – Overhead – Miscellaneous Overhead Association** option from the Directory menu to reach the input screen on next page.

The screenshot shows a software window titled 'oamaint' with a tab labeled 'Option'. The main area is titled 'EQUIPMENT - OVERHEAD - MISCELLANEOUS ASSOCIATION'. The form contains the following fields and values:

- Type: E (selected from a dropdown showing 'EQUIPMENT CHARGES')
- Code: DHANDSET
- Item: Digital handset
- Reference: D55667
- Description: NEC digital handset
- Print Order: 10
- Current Cost: \$50.00 (with a date field 14/10/2003)
- Disassociate: N
- Site ID: (blank) (dropdown showing 'All Sites')
- Extension Group ID: (blank) (dropdown showing 'All Extension Groups')
- Extension: (blank) (dropdown showing 'All Extensions')
- Applicable Start Date: 14/10/2003
- Applicable End Date: 01/01/2005

On the right side of the window, there are three buttons: 'OK', 'Interrupt', and 'Pick From List'.

Figure 10.1e: Equipment - Overhead Miscellaneous Association screen

Click Add and 'E' in the Type field. Type the equipment code or click on the **Pick From List** for the valid **Equipment** codes. This will fill the remaining fields from the **Equipment and Overhead** definition table.

Enter the Site, Extension Group or Extension as appropriate –

- The Site may be left blank. This will allocate the **Equipment** charge to every Extension in the network (assuming the Extension Group and Extension fields are blank),
- The Extension Group may be entered with the Extension field blank. This will allocate the **Equipment** cost to every Extension in that Extension Group,
- The Extension Group may be left blank and the Extension field filled with an Extension number. This will be validated and the Site and Extension Group field filled automatically if valid. This will allocate the **Equipment** cost only to that Extension,

Click **OK** to enter the record.

If the **Equipment** charge no longer applies for an Extension, Extension Group or Site, the association can be terminated from the date of termination by using the 'Update' mode to complete the 'applicable end date' field for the record concerned.

Reports

The **Equipment** charges will be shown after the Call Accounting costs when an Extension Group Summary Report is run. It is possible to select 'Summary', 'Detail' or 'Extended Detail'. In the case of 'Summary', a line will appear showing the total **Equipment** charge for the group for the period selected. In the case of 'Detail', each item of **Equipment** for each extension will appear with the charge relevant to the period selected. In the case of 'Extended Detail', all **Equipment** charges associated with each Extension will be shown on the report.

MISCELLANEOUS COSTS

General Description

Miscellaneous costs incurred by an organisation are able to be associated to the Extension Group, which actually incurred the cost. These **Miscellaneous** charges include conference call charges, Telecard costs, mobile telephone bills, repairs, line installation, training, minor capital equipment purchases etc. It is also possible to enter 'Credits' (eg. refunds of over charges or adjustments).

The **Miscellaneous** costs are normally entered into the database when the invoice or notice of debit is received. Each cost will be associated to an Extension Group and will appear on the Extension Group Summary Report together with the call costs for that group.

Configuration

Some types of **Miscellaneous** charges will be regularly incurred. These can be set up as a 'standard' item. The standard items can also be configured so that they are printed in a certain order on the Extension Group Summary Report.

These standard descriptions are normally set up by the system administrator and appear on a picklist to assist in data entry.

To enter a **Miscellaneous** charge select the **Overhead Associations** option from the Directory menu to reach the input screen below:

The screenshot shows a software window titled 'oamaint' with a menu bar (Option, View, Next, Prev, Add, Update, Delete, Exit) and a status bar ('1 Row Satisfy's Search Criteria'). The main area is titled 'EQUIPMENT - OVERHEAD - MISCELLANEOUS ASSOCIATION' and contains the following fields:

- Type: MISCELLANEOUS CHARGES
- Code:
- Item:
- Reference:
- Description:
- Print Order:
- Current Cost:
- Disassociate:
- Site ID:
- Extension Group ID:
- Extension:
- Applicable Start Date: Applicable End Date:

Figure 10.1f: Equipment - Overhead Miscellaneous Association screen

Click **Add** and enter 'M' in the 'Type' field.

The 'Code' is a computer generated number which provides a link to the database and cannot be overwritten.

The 'Item' field is used to provide a reference to the standard items already configured. **Pick From List** brings up a pick list of the standard items which can be selected.

Alternatively a non standard Item can be entered as required.

The 'Description' field can contain up to 65 characters and provides more information about the **Miscellaneous** charge.

The 'Print Order' field can be overwritten.

The amount of the **Miscellaneous** cost is inserted in the 'Current Cost' field. This can be entered as a negative amount for credits.

The current date is automatically entered which sets the date for which the cost applies. This date can be changed to a future date but not to a date earlier than the current date. The **Miscellaneous** charges will only appear on the report if the data entry date falls within the selected period of the report.

Miscellaneous costs are charged to an Extension Group, not an individual Extension. However, valid Extension numbers can be entered to assist in selecting the correct Extension Group.

Reports

The **Miscellaneous** costs will appear at the end of each Extension Group Summary Report. Normally a line would be printed for each **Miscellaneous** charge in the order determined by the 'Print Order' number. The credits will normally be configured to print last.

ECD ADMINISTRATORS MANUAL

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OVERVIEW

Introduction

The ECD module is used to enter details when an extension wants to make a call through a switchboard operator if they don't have the class of service required to make an STD or ISD call.

There are two levels of access:

- Administrator
- User (Switchboard Operator)

This manual describes the functionality and operating procedures available to the administrator.

ECD Administration Functionality

The ECD Administrator has the ability to maintain the ECD module and produce reports on calls placed through the switchboard operators.

There are two reports available to the Administrator:

- **ECDRpt** – The ECDRpt shows the cost and duration of calls made through a switchboard operator.
- **OpRpt** - The OpRpt reports on the number of switchboard operator transferred calls for a particular operator.

OPERATING PROCEDURES

After entering your login and password.

