SYSTEM MANAGEMENT

USING GROUPS

COMPANY STRUCTURE

In order to run departmental reports on LUMBERJACK, you will first need to set up the Groups. Groups are about collecting extensions, lines, etc., together to make a reporting group. LUMBERJACK is auto-learning. This means that as lines, operator consoles and extensions are used and the data is output from the switch, LUMBERJACK will add the information to the relevant database fields. By Grouping these entries you make up the Company structure. It is important to mention here that, in order to give flexibility to the Groupings, it is possible to have an extension appearing in several Groups. This allows you to have a shared Extension, e.g. a fax or secretarial position, in several relevant Groups. However, if you are amalgamating Groups to produce an overview of the total Company costs, be careful not to include two groups where extensions might be duplicated.

For this reason it is probably easiest to design your company structure on paper before starting to add extensions to Groups. Once you have the design, Export Extension list (select Export Extensions in the Scheduler and schedule it Now) and tick off the Extensions as you add them to Groups. Alternatively, put all the Extensions into one Group and use this Group in a Summary report with no Fields.

For example. Your company may fit into a structure similar to the following:

```
                      ┌─────────────────────┐
                      │   Widget & Co plc   │
                      └──────────┬──────────┘
          ┌──────────────┬───────┴───────┬──────────────┐
┌─────────────────┐┌─────────────────┐┌─────────────┐┌─────────────┐
│   Finance &     ││ Sales & Marketing││  Design &   ││  Service &  │
│ Administration  ││    Strategy      ││ Production  ││   Support   │
└─────────────────┘└─────────────────┘└─────────────┘└─────────────┘
```

For the company overview reports, especially where there are several PBXs, grouping the extensions into the above categories will probably be sufficient. However, it is quite likely that these Departments can be broken down into smaller teams. Take, for example, Sales & Marketing.

This Department could be broken down into the following categories:

Marketing Strategy   Extns: 1231, 1232, 1233, 1234

Sales: Major Accounts   Extns: 1341, 1342, 1343, 1344

Sales: Region 1 Extns: 1451, 1452, 1453, 1454

Sales: Region 2 Extns: 1561, 1562, 1563, 1564

Sales: Administration   Extns: 1671, 1672

There are two ways in which you can set up the Group for Sales & Marketing Strategy:

Create a Group which contains all the Extensions for all the Department teams, e.g. *Dept: S&MS Extns* would be a Group incorporating all the above extensions. With this method, when you use the Group for reporting, there will be a sub-total at the end of each Extension and a full Summary at the end.

Create a Group of Extensions for each of the Teams within Sales & Marketing Strategy (e.g. SMS: Mkt Strat; SMS: Maj Accts; SMS: R1; SMS: R2; SMS: Admin). Then create a Group of Groups to combine these Teams. When you use a Group of Groups for reporting, there will be a sub-total for each of the Extensions, a further sub-total for each of the Teams, and a final Summary of the whole report.

Examples of these differences can be seen later in this Tutorial. There will be times when you want one, and times when you want the other of these options. There is nothing to prevent you from creating both types of Group, provided that you name them in a recognisable form, e.g. *Dept: S&MS Extns*; *Dept: S&MS Teams*.

SPLITTING COSTS

The above Teams are clearly definable by extension, except for the Administrative resources which are shared between the Teams. Whilst all these groups could be incorporated into one group to create part of the company

structure, if you want to create a telephone account for, say, the SMS: Maj Accts Group, you would want to split the costs of all calls from Sales: Admin proportionally between the four S&MS groups.

To do this, run the report on Sales: Admin with the cost multiplied by 0.25 to show a quarter of the expenditure. A copy of this split report can be sent to each of the Groups as part of their telecomms costs.

DIRECTORY REPORT

To see a listing of all Extensions and their descriptions under their appropriate Group, run a Summary Report on all the Groups in the Company but with no fields selected, this will show all the Groups with the Extensions listed for each. See also Not in Group below.

It is also possible to check Groups in the Extension list under PBX>Extension (Operator, Trunk, etc). If you highlight an Extension, the centre box you will show all the Groups in which it is included.

On the other hand – we could sell you a full blown directory package called CATALOG….???? If interested please call focom limited for details.

NOT IN GROUP

You will find several Groups already set up in your system referring to Extensions, Trunks, etc. Not In Group. These may be used with your structured company reports to highlight all the extensions that have not been included in Groups and, as such, are not incorporated into the total company activity reports. When creating your Directory Report, incorporate the Extensions Not In Group, usually as the last entry, so that these extensions will be drawn to your attention and can then be allocated.

NAMING CONVENTIONS

From what you have seen above, you will realise that some form of naming convention will need to be established. Since all name lists in all the Report Set-up menus appear in alphabetical order, it may be helpful to name all your Extension Groups with a similar prefix. In the example above, we used Dept:. Likewise all the Trunk Groups could begin with Trunk' this will make them easier to find when you run reports.

If you have a large network with several PBXs, it will be useful to give the names the site ID as the prefix. It is possible, in LUMBERJACK, to create Groups of groups across the network. These could have a different prefix to show that they are Network groups.

When selecting fields from [Report Fields] you could either look for the Total Cost, Average Cost and Maximum Cost headings under *C* for *Cost*, or *T* for *Total* or *A* for *Average*, *M* for *Maximum* etc. Whichever convention you decide, make a point of keeping to it, since you will eventually have several headings as Costs, Totals, Averages and so on. In our examples we have made Cost the dominant word. This is, however, a matter of personal preference (*Cost - Total*, *Cost - Average*, *Cost - Maximum* etc).

Paying attention to naming convention in the beginning will prevent anyone having to rename everything later for greater clarification.

It should also be borne in mind, that you can always create your own special groups, filters and fields by prefixing them with your initials and Protecting them so that no-one else can change them. This is particularly useful if there are multiple users on the system.

FIXED COSTS

Fixed Costs allow the Comms Department to claw back expenditure by apportioning it to the users. For example, when a new telephone extension is installed, there is the cost of the physical handset, the cabling, the port, and the engineers time. In some companies the cost is allocated to the department as a one off Fixed Cost. There is also the ongoing maintenance of the system, this can also be apportioned to Departments as a monthly charge.

Our Fixed Cost module can be used for all cost reclamation as it is possible to set up 24 different cost types per PBX.

Once set up, these costs can be allocated to any extension, trunk, or operator. To include them in the reports, you will need to create the appropriate Fields. It should be noted that Fixed Costs can only be used in reports where a Group or Group of Groups is selected. They will not be calculated where a Filter of a Group is used.

SETTING UP COST TYPES

PBX>Fixed Costs

Types available: Daily, Weekly, Monthly, Quarterly, Yearly, One Off.

Each of these may be rounded as required: Rounded up, down, to the nearest period or rounded exactly.

Rounded and exact calculations are taken to a minimum of a day, and are, therefore, not applicable to the daily option. In practice, most of the time periods will either be set to exact or whole periods. Rounding up would be used if you wanted to charge a full amount, say a whole month's rental, against an extension that had only been used for a week.

The figure below shows an example of how these types may be set up.
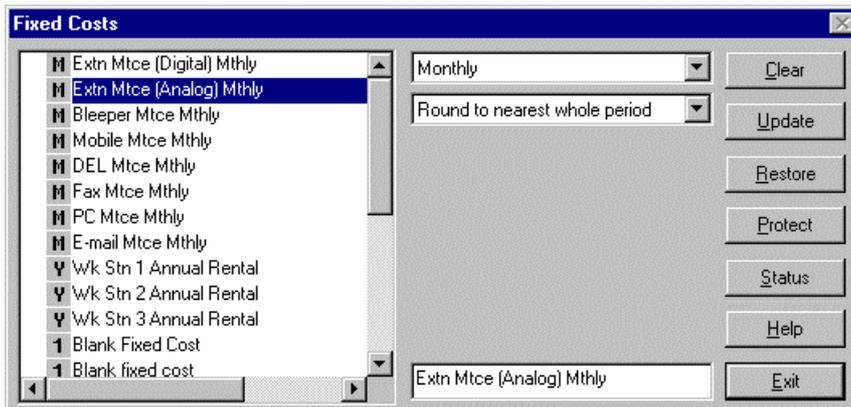
When deciding on the Type of Fixed Costs that is applicable, bear in mind the following scenario. You have set up a new extension on the 21st of a month and want to charge for the installation (One Off), and you also want to start charging the monthly rental from the date of installation. To do this, you highlight the new extension number, click on Fixed Cost, check the appropriate boxes and insert the installation date. When the report covering that month is printed, the *Installation* and *Rental* columns will show the appropriate amounts.

