



REMON G²

Client Application for Windows® User Manual

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1 Introduction to REMON-G2

REMON-G2 software provides a convenient, attractive and intuitive visual interface for monitoring elevators as well as multi-group application functionality, extended analysis and control capabilities that include building management commands, traffic analysis and playback functions. Its convenient, easy-to-use graphic interface is based on modern processing and network technologies for multiple-Client and multiple-Server applications.

Depending on hardware setup configuration, REMON-G2 receives and displays in real-time elevator traffic, car diagnostic information from elevator controllers. It stores traffic data and performs activity playback, traffic/activity analysis, generates predefined reports and provides graphical user interface to multiple Clients over the Internet/Intranet.

REMON-G2 implements user interface and data processing for the existing SWIFT FUTURA and SWIFT MERIDIA controllers. It replaces and enhances the older DOS version of REMON and eliminates the need for a Remote Video Unit (RVU) and related software.

1.1 REMON-G2 Architecture

REMON-G2 presumes the use of nonproprietary off-the-shelf hardware technologies and software platforms. REMON-G2 consists of the following elements:

Servers: Web servers with SQL compliant database and software for communication with elevator controllers;

Clients: Client Application Software is the Microsoft Windows®-based user interface for remote data access and presentation.

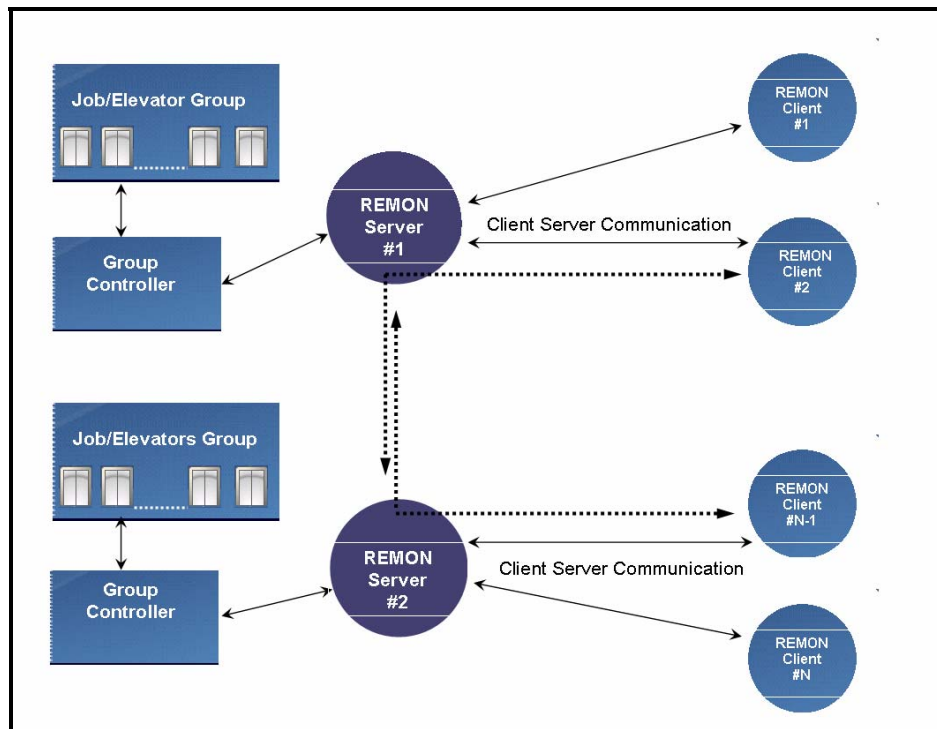


Figure 1: The REMON-G2 Architecture

Multiple Servers and Clients can exist simultaneously within the framework. Any authorized Client can communicate through REMON-G2 Servers with any elevator group in the network. An internal security system provides authorized data access and information safety.

1.2 REMON-G2 Communication

REMON-G2 Clients and Servers communicate using standard TCP/IP protocol. This structure is hardware and software independent and allows the elements to execute either on a single computer or on several computers over a TCP/IP network with diverse communication media including Ethernet (cable or wireless) and dial-up modem communication.

1.3 Document Scope

This document describes REMON-G2 Clients operation and usage. It does not cover REMON-G2 installation related issues (e.g. installing REMON-G2 servers and connecting to hardware, administrating REMON-G2, entering product ID).

2 Client Application Software (Client) for MS Windows®

The REMON-G2 Client Application Software written for MS Windows® provides the ability to view and control real-time elevator traffic and car diagnostic information from a standard personal computer. It also allows for the review and editing of security settings if present in installed equipment configuration. Several screens with graphical representation of diverse elevator data are available. The software can provide interface to review historical data. Service type and security scheduling is available.

The actual configuration is user and hardware dependent. Not all menu items and features may be present in a given setup.

2.1 Installation and Configuration

REMON-G2 Client Application software is based on ActiveX technology. Additional software usually not required. The REMON-G2 Client runs in any PC equipped with Microsoft Internet Explorer 5.5SP2 or higher that can access a REMON-G2 Server over Intranet or Internet.

2.2 Downloading and updating REMON-G2 Client Application Software

The first time your PC communicates with a REMON-G2 Server, the Client Application software is automatically downloaded and install into your PC. Check that your Internet Explorer's ActiveX security controls are enabled to permit the downloading and running of ActiveX applications as shown in Figure 2.

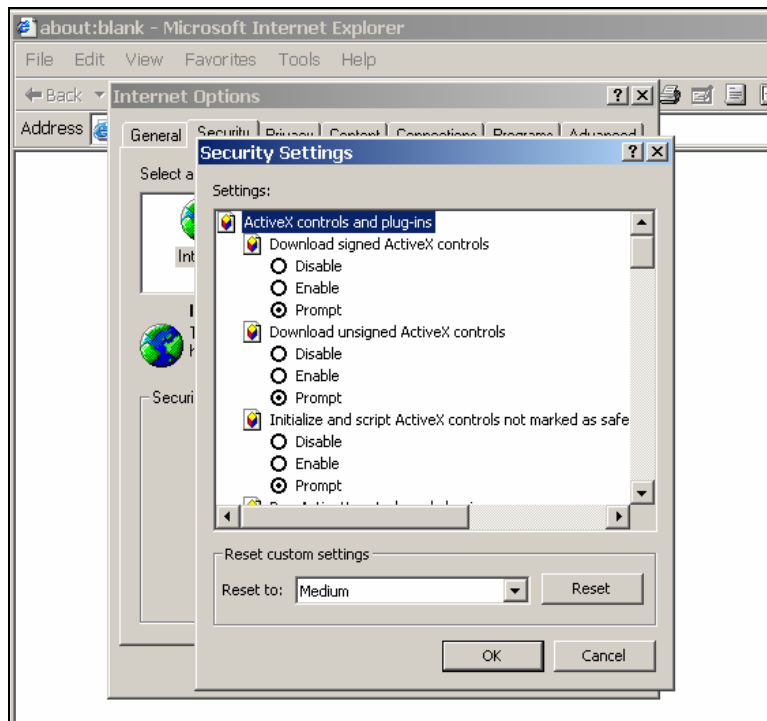


Figure 2: ActiveX control settings

If your PC's ActiveX controls are older than that of the PC running the REMON-G2 Server, the latest version of ActiveX controls will download and run automatically. You may be prompted for permission depending on your web browser's security settings. In this case click "Yes" to install the ActiveX control.



Figure 3 ActiveX download prompt

2.3 Logon

Logon is required to access any REMONG2 data. Only authorized users will have access to REMON-G2. Accessibility is based on the user's registered Username and Password pair (Figure 4). The REMON Administrator verifies the user's registration and access rights in the REMON-G2 system procedure. Unauthorized users will receive an error message indicating that an invalid user ID or password has been entered.

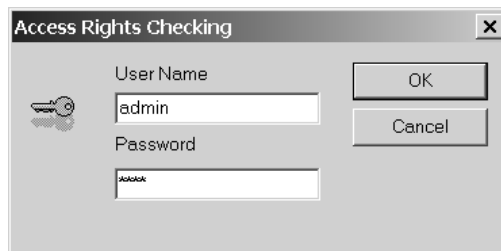


Figure 4 Logon prompt

2.4 Main Screen

The main Client Application screen layout is shown in Figure 5. It consists of two frames:

- Menu and Selection Tree (Tree) on the left
- Data Display Area (Display) on the right.

The entire Client screen and each of its frames can be resized to fit any standard Windows® style panel. To expand the Internet Explorer window to full screen, use the F11 key on your keyboard.



Figure 5: Main Screen, Client Application Software

2.5 Menu and Selection Tree

The Menu and Selection Tree presents a listing of the equipment being monitored by Client. The Tree consists of the available Jobs plus related information and available menu actions. Jobs represent an elevator group consisting of one or more cars (simplex, duplex, or multi-car). Clicking on a Job in the Tree loads the corresponding data for that Job into the Display. Clicking on “Remon”

root in the tree will display multigroup screen. Clicking on menu actions shows corresponding report or management screens in Display area or loads dialog boxes.

The Tree reconfigures itself based on the current user's authorization and the system's configuration. Only Tree items that are permitted to be used by the current user will be displayed.

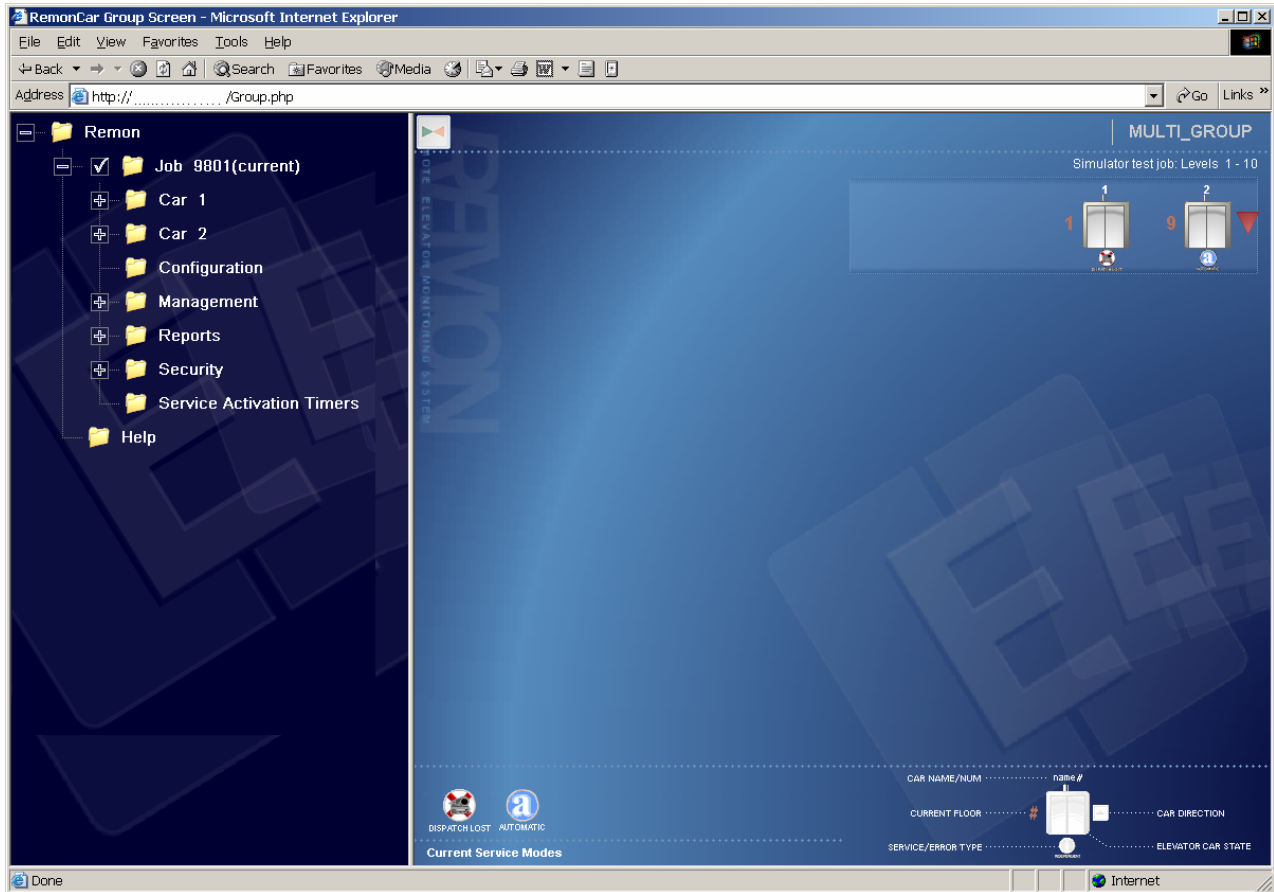


Figure 6: Menu and Selection Tree

To expand or decrease the area of the Menu and Selection Tree frame, click and drag on the narrow vertical border between the two frames. For convenient screen space management, The Menu and Selection Tree frame can be minimized/restored by clicking on the “Hide/Show Tree” button in the upper left corner of the Display.

The Client action menu is integrated into the Menu and Selection Tree. When an authorized user clicks a Tree item that can be processed by menu commands (a Job or an individual car), its complete branch is displayed including all available menu commands.

Clicking various Tree items will result in the actions described below. A “+” sign at the left of a Tree item means that lower level items are nested inside. Click the “+” to display (maximize) the nested sub-items, or “-” to hide (minimize) the displayed sub-items.

2.5.1 Remon

The default name given to the first level (tree root) in the Tree hierarchy is the “Remon”. Clicking on “Remon” reveals all available Jobs in a minimized “static” mode, and invokes the Multi_Group display in the Display frame (see paragraph 0:).

	<u>Tree item</u>	<u>Display type</u>
-	Remon	Multi_Group Display
+	Job #1	Single_Group Display
+	Job #2	Single_Group Display
+	Job #N	Single_Group Display
	Help	Help Home Page

Clicking “Help” in the Tree frame displays the help home page. Help files are HTML files located on every REMON-G2 Server. Help files present the user manual in HTML format.















2.5.2 Jobs

Jobs represent either single or multi-car elevator groups. When the user clicks a particular Job, the information for that Job is displayed in the Display frame to the right (see paragraph 4 Single_Group Display). Each Job has following subitems:

	<u>Tree item</u>	<u>Display type</u>
	Job # N	Single_Group Display
+	Car #1	
+	Car #2	
+	Car #3	
+	Car #N	
	Configuration	Job Configuration
+	Management	Job Management
+	Reports	Reports
+	Security	Security
	Service Activation Timers	Service Activation Timers

2.5.3 Cars










Clicking the “Car” expands the branch. It has no effect on the content of the Display frame.

	<u>Tree item</u>	<u>Display type</u>
	Job # N	Single_Group Display
	 Car #1	
	 Diagnostic	Diagnostic Screen
	 Reports	Individual Car Service
	 Management	Car Management
	 Recording and Playback	Error! Reference source not found.
	 Fault Screen	Fault Screen
	 Car #2	
	 Car #3	
	 Car #N	

2.5.4 Job Management

	 Management	
	 Set a Call at a Floor	Set Call at a floor
	 Toggle Parameters	Toggle parameters

2.5.5 Reports

  Reports	
-  Traffic Log for Time Period	Traffic Log
-  Car Service for Time Period	Car Service
-  Long Wait Calls	Long Wait Calls
-  Hall Call Distribution By Floor	Hall Call Distribution by Floor
-  Hall Call Distribution By Time Slot	Hall Call Distribution by Time Slot
-  Hall Call Traffic Summary	Hall Call Traffic Summary
-  Car Traffic Summary	Hall Call Traffic Summary

2.5.6 Security

  Security	
 Current Security	Current Security
 Security Settings	Security Settings
 Coded Car Call Codes	Coded Car Calls

2.6 Data Display Area

The Display frame on the right side of the main screen presents real-time status information about each elevator that the user is authorized to access including direction of travel, door status, and service mode. The content of the Display is based on the current Menu and Selection Tree choice. The following main graphical displays can appear in data display area:

- Multi_Group Display
- Single_Group Display
- Diagnostic Screen
- Job Configuration Screen
- Security Screens
- Reports Screens
- Playback Screen
- Service Activation Timers Screen

Additionally, there are several setup and information screens and dialogue boxes.