From the **Telmax21** dropdown menu, select **Directory** followed by **ECD Maintenance**. The ECD entry screen will be displayed. (Fig 1a)

Fig 1a: ECD Maintenance entry screen

Buttons

- **View** – Enables the administrator to view the details of specific calls placed through the operators. Selection is facilitated using filters in the details fields. The * can be used as a wild card search character. (See 0)
- **Next** – Displays the next entry in the search results list.
- **Prev** - Displays the previous entry in the search results list.
- **Add** – Allows the administrator to add a call request entry.
- **Mod** - Allows the administrator to modify a call request entry.
- **Del** - Allows the administrator to delete a call request entry.
- **UnPlacedECD** – Lists all requested but as yet unplaced calls.
- **ECDRpt** – Produces a report on placed calls.
- **OpRpt** – Produces a report on calls placed through the operators.
- **Quit** – Exits the ECD module.
- **Count Unplaced** – displays a count of the number of currently unplaced calls.
- **Status Field** – This button appears when the **View** button is selected. Moves the cursor directly to the ECD Status field

Screen Description

Field	Field Characteristics	Comments
Operator Extn	Numeric	Extension number that is allocated to the operator who placed the call.
Operator SiteID	Numeric	The ID of the site to which the Extn is allocated. Use Pick From List button to select.
Operator Login	Alphabetic	The login ID number of the operator who placed the call.
Reference No:	Numeric	A unique ID allocated to the call request.
Date/Time:	dd/mm/yy - hh:mm:ss	Date and time the call request was received.
Requestor Extn	Numeric	The extension allocated to the person requesting the call to be placed.
Requestor SiteID	Numeric	The ID of the site to which the Extn is allocated. Use or Pick From List button to select.
Requestor Surname	Alphanumeric	The surname of the person requesting the call to be placed.
Requestor Given Name	Alphanumeric	The first name of the person requesting the call to be placed.
Requestor Campus	Alphanumeric	The campus on which the person requesting the placement of the call is located.
Authorisor Surname	Alphanumeric	The surname of the person authorising the placement of the call.
Authorisor Given Name	Alphanumeric	The first name of the person authorising the placement of the call.
Authorisor Campus	Alphanumeric	The campus on which the person authorising the placement of the call is located.
PhoneNo:	Numeric	The phone number of the call destination.
Destination:	Alphanumeric	The location of the call destination.
Date/Time:	dd/mm/yy - hh:mm:ss	The date and time the call was placed
Voicemail:	Alphabetic 'Y/N'	Enter 'Y' to connect when call answered by voicemail to allow requestor to leave a message.
CallParty:	Alphanumeric	Person to whom the call was placed.
Advance Charge & Connect PhoneNo:	Numeric , * #	Phone number to which the call was booked. If a number is placed in this field the call will not be costed.
ECDStatus:	Alphabetic	Status of the requested call. Options are: Unplaced Not Confirmed Placed/Confirmed Cancelled
Date/Time:	dd/mm/yy -	Date and time the status was last updated.

	hh:mm:ss	
Duration:	Numeric	Length of the call in minutes and seconds
CostStatus 1:	Alphanumeric	Current status of the costing of the call. Options are: Y -Transferred for costing N – Not yet transferred Blank - Either
CostStatus 2:	Alphanumeric	ECD Status relating to Call Data Record. Options are: U – Uncosted C – Costed F – Failed To Cost
Cost:	Numeric	Cost of the placed call.
Date/Time:	dd/mm/yy - hh:mm:ss	Date and time the cost of the call was calculated.

The View Function

The **View** option is used to determine which data is reported on. Any field can be used to report on eg. **Date/Time**, **PhoneNo**, **ECDStatus** or any combination of fields.

Example 1:

To report on **Date/Time** for all ECD's for Jan 2004.

- Click **View** and press Enter down to **Date/Time** field under **ReferenceNo** field and type **01/01/2004:.** The cursor will now be located on the bottom line of the screen eg. **01/01/2004:.**
- Enter the end date type **31/01/2004** and then click **OK**
- The From and To date will look like **[01/01/2004:31/01/2004]**. (The colon between the start and end dates is inserted to define a date range.)

Click **OK**. All ECD's entered during this period will now be in the view list.

Example 2:

To report on a dialled number:

- Click **View** followed by Enter until the cursor is in the **PhoneNo** field and type in the number to report on. Eg. 0011*.
- Click **OK**. All calls in the database beginning with 0011 will be available to be viewed.

The ECD report

Select the **ECDRpt** button from menu and the screen below will be displayed.

