

## Using the Patrol Software

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### Setup

**Patrol requirements are set up by:**

- **Entering Client information**
- **Listing the Premises of each Client**
- **Detailing every Post for each of the Premises**
- **Using the Clock Schedule to set up the required route for each Post**
- **Access to the Premises page is from the Client page, access to the Post page is from the Premises page, and so on...**

The Client page is for contract and invoicing information. It contains the information necessary to conduct business; who to deal with and to who invoices must be submitted.

The Premises page lists the premises or sites belonging to the client where guards are to be posted. The address of the premises is the principle-required information. If a site bonus is applicable, the amount to be invoiced (Inv Site Bonus) and the amount to be paid to the guard (Post Site Bonus) per post are specified here. Each of the listed premises has a link to a Post page where the posts *for that particular site/premises* are specified.

The response required to an alarm or a dropped/failed clock point for the Premises is specified in the Premises Response field. To send a SMS to the Quality Controller responsible for the Premises in response to an event, enter the Post Remark of the Controller's Post in the Premises Response field starting with "C@" and ending with "@AAA@". For example, if the Controller's Post Remark is "Premises 1,2 and 3" then "C@Premises 1,2 and 3@AAA@" should be entered into the Premises Response field. The system looks up the cell number of the scheduled Controller and forwards a SMS. The "@" character must not be used in this field otherwise, and the wording must be exact.

The last section of the Premises Response field ("@AAA@") specifies the alerts sent. There are three characters between the last two "@" symbols. The first character controls SMS notification in response to Attention events, where a guard dials one of the system alarm/auxiliary numbers. The second character controls SMS notification in response to dropped/missed clock points. The third character controls SMS notification in response to clocking errors/mistakes. The character options are:

- **A = SMS notification to both the guard at the Post and the Quality Controller**
- **C = SMS notification to the Quality Controller only**
- **P = SMS notification to the guard at the Post only**
- **N = No SMS notification**

#### **Important Notes:**

- **Controllers should be listed in their own Premises sections, where the Premises Response field does not reference any of the Controllers listed in that section. (This does not cause a problem, but SMS messages only have a single possible destination.) Controllers can be assigned to a Client, but will probably be assigned as an overhead to the company.**
- **If a phone number is added at the end of the Premises Response entry, a SMS is always sent to this number whenever an event occurs. This number must be in International format. The full entry would then be "C@Premises 1,2 and 3@AAA@+27823334444".**

The Post page lists the posts required for a single site/premises. Each post must be specified separately. A night shift is not coupled to a day shift or any other posts on the same site. The same applies to a day shift. If there are three night shifts and two day shifts, five posts must be entered. Each post should be given a unique short descriptive name such as "Pick 'n Pay Lynnwood Night Shift 1" for the Post Remark.

Specify the start and stop dates of the contract. If the contract is open-ended, specify an end date that is at least a year in the future and don't forget to adjust it as necessary.

The critical Post information is in the Repeat Pattern field. This must specify which guards are to be posted and in which order.

- **The company he/she works for gives each guard a reference number. This company reference number is called the Register Reference as each guard's details are entered in the Register on the Register page.**
- **Example: there are three guards whose Register References (RR) are G101, G102 and G103.**
- **The pattern is entered *starting with the guard posted on the Start Date*. One RR is entered for each day. Each RR is separated from the next by a comma ",".**
- **Example: G101 starts, followed the next day by G102 and then by G103. The pattern for the first three days is "G101,G102,G103". If there is a gap in the pattern for one day (no post), it is specified with a "x".**
- **Example: there is a gap of one day on the fourth day. Thereafter the order of guards posted is G101,G102 followed by G101 again. This gives a complete seven day pattern of "G101,G102,G103,x,G101,G102,G101".**
- **When the post assignments are calculated, the system repeats the pattern as often as required until the end date.**
- **There are no restrictions on the permutations of guards. The pattern can be up to 250 characters long, but do not make any RR longer than necessary.**
- **Do not put in quotation marks ". These are just to show the start and end of the pattern. There can be no spaces or other illegal characters in the pattern.**

For each post the Start Time and Duration in Hours must be specified. The time format the same as a 24 hour clock running from 00:00:00 until 23:59:59. Fractional hours can be entered, e.g. ".5" for 30 minutes and ".25" for 15 minutes.

As shifts can start and end at any time, a night shift is specifically indicated by entering a "N" in the Night Shift field. Otherwise the field should be blank.