3 Multi_Group Display

Clicking on the "Remon" tree root in the Menu and Tree frame invokes the Multi_Group Display shown in Figure 7: Multi_Group Display for Windows® Client Application. This screen presents status information about each elevator accessible to the Client Application for a current user (i.e. if this username/password is present on remote server that server will return information to local one). Screen size and resolution determine the number of Jobs that can be presented in the Multi_Group display at one time.

If a given group is in Up Peak or Down Peak mode it will be surrounded with a frame.

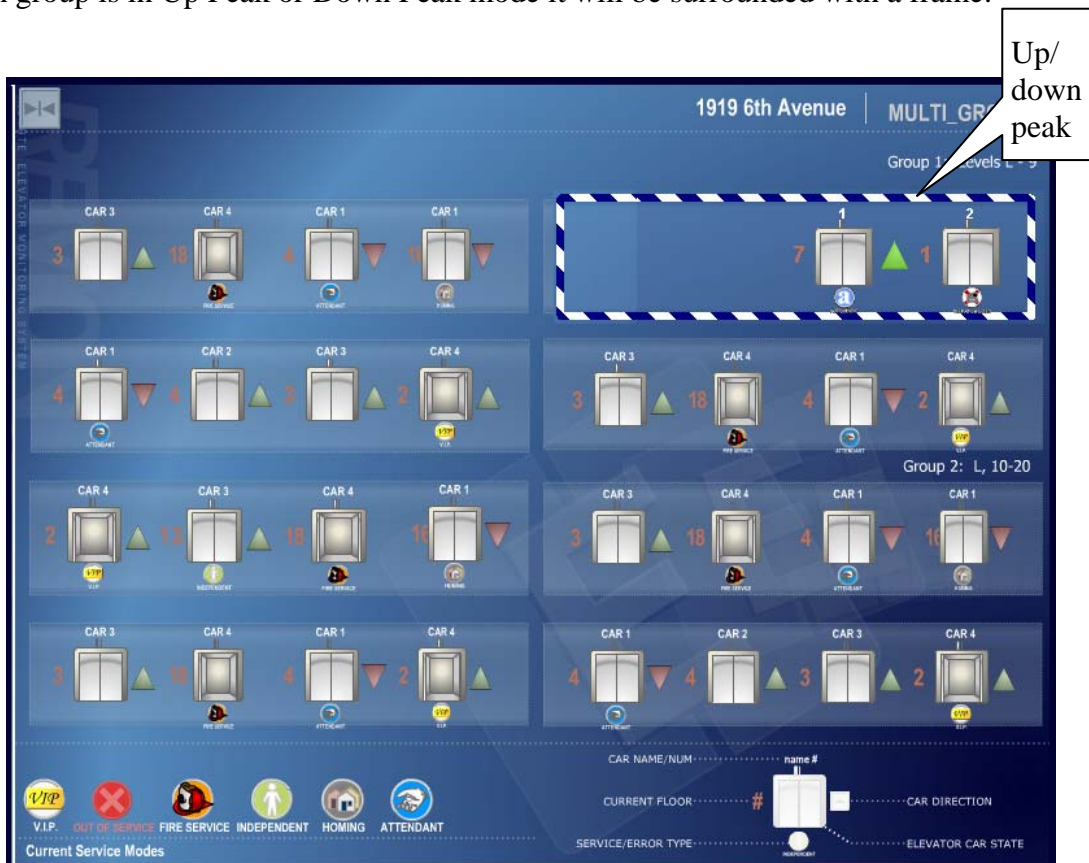


Figure 7: Multi_Group Display for Windows® Client Application

The information presented for each car is explained in Figure 9.

If communication with some group fails the “Disconnected” text can appear instead of group pictures.

4 Single_Group Display

Clicking on a particular “Job” (group) item in the Tree invokes the Single_Group Display that dynamically depicts the real-time hoistway position of all the elevators in the selected group. If there is insufficient screen space to display all cars simultaneously, the user may minimize the Tree frame by clicking on the “Hide/Show Tree” button.

The Single_Group Display presents the following:

- General job information (job name, peak status, number of floors and cars)
- Car position and direction of travel
- Hall calls assignments to the individual cars
- Car calls
- Car door status
- Car service status (mode)

The actual number of cars, floors, and floor numbers correspond to the configuration of the selected Job.

Right clicking anywhere in the Single_Group Display activates the Car Context Pop-up Menu for switching the control between dynamic and static display modes and setting Car and Job management functions and operational parameters. The structure of the context menu is shown in Figure 8. Some menu items can be grayed out depending on the current user access rights.

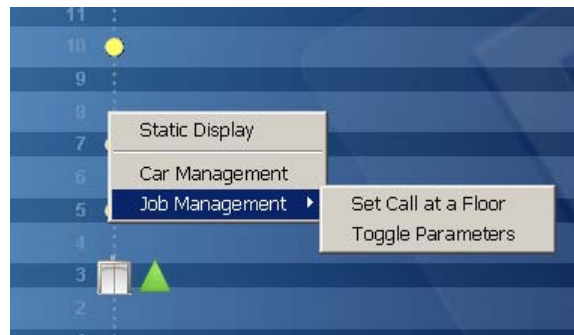


Figure 8: Car Context Pop-up Menu

Press Static Display item to switch view to Static/Dynamic mode. Car and Job Management functionality is described in 5.3 and 7, respectively.

4.1 Single_Group Display Options

Two options are available for displaying information about the cars in a Job/group. These are shown in Figure 9: “Dynamic” and “Static” car representation.

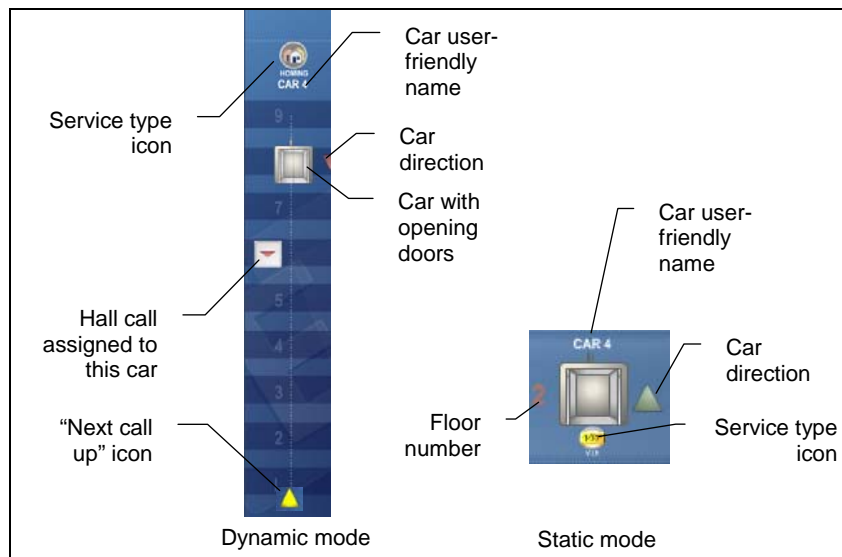


Figure 9: “Dynamic” and “Static” car representation

- “Dynamic” display. This option shows real time hoistway movement and status, and requires more screen space. The following conditions are displayed with this option: service mode front and rear car calls (with floors), front and rear hall calls (with floors and directions), and Next Call up (Automatic mode only). The various car and hall call icons are shown in Table 1: Hall and Car Call Icons. By default, the Single_Group is displayed in Dynamic mode.
- “Static” display. This option is more compact but displays less information. The following conditions are displayed with this option: front and rear door status (open/half open/closed), service mode (if applicable), car position (current floor), the presence of front and rear hall calls, and car direction.

4.2 Dynamic Display Scaling

The Dynamic Display presents up to 29 continuous landings.



Figure 10 Normal Single_Group screen (number of floors < 17)

When more than 17 landings are present, the horizontal “bars” are halved in height and the size of the car icon is reduced by 60% as shown in the following figure.

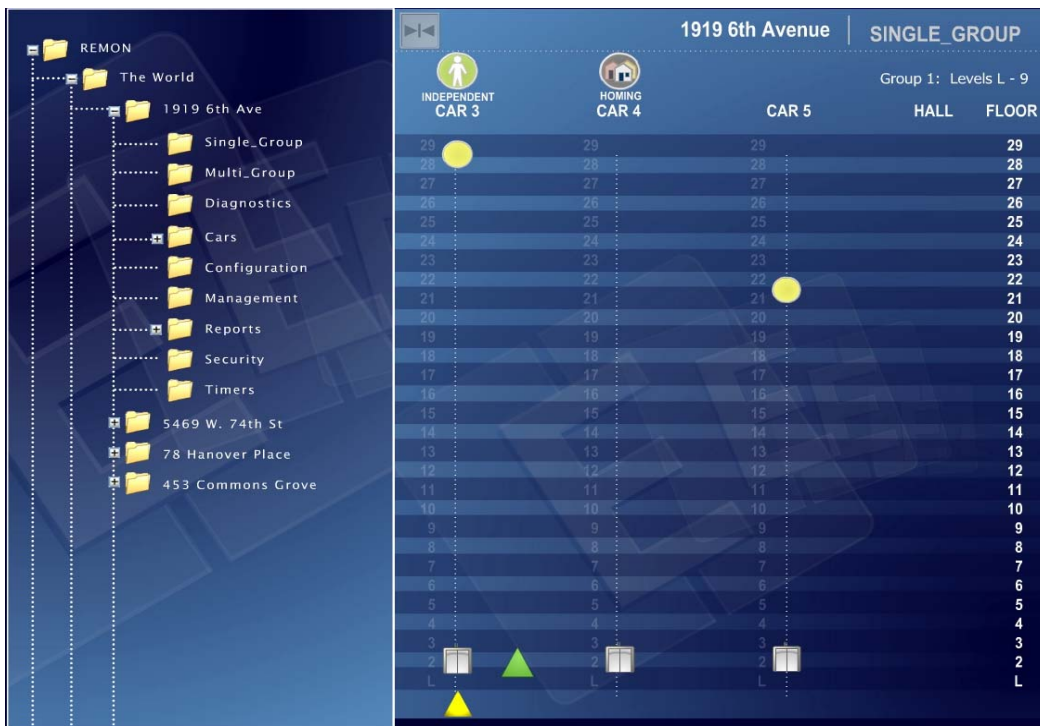


Figure 11: Scaled Single_Group screen (number of floors > 17 and < 29)

When there are more than 29 floors to be displayed, the 60% reduced car icon is used with each horizontal bar representing multiple floors. The actual floor position of each car is displayed to the left of the car icon.

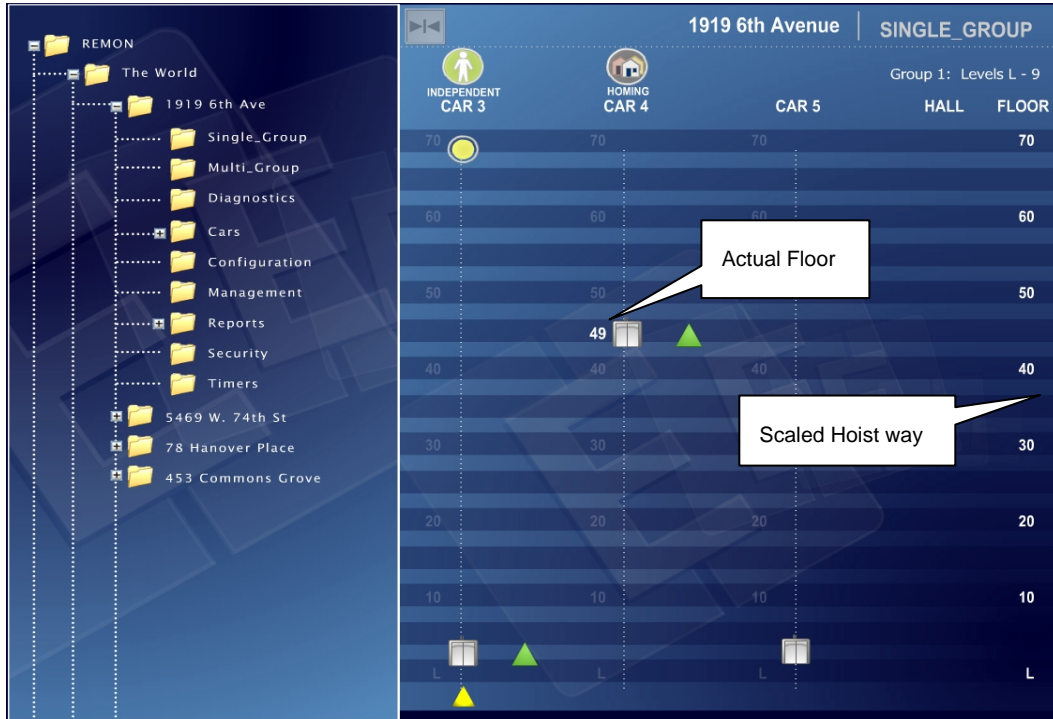






Figure 12: Scaled Single_Group screen (> 29 floors)

In Figure 12, the hoistway is scaled to about 3 floors per horizontal bar. As the car leaves floor “L” and heads up to “10,” you will see the car icon move to the first light blue horizontal bar above the “L” landing and stay there while the car passes floors 1, 2 and 3. Then the car icon will move up to the next bar (dark blue) as the car passes floors 4, 5 and 6. The process continues until the car reaches its destination

4.3 Car and Hall Calls Icons

The following hall and car call icons are used in both the Multi_Group and Single_Group displays reflecting real-time data from the elevator controllers.

Icon	Call Type	Icon	Call Type
	Hall Call Up		Rear Hall Call
	Hall Call Down		Front And Rear Call




















	Car Call: Rear		Car Call: Front
	Car Call: Front And Rear		

Table 1: Hall and Car Call Icons

4.4 Service Type Icons

The various types of elevator service states and car statuses that are monitored by REMON-G2 are shown in the following table.

Icon	Service Mode	Icon	Service Mode
	Automatic		VIP Service
	Out of Service from Car Controller		Code Blue
	“Next call up”		Fire Service
	Homing		Attendant Service
	Loss of Hall Call Power		Independent “IND” Service
	Loss of Power		Simplex/IR service
	Service Protection		Rear IR service
	Loss of Communication Service Protection		Dispatch Lost
	Emergency Power Recall		Timed-out Auto Service Protection from Group
















Icon	Service Mode	Icon	Service Mode
	Out of Service from Group		Safety
	Lobby		Disc front
	Init		Disc rear
	Count wgt		Earthq
	MG		Stop sw
	Inspection		Load bypass
	Security		Up peak
	Down peak		

Table 2: Service Types

5 Car Related Screens

5.1 Diagnostic Screen

The Diagnostic Screen displays car diagnostic information. The view changes according to the controller connected to the REMON Server. The following elevator controllers are currently supported by REMON:

- SWIFT FUTURA (CEC)
- SWIFT MERIDIA (CEC)

5.1.1 FUTURA Diagnostic Screen

A car-specific, real time CEC SWIFT FUTURA Diagnostic Screen is shown below. The Job (group) to which the car belongs is indicated in the upper right corner of the screen. General car information and current state are indicated at the bottom of the screen.