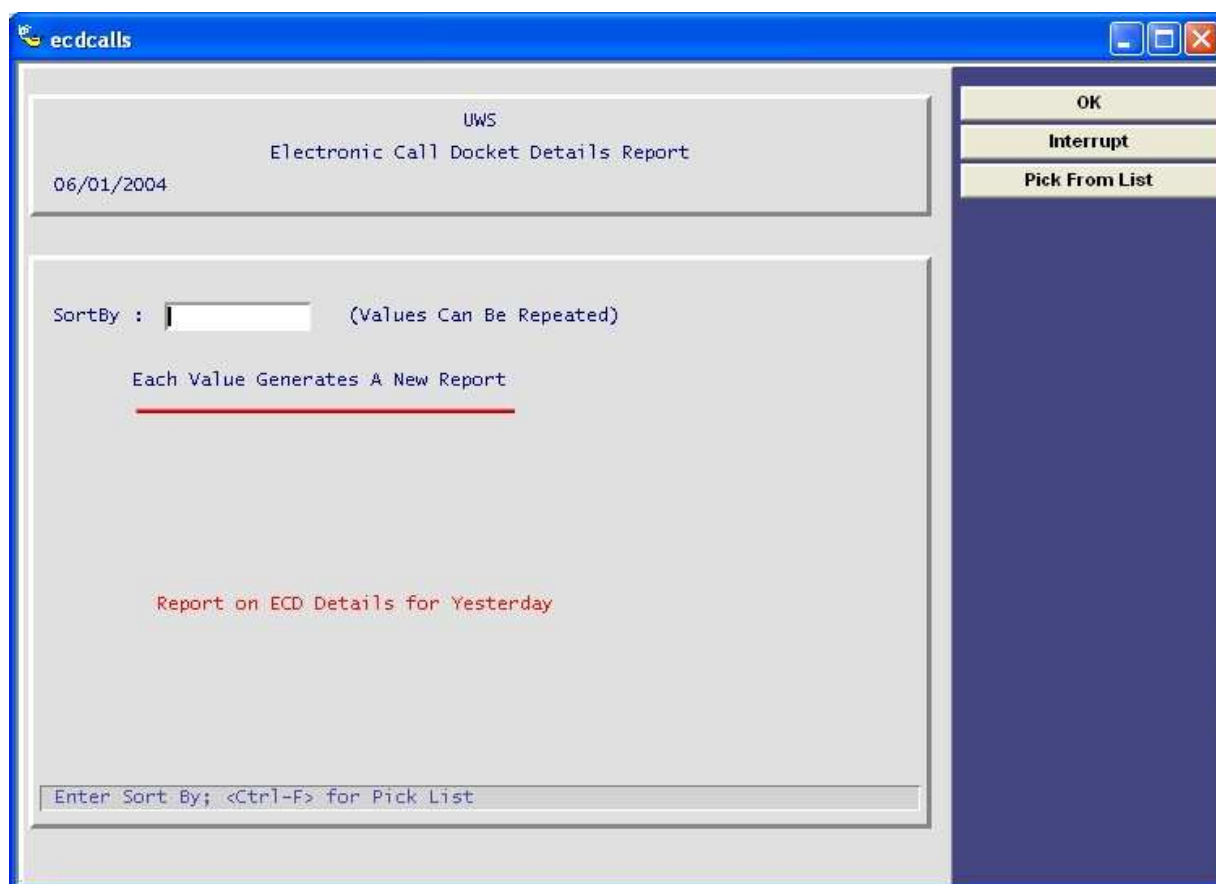


Fig 1b: ECDRpt entry screen

View List

When ECDRpt is selected, a ECD Details Reports window appears. This provides access to the View List option which allows the administrator to view all retrieved call details or only those from the previous day.

Press **Yes** to implement view list or press **No** to ignore view list

If **Yes** is pressed to implement View List, all data that was retrieved in the View will be reported on.

If **No** is pressed, only those from the previous day will be viewed.

Sorting the report

The ECD Report may be sorted by one or more fields.

To select these fields, use the '**Pick From List**' button to display the options, (See fig 1c). Highlight the fields to sort on and click **OK** to select each one individually. Chose them in descending order of sort priority.

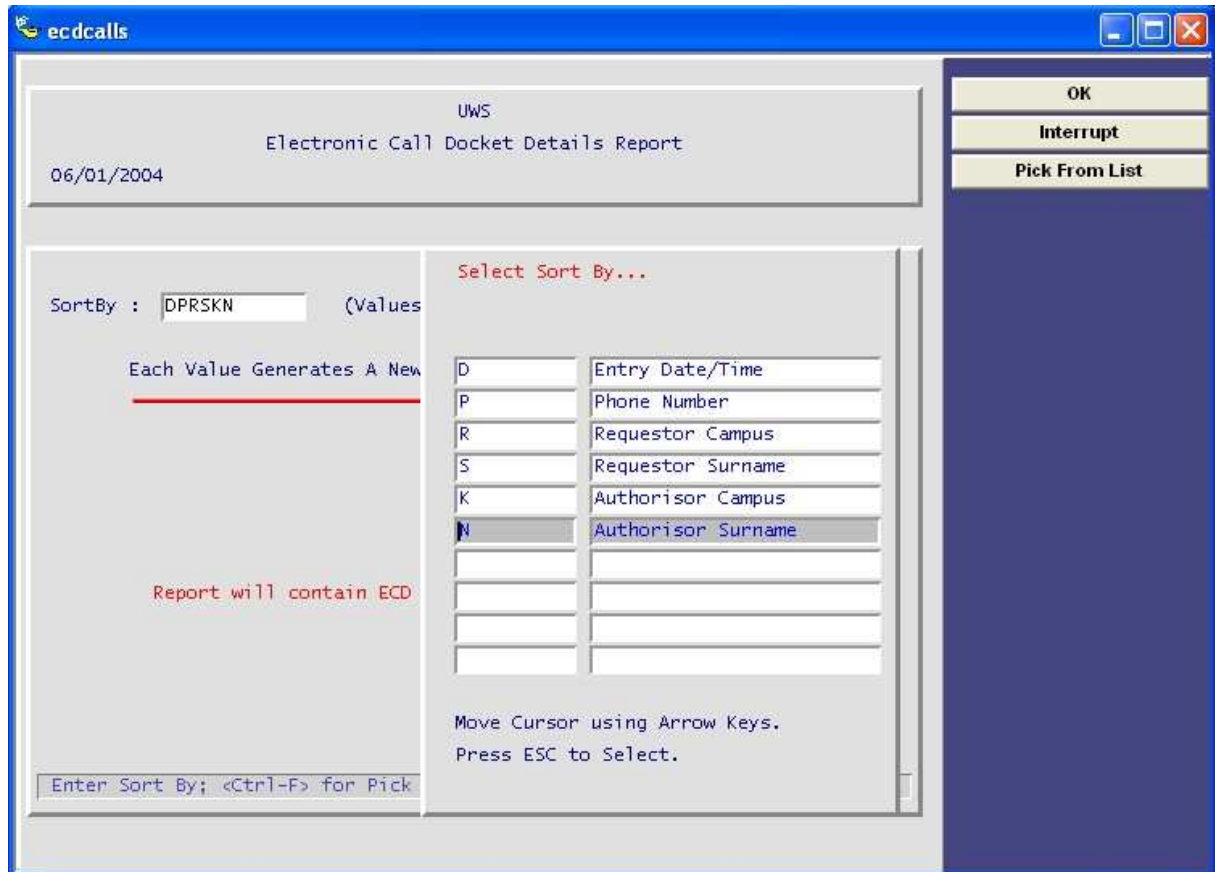


Fig 1c: ECDRpt sort order selection

By entering the appropriate letters in the **SortBy** field, you can sort the report in a number of ways:

Entry:

- **Date/Time** of placed and unplaced calls. Press **D**.
- **PhoneNo** will sort the report by dialled number. Press **P**.
- **Requestor Campus** and **Surname**. Press **R** followed by **S**.
- **Requestor Surname** and **Campus**. Press **S** followed by **R**.
- **Authorisor Campus** Press **K**.
- **Surname**. Press **N**.