How much do you want to charge of the first months rental, the full amount or the exact amount from the time of installation? If the rental Type is set to *Monthly*, the full month's rental will be allocated to the newly installed extension. If the Type is set to *Exact*, the rental will only be charged for the period since installation.

To set up the default costs:

PBX>PBX>Fixed Costs

In the figure below you will see listed all the Fixed Cost types that have been created using the method above.

Insert the appropriate cost against each type. These will be the default costs.

In order for LUMBERJACK to acknowledge new costs or after any changes in the amounts, you will need to run a Recache. (See page 97 of the Reference section).

ALLOCATING COSTS

Fixed costs may be set against extensions, trunks and operators. The figure shows costs allocated to an extension.

PBX>Extensions>Fixed Costs

Highlight an extension and click on Fixed Costs. If multiple extensions are to be allocated the same Fixed Costs, you can select them all by depressing the shift or control keys while clicking on the appropriate extension number.

You will see the list of the Fixed Costs types that you have created. If you click in the check box the default cost will be allocated. Alternatively, if you are charging an unusual cost, type in the specific amount. The date column may be set to show the start date for allocating these costs, this may be back dated.

One Off costs will only be printed on reports that are run for the period covering the installation. For example: if you have installed a new extension and want to show a one off installation charge in the March report, insert a date for any time during March and this will appear on the report.

USING FIXED COSTS WITH REPORTS

To use these Costs in a report you need to set up the Fields in the usual way:

Reports>Detailed Fields

When you select the Field Type as Fixed Cost, you will notice that the Fixed Costs button is no longer greyed out. Set up the title and justification in the usual way.
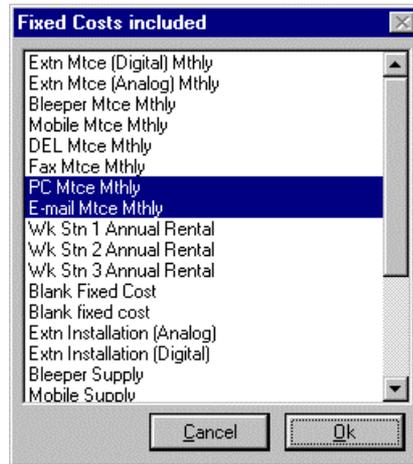
You will see the list of all the Fixed Costs, select the appropriate item and click on [OK]. It is possible to select multiple items under one field, for example, if you have several types of telephone extension but only want to show one column for extension in the report, highlight all the extension types under one field and the total will be printed.

Add the new Field to the list. Use this new Field as a base to create further Fields by changing the column title, the description, and selecting the appropriate Fixed Cost and [Add]ing to the list.

When Adding a new Detailed Field you will be prompted to create a Summary Field also. Click on [Yes] as this will save time later.

Having created the Detailed and Summary Fields, you will now need to create the Turbo Fields. To do this follow the same procedure as Detailed Fields.

TARIFF SET-UP

To create a tariff from scratch using LUMBERJACK window menus. If you are new to tariffs it would be advisable to follow this procedure through in order to understand the data produced by the exported .csv file.

From the Main Screen select Tariff>Tariff
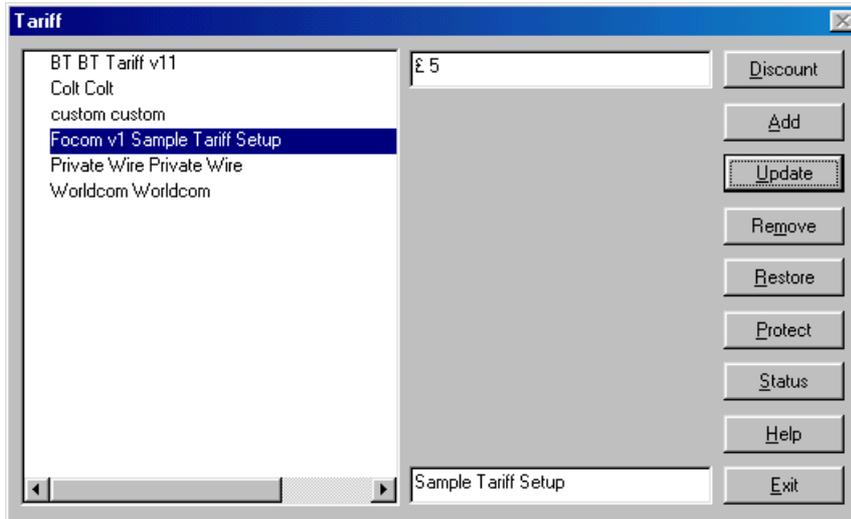
Click on [Add] and type in the name of the tariff you are setting up. In the above example it has been called *Focom v1*. Type in the number of decimal places you will be using for the costs in the box at the top. Type in a full tariff description in the bottom box. Click on [Update] then [Exit].

THE CHARGE BAND

This is the cost category. You will need to create one band for each of the different cost rates you are setting up. For example you may have several destinations that will be costed at the same rate, these destinations will be pointed towards the Band and the Band will allocate the cost from the Rate table according to the time of day.

Select Tariff>Band
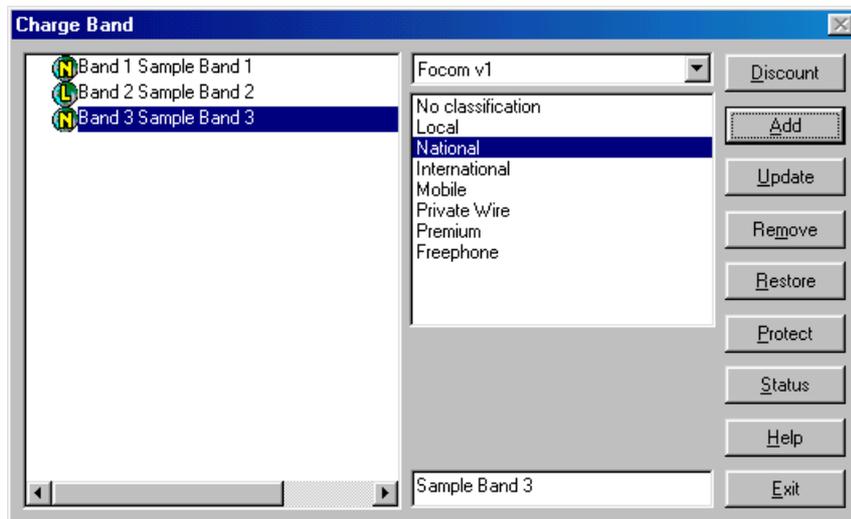
Select your new tariff name in the Tariff Selection box at the top.

Select the classification in the box below, i.e. National.

Type in the full description of the Band in the box at the bottom.

Click on [Add] and type in the Band name, i.e. Band 1, Band 2, etc. Then click [Exit].

THE CHARGE RATE

In the following examples there are two methods of costing calls. The usual method of charging is to cost one rate as standard, i.e. day time calls, and another for evenings and weekends. Sometimes weekends are charged differently.

Select Tariff>Rate

Type in start time and end time for rate (remember that end time should be one second prior to the start of next rate).

Highlight the days during which this rate will be effective - usually Monday to Friday

Set to Slot 1. For an explanation of Slots see below.

Minimum Cost in this example 4.2p - even if the call only lasts 30 seconds.

Select new tariff

Select 1st Band

Rate Connection delay - see below

Cositng period - most cost by the second

Slot duration - 23:59:59 if further slots not being used

Cost unit - usually, rates are given in costs per minute

Cost per unit: in this example 3.5p per minute

Charge Rate

Day Time Accrued Cost
Evenings Accrued Cost
Weekends Accrued Cost

Focom v1
Band 1
08:00:00   17:59:59

Monday
Tuesday
Wednesday
Thursday
Friday

00:00:09   00:00:01

Slot 1
£ 0.42000   23:59:59
£ 0.03500   00:01:00

Accrued Cost

Add
Update
Remove
Restore
Protect
Status
Help
Exit

The Rate Connection delay is set to 9 seconds in the example. This is only relevant if your telephone switch does not give the true outgoing duration time. Some switches start to accrue the call time as soon as the extension selects a trunk. If this is the case you can assume a connection delay whereby the calls will not be costed until after that time has elapsed. If this option is set and later the telephone system is upgraded to give true connection delays, you will not need to set this field to zero, simply check the box under Cost Styles (this is explained further on).

