

# Vivago



## Vivago Vista 7

Version 7.3

User Manual AEN0001-09 (2020-03-25)

# Content

|   |           |
|---|-----------|
| <b>INTRODUCTION .....</b>                         | <b>4</b>  |
| Intended use .....                                | 4         |
| Clarification of the symbols.....                 | 4         |
| Product and safety information.....               | 4         |
| Starting and logging in .....                     | 5         |
| The screen and views.....                         | 5         |
| Selecting sites .....                             | 6         |
| Logging out and Closing Vista.....                | 6         |
| <b>CUSTOMERS.....</b>                             | <b>7</b>  |
| The customers view .....                          | 7         |
| The customer List .....                           | 7         |
| Customer information, i.e. customer card .....    | 8         |
| Customer status and wellbeing lights.....         | 10        |
| Home base station status.....                     | 11        |
| MOVE phone status.....                            | 11        |
| LOCATE device status .....                        | 11        |
| Additional information for customer .....         | 12        |
| Real time curves: Curve 60min and Curve 24h ..... | 12        |
| Wellbeing .....                                   | 12        |
| Latest alarms.....                                | 14        |
| Events.....                                       | 15        |
| Settings .....                                    | 15        |
| Functions concerning customers .....              | 16        |
| <b>ALARMS.....</b>                                | <b>18</b> |
| The alarms view.....                              | 18        |
| Processing alarms.....                            | 21        |
| Watch acknowledgement .....                       | 22        |
| Nurse present.....                                | 23        |
| Reserving alarms .....                            | 23        |
| <b>ACTIVITY CURVES.....</b>                       | <b>24</b> |
| Activity curve basics.....                        | 24        |
| Blue night time, color codes and sleep .....      | 24        |
| Sleep detection and calculation .....             | 24        |
| Circadian rhythm .....                            | 25        |
| Real time curves page .....                       | 27        |
| Curve post analysis .....                         | 28        |
| Week analysis .....                               | 29        |
| Printing and Exporting activity curves .....      | 31        |
| <b>FLOOR PLANS .....</b>                          | <b>32</b> |
| <b>REPORTS.....</b>                               | <b>33</b> |
| <b>CUSTOMER PERSONAL SETTINGS .....</b>           | <b>35</b> |
| Technical settings.....                           | 35        |
| Alarm transfer settings .....                     | 36        |

Vivago MOBILE settings..... 37

Settings for Device Interfaces ..... 39

Settings for LOCATE..... 40

Curve alarms..... 40

Long-term alarms ..... 41

Alarm block table..... 43

Additional Devices..... 43

Allowed wandering detection base stations ..... 44

**USER ACCOUNT SETTINGS..... 45**

**TECHNICAL SPECIFICATIONS..... 46**

# Introduction

## Intended use

Vivago Vista is intended for monitoring, storing and analysing the data from the acceleration device to aid for the diagnosis of sleep disorders and to help in adjusting treatment plan if user has been diagnosed with a sleep disorder.





As an addition, Vivago Vista is intended for storage and analysis of physical movement and physical function related to Residence Assessment Instrument (RAI), to aid healthcare professionals in review, analysis and evaluation of body activity, sleep parameters and circadian rhythm.

The analysis is intended to notify and alarm relevant changes in user's activity, sleep, circadian rhythm and health status. Changes in medication, which have effect to body activity, sleep and circadian rhythm, can be reviewed, analysed and evaluated from measurement data and notifications.

Vivago Vista is also intended to transfer manual alarms from alarming devices to nursing staff to call for help. In addition, Vivago Vista sends automatic alarm, if user is not following normal movement patterns for prolonged period. The automatic alarms are generated by Vivago's unique adaptive algorithms. The analysis can send automatic notification for increased risk of falling, if user's normal circadian rhythm is weakened.

The device is intended to be used by healthcare professional – nurses and doctors.

## Clarification of the symbols

|   |  |   |                                       |
|---|--|---|---------------------------------------|
|  | Consult instructions for use   |  | Caution, consult instructions for use |
|  | CE marking. The product fulfils the MDD requirements for directive 93/42/EEC |  | Manufacturer                          |

## Product and safety information

Vivago Vista is the service software for Vivago systems.

Vivago Vista receives, analyses, and transfers alarms, notifications, activity curves and wellbeing information from Vivago watches and their peripherals. It stores information on customers and devices connected to the system. The user can access this information in a number of different formats: for example, the user can monitor the customers' activity curves, or print various reports.

### Warnings



No alarms are delivered during break in communication



The system might underestimate the Apnea-Hypopnea Index (AHI)

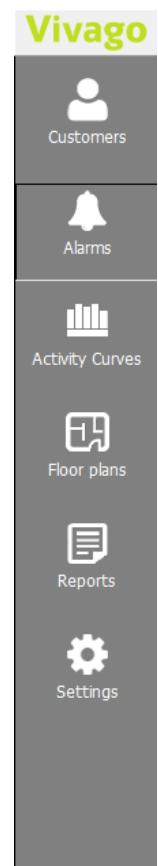
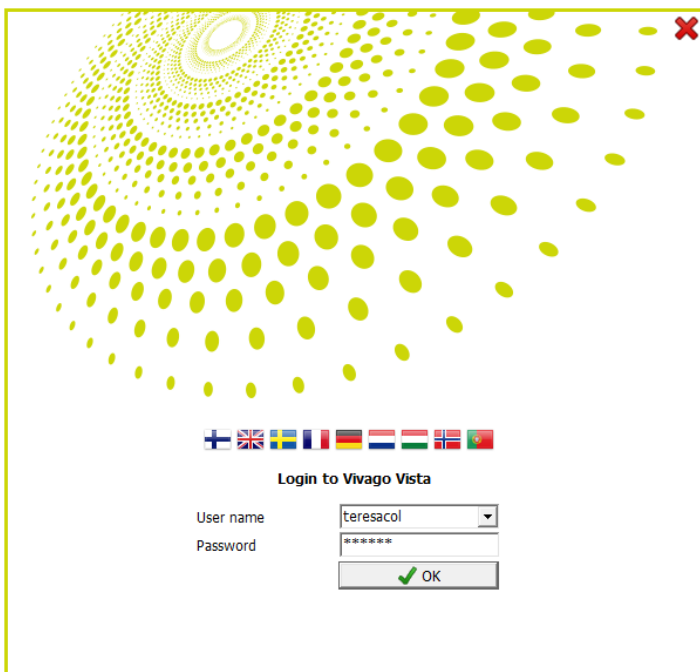
# Starting and logging in

The Vivago Vista user interface software can be launched by clicking its green and white V icon either from the desktop or from the Start menu.



Once the software is started a login screen is displayed. Input the **user name** and **password** that have been given to you to log in to Vivago Vista. Instructions for setting up user accounts can be found in the Vista Technical guide.

After logging in you can use the Vista user interface. You can close the screen anytime you like to log out. Vista will continue to receive and transfer alarms in the background.



## The screen and views

For viewing information in Vista, there are specific screens for each type of information. These screens are called views. For example, alarms that have arrived at Vista are displayed in the Alarm view. In the same way, activity curves may be viewed in the Activity curves view.

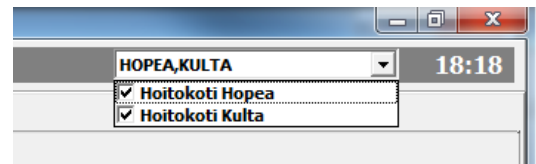
On the left side of the Vista screen there is a gray bar with its own icons for each view. The bar functions as a shortcut between different views; by clicking on an icon, you can bring up its corresponding view.

The Vista views are:

- **Customers:** customers' personal details and various settings, as well as notes, alarm history, activity curves and wellbeing information about customers
- **Alarms:** received alarms; a list of unacknowledged high priority alarms and the latest low priority alarms; also the total history of received alarms, which can be organized by customer, alarm type, date etc. and an alarm summary for viewing total number of alarms, total nurse visits etc.
- **Activity curves:** customers' activity curves; short-term as well as long-term activity screen and the post-analysis of the curves in one-day or week view
- **Floor plans:** the site's floor plan view that displays location information during an alarm situation. This view is available if the MAP Floor plan module is installed in Vista
- **Reports:** report on care effectiveness, summary of customer groups, report on nurse visits. This view is available if the NOTIO Report module is installed in Vista
- **Settings:** Vista settings: user accounts, alarm settings, alarm transfer, base station info. This view is available only for administrator accounts.

## Selecting sites

If you have logged into Vista with a user account that can view several sites, there will be a site selection box visible in the top right corner of the Vista screen. Use this box to select to view all sites or only selected ones. You can e.g. view alarms or customer groups of one site only.



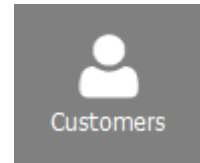
## Logging out and Closing Vista

You can log out of Vista by clicking the X on the top right-hand corner of the screen. Vista will return to the login screen. To close the program completely, close the login screen by its X icon.



# Customers

People connected to Vista monitoring are referred to as customers. Customers are entered into the Customer list. Each customer has a personal customer card that contains various identifying and personal information.



## The customers view

Customer information can be observed and changed in Vista's Customers view.

Customer list

Customer card

Additional customer information

| Name                | Room | Unit  |
|---------------------|------|-------|
| Jaakko Meriläinen   | 11   | 63739 |
| Taisto Virtanen     | 4    | 12347 |
| Vappu Korhonen      | 10   | 20778 |
| Pertti Saarinen     | 15   | 46613 |
| Anna Hotti          | 14   | 46504 |
| Seppo Jokinen       | 13   | 48897 |
| Liisa Kukkanen      | 6    | 23639 |
| Teuvo Virtanen      | 8    | 46518 |
| Bruno Berg          | 3    | 24128 |
| Brutus Nenonen      | 5    | 24126 |
| Ulla-Majja Väisänen | 9    | 24125 |
| Gertrud Söder       | 7    | 23652 |
| Kaarlo Virtanen     | 2    | 49878 |

| Customer wellbeing summary |                      |                      |                      |               |
|----------------------------|----------------------|----------------------|----------------------|---------------|
|                            | Last 6 months        | Last 3 months        | Last 7 days          | Change        |
| Sleep time                 | 6:59 (5 periods)     | 7:01 (5 periods)     | 9:54 (5 periods)     | Increased     |
| Circadian rhythm           | Good (0,33)          | Good (0,31)          | Excellent (0,12)     | Strengthening |
| Daytime activity           | 16,2                 | 15,3                 | 12,2                 |               |
| Usage (watch on wrist)     | 75 %                 | 86 %                 | 80 %                 |               |
| Outside of range           | 1:53                 | 1:13                 | 0 min                |               |
| Number of alarms           | Acute 0,4; Other 0,6 | Acute 0,5; Other 0,9 | Acute 0,0; Other 1,9 |               |
| Nurse present              |                      |                      |                      |               |

The Customers view screen is split into three: the Customer list, the selected customer's Customer card and her additional information tabs.

## The customer List

In the customer list, customers are displayed on consecutive lines. You can select a customer from the list by clicking on the customer's line: the information on the right side of the screen (the Customer card) changes whenever you move from one customer to another in the list.

The Customer list displays the following information on all of the customers:

- His/her name
- Room number
- Unit number, i.e. the watch ID number
- Information on whether the customer card is not in use: noted by a red exclamation point
- Information on whether the person is a member of the personnel: noted by a red "P"

And status:

| Name                | Room | Unit  |
|---------------------|------|-------|
| Kaarlo Virtanen     | 02   | 49878 |
| Bruno Berg          | 03   | 24128 |
| Taisto Virtanen     | 04   | 12347 |
| Brutus Nenonen      | 05   | 24126 |
| Liisa Kukkanen      | 06   | 23639 |
| Gertrud Söder       | 07   | 23652 |
| Teuvo Virtanen      | 08   | 46518 |
| Ulla-Majja Väisänen | 09   | 24125 |
| Jaakko Meriläinen   | 11   | 63739 |
| Seppo Jokinen       | 13   | 48897 |
| Anna Hotti          | 14   | 46504 |
| Pertti Saarinen     | 15   | 46613 |
| Vappu Korhonen      | A10  | 20778 |

- Symbols of the status of the customer and his/her watch: whether the customer is present or not and whether s/he is wearing the watch
- A nurse symbol if a nurse is present in the customer's room/home
- For home customers symbols of an abnormal status of his/her home base station: if the base station is out of use, the mains is not connected or the base station battery is almost empty
- His/her wellbeing status, i.e. the yellow and red color codes (see "Customer status for institutional customers" chapter below)

The customer list can be organized in a variety of ways. The list can be split into **groups**, e.g. there can be freely named groups such as Floor 1, Floor 2, Nurses, Device Interfaces. Each customer (or device) is selected into which group she/he/it belongs to. There are tabs at the top of the customer list to change between groups. Only the customers/devices belonging to the selected group will be shown in the customer list.