If a post requires the guard to have special skills, such as a "Driver" with "CIT" training, these required skills are entered in the Skills field separated by a comma ",". In this case the entry would be "Driver,CIT". The skills that can be specified are up to the individual company. Whatever term is used, the system looks for the same term in the Skills entry in the Register of guards. So if the term "Medical" is entered in the Skills field on the Post page, the system will generate an exception if the term "Medical" is not found in the Skills entry in the Register for the guard posted. There are no predefined skills.

The Instructions field can be used for any special notes for that post.

A post is invoiced according to the rates set under company Policy. If it is necessary to override the standard rates the Inv At field can be used to change the rate at which the post is invoiced per hour. The Post At field is used to override company policy for payment of the post (to the guard) at the entered amount per hour. To use the standard company policy figures these fields must be set to "0.00".

The Inv Extra Item field can be used to invoice a fixed amount per post for any special services/equipment supplied. Pay Extra Item allows the costs (to a third party) to be specified.

The Grade and Sex of the required guard must be entered. The characters used must be "A", "B", "C", "D" or "E" for the grade of guard and "M" or "F" for the sex.

The Accessories field must reflect what standard equipment is needed. The categories are "Radio", "Cell", "Firearm", "Dog", "Monitoring", "Vehicle" and "Specified". Multiple numbers of these items are specified by saying for example "Radio\*2". A post which required two dogs and a vehicle would be entered as "Dog\*2,Vehicle". The invoicing and cost aspects of these items are set under company Policy. The "Specified" category is used for any

other items. Under company policy the Specified item should be set to 1.00 (=R1.00). If it is necessary to add an amount of R25-00 to the invoice for agreed services/equipment, "Specified\*25" can be put in the Accessories field.

Once the Post entries have been completed, the patrol route for the post has to be set up. This is done using the Clock Schedule link for the post. This page requires specification of the clocking points to be visited (designated by unit Serial Number) together with the times of each visit. In practice the time is specified by a window with a start and end time. Example: Clock Serial No = "A0001P", Window Start = "23:55:00" and Window End = "00:05:00" means Clock Point (PCP) A0001P must be visited between 5 minutes to midnight and five minutes past midnight.

Each Clock Point visit must be entered on its own line. The entries do not have to be in order. To view them in order do an ordered search on either the Window Start time, or the Clock Serial No (= location), or both.

Clocking operations are based on calling specified phone numbers. The methods for clocking operations recognised by the system are as follows:

- **"D" - Dial a number generated by the Call Log algorithm. Currently PCP modules and SCP software support the algorithm. The source of the expected call is the number of the scheduled guard.**
- **"D" with specified phone number - Dial a number generated by the Call Log algorithm from a defined phone number. This method is used where the post has a dedicated phone to call in clock operations. The number is entered in the Clock Schedule Remark field in International format.**
- **"M" - Manual. This allows the software to be used in conjunction with legacy practices such as reporting in via radio. No call is made. The control room operator must enter the clocking operations as they happen.**
- **"0" through to "7" - A fixed phone number belonging to the same number set used by the algorithm, where the digit specified is the last digit of the phone number to be dialled. This method is useful for temporary contracts where there is no justification to install algorithm modules, and for evaluation of the Call Log system.**
- **"0" through to "7" with specified phone number - This system can be used with existing reporting systems. Clocking points may be short range coded radio transmitters, the on site radio receiver having separate relay outputs for each transmitter, e.g. a simple remote control system. The relay outputs are connected to a multi-channel telephone dialler that dials the assigned phone number when one of the remote transmitters is activated. The phone number dialling the system must be entered in the Clock Schedule Remark field of the Clock Schedule in International format, e.g. "+27123456789". This overrides the scheduled guard's cell number as the required response.**

For the "M" and "0" through "7" options the serial number should be left blank.

The company must keep a record of where each clock point is located. A brief description of the locations for each owned clock point may be viewed/updated by clicking on the Clock Point Locations link on the Clock Schedule page.

The current number displayed by the algorithm modules may be seen by clicking on the Current Patrol Clock Point Display link. A response that agrees with either the entry in the Early or Late columns is accepted. The difference between the two is the time allowed for the guard to dial the number displayed.