In this example it is set to 4.2p. Most tariff companies have a minimum cost for their calls, i.e. if the call costs 3.5p per minute but the minimum charge is 4.2p, a call lasting 30 seconds will cost 4.2p instead of 1.75p. Some companies also have a call set-up charge. For an explanation of how this is achieved see Slots below.

Click on [Add], you will then name the rate, for example *Day Time*

Continue to set up the Evening and Weekend rates in the same manner.

The other method of costing calls is the One Off Cost. This is sometimes used for Premium and Pager numbers.

In the example above the cost will be 75p regardless of the length of the call.

Slots

Where a tariff provider offers a specific cost for the first few minutes and another cost for the rest of the call, slots come into use. Most providers have a minimum call charge but some also have a call set-up charge. This is the scenario in our example below.
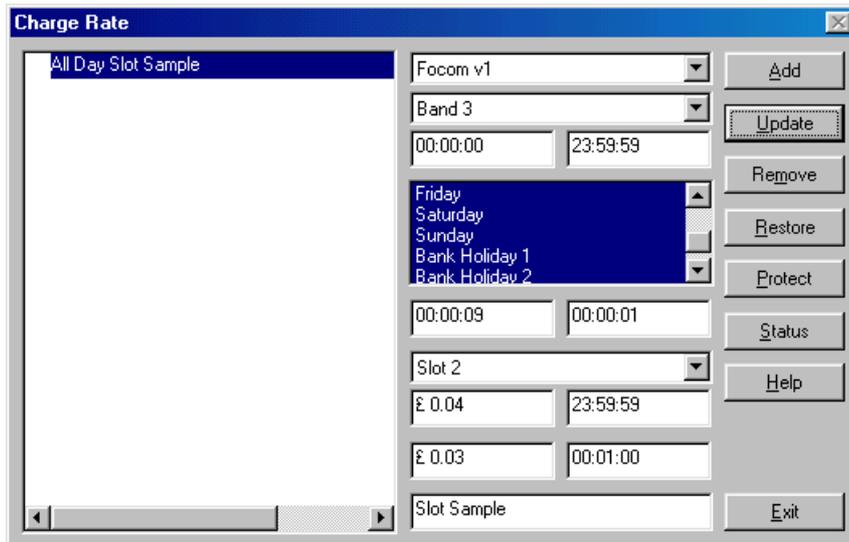

The provider has a call set up charge of 15p. In this case, Slot 1 is set to last for one second. Slot 2 is then used.

Slot 2 is set up in the usual way to show the ongoing costs.

There are three slots in LUMBERJACK. If this slot were to be relevant for, say, the next ten minutes, the duration box would be set to 00:09:59. Thereafter, Slot 3 would be used.

This has created the costing part of the tariff. What we now need to do is allocate the Bands to the dialled numbers. This is carried out under the Area Code.

AREA CODE

Select Tariff>Area Code
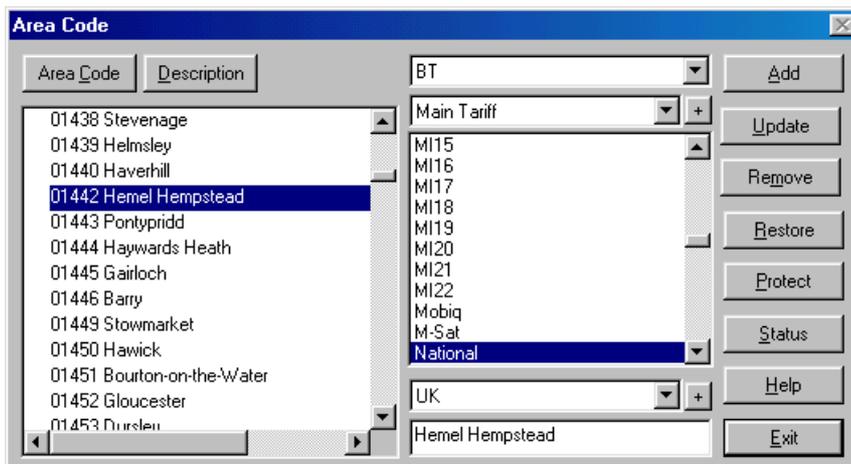
Select your tariff, in this example we are showing BT.

In the box below, select Main Tariff. Below this you will see all the Bands that you have set up. Click on [Add] and insert the dialling code for your destination. In the example above 01442 refers to Hemel Hempstead, so this is entered in the Description box. In the box above select the country relevant for this dialled number. If the country does not exist in the list, you will need to click on the [+] button to add it.

Congratulations! You have now completed a tariff! In order to use it, you need to set up the costing styles. See below.

However, if you are setting up a larger tariff, you may find it easier to export this tariff to a .csv file and see how it appears when in that form. See below.

User Defined Codes

User defined codes refer to the telephone numbers that each client sets up on their system, e.g. if you regularly dial 01442200000, you may want this to show up on your reports as **focom limited** rather than the generic tariff location name of Hemel Hempstead. These are set-up under Tariff>Area Code (see Reference section for details).

These numbers can be cut and paste from one tariff to another. However, the band names can differ from tariff to tariff. Generally if the Band name is National or Local, etc, these will be the same in every tariff. International and

non-geographic (e.g. mobiles, premium rates, etc.) tend to have their own banding conventions in each tariff. This will need to be checked carefully before importing the modified tariff.

BANK HOLIDAYS
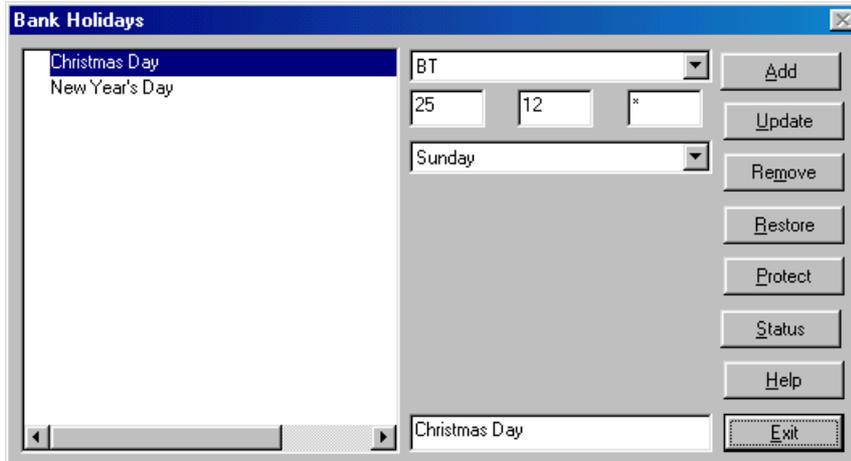
Most tariff companies charge Bank Holidays at the Weekend rate. This is set up as per the sample above using Sunday as the cost rate. Where the Bank Holiday is repeated on the same day every year, the asterisk may be used. However, moveable feasts such as Easter will need to be set up manually every year.

If a special rate is charged for Bank Holidays, select Bank Holiday 1 instead of Sunday, and set up a Charge Band and Charge Rate for this in the usual way. The only difference will be that under Charge Rate, you will select Bank Holiday I instead of the week days. Then set the costs accordingly.

IMPORTING AND EXPORTING TARIFFS

The above method is fine if you are only creating a small tariff or if you are amending a tariff. You will soon get very bored doing it this way and want to know the quick version. Unfortunately, tariffs are rather complicated and there is no quick method. However, there is another way which you may prefer to try. This is by creating a .csv file which may be imported. A .csv file is a comma separated value file, this means that each of the columns of data will be separated by a comma, this comma tells the import program to move on to the next field. As part of your installation you will have been given a standard tariff table and this will generally be on the server under ljcms\rates\.