If you enter DPK in the SortBy field three individual reports will be generated. The three reports will be sorted: the first by Date/Time, the second by the dialled number and the third by the Authorisor Campus.

Example of an ECD Detail Report sorted by Date/Time

06 Jan 2004		16:04:04		ELECTRONIC CALL DOCKET DETAILS REPORT						TCP HOBO		T21 2.00	
Input Criteria:		VIEW LIST INPUT											
Sort By:		Entry Date/Time											
Requested Phone		Requestor/Authorisor Extn		SiteID Campus		Given Name		Surname		Entry Date/Time dd/mm/yyyy hh:mm:ss		Operator Extn SiteID hhhh:mm:ss(\$)	
0397545555		5150		101 WRS		KIM		ARMSTRONG SMITH		06/01/2004 10:59:32 2		101 Call Not Costed	
0895555555		5150		101 WRS		KIM		ARMSTRONG		06/01/2004 11:15:38 2		101 Call Not Costed	
9999999		5150		101 WRS		KIM		ARMSTRONG		06/01/2004 11:18:25 2		101 Call Not Costed	
0299999999		5150		101 WRS		KIM		ARMSTRONG		06/01/2004 11:35:31 2		101 Call Not Costed	
88888888		5150		101 WRS		KIM		ARMSTRONG JONES		06/01/2004 11:39:53 2		101 Call Not Costed	
ELECTRONIC CALL DOCKET DETAILS REPORT										PAGE 1		END	

OpRpt: The Operator Statistics Report

Fig 1d: OPRpt entry screen

View List

When OPRpt is selected, an ECD Operator Stats Reports window appears. This provides access to the View List option which allows the administrator to view all retrieved operator statistics or only those from the previous day.

Press **Yes** to implement view list or press **No** to ignore view list

If **Yes** is pressed to implement View List, all data that was retrieved in the View will be reported on.

If **No** is pressed, only those records from the previous day will be reported on.

Sorting the report

The Operator Statistics Report may be sorted by one or more fields.

To select these fields, use the **Pick From List** button to display the options, (See fig 1c). Highlight the fields to sort on and click **OK** to select each one individually. Choose them in descending order of sort priority.

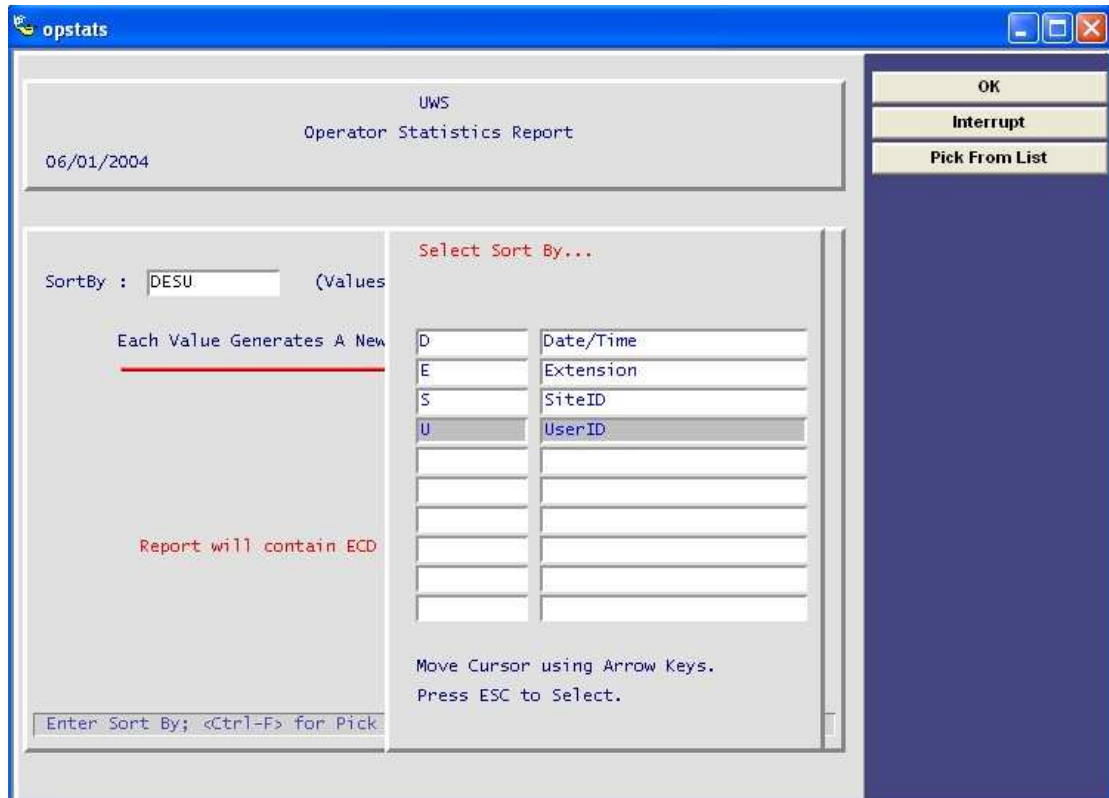


Fig 1e: OPRpt sort order selection

By entering the appropriate letters in the **SortBy** field, you can sort the report in a number of ways:

Entry:

- **Date/Time** – Press **D**.
- **Operator Extension Number** – Press **E**.
- **Site ID** – Press **S**.
- **User ID** (or operators login) – Press **U**.