*Important: Spread the time windows evenly over time to prevent bottlenecks, especially at shift start and end times. Example: If a shift starts at 18:00:00, allow the first window to cover from 17:40:00 to 18:10:00.*

### **Patrol resources are set up by:**

- **Entering guard/staff details in the Register**
- **If staff have been banned from Premises, this must be entered on the Ban page of each staff member**
- **If staff are unavailable for a period (e.g. sickness or leave), this must be entered on the Availability page of each staff member**
- **Once staff no longer work for the company the entries can either be deleted, or "##" entered at the start of the Remark field to keep the entry but prevent it from being included in the Reports**

Access to both the Ban and Availability pages is from the Register page.

The information entered into the Register is straightforward. Each guard is first given a company reference number or Register Reference. This must be unique and it should be as short as possible. This must be followed by his cell phone number, which is used to identify him/her to the system. No CLI (calling phone number) may be hidden.

The standard information of name and address is followed by an e-mail address. If left blank an address will be reserved based on the Register Reference.

The next entries are for ID Number and professional Reference Number followed by grade ("A" through "E") and sex ("M" or "F").

If it is required to pay the guard at a rate different from the standard grade hourly rate, it can be entered in the Post Override field. To pay the standard company rate, leave the figure as "0.00". The Remark column is open for company use.

Each entry on the Register page has a link to Availability and Ban pages reserved for that guard. Availability exceptions have a Start Date, an End Date and a reason. There are no predefined reasons but it is recommended that each company restrict possibilities to the minimum such as "Annual Leave", "Sick Leave", "Training" and "Compassionate Leave". If the phrase "\*\*PAID\*\*" is included in the reason, those dates will be paid.

Guards may be banned based on Clients, just enter the Client Reference on the page generated by the Ban link. The Reason for the ban is optional but encouraged.

### **Patrol *financial rules* are set on the Rules page:**

- **There should only be one set of Rules**
- **Public and Religious Holidays are entered on the Holiday page**

The Rules entry specifies much of the financial information on how the company is run.

Shifts are divided into types, comprising Day and Night shifts for each of the weekdays "Mon" through to "Sun" plus public holidays. Each of these types can be invoiced at a different multiplier (e.g. Inv Sun Night). Standard values would be: normal time = 1, time-and-a-half = 1.5, double time = 2 and so on. The shifts (guards) may also be paid using different multipliers (e.g. Post Sun Night) as well. (There are no practical restrictions on the values of the multipliers.)

These multipliers act on the specified guarding hourly rates. Again the amounts to be invoiced and paid are specified separately (e.g. Inv Grade B and Post Grade B respectively).

Accessories are dealt with in a similar manner. The amount they are invoiced at per period (invoicing cycle) is specified separately from the amount paid as costs to a third party. Example: a dog would be invoiced out at the figure given in Inv Dog; the amount in Pay Dog would go for dog biscuits.

Post Allowances are paid to the guard per shift for the Accessories specified for that post. These are only paid once. Example: The allowance for two dogs is the same as the allowance for one.

The remaining fields specify the following:

- **Inv Night Allowance** - if the costs of a night allowance are passed onto the client, this specifies the amount invoiced per shift
- **Post Night Allowance** - the amount paid per shift to the guard as a night allowance
- **Post Uniform Allowance** - the amount paid per shift to the guard for dry cleaning etc. This allowance can either be paid per shift or per period (see Wage Uniform Allowance)
- **Post General Allowance** - an amount paid per shift to the guard for any other reason
- **Wage Uniform Allowance** - the amount paid per wage period to the guard for dry cleaning etc.. This allowance can either be paid per shift or per period (see Post Uniform Allowance)
- **Wage General Allowance** - an amount paid per wage period to the guard for any other reason
- **Grade Change Allow** - options are "U" for allow upgrade, "D" for allow downgrade, "B" for allow both and "N" for allow none. These rules do not apply to shift substitutions, only to agreed scheduled assignments
- **Week Start** - if the company operates on a weekly instead of a monthly basis, the financial start day is specified here. Otherwise the field is used for indicating weekly working times

- **Max Post Hours** - the maximum number of hours that may be worked on a shift
- **Hours Limit W1** - the number of hours that may be worked in a week before overtime is paid
- **Overtime Rate W1 X** - the standard overtime rate if paid weekly, typically "1.5"; if paid monthly, set to "1"
- **Hours Limit W2** - the maximum number of hours that may be worked in a week
- **Overtime Rate W2 X** - the rate at which overtime is paid if this weekly limit is exceeded; if paid monthly, set to "1"
- **Hours Limit M1** - the number of hours that may be worked in a month before overtime is paid
- **Overtime Rate M1 X** - the standard overtime rate if paid monthly, typically "1.5"; if paid weekly, set to "1"
- **Hours Limit M2** - the maximum number of hours that may be worked in a month
- **Overtime Rate M2 X** - the rate at which overtime is paid if this monthly limit is exceeded; if paid weekly, set to "1"
- **Rules Remark** - company comment