To find out what the .csv file looks like, let's export an existing tariff, e.g. BT.
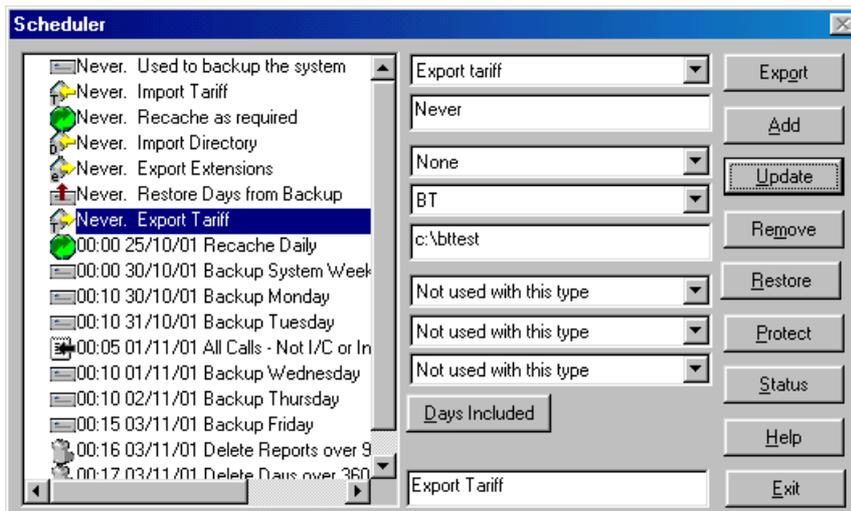
From Reports>Scheduler, select the option to Export Tariff. Create a destination file name as shown in the figure above and [Add]. If there is already an option in the list of the left, use this, changing the tariff and files names as required, then click on Update. Remember that when you are doing this from a client PC, the path you set, e.g. c:\export\ refers to the path as seen from the Server, not from your client machine.

The tariff file will now have been created at the destination you selected. Open the file using a text editor such as Notepad or Wordpad on your PC. It is not advisable to use a word processor as this will often add spurious characters to the file, even if saved as a text file.

When you look at the file, the name of the Provider is at the start of the file. It then sets up the Bands and their associated rates and costs. After this comes the number table. At the end of the file will be any User Defined codes that you may have entered followed by the area codes that are Local and Regional to your site. (See Note below regarding copying User Defined numbers between tariffs)

This tariff can be amended in this format if preferred and re-imported. Remember to save this document as a Text file type, this keeps it in ASCII which can be read by the import program.

Importing a Tariff

To import a tariff, we need the information in .csv format as described above. If we are amending a tariff already installed on the system, we need to make sure that the name of the tariff, as described in the first line of the file, is exactly the same as the name of the tariff that is on the system. If it is not, the import will create a new tariff.

Before starting to import a tariff, check in the server's C drive and see if there is a file called C:\import.err. If there is, delete the file to save confusion later.
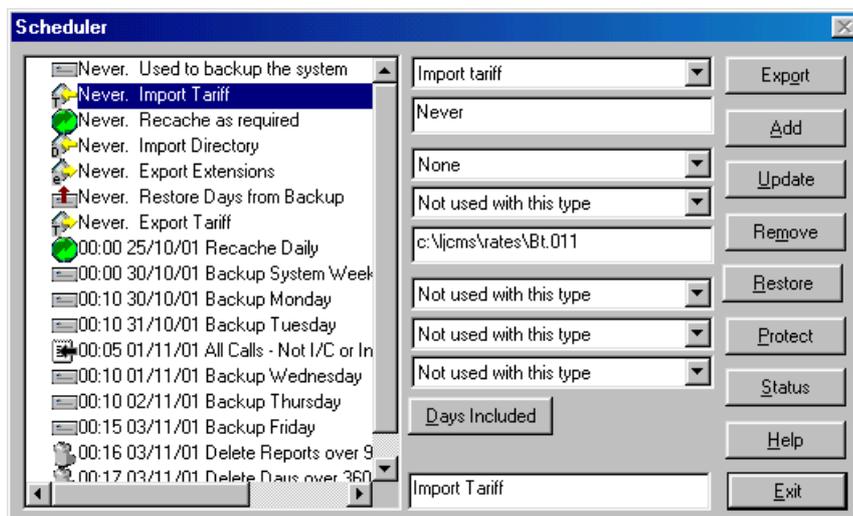
From Reports>Scheduler, select the option to Import Tariff. Amend the relevant file name, change the date (*Never*) to *NOW* and [Update].

If a LUMBERJACK error should appear with regards the file name, check the location and file name and repeat this option. It could be that the file extension is not what it appears under Windows Explorer. To be really certain check the file name in DOS.

If using the main server, you will see the Import File box come up on the screen. If on a client PC you will not be allowed to enter the Tariff screen until the import is complete. This will take varying amounts of time depending on the amount of information in the file and the speed of the PC. The standard BT file may take up to ten to fifteen minutes to load.

Using Explorer, check to see whether a C:\import.err file has been created. If it has, read the file and check what the entry says. If it refers to NC – the Not Costed band, this is fine. Any other information will indicate that there is a problem, e.g. and Band name entered incorrectly against a number.
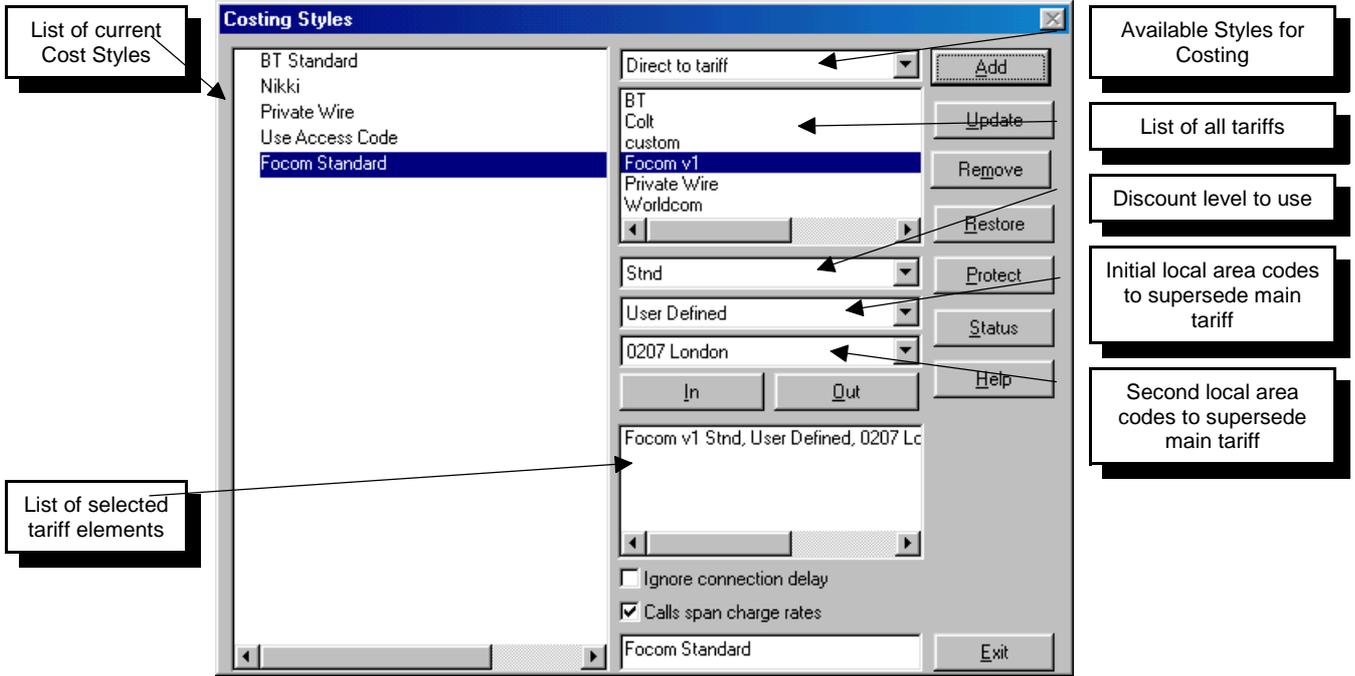
Once any issues are rectified, delete the import.err file.

When a new tariff is being imported, you will need to set-up the Costing Styles in order to use it.

SETTING UP A COSTING STYLE FOR A NEW TARIFF

Import the tariff using the method described above.

In order to make use of a new tariff, we need to create a Costing Style. From the menu select PBX>Cost Style.

Select *Direct to Tariff* from the Available Styles for Costing box.

Below this you will see a list of all the tariffs available on your system. Click on the tariff you are setting up.

In the first of the next three boxes below select either the Standard rate or any of the discounted rates that may be in the tariff. The next box should be set to User Defined. The box below should show the local area code.

Once these are set up click on [In], and the information you selected will appear in the box below.

Beneath this are two check boxes:

IGNORE CONNECTION DELAY: This should only be checked if the PBX outputs the true duration of the outgoing call. Some switches give the duration from the moment a user dials the number rather than from the moment the called party answers. If this box is not checked, LUMBERJACK will assume a given number of seconds before it starts to cost the call. This is generally set to 9 seconds, approximately three rings. You can check this under Tariff>Rate.

CALL SPAN CHARGE RATES: When a call starts in one charge rate and lasts through to the next, the cost is generally apportioned between the two charge bands. If the carrier continues with the charge rate in which the call started, this box should be unchecked.