The list itself may be **sorted** in alphabetical order according to the customers' names, or in numerical order according to the customers' room numbers etc. Use the **"Sort by:" selection** above the customer list to select the sort criteria.

To **search for customers** in the list, you can type a part of the customer name, his/her room number or watch number in the **search box** above the customer list. Only those customers that match the search will be displayed. Click the X in the search box to clear the search. Also, when the customer list is organized according to the customers' names, you can use the alphabetic keys to move from one customer to another. For example to move to the first customer whose name begins with an A, press the A key.

Below the customer list there are icons you can use to **Print customers**, **Export customer** information to a file, or **get information on the number of customers** of each type.

## Customer information, i.e. customer card

Every customer has a customer card that holds personal information, and information on the unit the customer is using; usually a watch. Once you have selected a specific customer from the customer list, you can view and edit the customer card on the upper right-hand corner of the screen in the Customers view.

When you change customer information, it is stored immediately when you click the **Apply button** on the card, or jump to another customer in the Customer list.

Below you will find explanations on the various fields of a customer card:

### Name

For this field, you can freely pick a name that is characteristic to the customer. This name will be displayed all around the Vista screens as well as when an alarm is received from this customer using an SMS or MOBILE message.

### Social security number, Address, Phones



These fields are for the customer's personal information. The fields can be freely filled out, and can be changed when desired.

### **Room number**

This field shows a room number for the customer. You can sort the customer list using these. The room number identifies the customer in the Vivago Vista INFO corridor displays. Also, the room number can be used to link the customer to fixed additional peripherals her room has. These include Device Interfaces and the Room station. If you change the room number Vista will automatically ask if you wish to take into use the Device Interfaces and the Room station that have the same room number.

### **Short message**

This field is used when Vista's alarms are transmitted onwards as local short messages to DECT systems. Recommendation: max 5 characters.

### **Extra ID**

If Vista's alarms are transferred as forward to another system, this field can be used as her ID number in that system. If Vista's alarms are transferred voice messages, this field defined the customer's identification number that will be "spoken" in the voice message.

### **Group**

Displays the customer's group. Click the group name to move the customer to another group. The group name is not displayed if there are no customer groups specified.

### **Unit type**

This field is used to tell Vista what type of unit the customer is using, e.g. a standard Vivago Watch. Note: select DOMI as the unit type for home customers, not Watch.

### **Watch/Unit number**

In this field, you enter the four to nine-digit device number of a customers's watch, Add-On/FIDO button, Device Interface or LOCATE tracker device.

### **Not in use; block all alarms**

If this selection is checked, Vista will prevent the customer's alarms from being displayed. This includes all alarms from her watch/Add-On/FIDO, room station and all wireless and wired peripherals: all will be blocked. You should temporarily check this field, rather than deleting the whole customer, if deletion is not absolutely necessary. If this field is checked, a red exclamation point will be shown next to the customer's name in the customer list.

### **Watch/Unit used by care personnel**

This selection determines whether a member of the care personnel is using the unit. Should this field be checked, the following applies:

- The alarm made with the watch button will show in Vista as a "Panic alarm". Thus there can be a different response than for the customers' button alerts. Remember to define a specific timetable for Panic alarms so they can be reacted to in a different way and more quickly.
- The individual may use his/her watch to acknowledge customers' alarms by means of the so-called Watch acknowledgement. For further information, see "Alarms: Watch acknowledgement".
- If the member of personnel is using a wandering detection watch, she can approach locked doors of the institution and they will be automatically opened for her. The person may also escort customers through these doors even if passage would not normally be allowed for them. See the section "Customer personal settings: Allowed wandering detection base stations" below.
- The customer list will display the letter "P" (personnel) at the end of the row for the units selected for care personnel use.

### **Customer image**

On the right side of the screen there is an image attached to the customer info.

# Customer status and wellbeing lights

You can see the status of institutional customers on a status box on the upper right-hand corner of the customer card, and also on the customer list.

You can see whether the customer is present or not and whether s/he is wearing the watch: there are symbol icons for this. E.g. an “empty wrist” is shown if the watch is not being worn. Note that the customer list shows no symbols for the customer is s/he is both present and the watch is worn, to identify that “everything is OK”.

The status screen displays customer’s latest known location:

- For customers inside a site, the latest base station that received messages from the customer is shown.
- For customers using Vivago MOVE, the latest GPS coordinates of the customer are shown. You can open a map of the location by clicking the coordinates.

If either of the long-term alarms have been triggered for the customer to inform that the customer’s circadian rhythm is weak or daytime activity lower than usual, this will be indicated with a red “traffic light” on the status box and on the customer list. See the status box for more details.

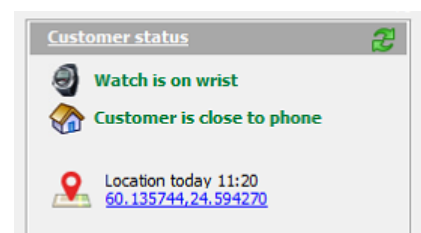
If a change has been detected in the customer’s wellbeing indicators, this will be noted with a yellow “traffic light”. You should check the Wellbeing tab at the bottom of the customer card for more details. See the “Additional customer information: Wellbeing” chapter below.

The customer status is not updated in absolute real-time. Instead, e.g. the removal of a watch will be shown with a 5-minute delay. This delay is not the same as the delay set in the customer’s “Watch off wrist delay” setting. Even if that delay was set at 90 minutes, the customer’s status box is updated 5 minutes after the removal – which corresponds to the customer’s curve.

The information of whether the customer is present or not is updated with a 15-minute delay.

The red and yellow traffic lights are updated once a day, at a set moment, usually in the early afternoon. This can be changed in the Vista settings; see the Technical guide.

Please note that the status box shows the latest status changes Vista is aware of. If the customer has left the area, Vista cannot possibly know whether the watch has been removed after that or not. Likewise, if the watch has been removed, Vista does not know whether the watch itself is present or not.



# Home base station status

Home customer's home base station status is available in the customer card.

The home base station number, latest contact time and the GSM signal strength is shown.

The status box will show a warning symbol if the base station's mains is not connected. Also there will be a warning symbol if the base station battery is nearly empty.

# MOVE phone status

The status of the MOVE phone is available in the customer card for customers using Vivago MOVE.

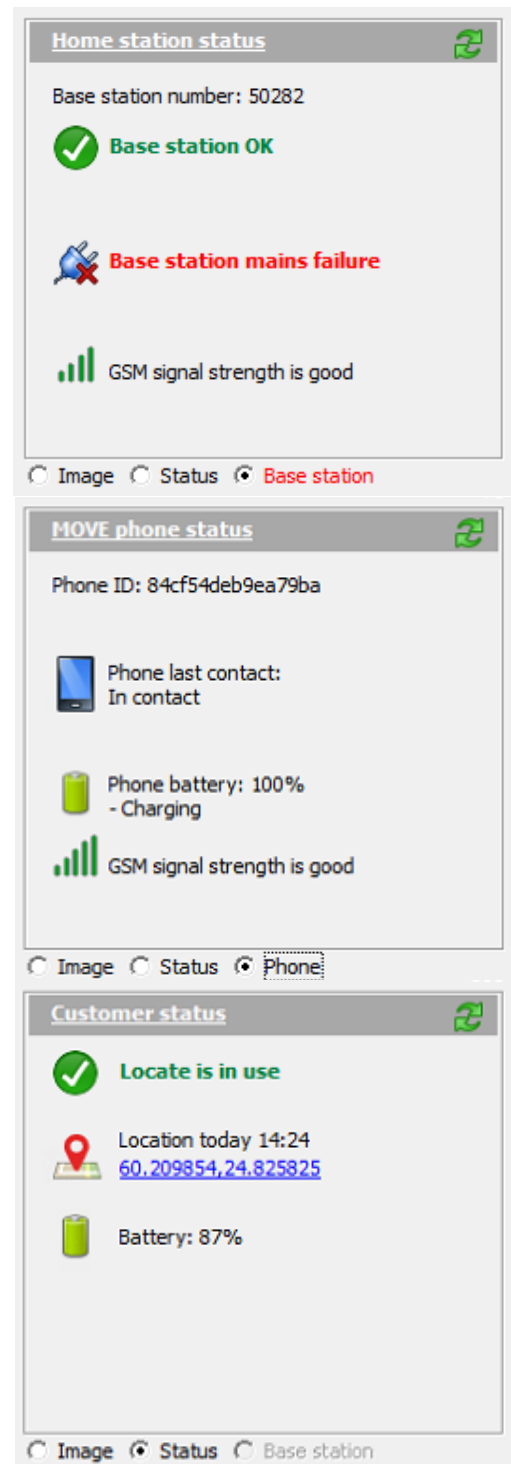
The latest contact time, battery status and the GSM signal strength of the MOVE phone are shown.

# LOCATE device status

The device status of the LOCATE GPS tracker device is available in the customer card.

The latest contact time and the latest GPS coordinates of the customer are shown.

Also the battery level is shown.

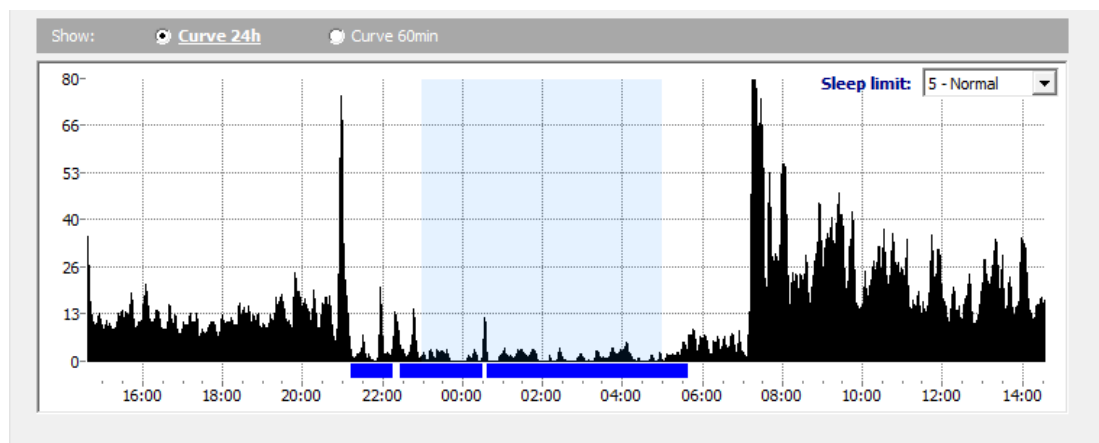


# Additional information for customer

This is an unrestricted memo, which can be used to store additional information, for example, regarding the customer's health, medication changes, events, etc. This information can be updated when necessary, and it can be displayed when an alarm is received from the customer.

## Real time curves: Curve 60min and Curve 24h

The customer's latest 60 minutes and latest 24 hours of activity curve. Notice that the activity curve will be displayed only for customers which Vista is collecting curves from. You can change the customer's sleep detection limit on the 24 hour curve screen. For more information, see "Activity curves".



## Wellbeing

This tab shows information on the customer's wellbeing. There are three summaries:

- Long-term wellbeing summary
- Short term wellbeing summary
- Monthly averages from the latest six months

### Long-term wellbeing summary

The table displays the daily averages for the latest six and three months and latest 7 days for: night time sleep time and sleep interruptions, daytime sleep time and sleep periods, circadian rhythm, daytime activity, watch usage (percentage on wrist), visits outside the base stations' range (mostly for home users), number of alarms (acute and non-acute separately) and info on nurse visits (number of visits and used time per day). Acute alarms include Manual alarm, Deterioration alarm and Wandering detection alarm.