Each company is responsible for entering the public holidays it recognises

*Important: Allowances can be negative (deductions) as well as positive*

## Reports

**Before reviewing reports, the Assignment of Posts must be calculated:**

**An Assignment can be edited from the reports. If changed, the Assignments must be recalculated for that day:**

- **Assignment** - View a grid of how staff are assigned to each Post graded by suitability to the Client (grade, sex and banning)
  - **Usage** - View a grid of how staff/resources are utilised graded by working times (availability, multiple booking and excessive hours)
  - **Schedule** = View a grid of the patrol schedule/events and status (responses/total)
  - **Financial** - View a grid of the financial costs/invoice ratio
  - **Summary** - View a summary of the financial position
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- Reports may be filtered by Client
  - If the summary report interval has either 7 (for weekly), or between 28 and 31 days in it (for monthly), a period summary is given
  - The standard Summary report uses as a basis an optimum scheduling of staff where none work overtime (what can be achieved)
  - Should staff work overtime the "Wage Penalty" calculated by the Usage Report must be added to the labour costs (the Summary report can be "corrected" automatically using a link at the bottom of the Usage report)

## Errors made in data capture will be detected when the assignments are calculated

The Assignment grid shows, using colour coding, how well guards have been allotted by Post based on client requirements. The number in each assignment cell is the hourly rate the Client will be invoiced. To obtain a short report on any assignment, click the invoice rate in the cell and a new window will open with information relating to that specific post on that specific day. When a guard substitution has to be made, it is done in this new window. The replacement guard's Register Reference is entered in the Actual Register Ref box, and the SUBMIT button pressed. Individual scheduled shifts may be "deleted" on an ad hoc basis by entering a "x" in the Actual Register Ref box. These changes will show in the same colour as Banned.

When there is no guard scheduled for a Post, the Day/Date is displayed in the cell in place of the hourly invoice rate. Individual ad hoc shifts may be added to a Post (where there is no scheduled guard) by clicking on the chosen Day/Date link in the appropriate Post row. The Register Reference of the guard to be posted is entered in the Actual Register Ref box, and the SUBMIT button pressed. These additions will show in the same colour as No Requirement/Contract.

The Usage grid shows, using colour coding, how well the posts have been allotted by guard based on working requirements. The number in each assignment cell is the hourly rate the guard will be paid. Again, to obtain a short report click the hourly rate link in the cell.

The Schedule grid shows, using colour coding, how well guards are completing the clock schedule for each post shift. The number in each cell shows the number of satisfactory clocking operations that have been completed out of the total for the shift. To obtain a breakdown report on the status, click the ratio link and a new window will open with information on the schedule status listed by clocking operation. The status of each clocking operation can be changed by clicking on the Update link on the right-hand side of the table. What options are available depend on the Method specified. Remarks can be entered against each clocking operation.

The Financial grid shows, using colour coding, how well the rostering has been done based on financial results, ordered by post. The number in each cell is the percentage profit made on the labour content of that post. Once again, to obtain a short report click the percentage.

The Summary table gives financial figures for the days specified firstly by post, and then as a total for the days specified. If the number of days is equal to either a week or a month, a different total is calculated which includes period based amounts (e.g. those for Accessories).

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## Printed Reports

**Report documents for printing are available for download from the links at the bottom of the following pages:**

### Assignment

- **Premises Report - Breakdown of guard assignment of Posts by date for each of the Premises. Each row gives the status of a guard for the period requested. Status can be "ON" for on duty, "P" for posted elsewhere, "NA" for unavailable and "E" for assignment error**
- **Clock Schedule Report - Breakdown of the required Clock Schedule/route for each Post, grouped by Premises**
- **Daily Posting Report - For each day a breakdown of who is assigned to which post together with fields for replacements and signatures for same**

### Usage

- **Roster Report - Documents to be given to guards to inform them of their post details for the period specified**
- **Attendance Report - As above, but with extra fields for signature of guard and supervisor, OB entries and time on/time off duty**

### Summary

**Only generated for report periods of a week or a month.**

- **Payroll Report - Data as CSV file containing many details of scheduled and actual posts, with one line for each day for each guard**
- **Clock Point Data - CSV file containing a list by guard/date/time of the clock points that were scheduled for the period, together with the outcome**
- **Payroll and Clock Point Report Macros - XLS file containing example macros to process the raw data in the CSV files into more useful reports**

All report documents are in RTF format and can be loaded directly into programs such as Microsoft Word/WordPad or Open Office, from where they can be printed.