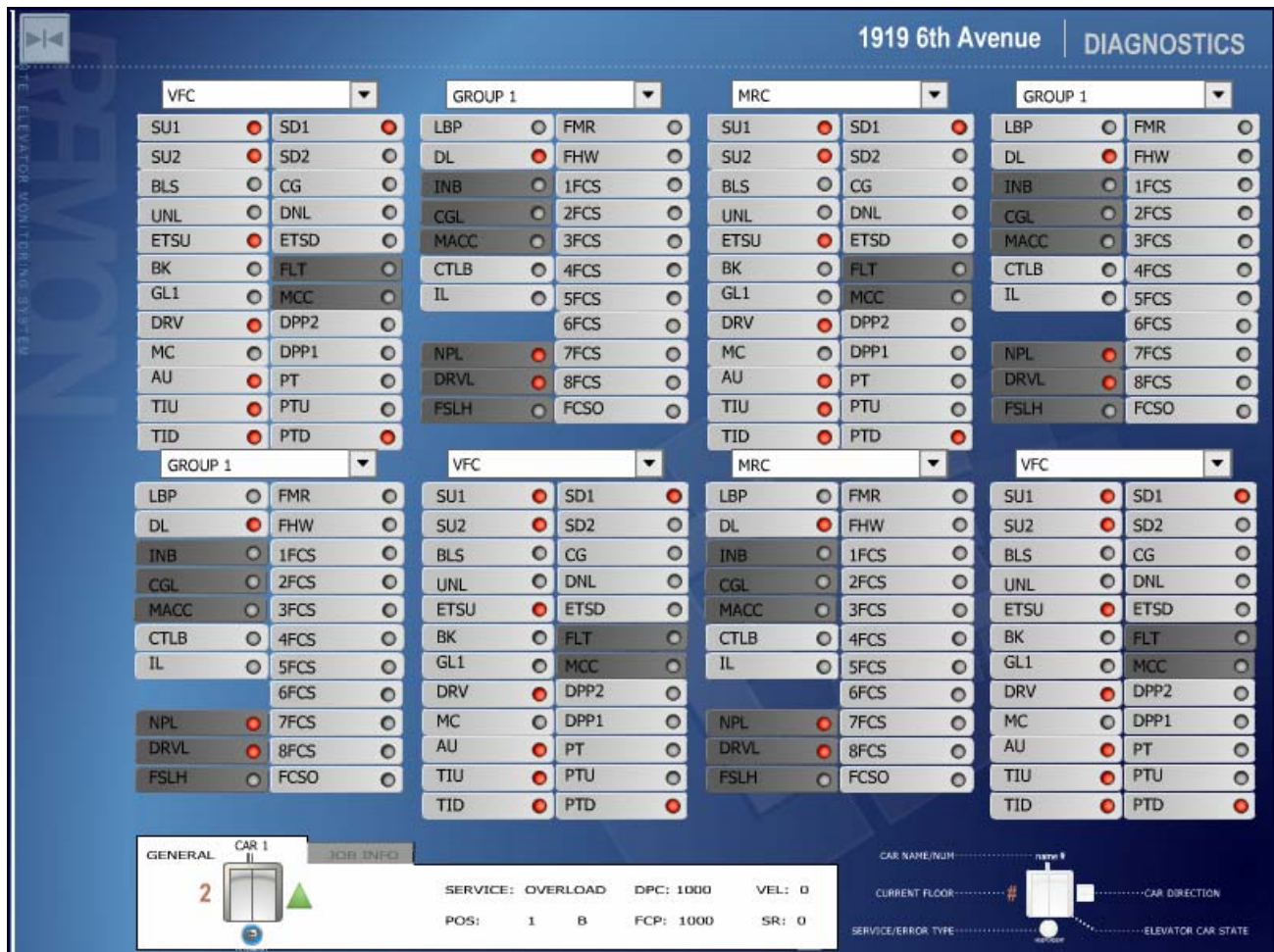


Figure 13: FUTURA Diagnostic Screen

The FUTURA Diagnostic Screen presents up to eight 24-LED data sets that correspond to FUTURA SMI I/O boards. The abbreviated names of the selected boards (taken from the FUTURA SPU/CCU) are identified in the pull down window at the top of each data set. Users can change the SMI boards to be displayed by clicking the pull down arrow and selecting the desired board. Board inputs are displayed on a red background; and outputs are displayed on a black background.

5.1.2 MERIDIA Diagnostic Screen

The MERIDIA Diagnostic Screen consists of several fields displaying names and values of ICC boards' I/O lines as well as some other known fields.

The diagnostic screen for MERIDIA has 8-LED IIC panes.

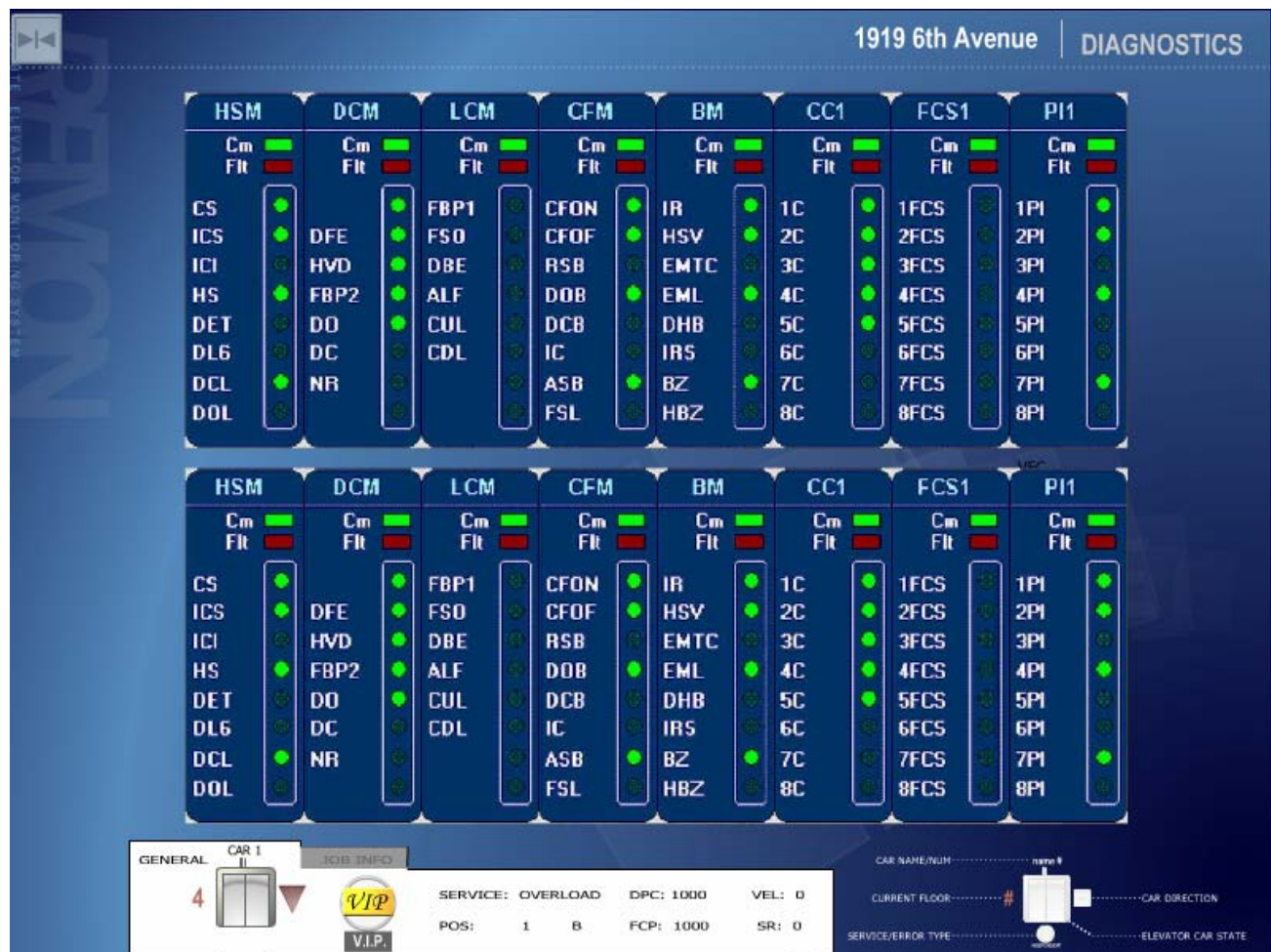


Figure 14: MERIDIA Diagnostic screen

5.2 Car Report

See section 8.1 for detail on car service report.

5.3 Car Management

The following car management functions are available in the dialog box shown in Figure 15. This box can be accessed from the Single_Group display by right clicking on the desired car, and selecting “Car Management” from the menu box:

- Set a front or rear call at a floor (the “Rear” radio button may have no effect depending on actual hardware settings)
- Select a floor for homing
- Independent Service Activate
- Independent Service Deactivate
- Independent Service Disable (Disables user to Activate or Deactivate Independent Service through Remon G2)
- Independent Service Enable (Enables user to Activate or Deactivate Independent Service through Remon G2)
- Homing Service Activate
- Homing Service Deactivate
- Attendant Activate
- Attendant Deactivate
- Car to Lobby Activate
- Car to Lobby Deactivate
- Car to Lobby with Door Closed Activate
- Car to Lobby with Door Closed Deactivate
- Lobby Independent Activate
- Lobby Independent Deactivate
- Special Service Activate
- Special Service Deactivate

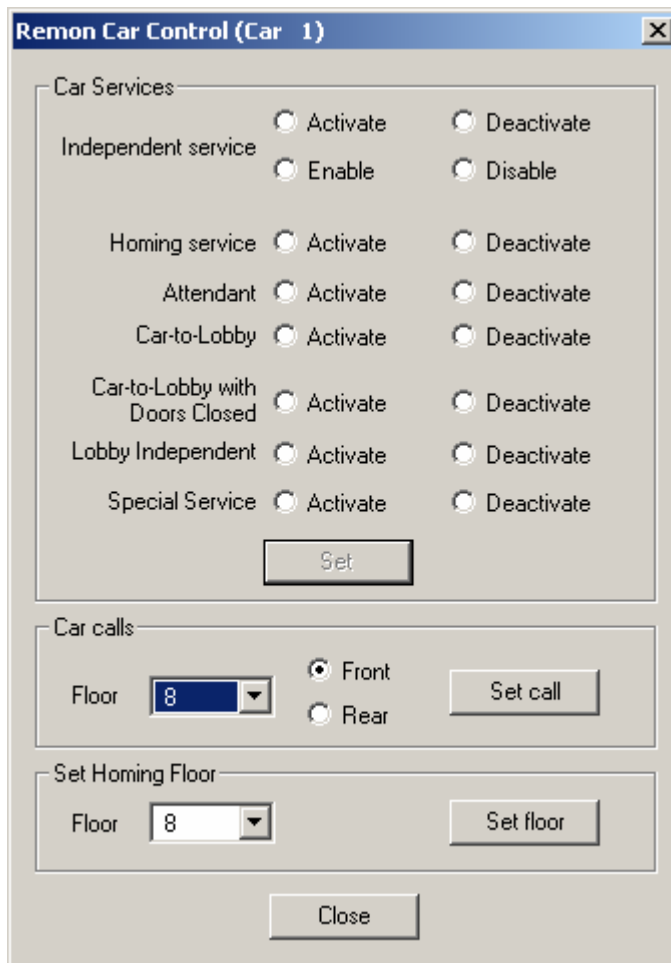


Figure 15 “Car Management” dialog box

5.4 Fault Screen

Fault screen can be used to review faults that are reported by FUTURA/MERIDIA controllers. It is displayed by clicking on “Fault screen” Menu and Tree item.

The screen outline is shown in Figure 16.

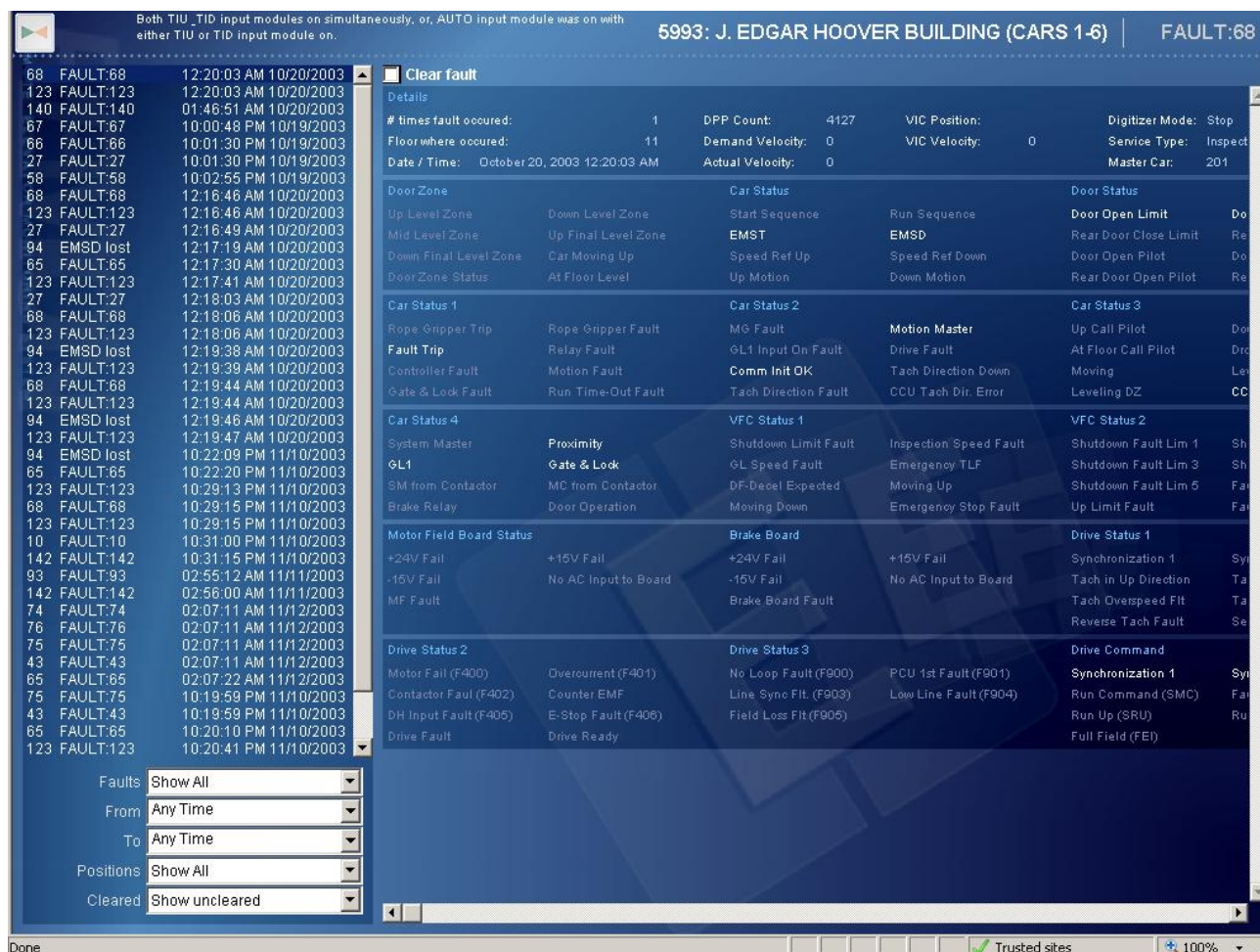


Figure 16 REMON-G2 Fault screen

In the left column the registered faults are listed. Selecting a fault automatically displays detailed fault information in the right part of the screen. The description of the fault is shown on top of the screen. Faults in the left column can be sorted by fault number, occurrence time and car position at the moment of fault using drop down lists at the bottom of the column. Choosing different values from these lists applies filters immediately.

Both parts of fault screen can be scrolled if they do not fit on the screen.

5.4.1 Clear fault from Fault Screen

There is a clear fault check box near the left column on the Fault screen. Select the fault you want to clear from the left column and then place a check in the clear fault check box. The fault will be removed from the list of faults in the left column.

6 Job Configuration

A screen for setting heavy traffic, and lobby parameters to controller is available for authorized (by access level) users by clicking a “Configuration” item in the tree displays parameters setting interface.