These wellbeing indicators are given a guiding classification:

- Circadian rhythm: "Excellent" when the value is smaller than 0.2, "Good" when the value is smaller than 0.4, "Fair" when the value is smaller than 0.5 and "Weak" when the value is bigger than 0.5
- Daytime activity: "Good" when the value is bigger than 20, "Fair" when the value is between 10 and 15 and "Weak" when the values is less than 10

All of the numbers in the summary table are average daily values. The last 7 days' average is shown if at least 4 days worth of activity data has been collected from the customer; the 3 month column requires 1.5 months of data and the 6 month column at least 3 months of data.

| Wellbeing              |                              | Long term wellbeing summary  |                             | The below table shows daily averages 26.10.2017 |  |
|------------------------|------------------------------|------------------------------|-----------------------------|---|--|
|                        | Last 6 months                | Last 3 months                | Last 7 days                 | Change 7 days vs 3 months                       |  |
| Nighttime sleep        | 11 h 29 min, 5 interruptions | 10 h 12 min, 7 interruptions | 9 h 17 min, 8 interruptions |   |  |
| Daytime sleep          | 5 h 44 min, 5 periods        | 4 h 35 min, 5 periods        | 4 h 43 min, 6 periods       |   |  |
| Circadian rhythm       | Fair (0,40)                  | Fair (0,41)                  | Weak (0,58)                 | <b>Weakening</b>                                |  |
| Daytime activity       | Weak (6,9)                   | Weak (8,4)                   | Weak (9,1)                  |   |  |
| Usage (watch on wrist) | 96 %                         | 94 %                         | 95 %                        |   |  |
| Outside of range       | 14 min                       | 24 min                       | 2:00                        |   |  |
| Number of alarms       | Acute 1,5; Other 1,1         | Acute 2,6; Other 1,1         | Acute 1,9; Other 0,9        |   |  |
| Nurse present          | 1,0 times (8 min / day)      | 1,6 times (10 min / day)     | 1,4 times (1 min / day)     |   |  |

The table also displays a **Change** column. The values for the 7 days are compared to the latest 3 months: if an indicator shows an increasing or decreasing trend (e.g. +- 25%), the table will highlight this with a describing text in the Trend column. The trend column will be highlighted with a yellow indicator if a non-urgent possible negative trend is detected. These are the cases:

- The average sleep time increases or decreases by 25 percent (and at least 75 minutes)
- Circadian rhythm goes weakens by 25 percent (and at least 0.15)
- Daytime activity drops by 25 percent (and at least 1.5)

This yellow notification is also indicated with a yellow “traffic light” in the customer list and customer status box on the customer card. The customer’s wellbeing should be checked. Use the wellbeing table and the activity curve analysis as an aid.

The wellbeing table is updated and the comparisons are made once every day. The exact moment of time can be changed in the Vista settings; see the Technical guide.

Note that you can **print a one-page wellbeing report** on a customer by clicking the printer icon on top of the customer list, and then selecting “Customer wellbeing report” as the report type.

### Short term wellbeing summary

This table displays the same wellbeing indicators as the long-term wellbeing summary, but for shorter periods of time. The table can be used for interval or rehabilitation care and gives the possibility to view changes in the customer’s wellbeing almost immediately, after a couple of days of monitoring. The table shows 14, 7 and 3-day averages of each wellbeing indicator.

| Wellbeing              | Short term wellbeing summary |                             |                            |                          | The below table shows daily averages 26.10.2017 |
|------------------------|------------------------------|-----------------------------|----------------------------|--------------------------|---|
|                        | Last 14 days                 | Last 7 days                 | Last 3 days                | Change 3 days vs 14 days |   |
| Nighttime sleep        | 6 h 24 min, 4 interruptions  | 6 h 14 min, 4 interruptions | 3 h 24 min, 1 interruption | Decreased                |   |
| Daytime sleep          | 1 h 17 min, 2 periods        | 2 h 3 min, 1 period         | 0 min                      |                          |   |
| Circadian rhythm       | Good (0,35)                  | Good (0,27)                 | Good (0,26)                | Strengthening            |   |
| Daytime activity       | Fair (14,9)                  | Fair (15,2)                 | Fair (16,9)                |                          |   |
| Usage (watch on wrist) | 99 %                         | 98 %                        | 97 %                       |                          |   |
| Outside of range       | 2:08                         | 4:17                        | 9:59                       |                          |   |
| Number of alarms       | Acute 0,2; Other 1,3         | Acute 0,1; Other 2,0        | Acute 0,0; Other 3,0       |                          |   |
| Nurse present          | 0,4 times (27 min / day)     | 0,4 times (9 min / day)     | 0,3 times (9 min / day)    |                          |   |

The **Change** column compares the latest 3-day values to the latest 7 days, or to latest 14 days if more than a week of data is available. Weakened values are indicated with a yellow color while strengthened ones are shown with a green color.

### Monthly averages

This summary makes it possible to examine long term changes in wellbeing, month by month. It shows the monthly averages of each wellbeing indicator from the latest 6 months.

| Wellbeing              | Monthly averages            |                             |                             |                             |                            |                             | The below table shows daily averages 26.10.2017 |
|------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|---|
|                        | 5/2017                      | 6/2017                      | 7/2017                      | 8/2017                      | 9/2017                     | 10/2017                     |   |
| Nighttime sleep        | 6 h 19 min, 4 interruptions | 6 h 45 min, 4 interruptions | 6 h 40 min, 4 interruptions | 6 h 37 min, 3 interruptions | 8 h 1 min, 4 interruptions | 7 h 18 min, 4 interruptions |   |
| Daytime sleep          | 30 min, 1 period            | 30 min, 1 period            | 32 min, 1 period            | 35 min, 1 period            | 29 min, 1 period           | 46 min, 1 period            |   |
| Circadian rhythm       | Good (0,24)                 | Excellent (0,19)            | Excellent (0,16)            | Good (0,21)                 | Excellent (0,18)           | Good (0,25)                 |   |
| Daytime activity       | Good (33,3)                 | Good (32,0)                 | Good (33,7)                 | Good (34,0)                 | Good (34,5)                | Good (32,7)                 |   |
| Usage (watch on wrist) | 97 %                        | 94 %                        | 94 %                        | 97 %                        | 99 %                       | 96 %                        |   |
| Outside of range       | 12 min                      | 33 min                      | 24 min                      | 57 min                      | 16 min                     | 49 min                      |   |
| Number of alarms       | Acute 4,3; Other 1,2        | Acute 3,5; Other 1,7        | Acute 4,0; Other 2,1        | Acute 4,9; Other 1,5        | Acute 3,8; Other 0,6       | Acute 4,4; Other 1,4        |   |
| Nurse present          | 1,7 times (5 min / day)     | 1,5 times (37 min / day)    | 1,9 times (25 min / day)    | 1,7 times (8 min / day)     | 1,5 times (17 min / day)   | 2,2 times (34 min / day)    |   |

## Latest alarms

An alarm list showing the customer's latest alarms from last 14 days. Notice that you can select alarms from this list by double-clicking on them. The alarm will appear in a new window.

# Events

On this tab you can create and view customer's exceptional events. Events may include, for example, a rehabilitation period, physiotherapy, medication change or falls. Vista allows you to keep track of the impact of these events on the customer's wellbeing.

The event time and desired length of follow-up period are recorded in Vista. After that, Vista will automatically evaluate the impact of the event on the customer's wellbeing indicators. This impact can be viewed as a wellbeing summary at day or week level, at any time. The follow-up period may, if necessary, be continued.

The events are displayed on the customer card in the event follow-up list and in the activity curves as orange bars on top

| Additional info   Real time curves   Wellbeing   Alarms   Events   Settings |                      |          |                               |          |
|---|----------------------|----------|-------------------------------|----------|
| Events follow-up  |                      |          |                               |          |
| Päivä   | Tyyppi               | Seuranta | Selite                        | Lisännyt |
| su 1.10.2017  | Sudden attack        | 7 days   |                               | MNY      |
| pe 27.10.2017   | Change in medication | 7 days   | increased pain killers dosage | MNY      |

of the activity curve. Events can be added in both views, and a single event summary can be viewed from either. The event can also be created in the alarm processing window when an alarm is triggered, for example, if a customer raises an alarm after falling.

To add a customer an event, click the Add button on the customer's Events tab. Enter the date, time and type for the event. Select the follow-up period time, i.e. how long you would like to track the effects of the event her wellbeing. You can also enter a more detailed explanation of the event, e.g. the name of the medicine that was changed, or whether the medicine was started or stopped.

The event's wellbeing report can be displayed by double-clicking the event. The wellbeing report starts updating after one day of monitoring. The report is updated daily until the follow-up period has been completed. The follow-up period time may be extended or shortened if necessary.

The summary summarizes the customer's wellbeing before the event and after the event. For example, if the follow-up period has been selected for 7 days, the summary shows the week's wellness summary before and after the event.

The summary shows e.g. the amount of nighttime sleep and sleep interruptions, circadian rhythm, daytime activity etc.

The summary automatically compares how wellbeing indicators have changed since the event. The changes are given verbal evaluation and the most significant changes (over + - 25%) are highlighted in color text.

Event

Add event

Date: 27.10.2017  
Time: 15:10  
Follow-up time: 7 days  
Type: Change in medication  
Added by: MNY  
Explanation: increased pain killers dosage  
Additional info:

OK Cancel Remove

| Change in medication ma 23.10.2017 |                             | The below table shows daily averages |                             |               |
|------------------------------------|-----------------------------|--------------------------------------|-----------------------------|---------------|
|                                    | 7 days before               | EVENT                                | 7 days after                | Change        |
| Nighttime sleep                    | 4 h 22 min, 3 interruptions |                                      | 8 h 14 min, 2 interruptions | Increased     |
| Daytime sleep                      | 5 h 29 min, 4 periods       |                                      | 4 h 4 min, 6 periods        | Decreased     |
| Circadian rhythm                   | Weak (1,90)                 |                                      | Weak (0,56)                 | Strengthening |
| Daytime activity                   | Weak (5,6)                  |                                      | Weak (5,8)                  |               |
| Usage (watch on wrist)             | 100 %                       |                                      | 99 %                        |               |
| Outside of range                   | 3 min                       |                                      | 4:47                        |               |
| Number of alarms                   | Acute 0,1; Other 1,1        |                                      | Acute 0,0; Other 1,0        |               |
| Nurse present                      |                             |                                      |                             |               |

# Settings

All the customer's technical settings are defined on this tab. Please see the end of this document, "Customer personal settings" chapter for details on them.

# Functions concerning customers

## Adding a new customer

You can add a new customer by clicking on the Add customer button towards the top of the Customer list. A new window will appear, in which you can enter basic customer information.

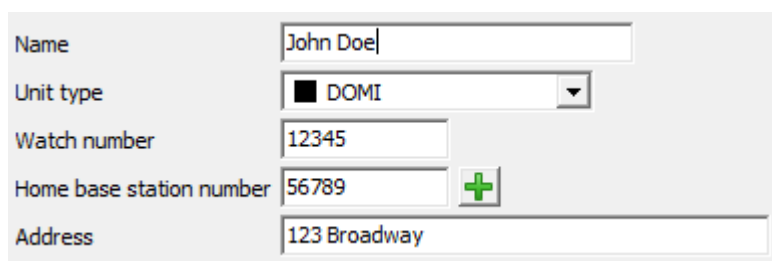
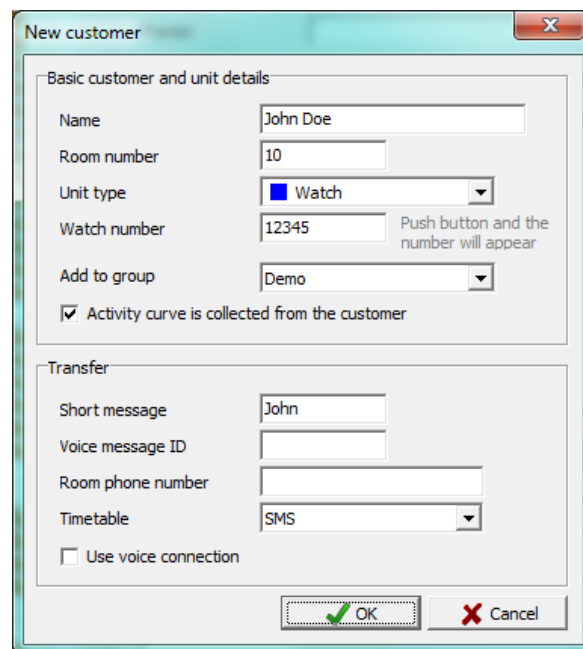
When defining a new customer, necessary information includes the customer's name, unit type and unit number. Without this information Vista will not be able to receive alarms or wellbeing information from the customer. You may enter other customer information if you wish.

In institutions also enter the room number of the customer. This helps in linking the customer to the fixed additional peripherals her room has.

You may also enter details regarding the customer's alarm transferring. E.g. select the correct transfer timetable and enter a Short message if the alarm is transferred to a DECT phone. Note that if the site only uses MOBILE for transfer, the Transfer part of the window will not be visible.

Hint: in an institution push the Vivago button of the watch when the New customer window is visible and the watch number will be automatically detected and filled in the corresponding field. This also works when pushing the alarm button on a Device Interface or LOCATE tracker.