If you enter **DESU** in the **SortBy** field four individual reports will be generated.

The four reports will be sorted: the first by Date/Time, the second by Operator Extension Number, the third by the Site ID and the fourth by the User ID or the operators login.

Example of an Operator Statistics Report sorted by Date/Time

06 Jan 2004 17:02:15 OPERATOR STATISTICS REPORT TCP HOBO T21 2.00

Input Criteria: VIEW LIST INPUT
Sort By: Entry Date/Time

Operator Extn	SiteID	UserID	Entry Date/Time dd/mm/yyyy hh:mm:ss	Call Count
1	101	andrew	05/01/2004 16:25:59	1
			TOTAL	1
2	101	john	06/01/2004 10:59:32 11:15:38 11:18:25 11:35:31 11:39:53	5
			TOTAL	5

O P E R A T O R S T A T I S T I C S R E P O R T

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ECD USER MANUAL

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OVERVIEW

Introduction

The Electronic Call Docket (ECD) module is used to enter details when an extension wants to make a call through a switchboard operator if their extension doesn't have the class of service required to make an STD or ISD call.

There are two levels of access:

- Administrator
- User (Switchboard Operator)

This manual describes the functionality and operating procedures available to the User.

OPERATING PROCEDURES

After entering your login and password.

From the **Telmax21** dropdown menu, select **Directory** followed by **ECD Maintenance**. The ECD entry screen will be displayed. (Fig 1a). It is on this screen that the details of the requested call are entered into the system.

Fig 1a: ECD Call Booking entry screen

Buttons

- **View** – Enables the operator to view the details of specific calls placed by request. Selection is facilitated using filters in the details fields. The * can be used as a wild card search character. (See 0)
- **Next** – Displays the next entry in the search results list.
- **Prev** - Displays the previous entry in the search results list.
- **Add** – Allows the operator to add a call request entry.
- **Mod** - Allows the operator to modify a call request entry.
- **Del** - Administrator function. Not available.
- **UnPlacedECD** – Lists all requested but as yet unplaced calls.
- **ECDRpt** – Administrator function. Not available
- **OpRpt** – Administrator function. Not available
- **Quit** – Exits the ECD module.
- **Count Unplaced** – displays a count of the number of currently unplaced calls.

- **Status Field** – This button appears when the **View** button is selected. Moves the cursor directly to the ECD Status field

Screen Description

Field	Field Characteristics	Comments
Operator Extn	Numeric	Extension number that is allocated to the operator who placed the call.
Operator SiteID	Numeric	The ID of the site to which the Extn is allocated. Use Pick From List button to select.
Operator Login	Alphabetic	The login ID of the operator who placed the call.
Reference No:	Numeric	A unique ID allocated to the call request.
Date/Time:	dd/mm/yy - hh:mm:ss	Date and time the call request was received.
Requestor Extn	Numeric	The extension allocated to the person requesting the call to be placed.
Requestor SiteID	Numeric	The ID of the site to which the Extn is allocated. Use Pick From List button to select.
Requestor Surname	Alphanumeric	The surname of the person requesting the call to be placed.
Requestor Given Name	Alphanumeric	The first name of the person requesting the call to be placed.
Requestor Campus	Alphanumeric	The campus on which the person requesting the placement of the call is located.
Authorisor Surname	Alphanumeric	The surname of the person authorising the placement of the call.
Authorisor Given Name	Alphanumeric	The first name of the person authorising the placement of the call.
Authorisor Campus	Alphanumeric	The campus on which the person authorising the placement of the call is located.
PhoneNo:	Numeric	The phone number of the call destination.
Destination :	Alphanumeric	The location of the call destination.
Date/Time:	dd/mm/yy - hh:mm:ss	The date and time the call was placed
Voicemail:	Alphabetic 'Y/N'	Enter 'Y' to connect when call answered by voicemail to allow requestor to leave a message.
CallParty:	Alphanumeric	Person to whom the call was placed.
Advance Charge & Connect PhoneNo:	Numeric , * #	Phone number to which the call was booked. If a number is placed in this field the call will not be costed.
ECDStatus :	Alphabetic	Status of the requested call. Options are: Unplaced Not Confirmed

		Placed/Confirmed Cancelled
Date/Time:	dd/mm/yy - hh:mm:ss	Date and time the status was last updated.
Duration:	Numeric	Length of the call in minutes and seconds
CostStatus 1:	Alphanumeric	Current status of the costing of the call. Options are: Y -Transferred for costing N – Not yet transferred Blank - Either
CostStatus 2:	Alphanumeric	ECD Status relating to Call Data Record. Options are: U – Uncosted C – Costed F – Failed To Cost
Cost:	Numeric	Cost of the placed call.
Date/Time:	dd/mm/yy - hh:mm:ss	Date and time the cost of the call was calculated.

The Add Function

- To begin entering a new call request into the database, click on the **Add** button.

The first time you **Add** a record after logging in, the cursor will move directly to the **Operator Extn** field for you to enter your **Operator Extn** number. When you enter your **Operator Extn**, the **SiteID**, **Login**, **ReferenceNo** and **Date/Time** fields will automatically be filled in and the cursor will move to the **PhoneNo** field.

Note: Following the completion of the first ECD, when you next add an entry, your **Operator Extn** number will automatically be inserted and the cursor will move directly to the **PhoneNo** field.

- Type in the telephone number the requestor wants to contact and press Enter.
- The cursor will move to the **Requestor** field. Type the extension number of the person requesting the placement of the call and press <Enter>.
- The **SiteID**, **Surname**, **Given Name** and **Campus** fields will be filled in from the directory details of the requestor.
- The cursor will move to the first character of the **Surname** field. If correct, click **OK** to move to the **Given Name** field.
- If the details in the **Given Name** field are correct, press Enter to move to the **Campus** field.
- If the details in the **Campus** field are correct, press Enter to move to the **Authorisor** field.