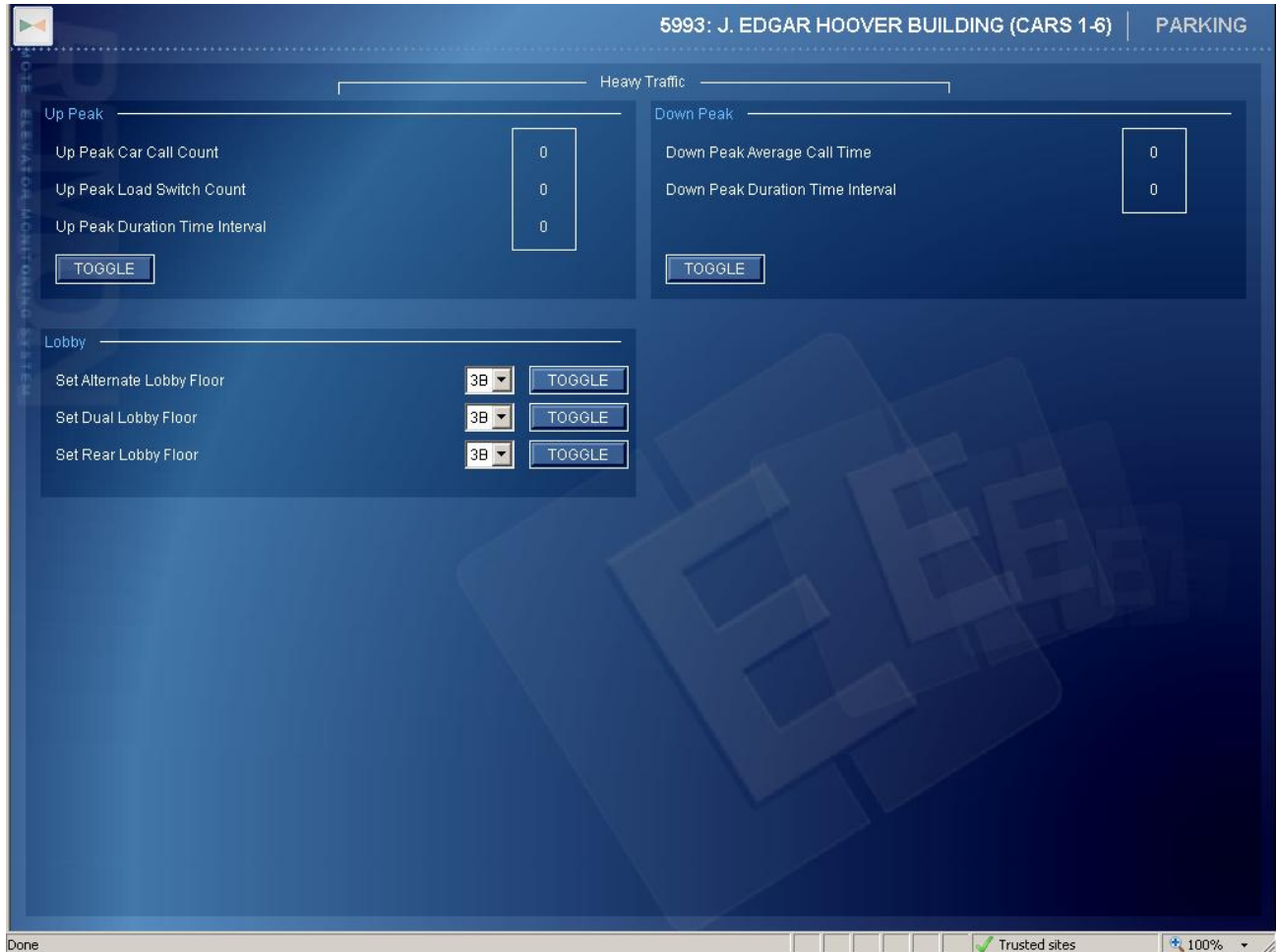


Figure 17. Job Configuration Screen

The screen consists of several zones related to up peak, down peak, lobby. The corresponding parameters are located in each zone. “Toggle” buttons enable or disable the corresponding feature status. Changing parameter values initiates writing them to controller flash immediately.

For further detail on configuration parameters, refer to FUTURA or MERIDIA user documentation.

6.1 Heavy Traffic Up/Down

Pane for Heavy Traffic Configuration is shown below.

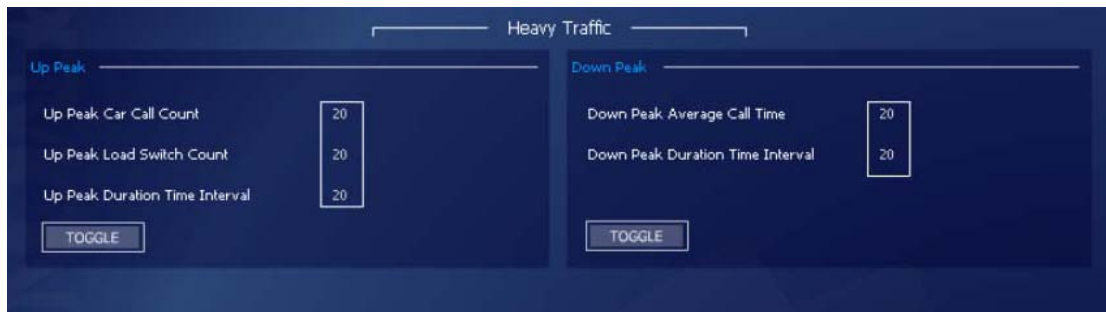


Figure 18. Heavy Traffic Setup Pane

6.1.1 Up Peak

During *heavy up*, the cars at the lobby are loaded one at a time (standard) and only the doors of the *next* car are open. As the car becomes loaded, or the loading time expires, the car leaves and another car becomes next. Special provisions can be implemented to permit multiple car loading.

A car completes its up trip after it has answered its car calls and any up hall calls assigned to it. It then reverses and proceeds to the lobby floor, provided the system is still in *heavy up*. The down hall calls can be answered by any car when assigned.

When the incoming traffic becomes lighter, SWIFT controller de-allocates cars from the lobby accordingly. The other cars park with their doors closed at the landing they last served.

Up Peak Car Call Count

- The number of trips, in a time interval, with more than 2 car calls registered from the Lobby Floor which will trigger UP Peak Operation.
- This must be a value between 1 and 20.

Up Peak Load Switch Count

- The number of trips, in a time interval, which will trigger UP Peak Operation.
- This must be a number from 1 to 15.

Up Peak Duration Time Interval

- The minimum duration Up Peak will last after being triggered.
- This must be a value between 10 and 255 seconds.

To set up Heavy Traffic parameters use appropriate pane on Job

6.1.2 Down Peak

SWIFT controller automatically recognizes heavy outgoing or down traffic by monitoring the recent and short-term traffic pattern, the number of down hall calls, their ETA's and the actual waiting time. During this mode, the down hall calls are given preferential service to handle the traffic which can occur in the evening or other time during the day. All cars assigned for *Next Up*, or other similar service, are released. Cars arriving at the lower dispatching terminal light their lantern and remain at the terminal for the same length of time as for any other floor. The available car(s) are dispatched immediately to floors or to a sector of floors with the highest down waiting time, or alternatively to the floors with the most down calls in the recent history buffer. All down hall calls

of down traveling cars are assigned based on which car has best potential arrival time. Down peak traffic mode has priority over up peak.

Down Peak Average Call Time

If the average Down Call ETA exceeds this value, Down Peak Operation will occur.

- This must be a value between 10 and 960 seconds.

Set The Down Peak Duration Time Interval

- The minimum duration of Down Peak after being triggered.
- This must be a value between 10 and 255 seconds.

After the selection is entered press **TOGGLE** button is needed to change controller settings. When user clicks TOGGLE button the new settings are written to REMON database also.

6.2 Lobby

6.2.1 Set The Alternate Lobby Floor

This feature allows the location of the lobby floor to be changed between two designated floors, which can be field adjustable. Selection of one of the two lobbies can be activated manually or by means of REMON-G2 service activation service. Dual lobby service overrides this feature.



Figure 19. Lobby Settings Pane

To set the alternative lobby floor press “down narrow” box to drop down the list of available floors. Make a choice (floor’s number indicated on the left of the box) and press TOGGLE button to update controller settings and REMON database.

6.2.2 Set The Dual (Second) Floor

This feature permits the dispatching of cars from two simultaneous main floors (field adjustable), each of which can have a *next car*. The selection of the secondary lobby floor can be activated manually or by means of REMON-G2 service activation service

Follow the same procedure for setting the alternative lobby floor.

6.2.3 Set The Rear Lobby Floor

Follow the same procedure for setting the alternative lobby floor.

7 Job Management

7.1 Set Call at a floor

The function is available either through MenuTree or Car Context Pop-up Menu. To set a call after function activation in Set Hall Call window set floor number, Up/Down and Rear/Front attributes and press “Set call” button as shown on Figure 20. Set Hall Call.

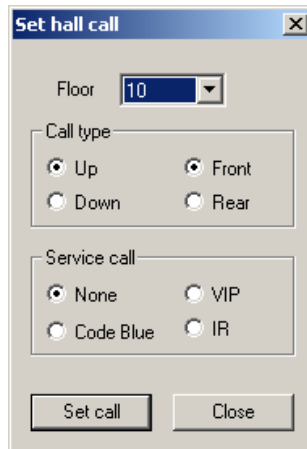


Figure 20. Set Hall Call

7.2 Toggle parameters

To toggle parameters check appropriate box and press SET as shown on Figure 21. Toggle Job Parameters.

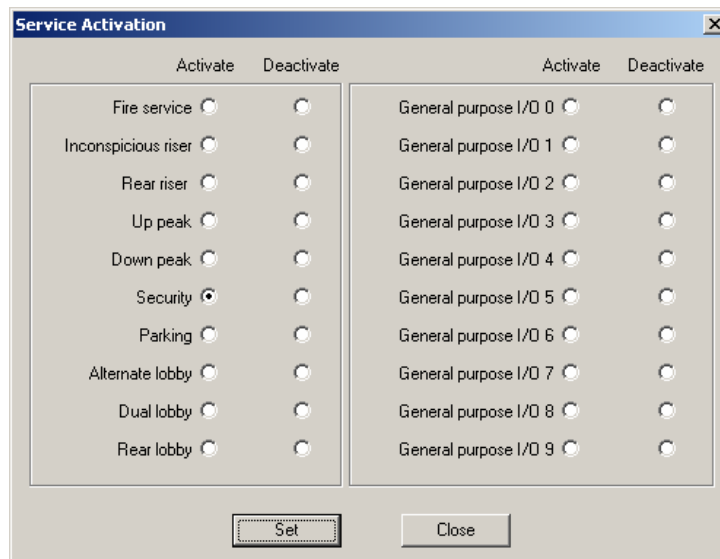


Figure 21. Toggle Job Parameters

8 Reports

Reporting feature allows reviewing historical system activity data collected for some predefined time. There are several types of reports available that cover different aspects of REMON-G2 functionality.

Please note that data collecting time range is set by system administrator and is initially 7 days. All data older than 7 days (or other period set by administrator) are deleted from the database and cannot be reviewed.

8.1 Individual Car Service

The “Individual Car Service” report displays service type changes for a car within time period. Unlike others, this report is available by clicking “Reports” item located below “Car” level.

To create a report for a given car:

- Click on the car and then click on its underlying report.
- Fill “From”, “To” boxes to set up report request parameters. The time range input field is a custom calendar control that provides convenient date and time selection. The parameters affect the report contents and view.
- Click “Submit” button. Requested data displays in area below the date/time range selection fields as shown in Figure 22. Individual Car Service Report Screen. If the list is long user will have to scroll the page up and down to review it.

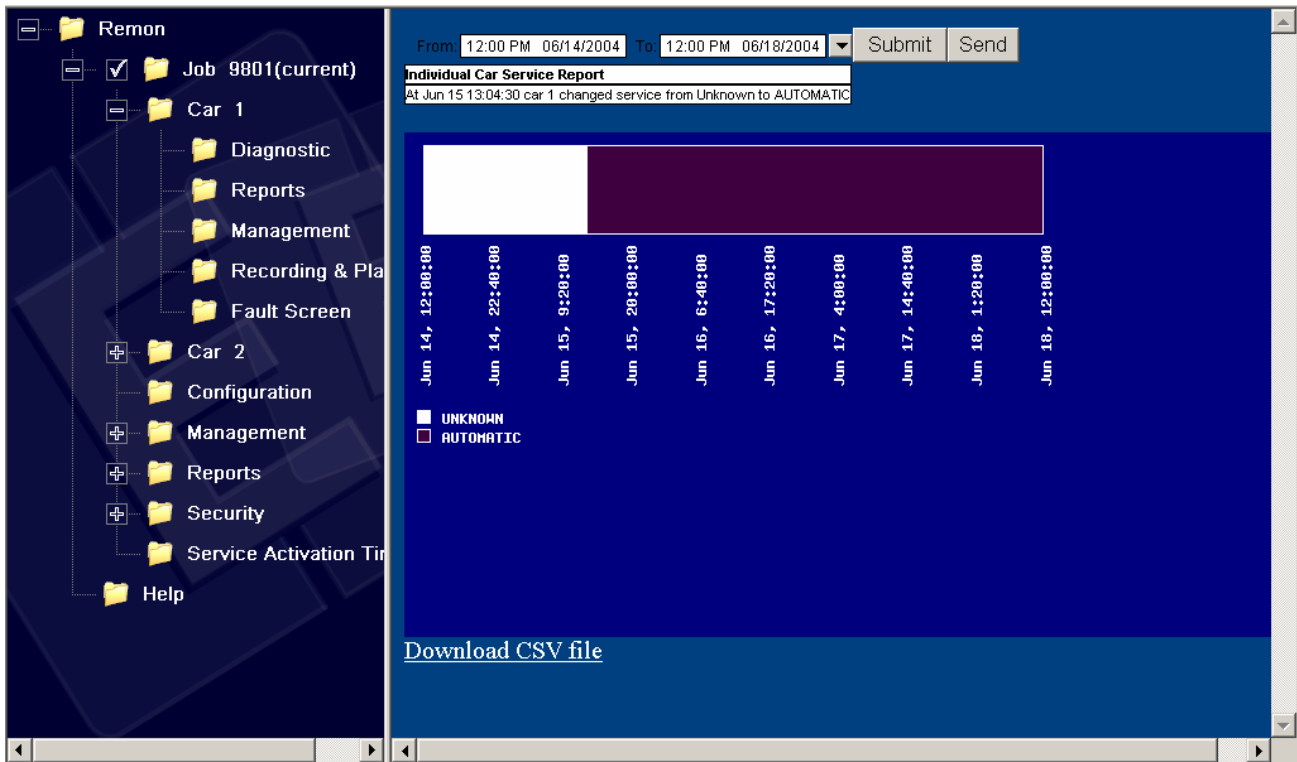


Figure 22. Individual Car Service Report Screen

Download report as textual *.csv (comma separated values) document by pressing “Download CSV file” reference at the bottom of the screen for further processing in table processing program, MS Excel for example.

Click “Send” button to form report as a separate HTML page in a new Internet Explorer window. It can be printed and sent over email using Internet Explorer “File->Print” and “File->Send” menu items if the computer has printer and email client installed. The generated HTML page outline is shown in Figure 23. Individual Car Service Report HTML.

From: 06/14/2004 12:00:00 **To:** 06/18/2004 12:00:00
Individual Car Service Report
At Jun 15 13:04:30 car 1 changed service from Unknown to AUTOMATIC

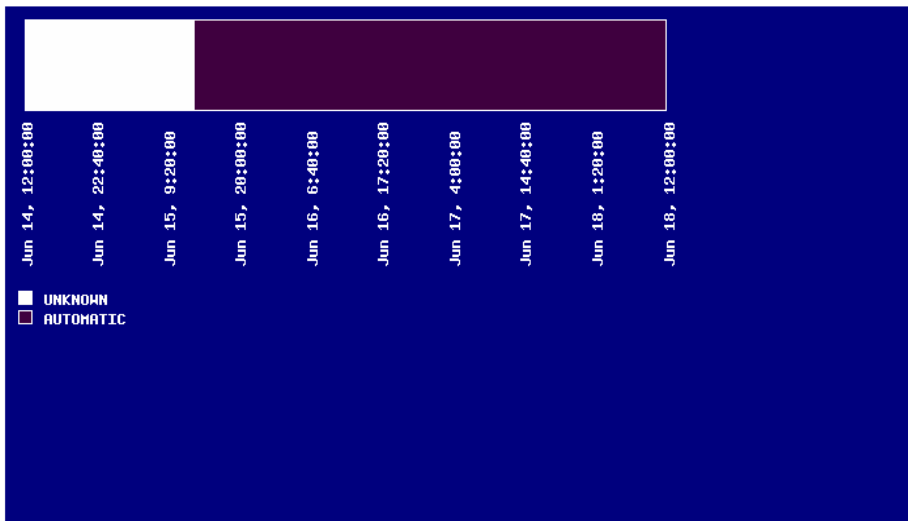


Figure 23. Individual Car Service Report HTML

Print report (looks similar to Figure 23. Individual Car Service Report HTML) using standard web browser Print function (Print button on browser toolbox or File-Print from browser menu). Printing the report on a color printer will provide better report view result. To improve hard copy view operator should enlarge the report area as much as possible before printing (can be done using mouse by sliding frame splitter to the left). Printing can be done from a separate page generated by clicking “Send” button.