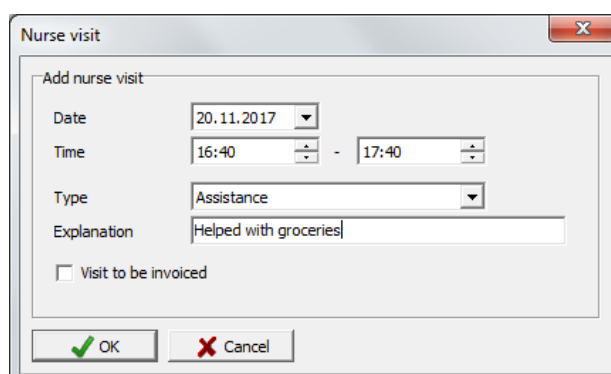
When adding a **home customer**, select "DOMI" as the unit type and enter both the Watch number and the Home base station number. You should also enter the home address of the customer.



If two customer share one Domi home base station create an own customer card for both customers. Enter their own watch numbers for each but use the same Home base station number for both. Vista will ask you to select the primary user for the home base station: if a manual alarm is made by pressing the button on the home base station or if the Nurse IN/OUT buttons on the home base station are used, these will be determined to belong to the primary user.

## Adding and modifying nurse visits

Vista makes it possible to manually add information on nurse visits after the visit. Adding a nurse visit to Vista afterwards could be required if the customer does not have a device to mark "Nurse present" in her home/room, or when the customer was cared for outside her home/room. A nurse visit can be added from her customer card or during alarm processing, if the alarm required a nurse visit.





Click the Add nurse visit button either on the customer card or in the alarm processing window. Enter a date and start and end time and a type/reason for the nurse visit. You can add a more detailed explanation to help in reports. If the nurse visit is to be invoiced, select the Visit to be invoice field. Visits to be invoiced are separated from other visit in nurse visit reports.

You can also edit manually entered nurse visits later. Open the Nurse visit for handling from any alarm list, then click the Modify nurse visit button on the Alarm processing window. This button is only visible if you have logged into Vista with an administrator account.

### Removing a customer

A customer can be removed by clicking on the Remove customer button in the customer card. Please note that if you remove a customer, all of his/her personal information and additional information is lost. There is no way to cancel customer removal!

Even when a customer is removed, her alarm and wellbeing information is archived. When removing a customer, you have the option to archive this information using the customer name or her customer ID only. When archived with name, you can still find her activity curves and alarm history by her name. When archived with customer ID, even her name is removed to protect privacy, and her alarm history and activity curves can only be found via the customer ID she had before she was removed.

If you wish to temporarily suspend a customer's alarms, there is a separate option for this in the customer card. See earlier section "Customer information: Watch not in use".

### Customer organizing and transferring, changing devices

Once you have created a card for a customer, it is intended to be permanent. Therefore, customers should not be transferred from one customer card to another by copying personal information, watch number, etc. to a new card. If a certain device changes ownership, do not change the new customer's information in the card containing the old device. Always create a new customer card and transfer the watch number from the old customer card to the new one. To transfer a watch number; replace the number on the old card with zero, then enter the new number on the new card.

### Moving customers to another group or another site

You can move a customer to another customer group by clicking the current group name on her customer card. Select a new customer group from the list that appears. If you have logged into Vista with a user account that can view customers from several site, any customer group from these sites can now be selected to move her to another site.

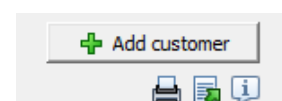
### Printing customer details or the wellbeing report

You can print customer details by **clicking the printer icon** on top of the customer list. A print window will appear allowing you to select the settings for printing. You can either print:

- The customer cards, in other words all customer details
- Just the customer list
- The selected customer's one-page Wellbeing report that includes the basic customer details, the long-term wellbeing summary and the activity curve for the latest week

### Exporting customer details

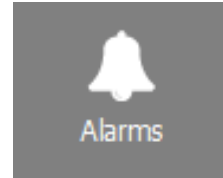
To export the customer list to Excel or text file, click the **Export icon** on top of the customer list.



# Alarms

One of the main functions of Vista is to receive alarms from connected customers and display them to the Vista user. Received alarms appear in the Vista Alarm list, and the user is notified of a new alarm both on the Vista screen and usual in e.g. mobile phone.

The user can then process the alarm according to operational instructions, customer information, and various history information included in the alarm. Once the user has accepted the alarm, he/she acknowledges it, and Vista knows that the alarm has been dealt with.



## Alarm colors and priorities

The alarm line may be indicated on the list in one of four colors:

- **Red:** the alarm has not yet been acknowledged. A red alarm type is high priority.
- **Blue:** the alarm type is a system alarm, and the alarm has not yet been acknowledged.
- **Yellow:** the alarm has not yet been acknowledged but it is a low priority alarm, a sort of status information.
- **Green:** the alarm has been acknowledged by a user. Some alarm types can also be defined so that they appear in Vista as if they have already been acknowledged; in other words, the alarms are considered least significant.

**High priority alarms (red and blue)** are always such alarms that must be immediately dealt with. They appear in the Alarm view's lower alarm list, and Vista begins to beep and always displays a notification window when receiving a high priority alarm.

**Low priority alarms (yellow and green)** are always a sort of status information, and they do not need to be dealt with urgently. In fact, they do not need to be acknowledged at all. Low priority alarms can function as some sort of additional system information. When Vista receives a low priority alarm, it will not notify you separately. Low priority alarms simply appear in the Alarm view's upper alarm list.

**When an alarm is acknowledged** - whether it was originally red, blue, or yellow - it will always turn green. This tells you that the alarm has been acknowledged, and that you no longer have to pay attention to it.

## Delayed alarms

If an alarm has been delayed – for example the alarm has been disabled during night time and the alarm was delayed until morning – the alarm is displayed with a text "Delayed alarm", both in the alarm notification window and alarm processing window; see below.

# The alarms view

The Alarms view has three tabs:

- **Latest alarms:** the main view for latest alarms. The view is automatically refreshed when a new alarm is received. You can use this view to process and acknowledge alarms.
- **Alarm history:** view for browsing all of the alarms received by Vista. A useful tool when you wish to do analysis work with alarms or view changes in a specific customer's alarm profile.
- **Alarm summary:** a statistical view of alarms, per customer. Can be used to view alarm amounts, acknowledgement delays, nurse visits to customer etc.

## Latest alarms

This view has to alarm lists that display the most recent alarms received by Vista. Every time Vista receives a new alarm, it appears in one of the alarm lists.

These two lists both have their own functions. The lower list displays unacknowledged high priority alarms. They can be recognized by their red or blue color. When an alarm is acknowledged (more about this below), it is immediately moved out of the lower alarm list, and its color changes.

The upper alarm list displays the latest acknowledged and low priority alarms. When either a high priority alarm is acknowledged or the alarm has originally been low priority, it is displayed in the upper alarm list.

**Vivago Vista - Hoitokoti Hopea - Logged in as hopea**

**Vivago Alarms** 18:19

Latest alarms | Alarm History | Summary

Latest acknowledged and low priority alarms

| Date          | Time  | Group   | Customer           | Alarm                     | From        | Acknowledgment    |
|---------------|-------|---------|--------------------|---------------------------|-------------|-------------------|
| ti 24.10.2017 | 15:05 | 2kerros | Lehto Sinikka      | Back in range             | (Huone 102) | Hoitaja paikalla  |
| ti 24.10.2017 | 15:19 | 2kerros | Lehto Sinikka      | Manual alarm              | (Huone 249) | (1)               |
| ti 24.10.2017 | 15:23 | 2kerros | Lehto Sinikka      | Nurse present             | (Huone 249) | Hoitaja poistunut |
| ti 24.10.2017 | 15:49 | 2kerros | Lehtimäki Liisa    | Manual alarm              | (Huone 201) | (m1)              |
| ti 24.10.2017 | 15:55 | 2kerros | Lehtimäki Liisa    | Manual alarm              | (Huone 201) | (m2)              |
| ti 24.10.2017 | 16:09 | 2kerros | Arho Tomi          | Manual alarm              | Huone 15    | (2)               |
| ti 24.10.2017 | 16:16 | 2kerros | Arho Tomi          | Nurse present             | Huone 16    | Hoitaja poistunut |
| ti 24.10.2017 | 16:20 | 2kerros | Arho Tomi          | Nurse present             | Huone 16    | Hoitaja poistunut |
| ti 24.10.2017 | 17:00 | 2kerros | Rönkkö Rauli       | Passivity notification    | (Huone 265) |                   |
| ti 24.10.2017 | 17:00 | 2kerros | Arho Tomi          | Passivity notification    | (Huone 271) |                   |
| ti 24.10.2017 | 17:19 | 2kerros | Lehto Sinikka      | Nurse present             | (Huone 249) | Hoitaja poistunut |
| ti 24.10.2017 | 18:23 | 2kerros | Lehtimäki Liisa    | Manual alarm              | (Huone 201) | (m1)              |
| ti 24.10.2017 | 18:57 | 2kerros | Ali-Melkila Pirkko | Nurse present             | Huone 26    | Hoitaja poistunut |
| ti 24.10.2017 | 18:57 | 2kerros | Lehtimäki Liisa    | Manual alarm              | (Huone 201) | (m1)              |
| ti 24.10.2017 | 19:52 | 2kerros | Lehto Sinikka      | Manual alarm              | (Huone 249) | Hoitaja paikalla  |
| ti 24.10.2017 | 19:57 | 2kerros | Lehto Sinikka      | Passivity notification    | (Huone 249) | Hoitaja paikalla  |
| ti 24.10.2017 | 19:59 | 1kerros | Kallio Seppo       | Passivity notification    | Huone 29    |                   |
| ti 24.10.2017 | 19:59 | 2kerros | Lehto Sinikka      | Nurse present             | (Huone 249) | Hoitaja poistunut |
| ti 24.10.2017 | 20:14 | 2kerros | Ali-Melkila Pirkko | Nurse present             | Huone 26    | Hoitaja poistunut |
| ti 24.10.2017 | 22:10 | 2kerros | Lehto Sinikka      | Manual alarm              | (Huone 249) | (1)               |
| pe 27.10.2017 | 12:23 | 1kerros | Kallio Seppo       | Hoitokäynti/Avustuskäynti |             |                   |

Unacknowledged high priority alarms

| Date          | Time  | Group   | Customer     | Alarm        | From     |
|---------------|-------|---------|--------------|--------------|----------|
| pe 27.10.2017 | 15:10 | 1kerros | Kallio Seppo | Manual alarm | Huone 01 |

Curve color codes: No curve available Watch off wrist Sleep Night time (11pm - 5am) Server OK

In the alarm lists every alarm is on its own line. The line shows when the alarm has been received, what type of alarm is in question, the name of the customer who triggered the alarm, the origin of the alarm (for example, the identifier of the base station that received the alarm). Furthermore, the upper list displays acknowledgement information for the alarm in question at the end of the line. Please note that the line may extend "outside" the window; use the scroll bar at the bottom to view all columns.

**To process an alarm, double click it** and the Alarm processing screen will appear. More on it below.

## Alarm History

Vista has its own Alarm history view for viewing old alarms. In Alarm history, you can browse all of the alarms received by Vista. Alarm history is a useful tool when you wish to do browsing with alarms or view changes in a specific customer's alarm profile.

- At the top of the alarm history screen, you have options to narrow down your history search to e.g. specific customer group, specific alarm type or certain time period. Use the three option boxes on the top of the screen to specify your search and then click the Search button. The search options work both for the Alarm information and the Summary mode:
- Customer:** Select whether to view alarms from all of Vista's customers, alarms from a single specific customer, alarms from a single group or only view non-customer system alarms.
- Alarm type:** Select whether to view alarms of any type, alarms of a certain type (e.g. "Manual alarm") or alarms belonging to a certain alarm type group (e.g. "Status messages") etc.
- Period:** You can search the whole alarm history or you can restrict the alarm history to a certain time period – the latest week, latest 30 days, this month, or any period defined by you. You can also choose to display all alarms (full 24 hours) or just alarms that were raised during the institutions night time or just during daytime.

Notice that the alarm history never automatically updates as Vista receives new alarms. You must always click on the Search button to display the most recent alarm information.

Alarm history terms

List of alarms

## The Summary tab

This is a statistical view of alarms and has one row for a customer. The row displays the full alarm count for the customer for the selected time period; the alarms per day average; the average alarm acknowledgment delay for the customer, and information on the nurse visits: number of visits and mean and total duration in minutes, also number of calls for extra help. Nurse visits to be invoiced are displayed separately.

You can select to view a summary for a specific customer group. You can print or export the report to a file.

Double click the row of any customer to view his/her full alarm information, i.e. to switch to the Alarm history view.

The boxes on top of the summary list displays total and average values for alarms, acknowledgments and nurse visits for all the customers selected for the summary: this way you can e.g. view totals for a certain customer group of a site.