The size and orientation of the reports are controlled from within these programs.

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## Important Operating Points

The system does not enforce rules on the company, it only flags the situation when a rule is broken

- To schedule a "No Post" in a Repeat Pattern, use "x"
- Register References (staff numbers) must have at least 2 characters
- Separate entries (Register References) in a Repeat Pattern with "," and do not include spaces
- If a Post entry is for a night shift, put a "N" in the "Night Shift" box - otherwise leave the box empty
- To denote grade use only "A", "B", "C", "D" or "E"
- To denote sex use only "M" or "F"
- Post entries reflect the normal expected posting patterns - do not change the entries to accommodate exceptions such as leave - those should be handled using the Reports
- Remember, the Post Start and End Dates are for the contract and should not be used for the roster period
  
- Stagger Clock Schedule Window times, do not create a bottleneck especially at shift start and end times.
- No Clock Schedule Window End time may be before the Post Start Time
- No Clock Schedule Window Start time may be after the Post End Time
  
- ID Numbers and Reg Numbers (e.g. SOB) *must* be entered
- Allow Grade Change options are "U" for allow upgrade, "D" for allow downgrade, "B" for allow both and "N" for allow none (scheduled/assigned postings only)
  
- Key to prefixes on the Rules Page:
  - \* "Inv" = Client invoiced
  - \* "Pay" = Paid to third party/costs
  - \* "Post" = Paid to staff per Post/hour
  - \* "Wage" = Paid to staff per wage period
- Setting night shift rates - Examples: Let the night shift rate for Friday be 1.0, Saturday 1.0, Sunday 1.5 and Monday 1.0. If the Company rule states the shift rate is determined by when the shift starts, these exact figures must be entered in the Rules. If the Company rule states the shift rate depends on how many hours are worked on each actual day, then the rates must be adjusted. For a night shift of 12 hours starting at 18:00:00 (6 hours each day) the figures become 1.0 for Friday, 1.25 for Saturday (6 hours Saturday + 6 hours Sunday), 1.25 for Sunday (6 hours Sunday + 6 hours Monday) and 1.0 for Monday
- If staff are paid by week, set monthly overtime rates to 1.0 - if staff are paid by month, set weekly overtime rates to 1.0
- Weekly cumulative working hours are calculated for Posts with starting times from 00:00:00 on the specified day (or the start of the report period) until 23:59:59 on the day before the specified day
- To enter Posts that are pure overhead, such as Quality Controllers and Supervisors, create a Client where the Client Reference is "overhead". All posts entered for this Client will have invoice amounts set to "0.00".
- If an entry is made in Availability containing the phrase "\*\*PAID\*\*", the corresponding dates will be paid, e.g. "Sick Leave \*PAID\*".

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## Notes

## Report Key

Colour	Assignment Meaning	Usage Meaning	Schedule Meaning	Financial Meaning
Dark Grey	Banned	Shift over maximum hours	No Response	Actual Loss
Red	Grade Assigned Too High	Hours Over 2nd Weekly Limit	Multiple Points dropped	Profit Margin below 10%
Pink	Grade Assigned High	Hours Over 1st Weekly Limit	One Point dropped	Profit Margin below 20%
Light Blue	Grade Assigned Low	Hours Over 1st Monthly Limit	One Point failed	Profit Margin below 30%
Dark Blue	Grade Assigned Too Low	Hours Over 2nd Monthly Limit	Multiple Points failed	Profit Margin below 40%
Bright Green	Assignment OK	Usage OK	On Schedule	Profit Margin above 40%
Dark Green	Assignment Substituted		Pending	
Light Green	No Assignment Required	No Usage	No Assignment	No Transaction
Yellow	Missing Parameters/Skills	Not Available	Waiting for first Point	Post on Public Holiday
Cyan	No Requirement/Contract	Day shift follows Night shift	No Requirement/Contract	No Requirement/Contract
Magenta	Wrong Sex	Multiple Assignments Warning	Schedule Error	Override Invoked