8.2 Traffic Log

The “Traffic log” report allows viewing details of Group traffic historical log. The report displays:

- Hall Call times, origin (front or rear hall) and directions
- Wait times corresponding to Hall Calls
- Car service status changes (if requested)
- Summary (number of calls within the period and average wait time).

To generate report:

- Click this tree item to open report request screen on the left.

- Fill “From”, “To” boxes and check boxes to set up report request parameters. If “Car service” check box is checked the table may interfere with car service change messages (if any). The time range input field is a custom calendar control that provides convenient date and time selection. The parameters affect the report contents and view.
- Click “Submit” button Requested data displays in area below the date/time range selection fields. If the list is long user will have to scroll the page up and down to review it. After receiving the report the user can adjust time range and resubmit his request. The report is redisplayed then with different data corresponding to new time range.

To provide reasonable system response and reasonable network load the data output is limited to 500 lines. If there are more than 500 lines in the report an information string (“More data is available”) is displayed in the last line of the list.

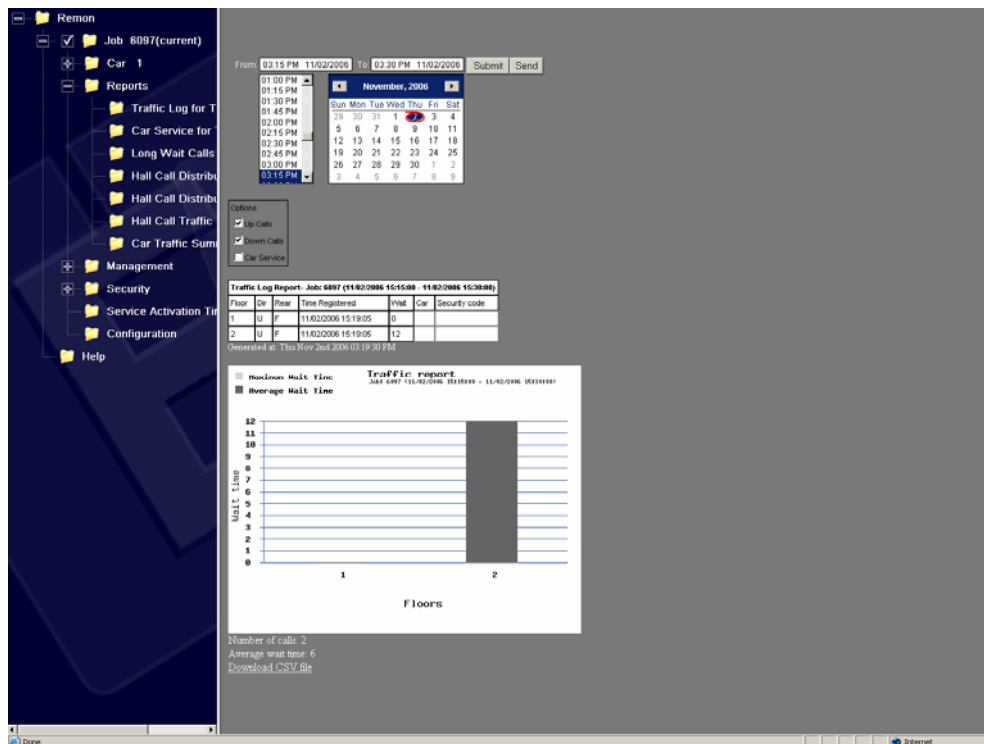


Figure 24. Traffic Log Report Screen

The data are also displayed as a histogram. The average wait time (dark grey) and the longest wait time (light grey) within the selected time interval are displayed for each car within the Group.

Download report as textual *.csv (comma separated values) document by pressing “Download CSV file” reference at the bottom of the screen for further processing in table processing program, MS Excel for example.

Click “Send” button to form report as a separate HTML page in a new Internet Explorer window. It can be printed and sent over email using Internet Explorer “File->Print” and “File->Send” menu items if the computer has printer and email client installed. The HTML attachment outline is shown in Figure 25. Traffic Log Report HTML. It contains:

- Job number and its user-friendly name
- Time range
- Report request parameters (up calls, down calls)

- Report data organized in a table
- Simple data analysis: separate numbers of up and down hall calls (with their type listed), total number of hall calls (a sum of two previous ones), average wait time, and maximum wait time.

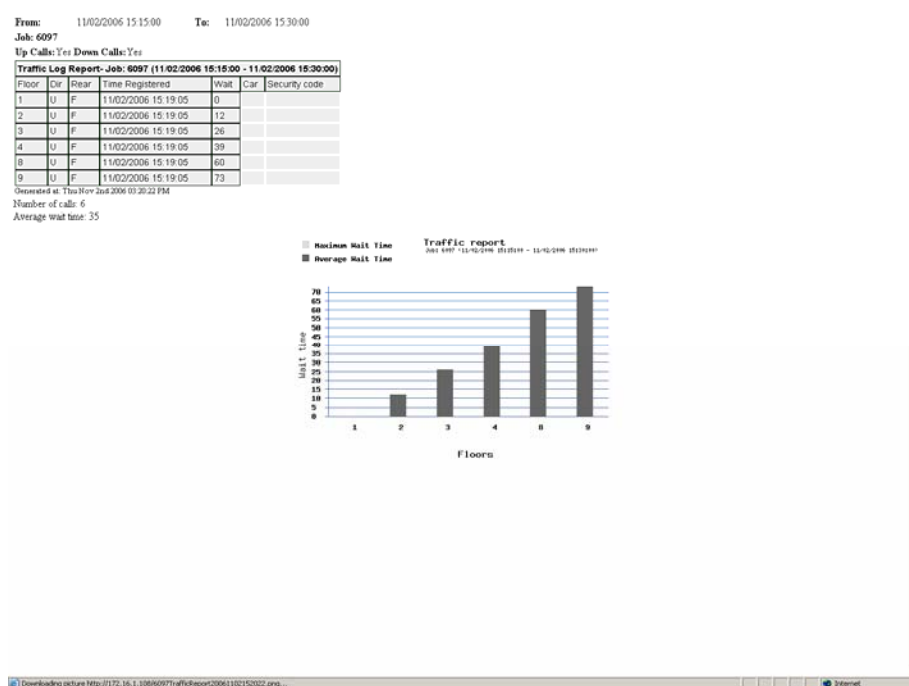


Figure 25. Traffic Log Report HTML

Print report (looks similar to Figure 25. Traffic Log Report HTML) using standard web browser Print function (Print button on browser toolbox or File-Print from browser menu). Printing the report on a color printer will provide better report view result. To improve hard copy view operator should enlarge the report area as much as possible before printing (can be done using mouse by sliding frame splitter to the left). Printing can be done from a separate page generated by clicking “Send” button.

8.3 Car Service

The “Car service” report displays car service within the Group for corresponding time slot. It allows comparing cars’ operation to optimize their workload within the Group. The report contains number of car calls, trips and “Out of service” time for each car in the group.

To generate report request:

- Click this Menu Tree item to open report request screen on the left.
- Fill “From” and “To” edit boxes to enter time interval in the data display area. The time range input field is a custom calendar control that provides convenient date and time selection.
- Click “Submit” button to display the report in the data display area as shown in Figure 26. Car Service Report Screen. After receiving the report the user can adjust time range and resubmit his request. The report is redisplayed then with different data corresponding to new time range.

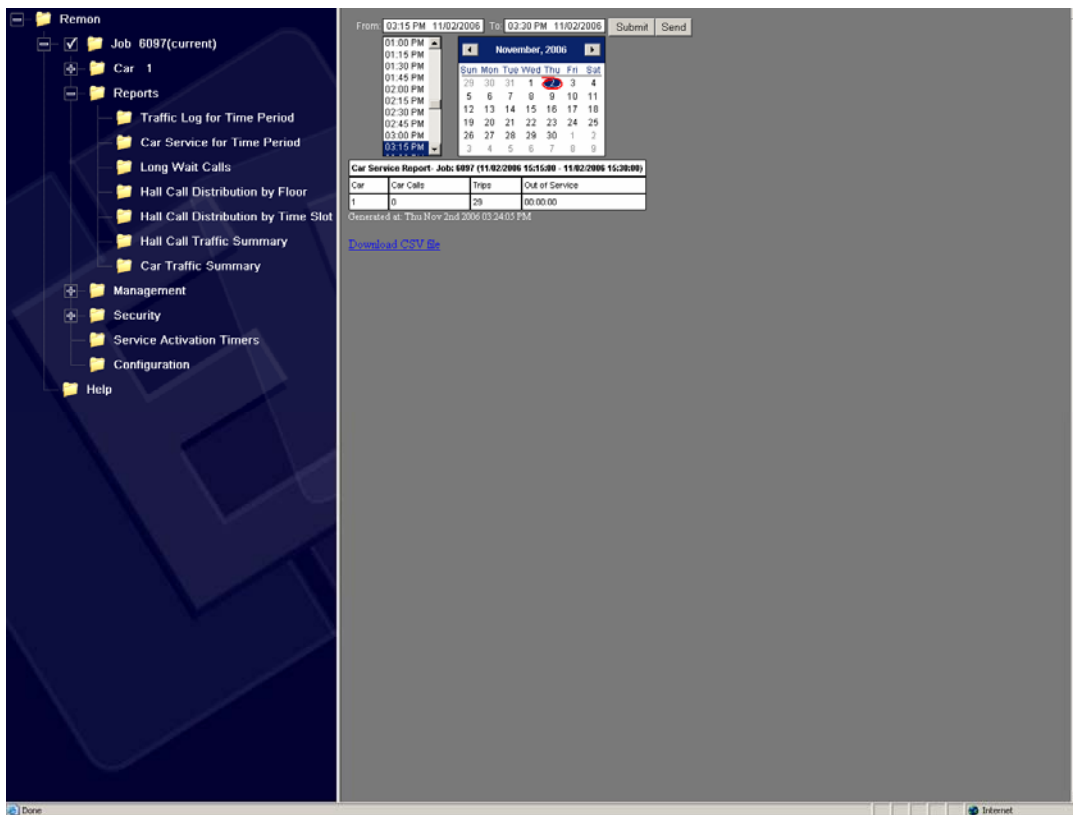


Figure 26. Car Service Report Screen

The data are displayed as a table with number of car calls, trips and out of service time during the requested period for each car.

Download report as textual *.csv (comma separated values) document by pressing “Download CSV file” reference at the bottom of the screen for further processing in table processing program, MS Excel for example.

Click “Send” button to form report as a separate HTML page in a new Internet Explorer window. It can be printed and sent over email using Internet Explorer “File->Print” and “File->Send” menu items if the computer has printer and email client installed. The generated HTML page outline is shown in Figure 27. Car Service Report HTML. It contains:

- Job number and its user-friendly name
- Time range
- Report request parameters
- Report data organized in a table

From:	To:		
Job: 6097			
Up Calls: Down Calls:			
Long wait time:			
Car Service Report- Job: 6097 (11/02/2006 15:15:00 - 11/02/2006 15:30:00)			
Car	Car Calls	Trips	Out of Service
1	0	29	00:00:00
Generated at: Thu Nov 2nd 2006 03:24:05 PM			

Figure 27. Car Service Report HTML

Print report (looks similar to Figure 27. Car Service Report HTML) using standard web browser Print function (Print button on browser toolbox or File-Print from browser menu). Printing the report on a color printer will provide better report view result. To improve hard copy view operator should enlarge the report area as much as possible before printing (can be done using mouse by sliding frame splitter to the left). Printing can be done from a separate page generated by clicking “Send” button.

8.4 Long Wait Calls

The “Long Wait Calls” report allows finding out long wait calls that happened within time range and their regularities. The report displays times, origin (front or rear hall) and directions of hall calls, and corresponding wait times. A short summary (number of calls within the period and average wait time) is also displayed.

To generate report request:

- Click this Menu Tree item to open report request screen on the left.
- Fill “From” and “To” and “Long Wait Time” edit boxes to enter time interval in the data display area. The time range input field is a custom calendar control that provides convenient date and time selection. The latter edit box allows entering the desired long wait time threshold. The default long wait time value is 45 seconds. Check or clear desired check boxes to retrieve up and/or down calls information.

- Click “Submit” button to display the report in the data display area as shown in Figure 28. Long Wait Time Report Screen. After receiving the report the user can adjust time range and resubmit his request. The report is redisplayed with different data corresponding to new time range.

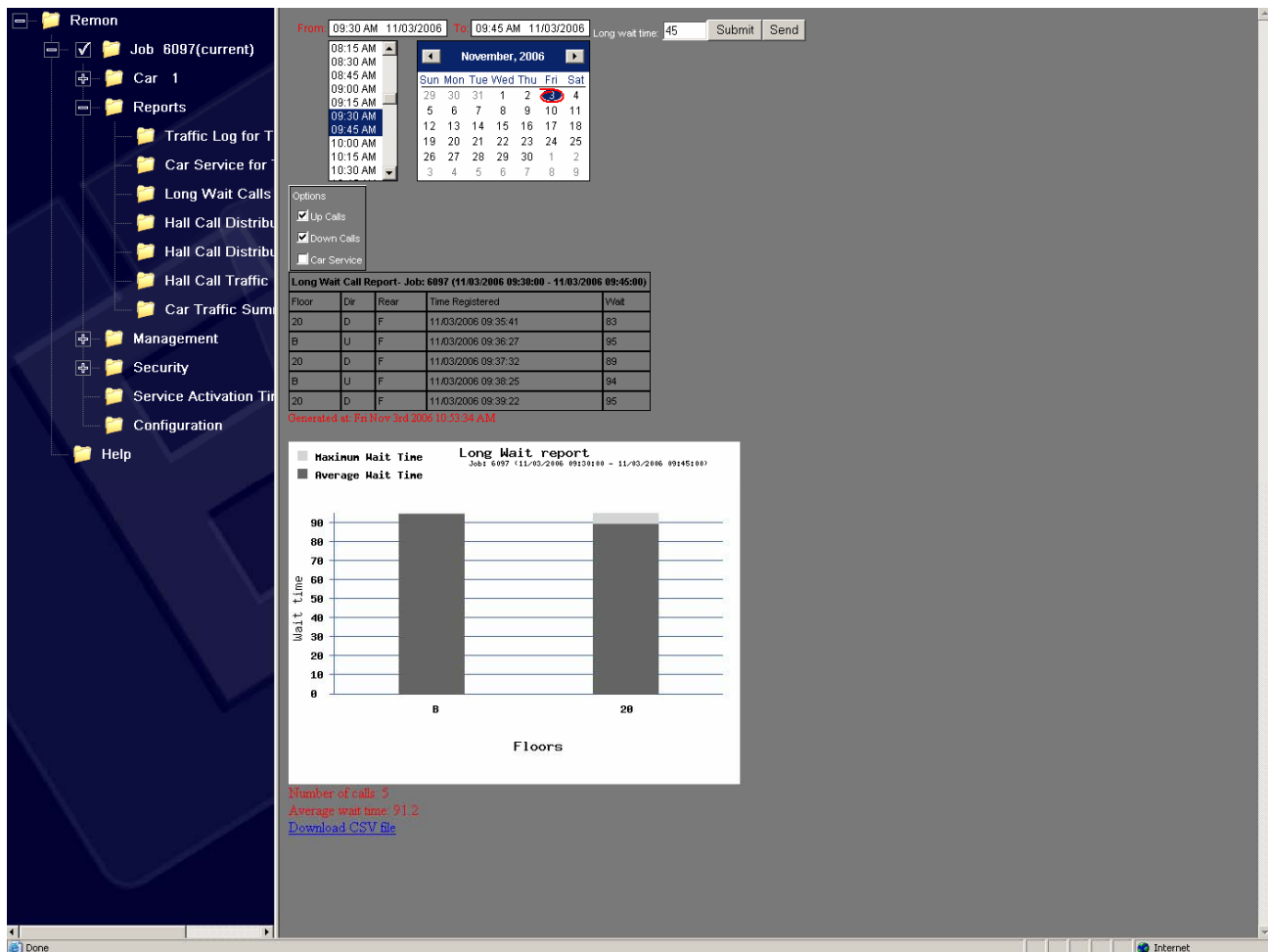


Figure 28. Long Wait Time Report Screen

The data are displayed as a table with following fields:

- Floor number
- Call direction
- Call registration
- Wait time.