Summary statistics:

- Total Customers: 7, Alarms: 4375
- Nurse visits: 2875, Duration: 42115 min
- Average values: Alarms / customer: 625, Alarms / day: 12, Delay: 8 min
- Visits / customer: 411, Durations: 16 min, Total / customer: 6016 min

| Customer          | Group   | Alarms | Alarms / day | Average ack. delay | Nurse visits | - average duration | - total duration | Laskutettavat käynnit | Lisäavunpyynnöt |
|-------------------|---------|--------|--------------|--------------------|--------------|--------------------|------------------|-----------------------|-----------------|
| Ali-Mekkiä Pirkko | 2kerros | 1101   | 3,0          | 12 min             | 522          | 13 min             | 6424 min         | 28                    |                 |
| Arho Tomi         | 2kerros | 566    | 1,5          | 9 min              | 648          | 11 min             | 6798 min         | 54                    |                 |
| Haapalinnä Raita  | 2kerros | 29     | 0,1          | 52 min             | 20           | 1 min              | 22 min           | 1                     |                 |
| Kartemo Elina     | 2kerros | 192    | 0,5          | 8 min              | 320          | 14 min             | 4201 min         | 4                     |                 |
| Lehtimäki Liisa   | 2kerros | 396    | 1,1          | 7 min              | 138          | 33 min             | 4167 min         | 21                    |                 |
| Lehto Sinikka     | 2kerros | 2071   | 5,7          | 5 min              | 1138         | 16 min             | 17233 min        | 115                   |                 |
| Rönkkö Raita      | 2kerros | 20     | 0,1          | 2 min              | 89           | 40 min             | 3271 min         | 4                     |                 |

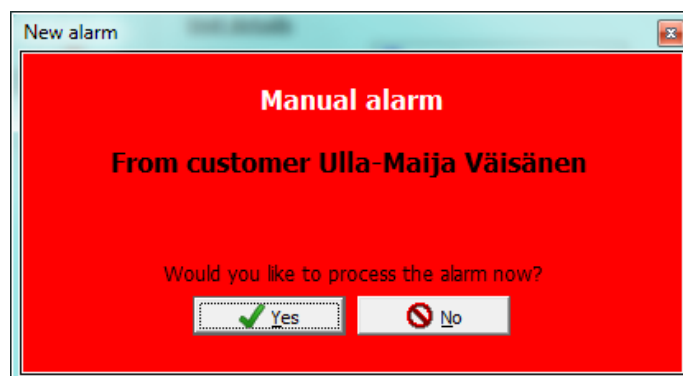
## Printing and exporting alarm information

You can print the contents of the Alarm history or Summary view by clicking the Print button in the top corner of the screen. Also, you can export the contents to a text file (with Tab separated values) or a Microsoft Excel (XLS) file by clicking the Export button.

# Processing alarms

## Upon receiving a new alarm

When Vista receives a new high priority alarm, it starts to make a beeping sound and displays a notification window on the screen, notifying you of the new alarm. The window displays a short description of the received alarm. In this situation, the user can either select the alarm for closer inspection, or bypass it.



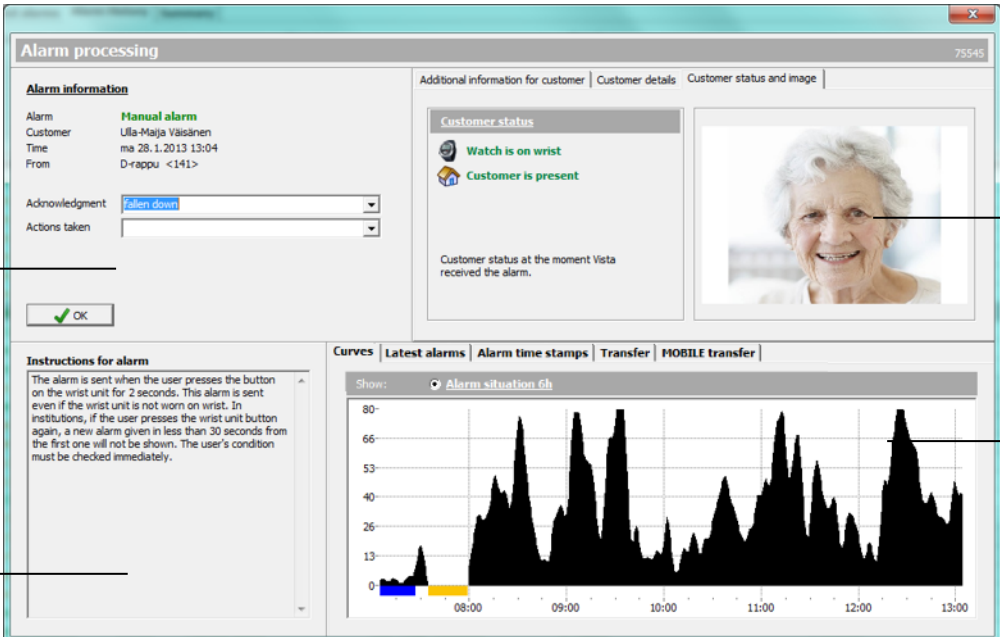
- By clicking on the **Yes** button in the window, or by pressing Enter, you can select the alarm for closer inspection. More information on this subject below.
- By clicking on the **No** button in the window, or by pressing the Esc key, the window will be closed and the beeping will stop, but the alarm will not be acknowledged. Therefore, the alarm remains on the alarm list, marked red or blue.

## Processing previous alarms

You may process previously received - bypassed, or acknowledged alarms by selecting an alarm from any alarm list in Vista and double-clicking on the alarm. This way the alarm you selected will appear in a new window.

## Alarm processing window

Once you have opened an alarm for processing, a new window will appear. This window presents the most important information related to the alarm, information on the customer who triggered the alarm, the customer's latest similar alarms, the customer's recent activity curve, and operational instructions for the alarm.



Alarm information

Instructions for alarm

Basic customer information

Various additional information

The alarm window can be closed by clicking on the OK button on the screen. The alarm is acknowledged by typing any text or selecting a predefined text into either one of the alarm's additional information fields, and then clicking on the OK button. Once you have entered the information, the fields are locked and you can no longer change the information.

The upper right-hand side of the screen displays **customer information** related to the alarm.

Operational **instructions for an alarm type** are located on the lower left-hand side of the screen. Each alarm type has its own operational instructions. Operational instructions can be freely changed from Vista's Settings view Alarm types page. For further information, see the Vista Technical Guide.

Helpful additional information for processing alarms can be found on the tabs at the lower right-hand side of the screen.

### Adding nurse visits and events

If there is a nurse visit related to an alarm or the alarm is a result of an event that should be followed-up to see if it has an effect in the customer's wellbeing, you can add a nurse visit or an event in the alarm processing window. See the chapter "Customers" for more information.

You can also edit manually entered nurse visits later. Open the Nurse visit for handling from any alarm list, then click the Modify nurse visit button on the Alarm processing window. This button is only visible if you have logged into Vista with an administrator account.

### Voice connection to home

When you are processing a new high priority alarm just received from a home customer with a home base station you could have the possibility to open voice to the customer.

In this case there will be an additional "Voice connection" bar at the top of the alarm processing window. Click the Open voice connection button to make the home station place to the number shown on the screen and open a voice connection to home.

The screenshot shows the 'Alarm processing' window. It has a title bar with 'Alarm processing' and a close button. Below the title bar is a section titled 'Alarm information' with the following details: Alarm: Manual alarm, Customer: Korhonen Piitu, Time: ti 24.10.2017 20:11, From: Huone 103 <255>. Below this information are two dropdown menus: 'Acknowledgment' with '(v3)' selected and 'Actions taken'. At the bottom right, there are two buttons: 'Add nurse visit' (with a person icon) and 'Add event' (with a plus icon). At the bottom left, there is an 'OK' button with a green checkmark icon.

The screenshot shows the 'Alarm processing' window with a 'Voice connection' bar at the top. It includes a blue button and a text field with 'To number: +358504341321'. Below this is a section titled 'Alarm information' with 'Manual alarm' in red. To the right of the 'Alarm information' section are three tabs: 'Additional information for customer', 'Customer details', and 'Customer status and image'. The 'Customer status' tab is currently selected, showing a 'Customer status' field.

## Watch acknowledgement

Selected systems support Vista's watch acknowledgement functionality. This means that members of care personnel can use their watches to remotely acknowledge alarms received by Vista. Watch acknowledgement works as follows: A member of care personnel first presses the button on his or her own watch for at least two (2) seconds. After that he or she immediately presses the button of the customer who triggered the alarm, again for at least two (2) seconds. Both buttons must be pressed within a specified time period. Typically, the interval between pressing the buttons is approximately ten (10) seconds (depending on Vista settings). After receiving a watch acknowledgement, Vista searches for all alarms received from the customer within a specified time period and records that the carer has acknowledged the alarms in question. Depending on Vista settings, alarms are either acknowledged altogether or re-categorized as yellow low priority alarms.

### Notes regarding watch acknowledgement

- You can only acknowledge customer alarms. You cannot acknowledge system alarms or alarms triggered by other members of care personnel.

- You can only acknowledge high priority alarms (i.e. red or blue alarms) that have not yet been acknowledged.
- If you are unable to press the button of the customer who triggered the alarm quickly enough after pressing the button in your own watch, press the button in your own watch again to get more time.
- All members of care personnel using watch acknowledgement must check the "Watch used by care personnel" option in their customer cards.
- Care personnel can also trigger manual alarms from their watches. You can trigger a manual alarm by pressing the button in your watch without pressing a customer's button immediately after that. Your alarm will be displayed on the Vista screen after a delay of about ten seconds.
- A Device Interface can also be used for Watch acknowledgement.

For more information on watch acknowledgement settings, see Vista Technical Guide.

## Nurse present

Customers' rooms may be equipped with Device Interface units or Room stations with so-called Nurse present functionality.

After receiving an alarm from a customer, if a nurse decides to visit the customer in his/her room, the nurse may use the Device Interface or Room station to signal s/he is attending to the matter. S/he can do this by pushing the "IN" button or the green Nurse button of the Room station. Immediately all alarms from the customer are acknowledged in Vista, with the text "Nurse present" entered into the acknowledgment field. A "Nurse present" alarm is generated in Vista, to inform other nurses that the matter is being taken care of. Also a nurse icon is shown in the customer's card and in the customer list.

When the nurse leaves the room, s/he pushes the "OUT" button or pushes again the Nurse button of the Room station. This functions as the "Nurse leaving" signal. The "Nurse present" alarm is now acknowledged.

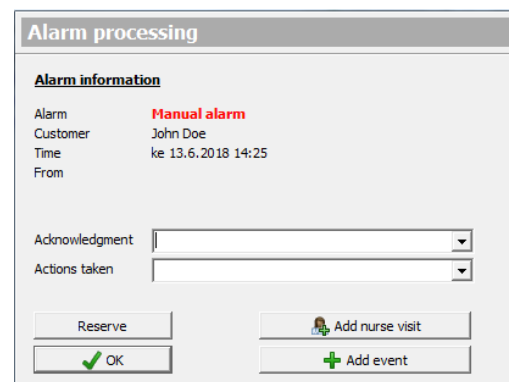
The duration of the visit, i.e. the time between entering and leaving is recorded in the "Nurse present" alarm in Vista. This can be viewed in the alarm processing screen's Timestamp tab. Also, alarm history will display the duration for each "Nurse present" alarm.

If the nurse forgets to sign herself out in the customer's room, she can also do so by clicking the Nurse icon visible in the customer's card.

To use the "Nurse present" feature using a Device Interface, the unit must be selected for the customer in her Additional Devices settings tab, in the "Unit for nurse present" field. If a room station is configured for the customer in the Additional devices / Room station field, the Nurse present functionality is automatically enabled. Please see the chapter "Customer personal settings" for further information.