Note: At any time you can use the up arrow key to go back and change any fields and use the down arrow to return to the current field.

- Type in the **Authorisor** surname and press Enter to move to the **Given Name** field and type the person's first name. Press Enter to move to the **Campus** field and enter their campus followed by the Enter key.
- The cursor will move to the **Destination** field. Type in the city or town of the requested call and press Enter.

- The cursor is now in the **Date/Time** field. If correct, press Enter. The cursor is now in the time field. If correct, press Enter.
- The cursor will move to the **VoiceMail** field. Enter **Y** if the requestor wants to leave a message if line is answered by voice mail or **N** if the requestor doesn't want to leave a voice mail message and press Enter.
- The cursor will move to the **CallParty** field. Type in the name of the person organisation that is being called and press Enter.
- The cursor will move to the **ADVANCE CHARGE AND CONNECT: PhoneNo** field. This field is used to enter a phone number for a call that is booked in advance and is typically the after hours number of the requestor.
- Press Enter to move to the **ECDSStatus** field. Type **Y** if the call has been successfully placed or **N** if the call was unsuccessful and press Enter. The cursor will move to the **Date/Time** field.

Note: Do not enter anything in the **Duration**, **CostStatus**, **Cost** or **Date/Time** fields down on the bottom two rows of the ECD screen. These fields will be automatically filled in when a call record match is received from the PABX.
- Click **OK** for the entry to be added to the database.

The View Function

The **View** option is used to determine which data is reported on. Any field can be used to report on eg. **Date/Time**, **PhoneNo**, **ECDSStatus** or any combination of fields.

Example 1:

To report on **Date/Time** for all ECD's for Jan 2004.

- Click **View** and Enter down to **Date/Time** field under **ReferenceNo** field and type **01/01/2004:**. The cursor will now be located on the bottom line of the screen eg. **[01/01/2004]**.
- To enter the end date type **31/01/2004** and then press Enter.
- The From and To date will look like **[01/01/2004:31/01/2004]**. (The colon between the start and end dates is inserted to define a date range.)

Then click **OK**. All ECD's entered during this period will now be in the view list.

Example 2:

To report on a dialled number:

- Click **View** and Enter until the cursor is in the **PhoneNo** field and type in the number to report on. Eg. 0011*.
- Click **OK**. All calls in the database beginning with 0011 will be available to be viewed.

The Modify Function

The **Mod** button is used for modifying the ECD that is currently displayed on screen. Use the view and **Next** and **Prev** to locate an ECD. **Mod** is generally used to change the **ECDSStatus** from **UnPlaced** to **Placed** or any other changes required. Note: when the **ECDSStatus** field is changed from **N** to **Y** the current date and time is automatically inserted in **Date/Time** field.

The Copy Function

The **Copy** button is used to copy an existing ECD to a new ECD.

To copy an ECD:

- Isolate an entry using **View**.
- The cursor will be moved to the **Operator Extn** field.
- Type in your console extension number and click **OK**.
- The screen will display a copy of the selected ECD.
- Select the record you wish to copy.
- Use the up and down arrow keys to move to fields that require changing, eg. **Date/Time** and **Authorisor**.

The Delete Function (Administrator only)

Administrator function only.

The Unplaced ECD Function

The **UnPlacedECD** button is used to report on unplaced ECD's.

BACKUP PROCEDURES

The System files and the System Application files should be backed up regularly or at least once a month. This ensures that a copy of SCO Unix, Informix and the latest Telmax21 application are readily available in case of a system crash.

The Database Files (Call data and directory) change regularly so they should be backed up at least each week.

For most systems fitted with a DAT tape drive it can be easier to simply do an entire system backup if it will fit onto one tape cartridge.

Login as root on the console and follow the following steps:

Back-up Procedures

You utilise the standard feature of the system for backing-up using the following steps:

1. Login as **Root** from the Telmax21 System Menu, select 2 for System Maintenance Menu.
2. From System Maintenance Menu, select 2 for Back-Up.
3. Select **4** for Entire System.
4. On request insert tape and press **Enter**.
5. Follow instructions on screen.
6. On completion of the back-up, remove the tape and label it with the following information:
 - System
 - *dd/mm/yy* (date of back-up)
 - Form of = cpio
 - Volume of
 - Date from *dd/mm/yy* to *dd/mm/yy*

Store in a separate location from the system.

7. Press **Enter** to continue.

Select **0** Previous menu.

Select **0** Previous menu.

Select **0** Quit.

DATA ARCHIVE

The Telmax21 Data Archive and Retrieval Module gives the user the ability to back-up the Telmax21 database partition and restore it onto a separate partition on the system for the purpose of retrieving historical call data for analysis.

The system is configured so that on-line database storage capacity is the same as the Archive storage capacity therefore if the system is configured to hold 12 months of call data on-line then the effective storage period with the archive partition is 24 months. The 12 months periods do not necessarily need to be consecutive, you could restore a back-up from 3 years ago.

Back-up Procedures

You utilise the standard feature of the system for backing-up using the following steps:

1. Login as **Root** from the System Menu, select 2 for System Maintenance Menu.
2. From System Maintenance Menu, select 2 for Back-Up.
3. Select 3 for Database files.
4. When prompted, select **Y** (for yes) to include call data in back-up.
5. On request insert tape and press **Enter**.
6. On the completion of the back-up identify the tape with the following information:
 - Database Files
 - *dd/mm/yy* (date of back-up)
 - Form of = cpio
 - Volume of
 - Date from *dd/mm/yy* to *dd/mm/yy*
7. Press **Enter** to continue.
Select **0** Previous menu.
Select **0** Previous menu.
Select **0** Quit.