Type in a description for this costing style. Click on [Add].

Incomplete Tariffs

Where a new tariff is incomplete, for example you have all the local, national and international rates but do not have the mobile or premium rates, you may want to use a different carrier whose tariff is complete to cost the rest of the calls.
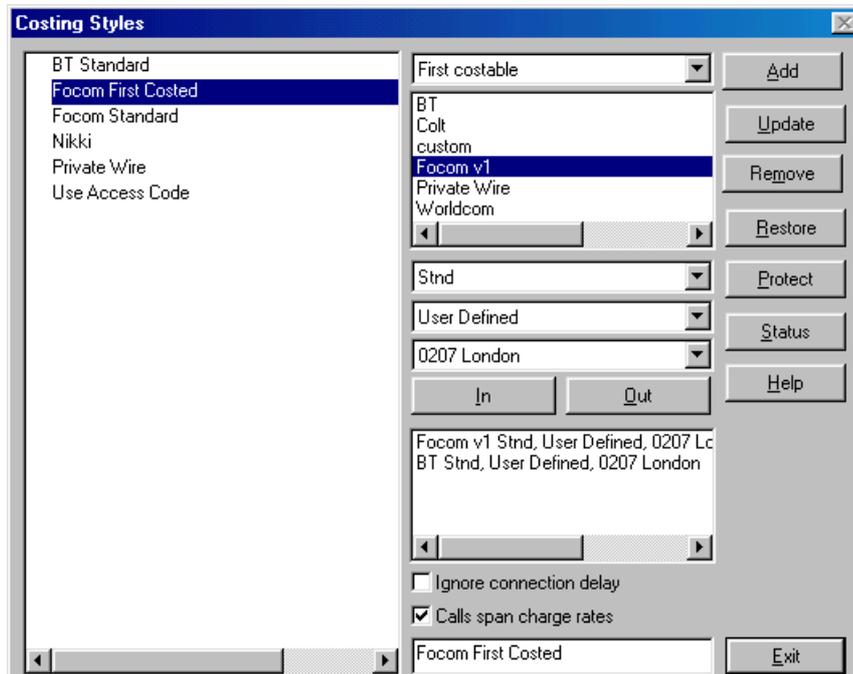
To set this up, select *First Costed* from the Available Styles for Costing. Then select the new tariff with the relevant local and user-defined codes. Then add the second tariff, to cost any calls that are not covered by your first tariff. Set-up the rest of the window in the usual way and [Add].

We now need to check the Access Codes.

ACCESS CODES
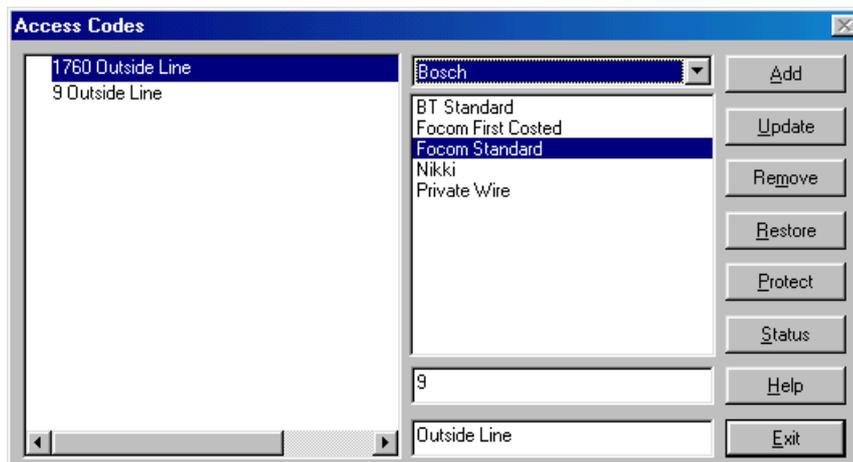
Go to PBX>Access Codes. The access codes will have been set up when your system was installed. However, if you have recently taken on a new provider, the call routing may have been set up with a new access code. This will be evident from the dialled numbers that you see on the system since they will all be prefixed by the new code. Your switch maintainer should have given you this information at the time the routing was set-up.

To add a new code, simply click on [Add] and a box will appear asking for the new code. Type in the code number and OK. Then point this code to the correct carrier by highlighting the carrier. Change the description. Click on [Update].

NO ACCESS CODE: Some telephone systems do not use an access code for routing purposes, in this case you can enter the word *None* and then point this at the carrier in the same way.

That's the simple part! There will be times when there are exceptions to the rule, particularly where no access code is used. At times like these the box directly above the description comes in very handy. For example, say your system does not output access codes for the vast majority of calls, but there are certain routes that are designated by access code. If you set up this access code and point it to the tariff as per usual, you will be faced with the problem that it will be stripped off every time this sequence of numbers occur, even when these number form part of a valid dialled number. In this case you need to use this box to specify the number of digits in the dialled number before the code is stripped off.

A full description of these options is set out under the Help button on LUMBERJACK.

Recache Now

Once you are happy with the set-up, you will need to Recache the database in order to make the changes effective.

Go to Reports>Scheduler. There should be an option already set-up on your system for a one off Recache. Change the time to perform from *Never* to *Now* and click on Update. The recache window will only appear on the LUMBERJACK server, so if performing this from a client PC you will need to wait until you are able to enter the tariff menu again before proceeding.

Recosting Processed Data

If you want to recost data that has already been processed on the system, go to System>Days Stored. Highlight the days you need to update and hit the Recost button. You will be asked if you want to update only where a change is detected, and if you want to update the Turbo fields. Say *Yes* in both cases.

REPORT VIEWER

Whenever a report is generated to be viewed on screen, Report Viewer is invoked. The allocated printer will define the format of the report

The above shows the Report Viewer displaying a report. Reports will be generated in portrait mode where possible but will automatically turn to landscape when necessary. Once the report has been generated, as above, it is possible to adjust the report settings to change the font, the font size, the information viewed in the header, etc.

In the top left of the screen you will see the Viewer control buttons. These are marked with post-it help notes. From left to right they are: Zoom In; Zoom Out; Next Page; Previous Page; Select Printer; Select Sections; Print Pages; Pages.

SELECT PRINTER - select a different printer, change the report formatting or add a graphic .BMP file.

SELECT SECTIONS - If you have run a report on several Groups, you can select just one of them by choosing that section from the list. This may then be printed separately.

SELECT PAGES - select the pages that you want to print.

PAGES - click the drop-down arrow to see the number of pages in the report

INSTALLING REPORT VIEWER

The Report Viewer is a separate module that may be installed on any PC. This gives those that do not have access to LUMBERJACK the ability to manipulate and print reports.

Installation: The REPPRT.EXE is generally stored under C:\ljcms\progs\. This is the LUMBERJACK Call Management System directory. Copy this file on to any PC that does not have LUMBERJACK access.

From the Windows Start menu: <u>R</u>un... the standard Windows search menu appears:

Type in the path and file name.

Select the relevant path and report file to be viewed, these will have been saved in .LJR (LUMBERJACK Report) format. (See *Copy* under *Reports Saved*, on page 100 of the Reference Section.) The Viewer Control panel and the report will appear on the screen.

Select the printer as described above.

REPPRT.EXE can be sent with Report files as an E-mail. Once installed it can be invoked at any time in order to view further reports.

DATA INPUT FROM FILE

There may be times when data needs to be refed or, for some reason, the system was off-line and the data collected into a file instead of directly into LUMBERJACK. This data file may be logged whilst the system is logging in real time.

From the System Menu, select Switch Input. There may already be an option to Input from File set up in the left hand column. Check the details or set-up as follows:

PBX: This should be set to the switch from which the data is being fed.

COMPUTER: This will probably be the main LUMBERJACK server. It will be the computer that is already set-up to collect the data from this switch.

INPUT: Select the option Read from File.

The Activate on start-up box should not be checked.

RAW LOG: The next box should be blank, this refers to collecting the raw data file and, since this has already been collected, you are unlikely to want another. However, if a second raw data file is required, it may be set up here. Give the path and file name. This must be different from the file used to collect the daily data file, otherwise the data will be stored with the current days log file.

DATA FILE: Enter here the path and file name of the raw data file to be logged. When the file is being read, data is sent to the system in manageable chunks, allowing the system to carry out other operations at the same time. The file is continually marked during logging so that, in the event of a system failure, the file will be marked at the appropriate point, and LUMBERJACK will continue logging the file once this feed is re-started.

SETTINGS: These are not used when inputting data from a file.