## Reserving alarms

If the alarm reservation feature has been enabled in the Vista system, a Reserve button will be visible in the Alarm handling window. You can use the button to reserve the alarm for yourself. The alarm will be acknowledged and a new "Nurse call, reserved" alarm will be created for the customer that made the original alarm call. This is used to notify other personnel that you have reserved the alarm call. Only you can acknowledge the alarm call.



| Alarm processing         |                      |
|--------------------------|----------------------|
| <b>Alarm information</b> |                      |
| Alarm                    | Manual alarm         |
| Customer                 | John Doe             |
| Time                     | ke 13.6.2018 14:25   |
| From                     |                      |
| Acknowledgment           | <input type="text"/> |
| Actions taken            | <input type="text"/> |
| Reserve                  | Add nurse visit      |
| OK                       | Add event            |

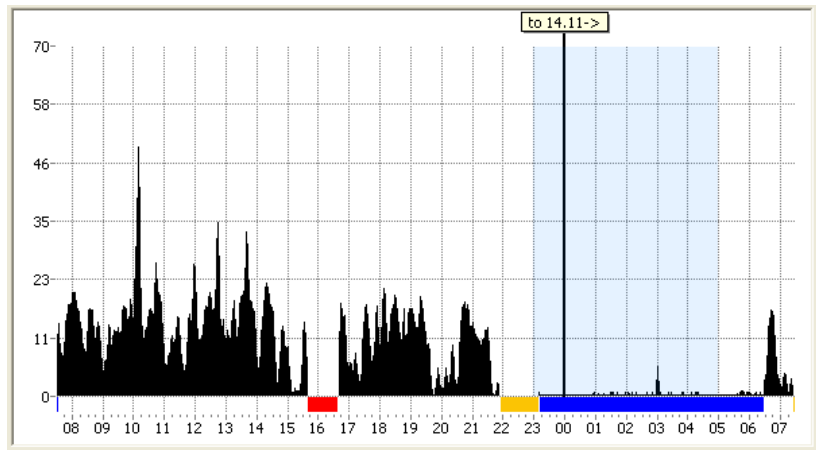


# Activity curves

## Activity curve basics



The Vivago watch monitors the user's movements. The measured movement signal is transmitted to the Vista software via a base station. Vista stores each customer's measurement data and generates an activity curve from the stored data. The curve can be viewed and analyzed on the Vista screen. Each point in the curve represents the activity during one minute of time. If the user has moved a lot, or the movements are strong, the curve has a high value. If the watch has not registered any movements, the curve has a zero value.



Vista displays activity curves on specific curve screens. There are short-term 60-minute screens and long-term 6 to 24 hour screens in Vista. The bottom edge of the screen displays a timeline, which shows the corresponding time for each point of the screen. On the left side there is a vertical axis with numbers ranging from 0-100%. 100% is the highest possible activity.

You can view activity curves in Vista:

- In the Real-time curves page, in which you can select curves from up to 12 customers for simultaneous monitoring
- In the Customers view, on each customer's customer card
- In Curve post analysis, where you can open a single customer's curve for advanced analysis

## Blue night time, color codes and sleep

Vista's activity curve screens have four helpful color bars – see the example curve screen above:

- Night time – from 11 pm to 5 am – is highlighted with a light blue background
- The situations in which Vista has not received any curve information from the customer (e.g. the customer is outside the range) are marked in red color below the curve.
- The situations in which the customer has not worn the watch are marked in yellow
- Those points of time Vista has interpreted as sleep are marked in blue (see "Sleep detection" below)

## Sleep detection and calculation

During sleep a person usually moves just a little or does not move at all. When a person is awake he/she moves significantly more than in a sleep. Based on this fact the sleep time can be detected using the activity curve. If the curve shows only little activity for a long period of time, the user is probably asleep.

Vista can automatically calculate an estimate of the user's sleep and wake states from the activity curve. The estimate is based on a commonly known thresholding technique. If the curve is below a set threshold for a predefined time, Vista



decides that the user is asleep. If the curve is above the same threshold for another predefined time, the user is a wake. Based on this analysis Vista also calculates:

- Nighttime sleep amount and number of sleep interruptions, between 8pm and 10am. The calculated value is updated in Vista at 10am
- Daytime sleep amount and number of sleep periods, between 10am and 8pm. The calculated value is updated in Vista at 8pm

The sleep time can be shown as a blue bar below the curve displays; see “Curve post analysis”.

It is possible to specify the sleep detection threshold (limit) for each customer: either on his/her customer card’s Curve 24h screen or on the Curve post/week analysis screen by selecting the Show sleep, Level.

Note! The sleep detection is an estimate that has a limited accuracy. The accuracy depends strongly on the user’s behaviour and the settings in Vista. The automatic sleep detection will usually give longer sleep times than the user actually has. The inaccuracy can be in the order of 30 to 70 minutes depending on the user and Vista settings. If the user has sleep disorders that cause restless sleep, abnormally low daytime activity or decreased functional ability, the inaccuracy of the sleep detection may be even larger.

## Circadian rhythm

The activity curve can be used to follow the user’s **circadian rhythm** i.e. sleep-wake rhythm. Vista calculates and displays an index describing the circadian rhythm of each day. The index is calculated by dividing the average night time activity (Night Activity) with the average daytime activity (Day Activity):

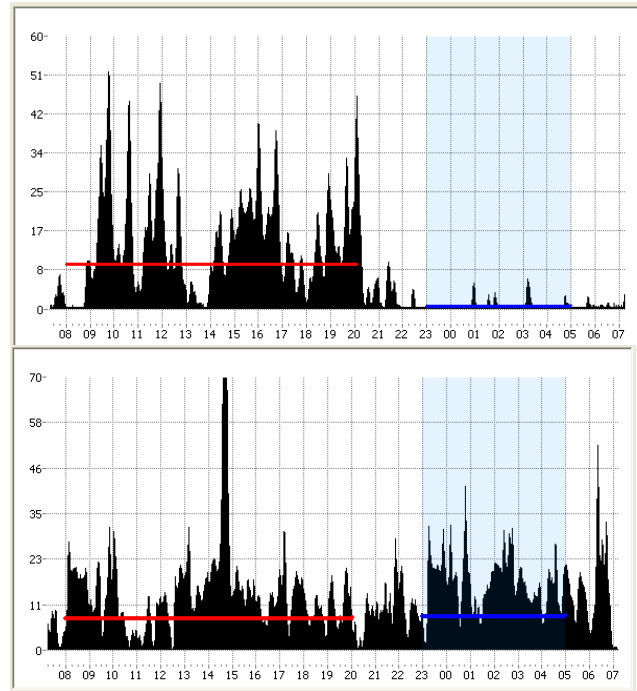
$$\text{Circadian rhythm} = \frac{\text{NightActivity}}{\text{DayActivity}} .$$

The night time used in the calculation is defined to be within 11pm – 5am. This time is highlighted with a light blue background in the curve screens. The daytime is between 8am – 8pm. The index is calculated by dividing the Night Activity with the Day Activity from the previous day.

Circadian rhythm index describes the quality of the sleep-wake rhythm. If the rhythm is strong, the night time activity is low and the daytime activity is high. In this case the index is close to zero; see Example 1 below. If the rhythm is weak, the night time activity is close to the daytime activity, thus the index is close to one; see Example 2 below. If the index is larger than one, the rhythm is reversed i.e. the user is more active during the night than during the day.

### Example 1: Strong circadian rhythm

Night time average activity = 1 (blue line) and daytime average activity = 10 (red line) -> the circadian rhythm index =  $1/10 = 0,1$ ; thus the rhythm is strong.



### Example 2: Weak circadian rhythm

Nighttime average activity = 8 (blue line) and daytime average activity = 8 (red line) -> the circadian rhythm index =  $8/8 = 1$ ; thus the rhythm is weak.

The Curve post analysis page shows the calculated circadian rhythm index in the box below the curve screen. The Week analysis screen shows the index also in graphical form in a window at the right side of the curve screens.

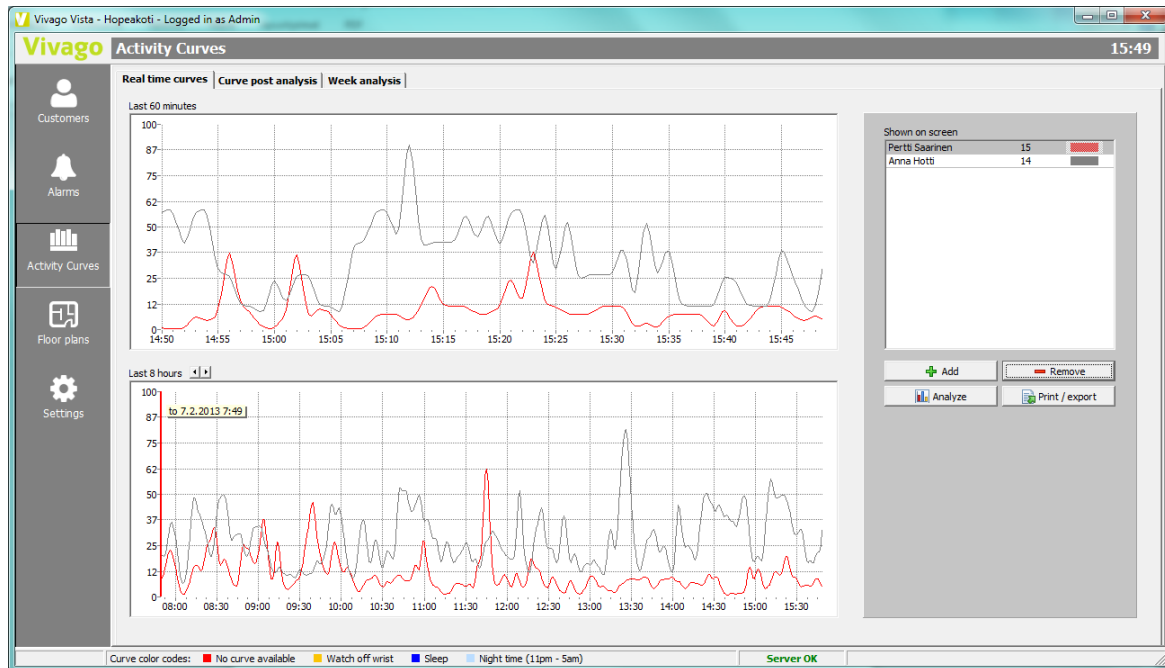
# Real time curves page

If you wish to view activity curves from several customers at the same time, the Real-time curves page of the Activity curves view is best suited for your needs.

There are three parts to this page: two different curve screens and a customer list that displays with color codes which customers are selected for real time viewing.

The activity curves displayed on the screen are updated in real-time. Each customer's curve is displayed in its own color.

The upper activity screen displays activity for the last hour, and the lower screen displays activity for previous 6 to 24 hours; the time period can be selected with the arrow keys on top of the curve screen.



In the activity screens the latest data is presented on the right-hand side of the screen. The curve moves to the left as the new data is being introduced.

The activity curve display on top (short-term) differs from the activity curve display on the bottom (long-term). The activity curve on the top has less smoothing than the bottom one; the changes in activity can be seen quicker. The top activity curve display can be used for rapid activity level change analysis.

# Curve post analysis

The activity curves of customers can be analysed later on the Curve post analysis or Week analysis page.

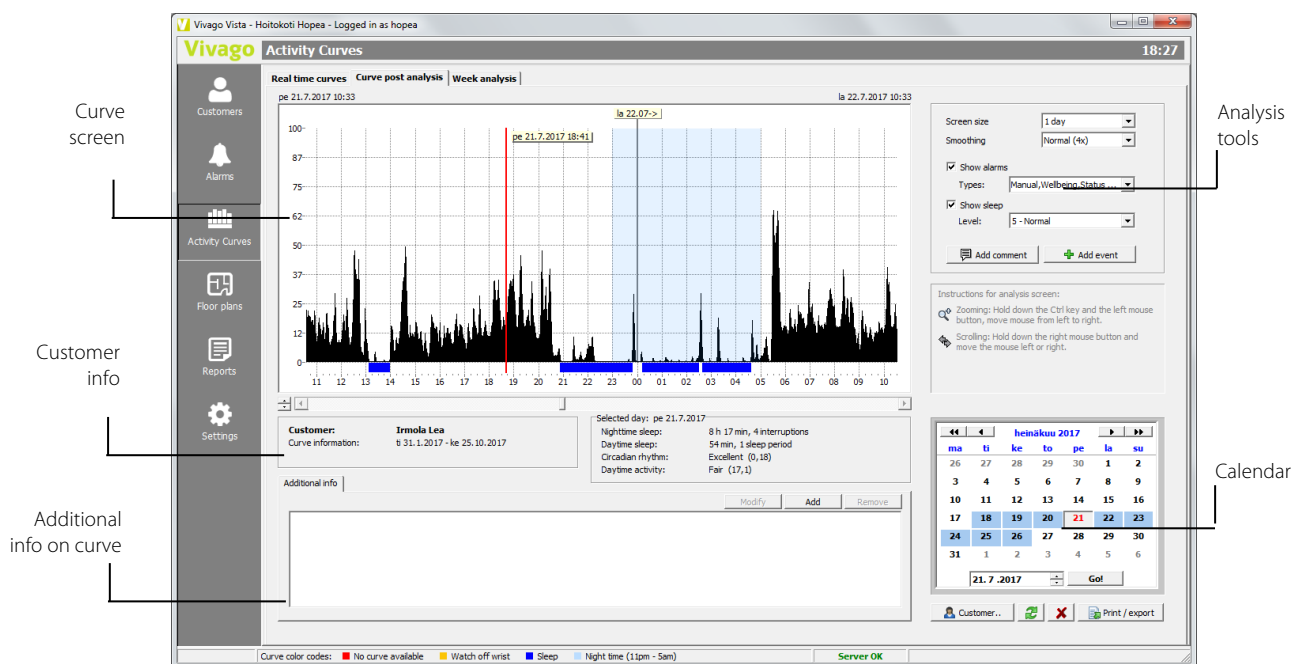
A customer can be opened for post analysis by clicking the Curve analysis button on his/her customer card; or you can click the "Customer.." button on the analysis pages to select a customer.