PROCEDURE TO RESTORE BACK-UP TAPES

1. Login as **Archive** with password: (same as root).
2. From Menu select **A** (Application), **S** (System), **R** (Restore) archive back-up.
3. Select **Y** to restore the archive back-up tape.
4. Enter Informix, password: (Same as root password).
5. Insert required 'Back-Up Tape to be retrieved' and press **Enter**.
6. On completion you will get a message that the retrieval is complete, press **Enter**.
7. The system will now indicate the period restored, press **Enter** to continue.

You can now use the standard menu structure to analyse and restore the archived data as you would on the on-line data.

ADDING NEW TELMAX21 USERS

To add new users to the Telmax21 involves a 2-step process as follows:

Step 1. Adding the Unix user

1. Login as **root**.
2. Enter root password
3. Select **2** for System Maintenance Menu and press **Enter**.
4. Select **1** for System Administration Shell and press **Enter**.
5. This will run SCOadmin.
6. Highlight 'Account Manager' and press **Enter**.
7. Press right arrow, highlight 'Users' and press **Enter**.
8. Highlight 'Add New User' and press **Enter**.
9. At 'Login:', enter up to an 8 character user name and press **Enter**.
10. Do not change the User ID, press **Enter**.
11. In 'Comment' you can add the full users name (Eg: John Smith or location), then press **Enter**.
12. Press **Enter** to set password.
13. Leave 'Login Shell' as **sh**.
14. Press **Enter** 3 times to accept 'OK' then press **Enter**.
15. Press **Enter** on 'Enter a new password'.
16. Type in password and press **Enter**.
17. Re-type in password and press **Enter** twice to accept 'OK'.
18. Press **Enter** and the new Unix user will be added.
19. Press <**TAB**> to 'Host' and press **Enter**.
20. Press **x** and you will come back to 'SCOadmin'.
21. Press <**TAB**> to highlight 'File' and press **Enter**.
22. Press **x** this will bring you back to 'Telmax21 System Maintenance Menu'.

Step 2. Adding the Telmax21 application user profile for GUI mode

1. Select **3** for 'Install a user menu' and press **Enter**.
2. Type in user name and press **Enter**.
3. Press **Enter**.
4. Select **1** for 'Standard' and press **Enter**.
5. Select **7** for 'D4GL (WTK) REMOTE COMMANDS' and press **Enter**.

A message 'All Done' will be displayed. Press **Enter**.

This brings you back to 'Telmax21 System Maintenance Menu'.

6. You can install other user profiles or press **0** and **0** to logout.

Installation of WTK client software on a user's Windows PC For software Version 1.3d

1. Before starting ensure that the user has been added as per above section.
2. Insert the WTK Install CD.
3. Open folder 'WTK Install' and double click **t21inst.exe**.
4. A 'Command Prompt' window will be displayed, then a 'WinZip Self-Extractor – t21inst.exe' window.
5. Click on **Unzip** button
6. Then you will be informed, '90 file(s) unzipped successfully'. Click **OK**.
7. **Close** the 'WinZip Self-Extractor – t21inst.exe' window.
8. Open 'C:\4glsrv\t21inst' folder. Double click on **install.bat**.
9. A box with the text 'Welcome to Informix 4GL-Server' will be displayed. Click **OK**.
10. If you have an existing Informix 4GL-Server installation, you will be asked if you want to install in a different directory. Select **No**. Do not change the default install path (leave as C:\Program Files\..\4GLSRV)
11. A box with the text 'Select Program Manager Group' will be displayed. Click **OK**.
12. A window will appear with 'The installation of Informix 4GL-Server 1.484 is finished'. Click **OK**.
13. You will be returned to the Command window, which will contain:

```
TRANS-MIT TELMAX21 WINDOWS MENU INSTALL SCRIPT
Telmax21 Windows menu rev 1.3d      06/04/2000
```
14. Press any key to continue. The message 'Installing Telmax21 Windows' will be displayed.
15. A message will appear saying, 'Adding registry entries' will be displayed. When this process is complete, click **Yes**.
16. Another box will appear informing you that the 'Information has been successfully entered into the registry'. Click **OK**.
17. Open the 'c:\4glserv\T21env.bat' file using NOTEPAD. Your PC may do this automatically when you click on it using Windows Explorer.
DO NOT EDIT THIS FILE IN ANY OTHER WORD PROCESSOR.

The following lines will be displayed.

‘Set LOGNAME=yourt21userid’

‘Set t21host=t21machinename’

‘Set t21client=yourpcname’

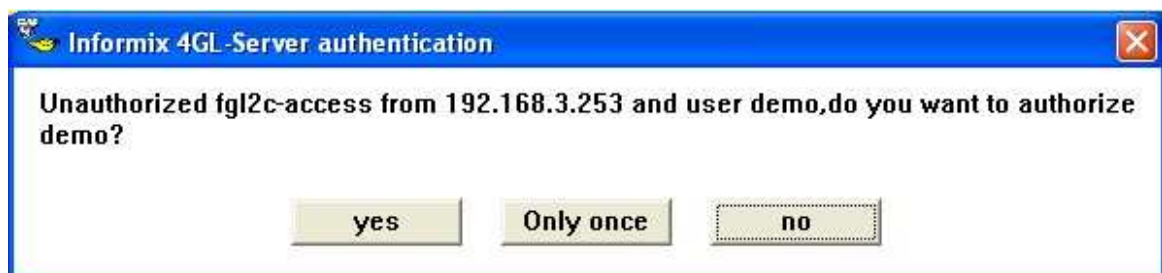
18. Replace ‘yourt21userid’ with the user’s login on the Telmax21.
19. Replace ‘t21machinename’ with the Telmax21 system name or IP address.
20. Replace ‘yourpcname’ with the name from Network, Identification, Computer name or @**IP** if DNS or hosts are not being used.
21. Click on the **x** at the top right corner of the Notepad window and the following message will appear. ‘Do you want to save changes.’ Click **Yes**.
22. A message will be displayed ‘T21 Windows NT Menu Install Complete’ Press any key to continue.
23. When ‘Finished’ appears in the window frame, click on **x** to close the window.
24. The installation is now complete.