If the list is long user will have to scroll the page up and down to review it. To provide reasonable system response and reasonable network load the data output is limited to 500 lines. If there are more than 500 lines in the report an information string (“More data is available”) is displayed in the last line of the list.

The data are also displayed as a histogram. The average wait time (dark grey) and the longest wait time (light grey) within the selected time interval are displayed for each floor in the Group.

Download report as textual *.csv (comma separated values) document by pressing “Download CSV file” reference at the bottom of the screen for further processing in table processing program, MS Excel for example.

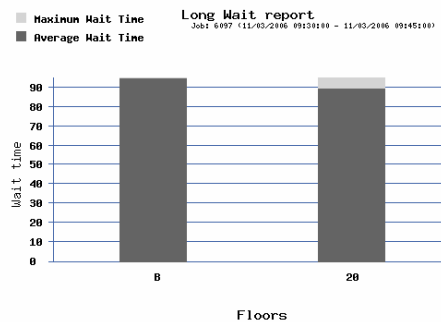
Click “Send” button to form report as a separate HTML page in a new Internet Explorer window. It can be printed and sent over email using Internet Explorer “File->Print” and “File->Send” menu items if the computer has printer and email client installed. The generated HTML page outline is shown in Figure 29. Long Wait Time Report HTML. It contains:

- Job number and its user-friendly name
- Time range and report creation time
- Report request parameters (long wait threshold)
- Report data organized in a table
- Simple data analysis and graphical data representation.

From: 11/03/2006 09:30:00 To: 11/03/2006 09:45:00
 Job: 6097
 Up Calls: Yes Down Calls: Yes
 Long wait time: 45
 Long Wait Call Report- Job: 6097 (11/03/2006 09:30:00 - 11/03/2006 09:45:00)

Floor	Dir	Rear	Time Registered	Wait
20	D	F	11/03/2006 09:35:41	83
B	U	F	11/03/2006 09:36:27	95
20	D	F	11/03/2006 09:37:32	89
B	U	F	11/03/2006 09:38:25	94
20	D	F	11/03/2006 09:39:22	95

Generated at: Fri Nov 3rd 2006 10:53:34 AM
 Number of calls: 5
 Average wait time: 91



Downloading picture <http://172.16.1.108/6097LWTTrafficReport20061103105334.png...>

Figure 29. Long Wait Time Report HTML

Print report (looks similar to Figure 29. Long Wait Time Report HTML) using standard web browser Print function (Print button on browser toolbox or File-Print from browser menu). Printing the report on a color printer will provide better report view result. To improve hard copy view operator should enlarge the report area as much as possible before printing (can be done using

mouse by sliding frame splitter to the left). Printing can be done from a separate page generated by clicking “Send” button.

8.5 Hall Call Distribution by Floor

The “Hall Call Distribution by Floor” report helps in traffic analysis. It displays number of hall calls and call distribution by wait time for each floor. Percentage of wait times and total number of corresponding calls are calculated.

To generate report:

- Click this Menu Tree item to open report request screen on the left.
- Fill “From” and “To” and “Up Hall Calls” and “Down Hall Calls” check boxes to enter the required parameters in the data display area. These checkboxes are used to allow user to separately review up or down hall calls. The time range input field is a custom calendar control that provides convenient date and time selection.
- Click “Submit” button to display the report in the data display area as shown in Figure 30. Hall Call Distribution By Floor Report. After receiving the report the user can adjust time range and resubmit his request. The report is redisplayed with different data corresponding to new time range.

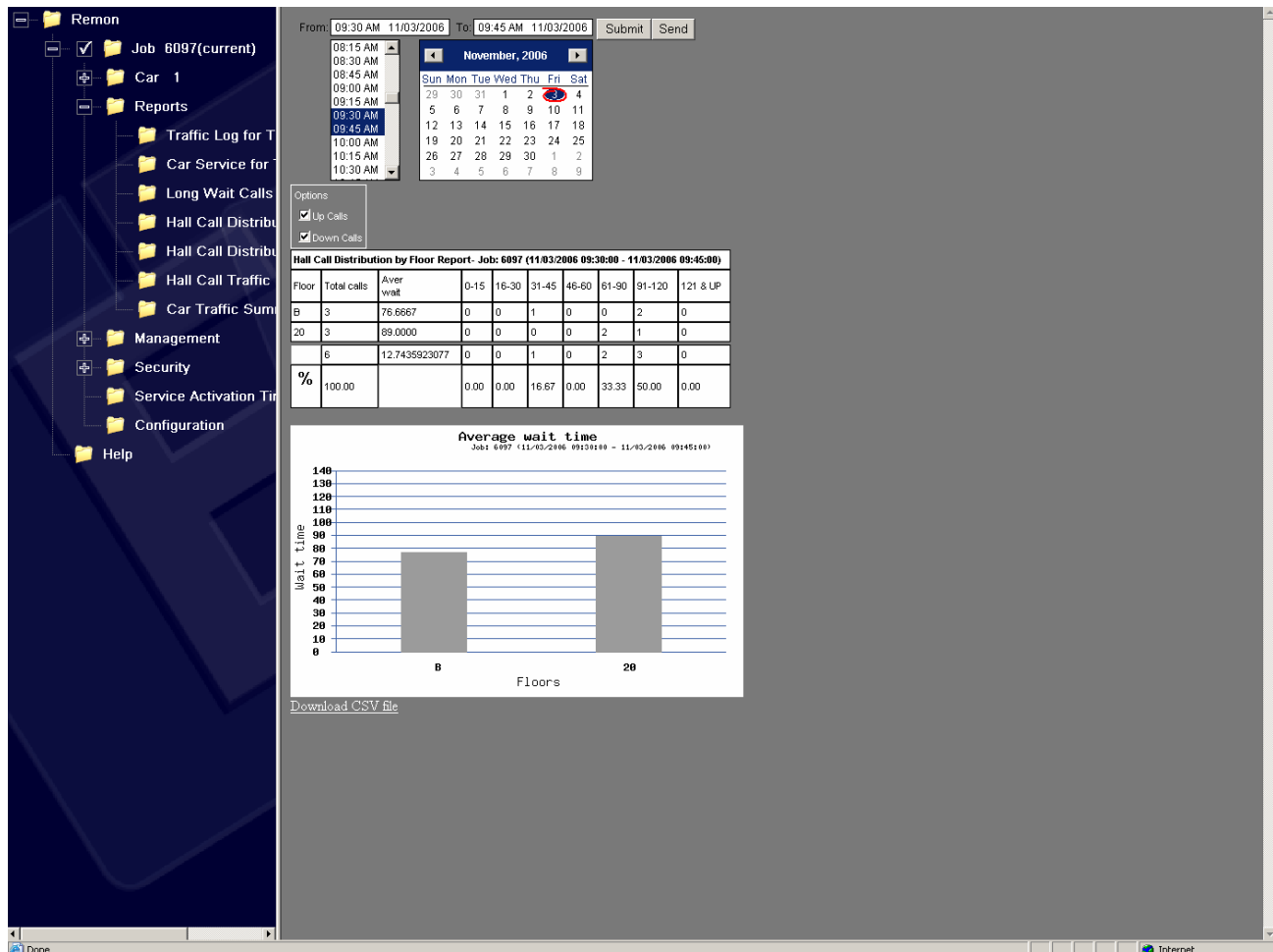


Figure 30. Hall Call Distribution By Floor Report

The report consists of a table and a graph. The table represents floors, number of calls, total and average wait times for each floor and distribution of calls with different lengths per floor. The graph displays average wait time distribution per floor.

Download report as textual *.csv (comma separated values) document by pressing “Download as *.csv file” reference at the bottom of the screen for further processing in table processing program, MS Excel for example.

- Click “Send” button to form report as a separate HTML page in a new Internet Explorer window. It can be printed and sent over email using Internet Explorer “File->Print” and “File->Send” menu items if the computer has printer and email client installed

Print report using standard web browser Print function (Print button on browser toolbox or File-Print from browser menu). Printing the report on a color printer will provide better report view result. To improve hard copy view operator should enlarge the report area as much as possible before printing (can be done using mouse by sliding frame splitter to the left). Printing can be done from a separate page generated by clicking “Send” button.

8.6 Hall Call Distribution by Time Slot

The “Hall Call Distribution by Time Slot” report helps in traffic analysis. It displays number of hall calls and call distribution by wait time for each time slot. Percentage of wait times and total number of corresponding calls are calculated.

To generate report:

- Click this Menu Tree item to open report request screen on the left.
- Fill “From” and “To” and “Time slice” edit boxes as well as “Up Hall Calls” and “Down Hall Calls” check boxes to enter the required time parameters in the data display area. These checkboxes are used to allow user to separately review up or down hall calls. The time range input field is a custom calendar control that provides convenient date and time selection.
- Click “Submit” button to display the report in the data display area.as shown in Figure 31. Hall Call Distribution By Time Slot Report Screen. After receiving the report the user can adjust time range and resubmit his request. The report is redisplayed with different data corresponding to new time range. To provide reasonable system response and reasonable network load the data output is limited to 500 lines. If there are more than 500 lines in the report an information string (“More data is available”) is displayed in the last line of the list.

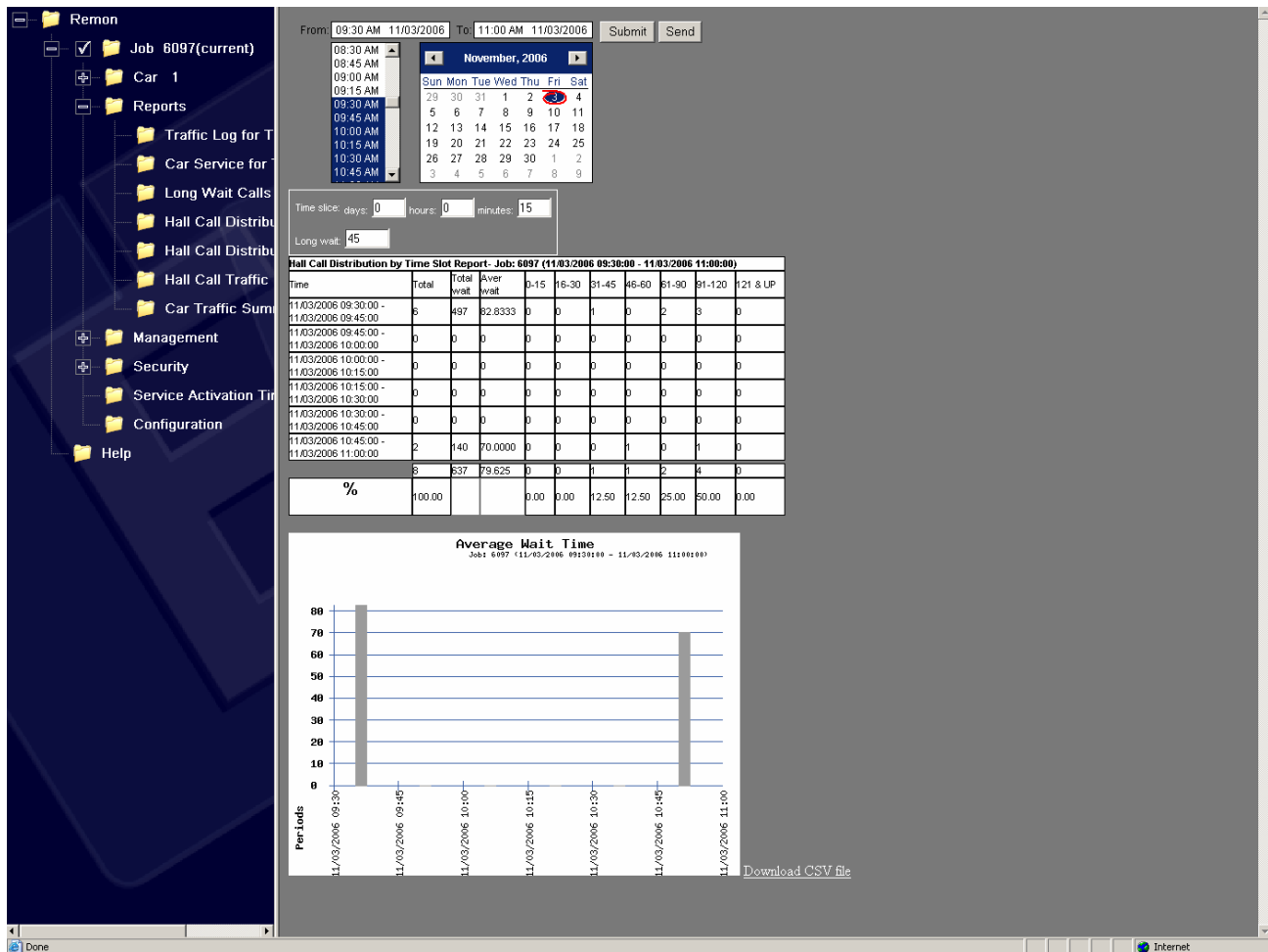


Figure 31. Hall Call Distribution By Time Slot Report Screen

The report consists of a table and a graph. The table represents:

- Time interval
- Number of calls per time interval
- Total and average wait times for each time interval
- Distribution of calls with different lengths per time interval.
- Graph displays average wait time distribution per time interval.

Download report as textual *.csv (comma separated values) document by pressing “Download as *.csv file” reference at the bottom of the screen for further processing in table processing program, MS Excel for example.

- Click “Send” button to form report as a separate HTML page in a new Internet Explorer window. It can be printed and sent over email using Internet Explorer “File->Print” and “File->Send” menu items if the computer has printer and email client installed

Print report using standard web browser Print function (Print button on browser toolbox or File-Print from browser menu). Printing the report on a color printer will provide better report view result. To improve hard copy view operator should enlarge the report area as much as possible before printing

(can be done using mouse by sliding frame splitter to the left). Printing can be done from a separate page generated by clicking “Send” button.

8.7 Hall Call Traffic Summary

The "Hall Call Traffic Summary" report displays information about hall call traffic:

- Number of calls
- Number and percentage of long wait calls
- Average wait time and availability for each time slot.

To generate report request:

- Click this Menu Tree item to open report request screen on the left.
- Fill “From” and “To” and “Timeslice” and “Long Wait Time” edit boxes to enter the required time parameters in the data display area. The time range input field is a custom calendar control that provides convenient date and time selection.
- Click “Submit” button to display the report in the data display area as shown in Figure 32. Hall Call Traffic Summary Report Screen. After receiving the report the user can adjust time range and resubmit his request. The report is redisplayed with different data corresponding to new time range. To provide reasonable system response and reasonable network load the data output is limited to 500 lines. If there are more than 500 lines in the report an information string (“More data is available”) is displayed in the last line of the list.