Please note that when analysing a customer's curve it is not updated in real time. To view the latest curve, you can click the green Refresh icon at the bottom right corner of the screen.

## Curve post analysis: One-day screen

On this page, you can analyse the curve on a vertical curve screen, usually one day at a time.

The top of the screen displays the actual curve screen, below it you will find additional information on the customer and the right-side tools to help in analysis.



Use the **Calendar** at the bottom right corner of the screen to select the day you wish to analyze. All days that have recorded curve data are displayed in dark colors in the calendar. When you select a certain day from the calendar, Vista will automatically read to its memory four preceding and four succeeding days from that day. These will be marked with a light blue background in the calendar. You can analyze all of these days at one time in the curve screen by simply scrolling the screen using the **scroll** bar below the curve screen or by placing the mouse pointer over the curve screen, then clicking and holding down the right mouse button while moving the mouse the left or right.

You can **zoom in on the activity screen** in the following way: Hold down the Ctrl key and the left mouse button, then move the mouse from left to right. You will paint the area to be zoomed in white. Release the Ctrl key and the mouse button and the area will be zoomed. To cancel the zoom – i.e. to return to the previous curve screen state – click the Cancel zoom button that will appear on the Analysis tools box.

You can **adjust the vertical maximum** of the screen by using the arrow buttons at the left below the curve screen.

The **daily analysis data** calculated for the analyzed day is displayed below the curve screen. The data includes the sleep analysis data: nighttime sleep and interruptions, daytime sleep and periods, the daytime activity mean value and the circadian rhythm

|                            |                             |
|----------------------------|-----------------------------|
| Selected day: pe 21.7.2017 |                             |
| Nighttime sleep:           | 8 h 17 min, 4 interruptions |
| Daytime sleep:             | 54 min, 1 sleep period      |
| Circadian rhythm:          | Excellent (0,18)            |
| Daytime activity:          | Fair (17,1)                 |

index.

An **additional information screen** is displayed at the ultimate bottom of the screen. Vista adds its own remarks to the list, for example if the customer's name or watch number has changed. You can also add your own rows (pieces of additional information) by clicking the Add button.

curve **smoothing** and whether to **display customer's alarms** as tags on top of the curve and to **display the detected sleep** below the curve.

Using the dropdown menu below the Alarms selection you can select which types of alarms you wish to view.

In the Sleep: Level selection you can **change the individual sleep detection threshold level** for the customer.

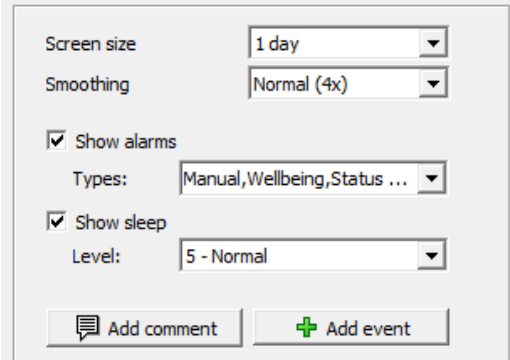
### Adding comments

You can add your own comments "on top" of the customer's curve: click on a position on the curve screen and click the Add comment button. Now you can enter a short comment related to that curve position. The comment will appear on the curve screen but only the first few characters of the comment are visible. To display the complete comment text, click on the comment's green header. To modify or delete the comment, double click on the header.

### Adding events

You can add special event for a customer to monitor their effect on her wellbeing. Click on a position on the curve screen and click the Add event button. Now you can enter a description for the event and click OK. The event will appear on the curve screen as an orange bar. To display the complete event text, click on the event bar's orange header. By double-clicking the header, you can view the wellbeing summary of the event and modify its details.

For more information on events see the chapter "Customers".



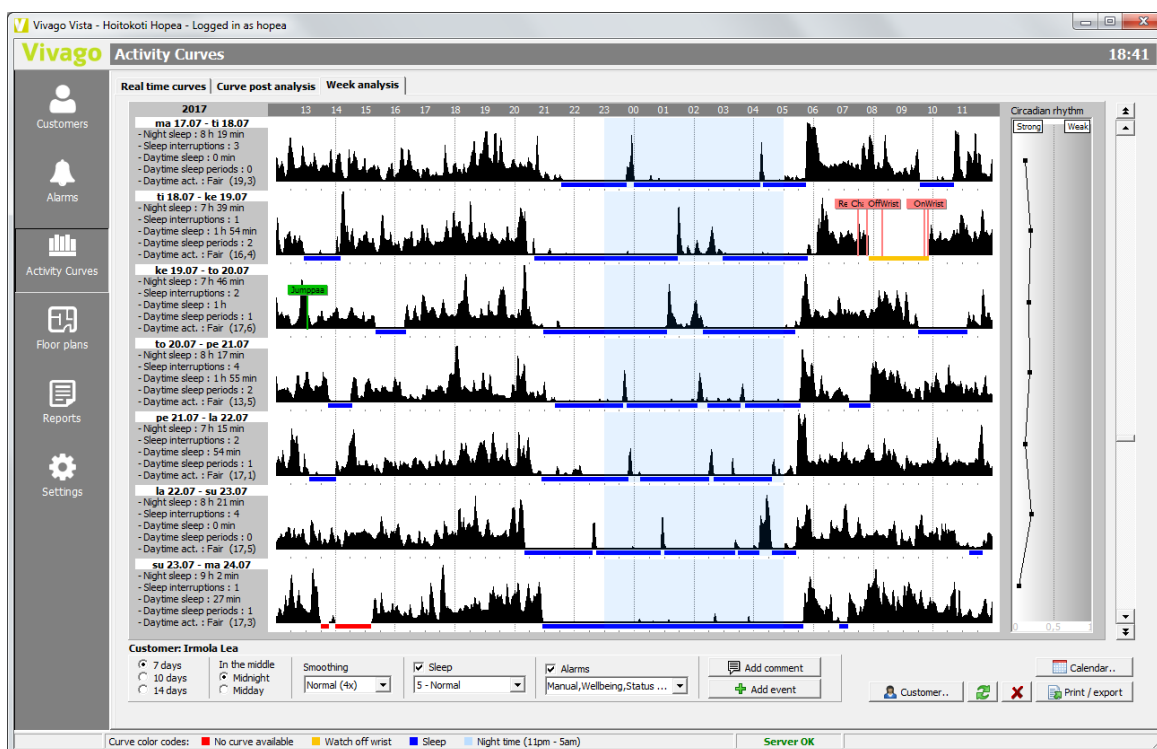
The screenshot shows a settings panel with the following options:

- Screen size:** A dropdown menu currently set to "1 day".
- Smoothing:** A dropdown menu currently set to "Normal (4x)".
- Show alarms:** A checked checkbox. Below it, a dropdown menu labeled "Types:" is set to "Manual, Wellbeing, Status ...".
- Show sleep:** A checked checkbox. Below it, a dropdown menu labeled "Level:" is set to "5 - Normal".
- At the bottom, there are two buttons: "Add comment" (with a speech bubble icon) and "Add event" (with a green plus icon).

## Week analysis

In addition to the basic Curve post analysis screen Vista has another screen for post analysing customers' curves. This screen is called Week analysis and it allows you to view several days of a customer's curve at a time, with one day upon the other.

The week analysis screen displays 7, 10 or 14 days of curve at a time. The days are displayed one day upon the other. The oldest is at the top; the newest is at the bottom. The days have been positioned in such a way that their corresponding points of time are vertically on top of each other. For example, the midnight of each day is exactly at the middle of the screen. The common timeline is displayed on top of the screen.



On the left of each curve screen there is box that displays the **daily analysis information** on that specific day: details on night time sleep, daytime sleep and daytime activity.

To the right of the curve screens you can see the **customer's circadian rhythm**. This is common graph that displays the circadian rhythm indexes for each of the 7 to 14 days of curve on the screen. In the graph there is a single point for each day, horizontally adjacent to the curve screen of that day. The point indicates the circadian rhythm index of the day. There is no point visible for those days that do not contain enough curve information for calculating the index. The more left a point is the stronger the circadian rhythm of the day, while as the points on the right indicate a weak circadian rhythm index. The circadian rhythm graph will turn dark if any day on the screen has a circadian rhythm index above 1.0. All of the index points above 1.0 are marked in red color.

Furthest to the right on the week analysis screen there is a scrollbar that allows you to scroll days backward and forward. On the bottom of the screen you will find analysis tools, which are described below.

**Customer: Irmola Lea**

☒ 7 days   
 ☐ 10 days   
 ☐ 14 days   
 In the middle: ☒ Midnight   
☐ Midday   
 Smoothing: Normal (4x)   
☒ Sleep   
☐ Alarms   
 Add comment   
 Add event

5 - Normal   
 Manual, Wellbeing, Status ...   
 Print / export

The bottom of the screen displays the same analysis tools as the day view. Also especially for the week screen you can select whether the days on the screen are centered on **midnight** or on **midday**. If you choose "midnight" each curve screen will actually contain curve belonging to two different days because the curve starts at noon and ends at noon. Using this setting it is easy to analyse the full night time and sleep periods of a customer. If you choose the "midday" settings you can on the other hand analyse full days on the screen – starting at midnight and ending at midnight.

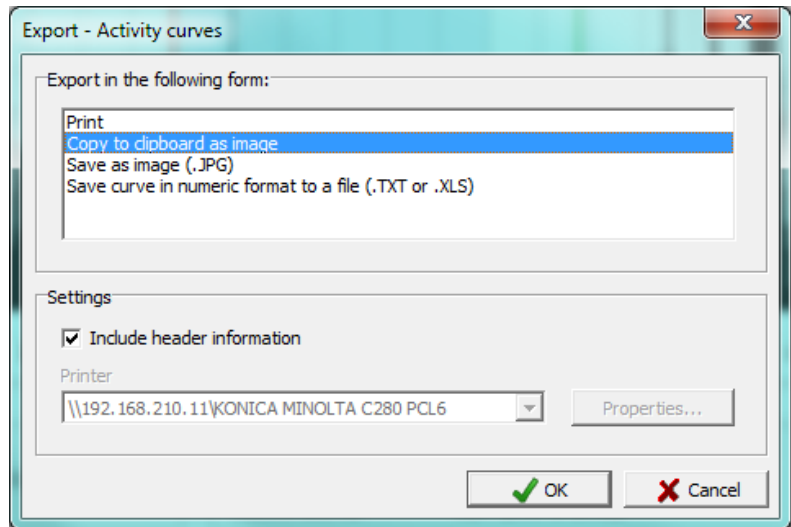
# Printing and Exporting activity curves

The activity curves displayed by Vista can be printed or exported to for example an image file. The activity screen on display is always the one that is exported. If you are on the Real-time curves page, one or all the curves on the screen are exported; and if you are post analyzing a recorded activity curve, the analysis curve on the screen is exported.