DESCRIPTION: Type in a description, such as: Input from File.

Click on [Add]. Then [Exit] the screen.

TO START LOGGING FROM FILE:

Go to System>System Status. Highlight the *Input from File* entry that you have created, click on [Start]. This will schedule the job and the activity should start shortly. A box will appear alerting you to the fact that you will need to refresh the screen. Click on [Refresh] a few times until the indicator light turns to green. If this does not happen after about 30 seconds, check that you have the correct details set-up. Make any necessary changes and then start again.

NOTE: Data from a raw log file rarely includes the year as part of the date, in these cases it is taken from the logging PC. If you are logging a file from the previous year, you will need to change the date on the computer first. However, if you do this on a live system, you will need to collect the live feed into another file whilst logging the data file, or this will also be logged as the earlier year. If in doubt, call the Help Desk.

HOUSEKEEPING

Get into the habit of housekeeping LUMBERJACK on a regular basis. This will avoid your PC or network becoming clogged with useless data. The frequency will depend on the size of the system and the amount of use it has.

BACKUPS: Decide on the frequency of backups and set this up in the Scheduler. (See page 97 of the Reference section.)

REPORTS SAVED: Every time a report is run, a copy of it is stored under Reports Saved, even if you are creating a file. If you have created a report that you will not need again, get into the habit of deleting it immediately. Regularly scheduled reports should be deleted once they have become obsolete. (See page 100 of the Reference section.)

RAW FILES: The data from the switch output is stored, usually, in a separate file for each day. To check how your system is set see System>Switch Input (see page 131 of the Reference section). These files are not deleted or overwritten. It is up to the user to decide whether or not to keep an archive of the raw files. Either copy it to disk or archive directory, or delete old files after three months minimum. Note that, in the event of a system failure, data can be refed from these files. It should also be noted that if call data was required as evidence in a legal case only the raw files are accepted and not the processed data.

DAILY LOGGED FILES: The Daily Logged Files (Days Stored) can be deleted after a set period of time. (See page 95 of the Reference section.)

DISK SPACE LOW: If the warning window shows that disk space is below the minimum requirement, action should be taken to clear space on the hard disk. As the hard disk fills up the system will struggle to run reports and will eventually be unable to log further data and grind to a halt. It may not be possible to retrieve the system in its entirety. If you are uncertain, call the Help Desk immediately. (See page 99 of the Reference section and page 163 of this section.)
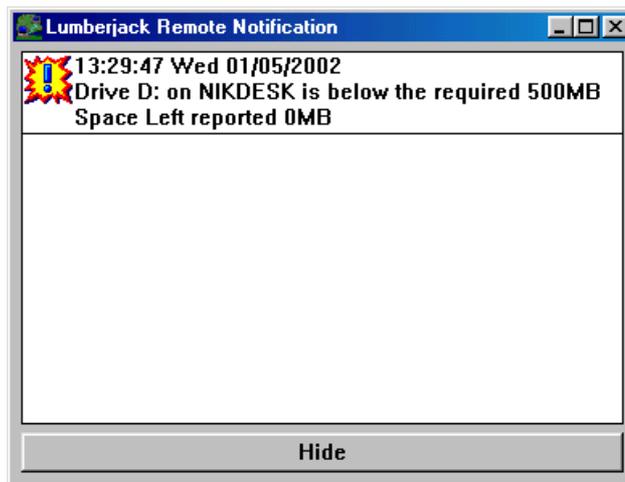
It should be noted that faults reported to Help Desk incurred as a result of bad housekeeping will be changeable.

TROUBLE SHOOTING

ERRORS/MESSAGES

All LUMBERJACK error warning windows will be headed LUMBERJACK ERROR. In some cases an error will provoke an interactive window that requires *handling* by the users. These users will have been identified when the system was installed. When any of the following messages occur, take the action as listed below.

NOTE: If the programs listed below are running as Services they must be restarted from Services in the Control Panel (if your server is running Windows2000 Services can be found under Administrative Tools). If in any doubt call the Help Desk.

A SWITCH INPUT FAILURE:	This is provoked by an error at the data collection point. LUMBERJACK will attempt to reconnect. When this error occurs, check to see that LUMBERJACK is logging OK and mark the error as handled.
A DATABASE SERVER FAILURE:	The system has stopped logging and the switch data is being buffered. Restart the database server by selecting Start>Programs>focom limited>Saw Mill.
A SCHEDULED REPORT RUNNER FAILURE:	This will not affect standard running of reports, however, your scheduled reports will not be able to run. Restart the schedule runner by going to System>System Status. The Report Scheduler will have a red button - select it and click [Start].
A REAL TIME SERVER FAILURE:	This will cause the loss of all the real time screens. Restart the real time server by by going to System>System Status. The Real Time Server will have a red button - select it and click [Start].

To mark errors as handled.

Go to the History Menu and click on View Messages. Those requiring acknowledgement will be marked with an icon. Highlight the appropriate error and click on [Handled]. A confirmation box will appear, click [OK]; the icon will disappear. Once error messages have been marked as *Handled* they will automatically be deleted after seven days.

All the application errors are collated in the file c:\ljcmsapp.log. Send this file to **focom limited** by e-mail or, if you have remote diagnostics, **focom limited** can collect it on dial-up.

New errors will be added to these in future updates. If in doubt, always call the Help Desk.

COLUMN HEADINGS

All the column headings have disappeared! This could be because you Added a new report format, and/or chose the Field Names after adding and did not [Update] on [Exit]. The system will prompt you to [Update] if any changes have been made after Adding but this option may not have been taken.

Alternatively, if you have made any changes under the [Report Fields], e.g. if you wanted to rename the items in the listing, you would probably have deleted the old name. This would also have deleted it from the Report Set-up.

LICENCE EXCEEDED

If you have exceeded your licence, you have up to 35 days to do any housekeeping to bring the number of extensions being used back within the number allowed under the licence. If you need all the extensions being used then you may have to purchase additional extensions for the licence - these are sold in block of 100.

REPORTS NOT RUNNING

If the Reports are not running check if you have exceeded your licence. From the front screen click on Help>About LUMBERJACK.

REPORT VIEWING

If a report has been sent to screen, or if, when clicking on View, an error message is given, check that a printer default has been set under System>User.

PRINTING REPORTS

If the reports are not being printed check the following areas:

Is the Remote Execution loaded? If not, load it from the LUMBERJACK directory.

Are you directing the report to the right printer? (See , Page). Check set-up, click [Update].

Histograms. There are two options with Histograms: reverse printout or grey. Some printers will only accept one or the other. To change the option, go into Report>Printer Set-up>Sections and click on the check box by *Histogram Inverted*.

REPORTS WILL NOT RUN

When clicking on [RUN], you see the following error message:
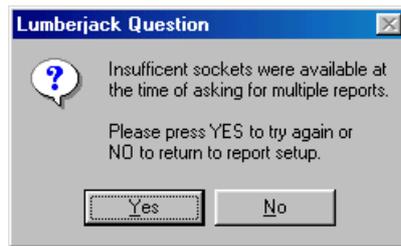
This happens if you try to run more than five reports at exactly the same time. That is, you have highlighted more than five and clicked [RUN]. Since there are only five sockets available, the sixth and subsequent reports will provoke this error message. Click on [Yes] and the reports should then run.

However, if the problem persists refer to page 156 of this section - Restarting Programs, or call the Help Desk.

COPYING REPORTS

When you copy a report to a .CSV file, a Windows dialogue box is used. .

Select the type of file you want - in this case select CSV File (*.CSV) - the default is LUMBERJACK Report (*.LJR)

By selecting CSV File as the type, this will remove all the LUMBERJACK formatting at the beginning of the report.

When importing a report into some spreadsheet packages, the extension .CSV invokes many assumptions about the content of the file. This can cause the leading zero to be excluded from the dialled digits.