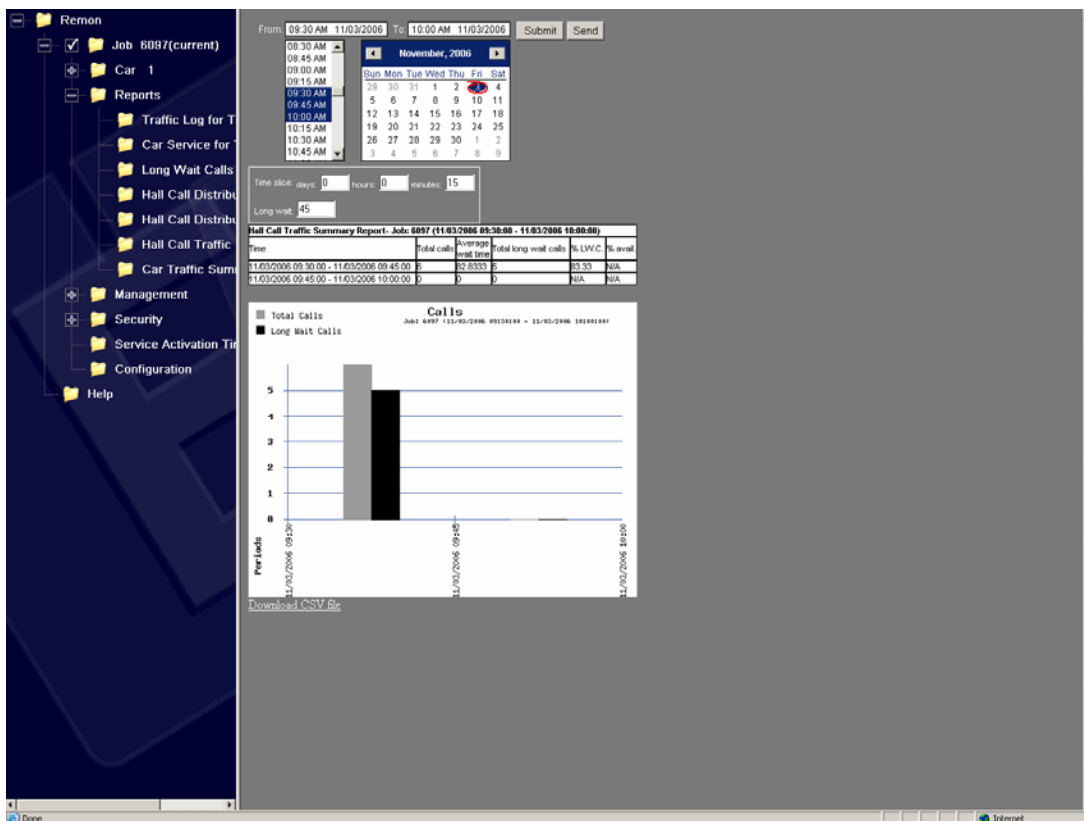


Figure 32. Hall Call Traffic Summary Report Screen

The report consists of a table and a graph. The table represents time intervals, number of calls per time interval, average wait time for each time interval, percentage of long wait calls and availability percentage. The graph displays average wait time (dark grey bars) and percentage of long wait hall calls (light grey bars) per time interval.

Download report as textual *.csv (comma separated values) document by pressing “Download as *.csv file” reference at the bottom of the screen for further processing in table processing program, MS Excel for example.

Click “Send” button to form report as a separate HTML page in a new Internet Explorer window. It can be printed and sent over email using Internet Explorer “File->Print” and “File->Send” menu items if the computer has printer and email client installed. Report contains:

- Job number and its user-friendly name
- Time range
- Report request parameters (time slice and long wait time threshold)
- Report data organized in a table
- Simple data analysis (number of calls and long wait time calls vs. time slice graph).

Print report using standard web browser Print function (Print button on browser toolbox or File-Print from browser menu). Printing the report on a color printer will provide better report view result. To improve hard copy view operator should enlarge the report area as much as possible before printing (can be done using mouse by sliding frame splitter to the left). Printing can be done from a separate page generated by clicking “Send” button.

8.8 Car Traffic Summary

The "Car Traffic Summary" report displays information about car traffic for each car within group during given time interval:

- Number of trips, one floor runs, door cycles and car calls
- Availability (out of service) for each time slot.

To generate report request:

- Click this Menu Tree item to open report request screen on the left.
- Fill “From” and “To” edit boxes to enter the required time parameters in the data display area. The time range input field is a custom calendar control that provides convenient date and time selection.
- Click “Submit” button to display the report in the data display area as shown in Figure 33. After receiving the report the user can adjust time range and resubmit his request. The report is redisplayed with different data corresponding to new time range.

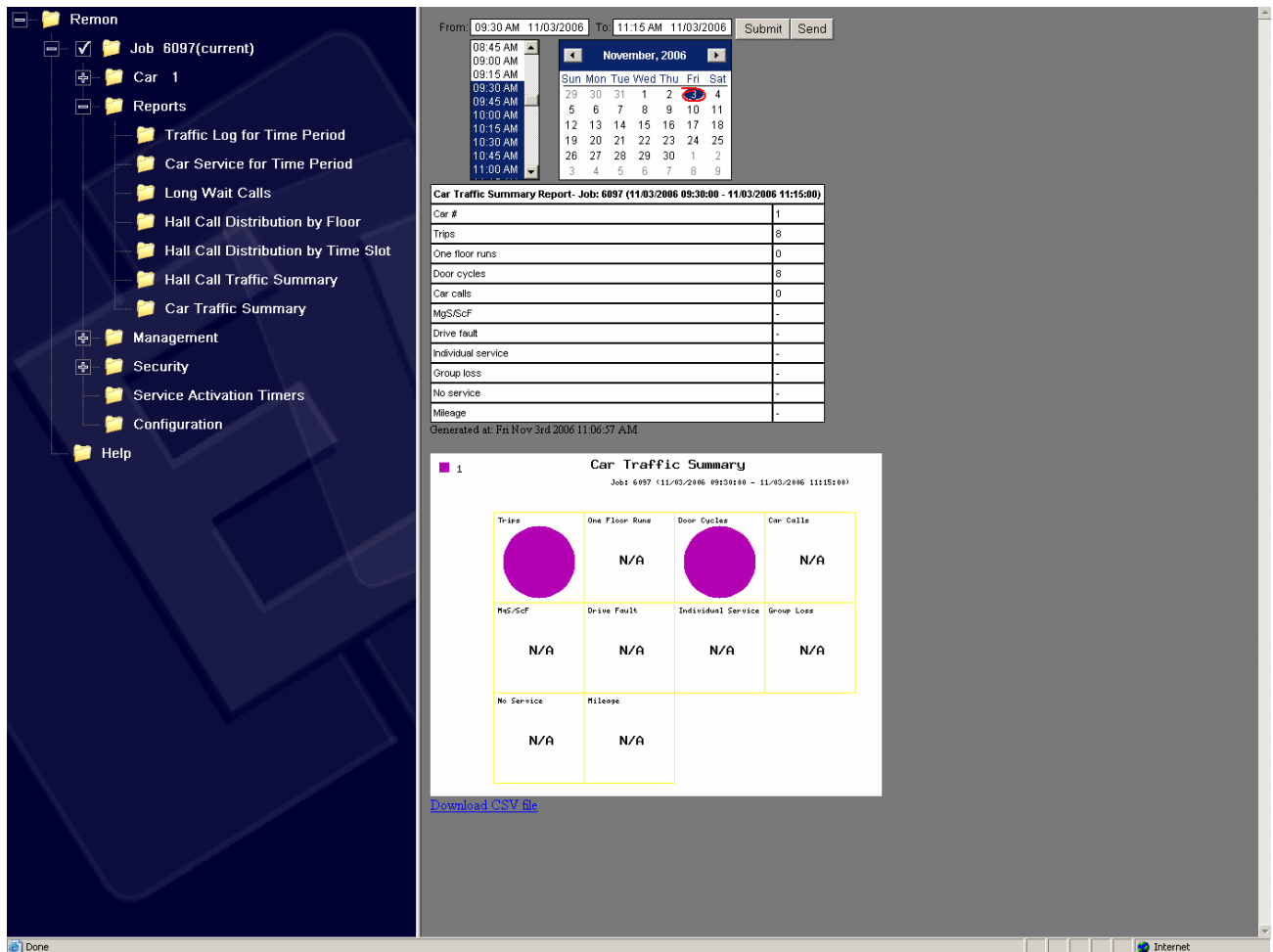


Figure 33. Car Traffic Summary Report Screen

The report consists of a table and a graph. The table represents number of trips, one floor runs, door cycles, car calls, and other parameters. The graph displays the same parameters as pie charts to allow easy comparison between cars.

Download report as textual *.csv (comma separated values) document by pressing “Download as *.csv file” reference at the bottom of the screen for further processing in table processing program, MS Excel for example.

Click “Send” button to form report as a separate HTML page in a new Internet Explorer window. It can be printed and sent over email using Internet Explorer “File->Print” and “File->Send” menu items if the computer has printer and email client installed. Report contains:

- Job number and its user-friendly name
- Time range
- Report time interval
- Report data organized in a table
- Report data pie charts.

Print report using standard web browser Print function (Print button on browser toolbox or File-Print from browser menu). Printing the report on a color printer will provide better report view result. To

improve hard copy view operator should enlarge the report area as much as possible before printing (can be done using mouse by sliding frame splitter to the left). Printing can be done from a separate page generated by clicking “Send” button.

9 Security

The security features allow authorized user to manage built-in FUTURA or MERIDIA security features (if present in current installation). This item is never displayed in Menu Tree if security is not programmed into the equipment.

Among available security management features are the following:

- Viewing current hall call and car call security configuration
- One-click enabling or disabling security
- Securing or unsecuring a single floor or all floors
- Applying one of predefined security configurations stored in the database
- Editing predefined security configurations
- Listing floors where given security code is used
- Listing security calls for given floor
- Assigning given security code to a floor
- Assigning given security code to all floors
- Deleting given security code from a floor
- Deleting given security code from all floors

9.1 Current Security

The control is displayed after clicking “Current Security” item in the left Menu Tree frame.

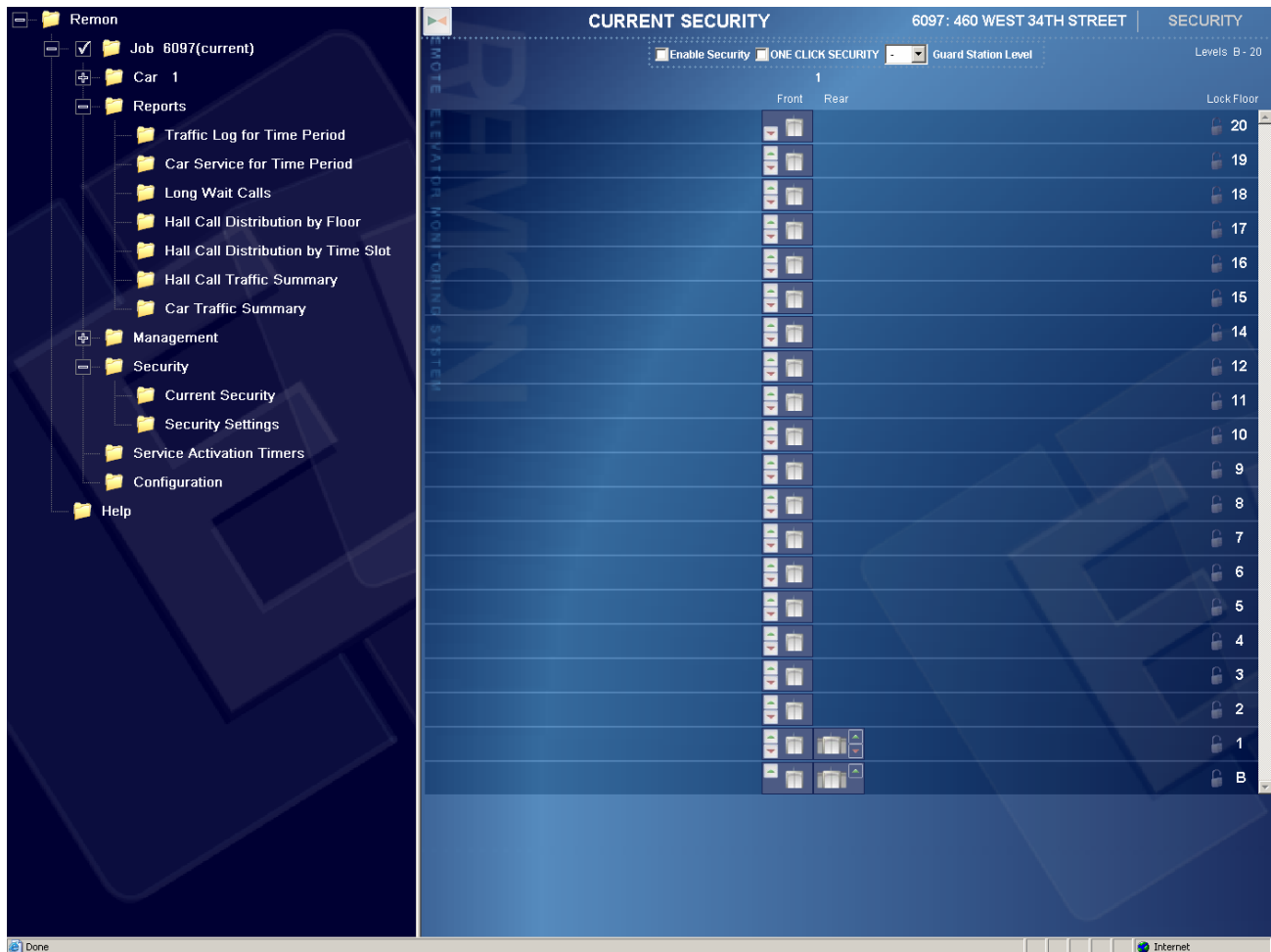


Figure 34. Current Security Screen

Current Security Screen displays the current security layout. The user can modify the security by using the mouse to enable or disable security, secure halls and cars as described below. The scroll bars are used to display calls on taller buildings. Scaling is not supported on this view.

9.1.1 Enable Security

To use security configurations FUTURA or MERIDIA controller must be put into “Enable security” state. This is done using the corresponding checkbox on Current Security Screen. Checking the checkbox results in sending “Enable security” command to controller. Unchecking the checkbox results in sending “Disable security” command to controller.

9.1.2 One Click Security

“One Click Security” – Formerly known as “Guard Station” or “Total Building Security” is activated by checking the box labeled “One Click Security”. All floors and Car Calls will be locked except on the Guard Station level. “Enable security” command is also issued to controller to process the case when security has been disabled at the moment of clicking “One Click Security”. “Guard Station Level” control defines the floor that will not be secured when clicking the “One click security” checkbox on Current Security Screen.

9.1.3 Secure Doors, Floors and Hall Calls

Clicking on Hall Call narrow buttons and cars icons toggles the security status of hall call or car call for particular floor and car. Click on the yellow padlock to secure the entire floor (car calls and hall calls / fronts and rears).

The settings are sent to controller immediately.

IMPORTANT NOTICE. Some time (several seconds) is needed to re-read the latest controller settings after change so there is a delay between clicking on car or hall call button and visual response. If there were several clicks the result is undefined (usually only the last click is processed).

9.2 Security Settings

The screen allows creating security configurations, saving them to database, reviewing, deleting, and loading to FUTURA or MERIDIA controllers.



Figure 35. Edit Security Settings

Clicking Security Settings item from Menu Tree opens Edit Security Settings Screen to create or to manage predefined security configurations as shown on the picture below. The screen initially loads with current security configuration displayed.

To display other previously defined security configurations select the corresponding name from “Configuration name” drop-down box. The configuration being displayed can be loaded into FUTURA or MERIDIA controller immediately but will have effect only if the controller is currently in “Enable security” state (see 9.1.1).

The security configurations created using this screen can be later used to set security in Service Activation Timers (see section 10).

9.2.1 Create New Configuration

To create a new security configuration:

- First select a new name on the Configuration Name Text Box.
- Click on the Front or Rear Elevators to secure the Car Calls for that particular car on that particular floor.
- Click on the Hall Calls Front or Rear (Up and Down) to secure that particular call and particular direction for all the cars.
- Click on the yellow padlock to secure the entire floor (car calls and hall calls / fronts and rears).
- Save the configuration by press “Save” button on the top of the screen.

The saved configuration appears in “Add security” combo box in “Service Activation Timers” window.

9.2.2 Load Configuration into car controller

To load selected security configuration into car controller:

- Drop down Configuration Name Text Box by pressing down narrow on the left. Select a name from dropped down list of available configurations.
- Load the configuration by press “Load” button on the top of the screen. You will see the message while loading security configuration to car controller and after a certain interval another message describing the result of the operation.

Loading security configuration to car controller is a lengthy process. To start the process certain conditions must be met (e.g. master car in group must not be moving) so overall delay could be a minute or so. A message box is displayed as security is loaded and another message box appears on security loading result.

9.2.3 Delete Configuration

To delete security configuration from the database:

- Drop down Configuration Name Text Box by pressing down narrow on the left. Select a name from dropped down list of available configurations.
- Delete the configuration by press “Delete” button on the top of the screen. After you answer “Yes” to confirmation message the configuration will be deleted.

The deleted configurations will not appear in “Add security” combo box in “Service Activation Timers” window more. Also, these configurations will not be loaded through Service Activation Timers interface if scheduled before so be very careful.