Post install tests

- If you cannot connect to the server correctly, you may need to either restart the PC or click on **Start T21** icon in the **Start → Program → Startup** menu.
- Once Telmax21 is running, open the **Directory Maintenance** screen and check that it is operational.
- Also run an **Extension Detail Report** and set the report options to **Save** on the client PC.

First login to the WTK client

The first time a user logs into the newly installed WTK client, the following window will appear:



Click on the **Yes** button. The window will disappear and not be redisplayed in future

PROCEDURES TO CHECK CALL LOGGING UNIT

To Check the Log File entries

1. From 'System' option on 'Main Menu', select Terminal Access to Remote CLU.
2. Enter 'Node Name' or click on 'Pick From List' to find, OK to select.
3. When Telmax21 banner screen is displayed, enter y to stop timeout-hangup.
4. At 'login:' request, enter catcom followed by the password for the CLU.
5. At '~\$' prompt, enter DATE. The current CLU PC date will be displayed in the following format:
Day name, Month name, Day date, Time, Time zone, Year
6. Change to the logging file directory by entering cd /u/catcom/clp. The prompt '~\$/clp\$' will be displayed.
7. To display a log of the last ten minutes logged call activity, enter tail log. A list of calls logged in the last ten minutes will be displayed in the following format:
PABX time CLU PC time
DD-MMM-YY hh:mm Rec: (record no.) Rej: (reject flag) DDD MMM DD hh:mm:ss YYYY
8. Check that the PABX time and CLU PC time are the same or very close.
(If there is a difference more than several minutes, go to 'CLU Date and Time Change Procedure' below.)
9. To display the call logging activity in real time on a 60 second cycle, enter tail -f log. The displayed call log will be updated every minute. To stop this display, enter <CTRL-C>.
10. To display an hourly summary of calls logged for the last ten hours of the previous day, enter tail log.hourly. The listed record numbers represent the last record number logged for that hour.
11. To display an hourly summary of calls logged for the last ten days of the previous day, enter tail log.daily. The listed record numbers represent the number logged calls for that day.

CLU Date and Time Change procedure

1. From '~\$' prompt, enter su root to login and enter the assigned password.
2. Type in the new date and time in the format MMDDhhmmYY. (eg: 1020191203 for 7:15pm on the 20th Oct 2003.)
3. Enter clock -w to write the new date and time to the CMOS PC.
4. Enter date to check that the time has updated correctly.
5. Use tail -f log to check that logging is using the correct date. To stop this display, enter <CTRL-C>.

Leave the Call Logging Unit

1. From '~#' prompt, enter exit.
2. From '~\$' prompt, enter exit.

APPENDIX 1: TELMAX21 USER INPUT STANDARDS

Standard Date Format

DD/MM/YYYY where:

- **DD** = two digit day date (Eg: 01)
- **MM** = two digit month date (Eg: 12 for December)
- **YYYY** = four digit year date (Eg: 2003)

Standard Time Format

hh:mm where:

- **hh** = hours
- **mm** =minutes

Operators for range selection

Operator	Name	Example Pattern in quotes
=	Equal to	'=x'
>	Greater than	'>x'
<	Less than	'<x'
>=	Greater than or equal to	'>=x'
<=	Less than or equal to	'<=x'
:	Range	'x:y'
..	Range	'x..y'
*	Wildcard	'*x, x*, *x*'
?	Single-character wildcard	'?x, x?, ?x?, x??'
	Or, and	'a b'

APPENDIX 2: CALL RECORD TYPES

Call Types

Call Type	Carrier
D	Telstra PSTN Local
S	Telstra PSTN STD
X	Telstra PSTN IDD
a	Telstra ISDN Local
b	Telstra ISDN STD
c	Telstra ISDN IDD
d	Optus Local
e	Optus STD
g	Optus IDD
h	AAPT Local
I	AAPT STD
j	AAPT IDD
k	Global One Local
l	Global One STD
m	Global One IDD
n	Primus Local
o	Primus STD
p	Primus IDD
q	World Exchange Local
u	World Exchange STD
w	World Exchange IDD
r	CVPN Local
s	CVPN STD
t	CVPN IDD
x	CustomNet Local
y	CustomNet STD
z	CustomNet IDD
M	Vodaphone local – mobile calls
v	Vodaphone STD
041[4,5,6]* only	Vodaphone IDD
4	Powertel Local
5	Powertel STD
6	Powertel IDD
D	Macquarie Local
S	Macquarie STD

Inlet Type

Type Code	Description
E	Extension
P	Operator
I	Incoming Trunk, no detail
A	Incoming Indial Trunk
B	Incoming PSTN Trunk
L	Incoming Network Trunk
C	Incoming Charge Net

Outlet Type

Type Code	Description
E	Extension
P	Operator
O	Outgoing Trunk, no detail
K	Outgoing PSTN Trunk
L	Outgoing Network Trunk

Account Code Answer Flag

Flag	Description
O	No Error
D	Dialled Prefix not defined
F	Dialled Prefix & Route Error
T	Time Band Error
N	Short Duration Call
A	Incoming Extension Error
B	Outgoing Extension Error
E	Extension Error
R	Route Not Defined

RouteTrunk Type

Type Code	Description
K	PSTN Route
T	Tie Route
L	Indial (PSTN) Route
C	Chargeable Route

Expanded Call Type

Type Code	Description
O	Original Call (Default)
A	Operator Assisted Call

Meter Flag

Flag	Description
A	Actual PSTN Meter Pulses given by PABX and record not previously completed
C	Actual PSTN Meter Pulses given by PABX and record previously completed
P	Meter Pulses derived
#	Pulses not derived

Selected Route Field

Code	Description
F	First Choice Route
A	Alternative Route
P	Overflow from PSTN
N	Overflow to PSTN

Continuation Flag

Flag	Description
N	Normal Call
A	Alternate Site ID
1	First Override Carrier used
2	Second Override Carrier used