If you need to keep the leading zero, once you have save the report as a .CSV file rename the new file to change the extension from .CSV to .TXT. The spreadsheet will generally ask for information regarding the translation of the data. In this case ask for the dialled digits column to be treated as text.
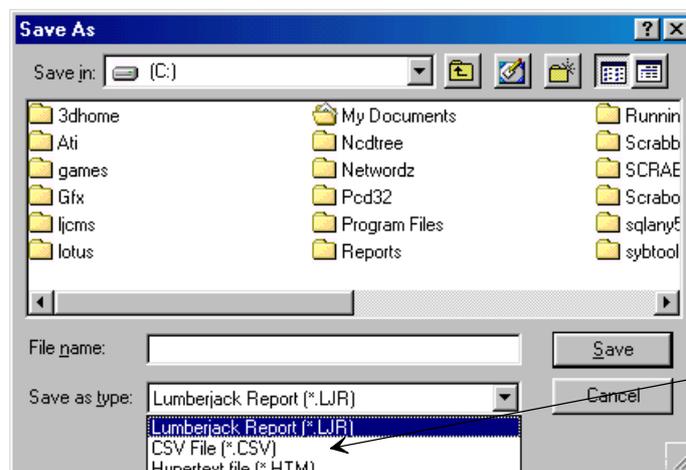
CHANGES NOT BEING RECOGNISED

If you make any changes that affect the database entries such as tariff, fixed costs, extension names, a Recache has to be run before the changes are acknowledged. See page 97. Also see Filters below.

EXTENSIONS NOT AUTO-LEARNING

If new extensions are not appearing in the Extension list, this could mean that the auto-learning has been turned off. To check this, click on PBX in the title bar, and from the drop down menu select PBX. You will see a check box marked Autolearn Extensions, this should be checked if you want the system to learn automatically.

LOGGING DATA

LUMBERJACK takes its date and time from the switch output. If you notice that these are wrong when viewing the real time screens, check the time on the switch.

If LUMBERJACK has stopped logging:

Check to see if the V24 cable has been unplugged.

Has there been a switch upgrade that may have changed the output?

FILTERS

You have deleted a filter but it still seems to be affecting the reports.

If you are not sure, choose a printer set-up that allows you to see the full filter. This will confirm whether the deleted filter is still in use.

If the deleted filter was part of a filter of filters or a group of filters, the deleted filter will be retained in the memory of any report set-ups that used it. To clear this, highlight the report under the Report Setup screen, change the filter selected, Add the report, reselect the filter you have modified and click on Update. The new filter settings will be recognised.

UNABLE TO LOG ON

You have keyed in your usual name and password but the system will not recognise them. This generally hints at a problem with the database, the mostly likely being that the LUMBERJACK server has run out of space. Check to see if this is the case. If so, copy or delete any unwanted items from the hard drive. See Space Warning below.

Once any space issues have been resolved, give the Help Desk a call and they will restart the database.

SPACE ON DISC DRIVE LOW

If you see a pop-up window warning of low space on a particular drive you may be in danger of running out of logging space (see page 159 of this section). It may be that you need to delete some items or copy them to another place. Alternately, it may be time to think about increasing the size of your hard disk. If this warning is ignored you could be in danger of losing data. If you have any queries, contact the Help Desk.

To create more space on the disk there are several things that can be moved or deleted.

DAYS STORED: Are you keeping more data on the system that you need for report generating purposes? Check this under System>Days Stored. If there is more data than you require, highlight the days to be deleted and click on Remove. It would be advisable to check the Delete Days option under Scheduler, this should be set to the number of days data you want to keep on the system before data is deleted, e.g. to keep the last quarter set this to 100 days, and so on. It may be that this is set to a higher limit than the hard disk can handle.

REPORTS SAVED: Do you have a back log of reports that are no longer needed?

BACK-UPS: Back-ups should always be saved to a different media than the disk housing the LUMBERJACK database, however, it may be that the back-up files are being generated on the hard disk and then copied across to another media without being deleted.

RAW DATA: You should always have at least 3 month of raw data available in case of any logging problems. Historical data is stored at the discretion of the user. Some like to compress the data for long term storage, others are happy to delete it once the reports have been generated for a particular accounting period. This data is generally stored under the LJCMS\RAW\ subdirectory on the server.

TECHNICAL INFORMATION

Information reaches LUMBERJACK via the V24 CIL port of the telephone system. This may be a direct feed or via a network connection. Data may also be collected in a buffer and downloaded over a modem, or transferred from a file.

Once the call record is received it passes through the Call Record Analysis Program (RAP). This converts the data into the relevant components and stores the information in the database. A duplicate of the original call record is stored in the raw log file. (See Switch Input, page 131.)

The database is accessed via report modules in order to generate reports.

The Saw Mill and user defined Real Time screens are fed the data after the cost has been calculated in the database.

COSTING

HOW UK SITES ARE COSTED: Call costs are allocated as they are logged. When the system is set up, either the access codes or specific lines are allocated to the relevant tariff. When the call is processed, the system looks up the tariff table to calculate the cost.

HOW INTERNATIONAL SITES ARE COSTED: When logging international sites the local tables will be used to calculate the costs and this will appear on the Real Time screens. Reports may be generated in either local currency or £ Sterling.

To convert the local currency into £ Sterling, the conversion rate must be entered (see Exchange Rate, page 115). It is the client's responsibility to keep this up to date. It is, therefore, possible to generate reports across the whole network in one currency. Using the LUMBERJACK Report Fields, it is also possible to run a report that shows both the local and the UK cost.

HOW SPLIT CALLS ARE COSTED: The Standard Reports will reflect the true cost and duration of a call. However, a call may be in several parts.

For example: Extension A makes an outgoing call, via Trunk Z, that is then transferred to Extension B.

In order to correctly cost a call, the total call length must be recorded, and the cost apportioned against that complete call record. To split the call into its various components before costing would incur a minimum call charge on each part of the call. Since one part of the call may only last a minute, this would invoke a cost of the minimum rate, say three minutes. LUMBERJACK Reports, therefore, associate the cost with the complete call. The cost is then apportioned to the parties involved. Since a single cost is allocated to a call, this does not cause any problems with Turbo reports.

However, when running Summary or Detailed Reports, the full call length will be apportioned against each party involved in the call. If these calls are totalled, there will appear to be duplication, since the full length and cost is repeated. For example, in the scenario above, a Detailed Report on Extension B would show all calls incoming, outgoing, and transferred to and from the Ext. If the report does not include all parties as column headings it will appear that a call from Extension A, outgoing on Trunk Z, had been incorrectly included in the listing for Extension B. In fact, if all party information is requested, it will be clear that this call was transferred, since Extension B is Party 3. The complete call will then be costed on this report. Likewise if a Detailed Report is run on Extension A, or Trunk Z, this call will appear at full cost.

It is possible to exclude these calls if required, see Report Set-up, [Group Search], page 87.

CLIENT UPGRADES

When the LUMBERJACK server has been updated with the next release of software, the clients will be notified when they log on to the system. There will be a warning message on screen altering the user that their software has to be updated. You will not be able to use LUMBERJACK until you accept the upgrade. A cancel option has been provided but, since the upgrade will only take a few moments, it makes sense to accept the option immediately.

Provided that the Reps folder on the LUMBERJACK server has been shared, the upgrade will happen across the network. If for some reason the folder is not shared you will need to put the LUMBERJACK Upgrade CD-ROM in your CD-ROM drive and run setup.exe on the CD. Alternatively copy the Setup.exe file usually from the server and run it.

Double click the SETUP.EXE to run it.

Ensure that only the top check box is selected

Select the elements to install.

☑ Client elements. Required for accessing the database from this machine

☑ Logging elements. Required for logging a switch input to this machine.

☑ Server elements. Required if this machine is the main database server.

☐ Directory server. Required if this machine is the main directory server.

☐ Directory client. Required for accessing the Directory.

☐ FO-COM is a stand alone data collection to files.

☐ FO-Net is a serial to network gateway.

☐ FO-Buf is a serial to PSTN gateway.

OK   Cancel

Pron

Install Directory Selection

Please enter the directory to install to

c:\ljcms   Browse

OK   Cancel

Click [OK]

Select group to create

Accessories
Accessories
Administrative Tools
focom limited
Startup
Startup
Sybase SQL Anywhere 5.0
WinRAR

focom limited

OK

Click [OK]

LUMBERJACK SET-UP

SOUNDS

If you do not like the sounds associated with LUMBERJACK, these can be changed.

Click on Start>Setting>Control Panel>Sounds. The options are listed under LUMBERJACK Call Management.

|	
Alarm Cleared	Real Time Alarm Raised
Client Started	Report Complete
Client Stopped	Switch Alarm Raised
Program Alarm Raised	User Alarm Raised

ICONS

The LUMBERJACK start up executables are loaded into Startup menu so that they are automatically loaded if the PC is powered down and restarted. Users with an NT server will need the programs installed as a service to avoid having to input the [Ctrl]+[Alt]+[Del] NT log-on before LUMBERJACK can load.

On the main server PC, there will be an icon for the Sybase SQLAnywhere database and an icon for the Saw Mill (Real Time screen). In the system tray (where the clock is!) there will be two regular icons for the Remote Notification program and the Call Collection program. When a scheduled report is running, there will be a further icon in this tray, when you hold the mouse pointer over this icon it will show how much of the report has been processed.