9.3 Coded Car Calls

This feature allows listing, adding, editing and deleting security codes for a given floor or floors as shown on Figure 36. Security codes allow protecting selected landings from unauthorized access. For further information on security codes please consult your equipment user manual.

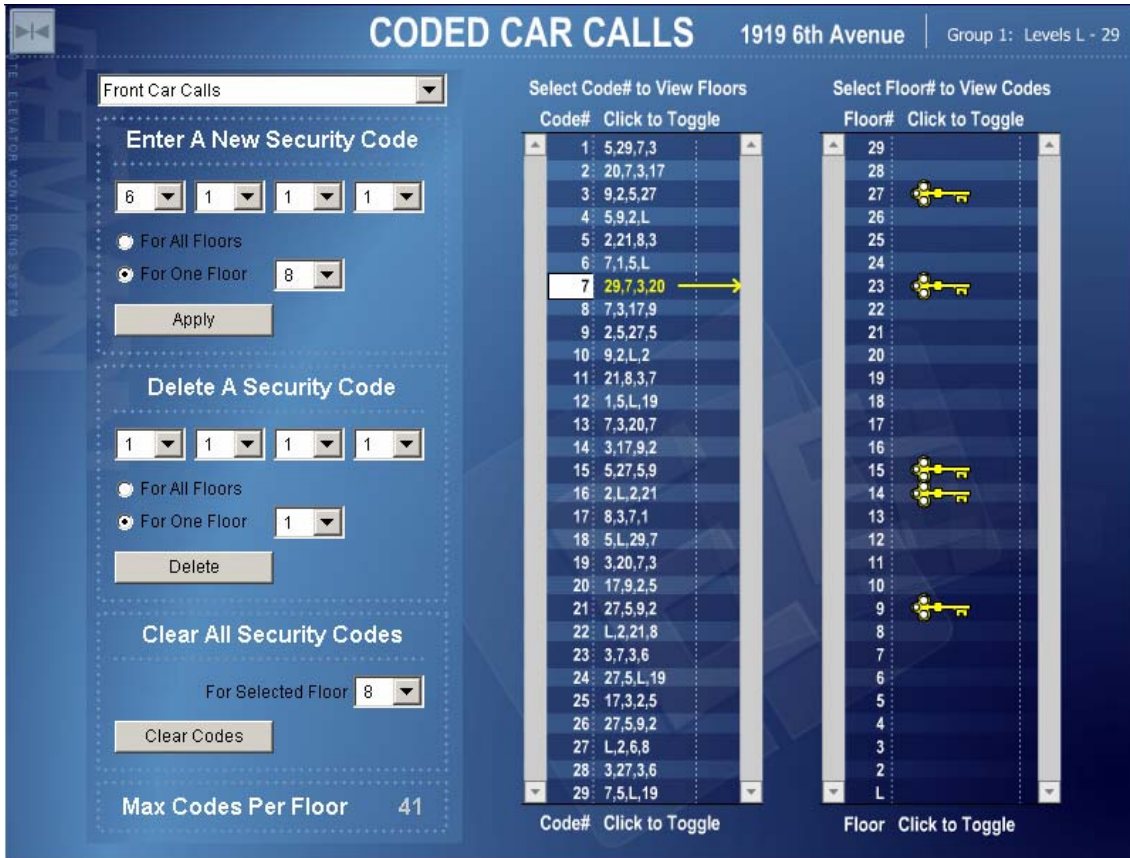


Figure 36. Coded Car Calls

Before any of the following operations, choose front or rear car calls using a dropdown box in the top left corner of the screen.

To list floors for code click desired code in “Select code to view floors” column. The “Select Floor# to View Codes” column will be updated by placing a “Security Key” on the floors that the particular code affects.

To list codes for floor user should click desired floor in “Select floor to view codes” column. The “Select Code# to View Floors” column will be updated by highlighting the codes that are associated with that floor.

The “Max Codes Per Floor” displays the controller limited number of codes that can be assigned to a single floor. This value is for reference only and cannot be changed.

9.3.1 Enter A New Security Code

To add a code user should enter the desired code in “Enter new security code” field on Figure 36. Coded Car Calls. The entered code can be assigned to all floors or for individual floor, in the latter case the floor should be chosen from dropdown list. Pressing “Apply” will set the code.

9.3.2 Delete A Security Code

To delete a code user should enter the desired code in “Delete security code” field on Figure 36. Coded Car Calls. The entered code can be deleted from all floors or from individual floor, in the latter case the floor should be chosen from dropdown list. Pressing “Apply” will delete the code. The changes will be visible in the right columns immediately.

9.3.3 Clear All Security Codes

To delete all security codes for particular floor choose the desired floor and then use “Clear Codes” button.

10 Service Activation Timers

Service activation timers are implemented in REMON software. To provide service activation for given job the connected REMON server must be up and running.

The following services can be configured to start and stop at a schedule:

- Up Peak Service
- Down Peak Service
- Alternate Lobby Service
- Dual (Two) Lobby Service
- Rear Lobby Service
- Parking Service
- Inconspicuous Riser Service
- Rear (Other) Riser Service
- Loading security configuration

10.1 Service Activation Timers Interface

The control is displayed after clicking “Service Activation Timers” or underlying items in the left frame.

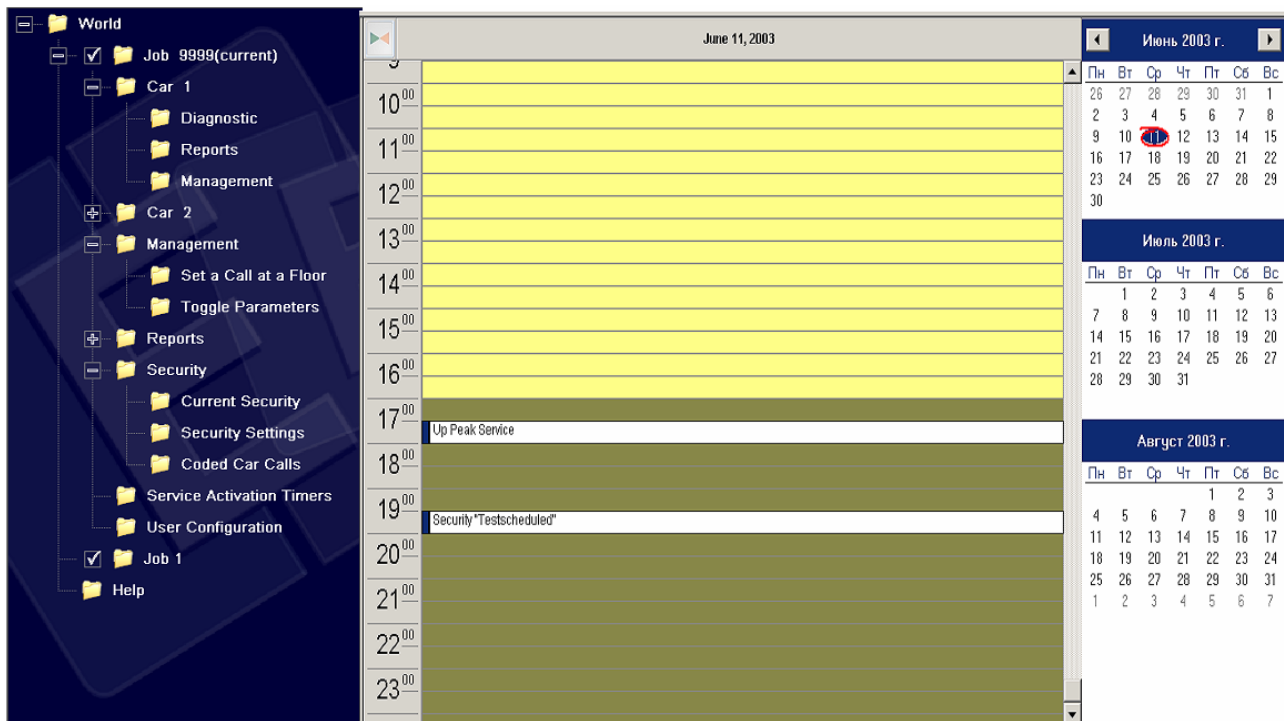


Figure 37. Service Activation Timers Screen

The interface displays the services using calendar controls. Clicking in calendar in the right column displays the selected day in the middle column with active service periods listed in white bars. The

names of the services are displayed within the bars. Right Click on the timetable activates pop-up menu as shown below.

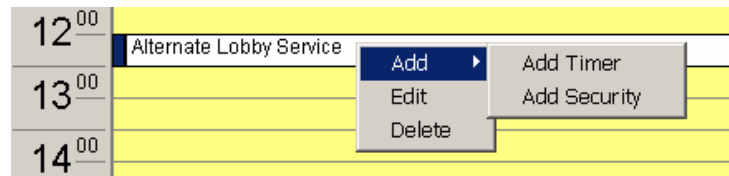


Figure 38. Service Activation Timer Pop Up Menu

10.2 Add Timer

Timers for any of available services can be added, edited and deleted by using appropriate panel. To add timer, right click in the corresponding string at corresponding time and choose “Add -> Timer” from appeared pop up context menu. Clicking in exact region is not obligatory but convenient because the opened dialog box is filled with values corresponding to click region. The dialog box is displayed on the picture below.

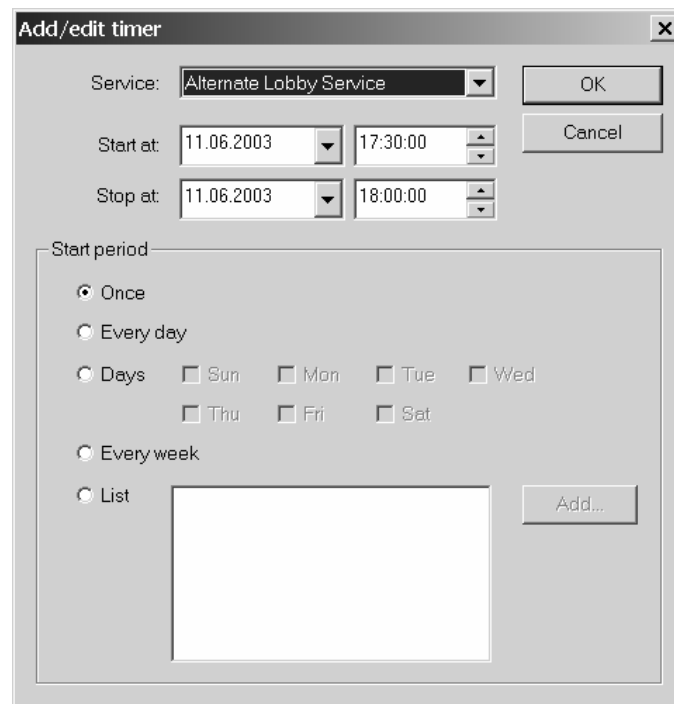


Figure 39. Add/Edit Timer Panel

- Choose the desired service from a dropdown list
- Set service start and service stop times
- Choose the desired service start period (once, every day, several days within a week, a list of days). To add days to the list, user should use calendar control. To remove days from list, user should mark a day and hit “Delete” button on the keyboard.
- Click “OK” button to add timer or “Cancel” to cancel setting service

10.3 Add Security

To load security configuration at a given time right click in the corresponding string at corresponding time and choose “Add -> Security” from appeared context menu. Clicking in exact region is not obligatory but convenient because the opened dialog box is filled with values corresponding to click region. Managing security configurations is described in 9.2

The dialog box is displayed on the picture below.

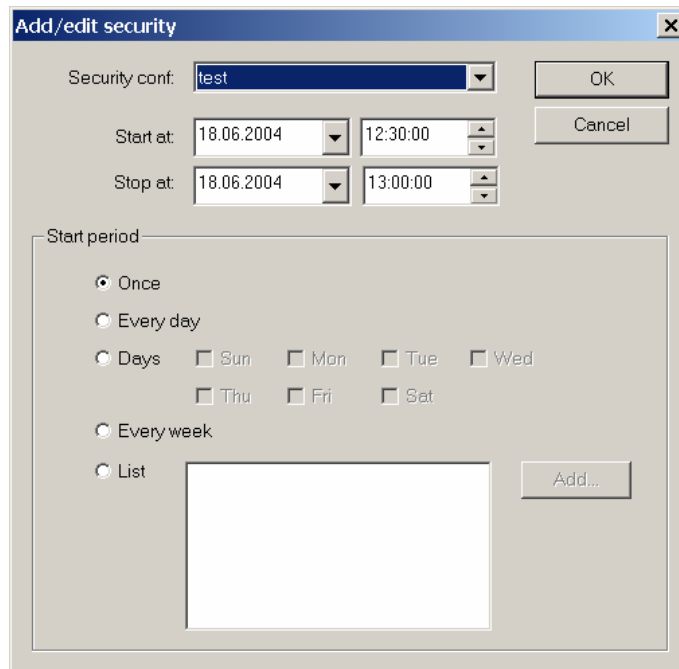


Figure 40 "Add/Edit Security" dialog box

- Choose the desired security configuration from a dropdown list
- Set configuration load time and disable time
- Choose the desired configuration load period (once, every day, several days within a week, a list of days). To add days to the list, user should use calendar control. To remove days from list, user should mark a day and hit “Delete” button on the keyboard.
- Accept timer by click “OK” button. Cancel setting service by clicking “Cancel” button.

Be careful when working with security configurations as overlapping can bring to confusion. Avoid inserting one security configuration in the middle of another as the inserted configuration will disable the bounding one on its exit.

10.4 Edit Timer or Security Settings

To edit timer, right click on the timer on Service Activation Timers Screen to pop up context menu.

- Choose “Edit” from appeared context menu. Add/Edit Timer dialog box is displayed filled with selected timer data.
- Change times and periods.
- To confirm changes, user should click “OK” button. To cancel editing click “Cancel” button.

10.5 Delete Timer or Security

To delete timer right click the appropriate timer on Service Activation Timers Screen to pop up context menu and choose “Delete” from appeared context menu. The timer will be deleted from database and from Service Activation Timers Screen.

11 System Requirements

The computer(s) running REMON-G2 Client Application must run under Windows® 98/ME/2000/XP and an Internet Explorer 5.5SP2 or later web browser with enabled ActiveX controls.

12 Glossary

CCN: “Car Communication Number.”

CCU: “Car Control Unit” in MERIDIA. It is functionally equivalent to FUTURA’s SPU. It has a limited floor number.

CTG: “Car To Group” bus and is the RS-485 bus interconnecting the SPUs within the group.

FPI: “Floor Position Indicator.” These are the two characters that represent the floor displayed on an RVU.

HC: “Hall Call” bus. Hall call requests come to all SPUs or CCUs over this bus.

HTML: “Hypertext Markup Language,” a [hypertext](#) document format used on the [World-Wide Web](#).

ICC: An I/O module used in MERIDIA. It has 8 I/O lines. Inserted into IOC. Can be either input or output (all 8 lines together; no individual direction change).

IOC: A carrier board connected to one of the CCU’s buses in MERIDIA. An IOC carries a number of ICCs.

Job: A group of one or more elevators cars with SPUs interconnected over an RS-485. Also referred to as **Single_Group**.

RPU: “Remote Processing Unit.” Also known as an SPU-V. Requires additional polls during operation.

RVU: “Remote Video Unit.” It is used to obtain group and car data from SPUs. It is obsolete and will be replaced by the REMON-G2 Decode Application.

SMI: A board with up to 24 solid state relays (SSR) and chip controllers for FUTURA. Can be connected to an SPU or RPU using RJ-45 cable. Each SMI can be addressed by SPU. Here are abbreviations for some of the following known SMIs:

VFC: Velocity/Fault Controller

MRC: Motor Room Interface Controller

GPx: General Purpose I/O

TOC: Top Of Car controller

COP: Car Operating Panel I/Os. Manages fire switches, car light etc.

CC1: Car Call I/Os. Manages car call buttons I/O.

HLED1: Hall Lantern I/Os.

HC1: Hall Call I/Os.

SPU: “System Processing Unit” in FUTURA. Each SPU manages its own car.

SPU-V: An extension unit used in FUTURA when catering to more than 60 floors. Also known as an RPU (Remote Processing Unit.) Requires additional poll during operation