These programs should not be shut down without direction from focom limited.

If the Close Window option is selected on the Saw Mill, a warning message will pop up: *This will disable the Real Time Screens. Are you sure? [Yes] [No]*. Unless you have been asked by the **focom limited** Help Desk to shut this down, click the [No] option.

DATABASE: Sybase SQLAnywhere is the preferred database used with LUMBERJACK. It is possible for the system will have been installed on a user-preferred database such as Oracle. This is the main engine of the call logger; if the database is shut down the system will stop logging. There is no warning for the Sybase database.
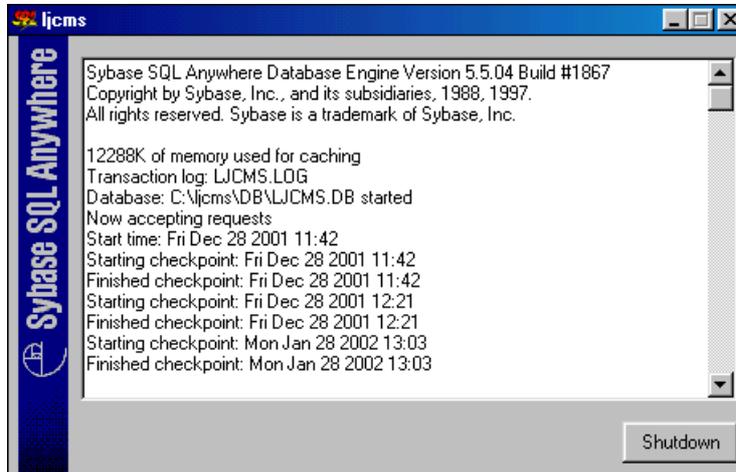
The Remote Notification program may be shut down by clicking on it with the right mouse button and choosing this option. If it is shut down you will not be able to print or view reports, not see errors or messages. There are various other data collection and network aspects that would also be disrupted. (For more information see below.)

The Call Collection program may be shut down by clicking on it with the right mouse button and choosing this option. A warning message will appear: *Closing this will stop calls being collected. Do you want to continue to collect calls? [Yes] [No]*. Unless instructed otherwise by the **focom limited** Help Desk, choose [Yes] otherwise you will stop logging.

Client PCs will have the Remote Notification and Call Collection icons in their system tray, but not the Database or Saw Mill.

RESTARTING PROGRAMS

In the event of accidental closure of programs:

REMOTE NOTIFICATION: Click on *Start>Programs>focom limited>Lumberjack Remote Execution*. If it is running as a service you must start it through the Control Panel; go to *Start>Settings>Control Panel>Services>Lumberjack Remote Notification* then click on [Start].

CALL COLLECTION: Restart the call collection by selecting *System>System Status* with LUMBERJACK. The COLLECT:(Main Lumberjack Server name) will show a red button. Highlight the COLLECT entry you want to start and click on [Start]. A window will appear to say that there will be a delay until the data starts collecting again, click [OK] then click on the [Refresh] button. You will see the data start to flow in the Saw Mill. The COLLECT:(Main Lumberjack Server name) will show a green button.

DATABASE: Click on the database icon under *Start>Programs>Startup* menu. If running as a service, select *Start>Settings>Control Panel>Services* then click on *SQLAnywhere LUMBERJACK* and select [Start].

NOTE: If you are using Windows2000 you will find your Services under *Start>Settings>Control Panel>Administrative Tools*.

In the event that the Report Server, Scheduler, Saw Mill (Real Time server), or Error Reporting need to be restarted, this can now be done from System>System Status whether a service or not.

Select the Server that you want to start - the button will be red.

Click [Start], then [OK] the warning message - the button should turn green.

If the button does not turn green click [Refresh]
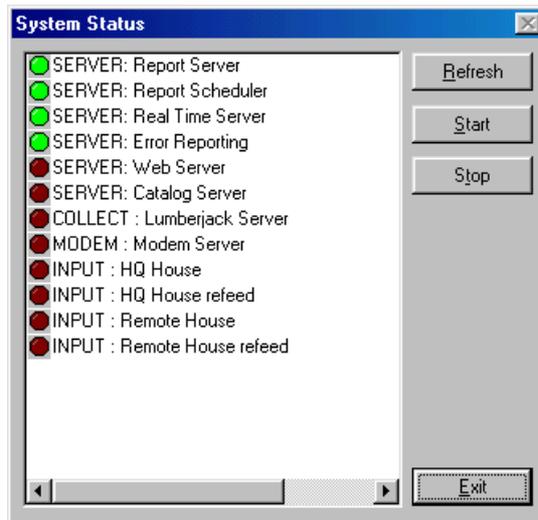
REMOTE NOTIFICATION PROGRAM

The icon for this is found in the system tray on the LUMBERJACK server and the Client PCs.

Usually Remote Notification will have been loaded into the startup menu.

If not, follow the steps on the previous page

A right mouse button click on the blue tree will bring up this menu

focom limited
Dec 27 2001

Show Errors

Free Space Check

Close

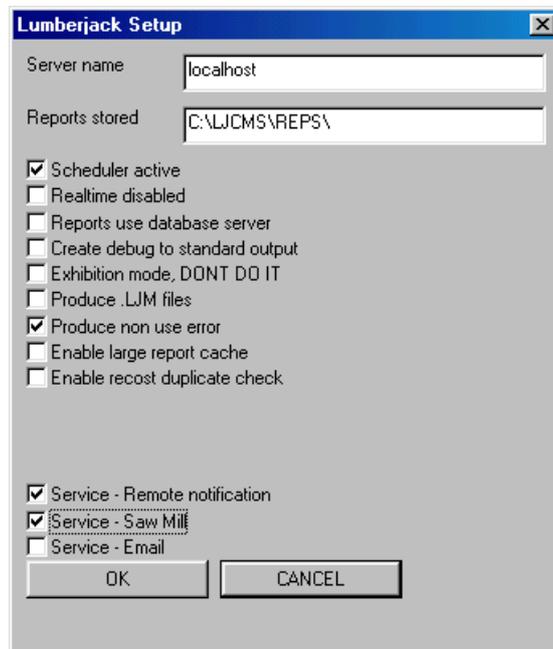|	
SHOW ERRORS:	Select this to see a list of all the error messages that have been sent to users. See View Message, page 137 of the Reference Section
FREE SPACE CHECK:	This is a safety devise designed to warn the user when space is running low on the LUMBERJACK server. However, it will be applied to the PC on which it is set so can, therefore, be used by Client PCs if required.
CLOSE:	Closes the program. You are unlikely to need to do this unless requested to do so by Help Desk.

Drives to check
☑ Drive C:
☑ Drive D:
☐ Drive E:
☐ Drive F:
☐ Drive G:
☐ Drive H:
☐ Drive I:
☐ Drive J:
☐ Drive K:
☐ Drive L:
300 Mb
OK

SET-UP

There may be times when the set-up needs to be changed, e.g., a new network address. This can be changed using LUMBERJACK Setup. The icon for this is stored under the **focom limited** sub-directory.

Lumberjack Setup

Server name: localhost

Reports stored: C:\LJCMS\REPS\

☑ Scheduler active
☐ Realtime disabled
☐ Reports use database server
☐ Create debug to standard output
☐ Exhibition mode, DONT DO IT
☐ Produce .LJM files
☑ Produce non use error
☐ Enable large report cache
☐ Enable recost duplicate check

☑ Service - Remote notification
☑ Service - Saw Mill
☐ Service - Email

OK   CANCEL

There are various options under this window that will have been set up at the time of installation. It is advisable to contact the Help Desk before making any changes to these screens if you are uncertain of the implications.

If the IP address or name for the server has changed, then each Client PC will have to be updated. To do this, on a Client PC, select Start>Programs>focom limited>LUMBERJACK Setup, then select LUMBERJACK Setup from the Main menu and change the Server Name.

SCHEDULED EVENTS

LUMBERJACK constantly monitors the Scheduler to ensure that any reports entered are run at the appropriate time. However, there may be occasions, e.g., after a power down of several days, when you will not want to carry out the scheduled activities, such as run reports or make back-ups, since no data will have been collected. Starting LUMBERJACK will automatically invoke the Scheduler to produce the backlog of reports.

Use the LUMBERJACK setup program (shown above) to deactive the Scheduler, then reset the dates within the Scheduler. When you have done this go back to LUMBERJACK setup and activate the Scheduler.