Click the Print/Export button and then select:

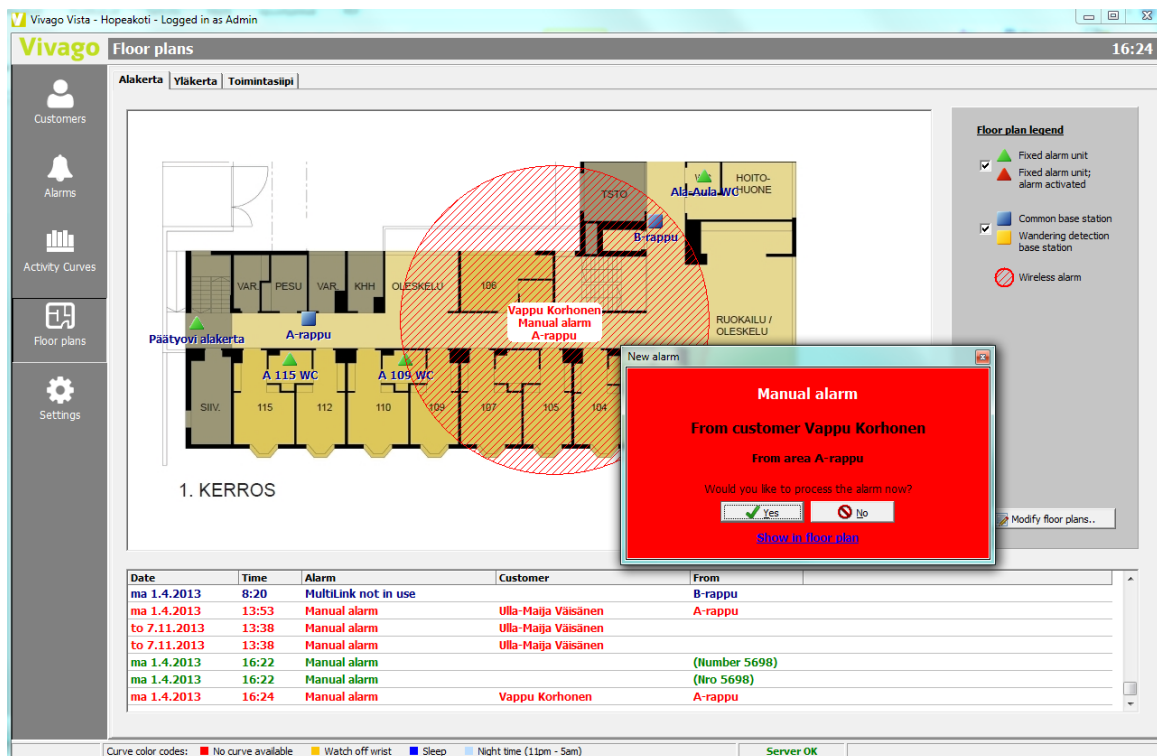
- **Print:** The curve is sent to a printer. You can select the printer and its settings from lower on the window.
- **Copy to clipboard as image:** the curve is saved in a Windows clipboard in image form. The image can thus be easily used in other applications by means of their Paste function.
- **Save as image (.JPG):** the curve is saved as a JPEG image file, with a desired name.
- **Save curve in numeric format to file (.TXT or .XLS):** The curve height information is saved from left to right, each numeric value on its own line, in a text file or Microsoft Excel file. Select the file type on the "Save as" dialog. When post analyzing a curve, you can select the period of time to save and whether to also save the calculated analysis data (such as total sleep time for each day) in a separate text file.

When exporting real time curves, you can choose screen whether to export short term or long-term curves on the screen. Similarly, you can decide on whether to export all the curves, or only a selected customer's curve.



# Floor plans

The Floor plans view is visible if your Vista has the **MAP Floor plans module** installed.



The floor plans view shows a graphical overview of the institutions floor plans. The institution may be split into suitable parts. You can switch between parts (floor plans) by clicking the tabs at the top of the screen. The parts could be different floors of the institutions, different sections and so on.

Fixed alarm devices, i.e. Device Interfaces, may be added to the floor plan. Also, base stations can be added so that their names and locations become more familiar.

When an alarm is received from a fixed alarm device its icon starts to blink on the floor plan. The alarm can then be processed and acknowledged by clicking on its blinking icon.

When an alarm is received from a wireless alarm device, i.e. watch or Add-On, the surrounding of the base station the person was nearest to starts to blink on the floor plan. So this way the floor plan can be used to roughly locate the customer.

In Vista's View options, you can select whether Vista should automatically switch to show the corresponding floor plan in case of an alarm. Even if that option is not selected you can still click on "Show in floor plan" selection in the red blinking alarm notification window to show the floor plan.

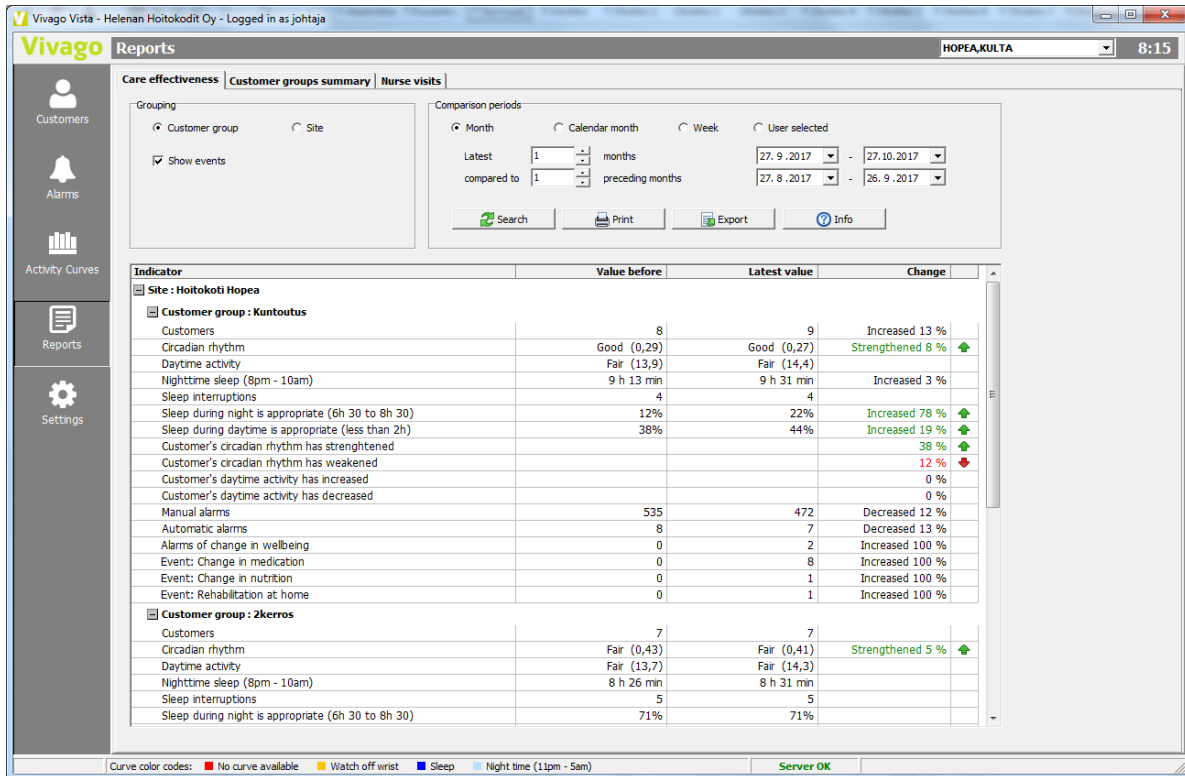
Note that you can later on view acknowledged alarms in the floor plan: click any alarm on the bottom alarm list on the floor plans view to show the alarm location on the floor plan.

The system administrator has predefined the floor plans. You need an administrator user account with the right to make setting changes to edit the floor plans. See the Technical guide for more details.



# Reports

The Reports view is visible if your Vista has the **NOTIO Report module** installed. Also, you need to login to Vista with a user account that has the right to view reports.



The Reports view has three tabs:

- **Care effectiveness** report for can be used to monitor whether changes in care processes have effect on customers' wellbeing indicators
- **Customer groups summary** is a view of alarms, nurse visits and other information related to the operation of each customer group. This report can be used in aid for planning resource use.
- **Nurse visits** report can be used to review details on customers' nurse visits, for example to assess the workload of nurses

At the top right corner of the view, it is possible to select a period of time for a report, for example, to see nurse visits of the last three months. When viewing the care effectiveness report you select the reference periods, i.e., the "before" and "after" periods. For example, you can compare your customers' June wellbeing with July's wellbeing. Comparisons can also be made on a daily or even yearly basis.

At the top left corner of the view, you can select the grouping of the report: reports can be viewed either for each customer group or for the entire site's customers at once.

Once you have defined the report period at the top of the screen, click the **Search button** to view the report.

## Care effectiveness

The care effectiveness report gives an idea of customers' condition, by comparing, for example, their circadian rhythm, daytime activity, sleep amount and sleep quality.

In addition, sleep amount is analysed to show by how many customers sleep an appropriate amount during the night and day.

The wellbeing indicators for the “before” reference period are displayed in the table's **Value before** value column, and the values for the latter “after” period are displayed in the **Latest value** column. The **change** column indicates the magnitude of the change in the wellbeing indicator. Improvements in wellbeing numbers are highlighted with green text and green arrows, while weakening is highlighted with red text and red arrow.

| Indicator  | Value before | Latest value | Change           |   |
|--|--------------|--------------|------------------|---|
| <b>Site : Hoitokoti Hopea</b>                      |              |              |                  |   |
| <b>Customer group : Kuntoutus</b>                  |              |              |                  |   |
| Customers  | 8            | 9            | Increased 13 %   |   |
| Circadian rhythm                                   | Good (0,29)  | Good (0,27)  | Strengthened 8 % | ⬆ |
| Daytime activity                                   | Fair (13,9)  | Fair (14,4)  |                  |   |
| Nighttime sleep (8pm - 10am)                       | 9 h 13 min   | 9 h 31 min   | Increased 3 %    |   |
| Sleep interruptions                                | 4            | 4            |                  |   |
| Sleep during night is appropriate (6h 30 to 8h 30) | 12%          | 22%          | Increased 78 %   | ⬆ |
| Sleep during daytime is appropriate (less than 2h) | 38%          | 44%          | Increased 19 %   | ⬆ |
| Customer's circadian rhythm has strengthened       |              |              | 38 %             | ⬆ |
| Customer's circadian rhythm has weakened           |              |              | 12 %             | ⬇ |
| Customer's daytime activity has increased          |              |              | 0 %              |   |
| Customer's daytime activity has decreased          |              |              | 0 %              |   |
| Manual alarms                                      | 535          | 472          | Decreased 12 %   |   |
| Automatic alarms                                   | 8            | 7            | Decreased 13 %   |   |
| Alarms of change in wellbeing                      | 0            | 2            | Increased 100 %  |   |
| Event: Change in medication                        | 0            | 8            | Increased 100 %  |   |
| Event: Change in nutrition                         | 0            | 1            | Increased 100 %  |   |
| Event: Rehabilitation at home                      | 0            | 1            | Increased 100 %  |   |

In order to monitor the effectiveness of care, the report shows how many customers' circadian rhythm has improved or weakened between the reference periods. The same is displayed for daytime activity.

The report shows the number of wellbeing alarms and the number of alarms indicating long-term changes in wellbeing over the reference periods.

The report makes it possible to keep track of **events** registered to customers, for example, whether the medication changes have been made more than before or whether the number of falls has reduced.

## Customer groups summary

The Customer groups summary report is designed as a management tool to support resource planning.

The report contains statistics for the number of customers, usage percentages of watches, number of alarms, acknowledgment delays, numbers of nurse visits and visit durations, and panic alarms in a customer group or site.

## Nurse visits

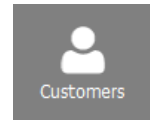
The Nurse visits report can be used to view the number, duration, and types of nurse visits at the site or customer group level, for example, to assess the workload of nurses. The report lists the total number of visits, how many visits have been made to the customer, how many have been added separately manually, how many of the visits are to be invoiced, and how many times the customer needed extra support personnel.

The report can also be used to track the reasons for the nurse visits, for example, how many visits have been made to distribute medications or for customer's outings.

| Visit type                      |  |           |        |              | Amount  |              |              |          |           |      |              |       |
|---------------------------------|--|-----------|--------|--------------|---------|--------------|--------------|----------|-----------|------|--------------|-------|
| [-] Site : Hoitokoti Hopea      |  |           |        |              |         |              |              |          |           |      |              |       |
| [-] Customer group : 1kerros    |  |           |        |              |         |              |              |          |           |      |              |       |
| Customers                       |  |           |        |              |         |              |              |          | 10        |      |              |       |
| Total all visits                |  |           |        |              |         |              |              |          | 430       |      |              |       |
| Total nurse visits              |  |           |        |              |         |              |              |          | 412       |      |              |       |
| Total other visits              |  |           |        |              |         |              |              |          | 18        |      |              |       |
| Total visits to be invoiced     |  |           |        |              |         |              |              |          | 17        |      |              |       |
| Total extra help present visits |  |           |        |              |         |              |              |          | 21        |      |              |       |
| Nurse visit: Assistance         |  |           |        |              |         |              |              |          | 6         |      |              |       |
| Nurse visit: Medication given   |  |           |        |              |         |              |              |          | 10        |      |              |       |
| Nurse visit: Hygiene care       |  |           |        |              |         |              |              |          | 1         |      |              |       |
| Nurse visit: Visit outside      |  |           |        |              |         |              |              |          | 1         |      |              |       |
|                                 |  |           |        |              |         |              |              |          |           |      |              |       |
| Customer group                  |  | customers | alarms | alarms / day | delay   | nurse visits | visits / day | duration | duration  | help | panic alarms | Usage |
| [-] Site : Hoitokoti Hopea      |  |           |        |              |         |              |              |          |           |      |              |       |
| 1kerros                         |  | 10        | 1426   | 15,7         | 158 min | 430          | 4,7          | 24 min   | 9437 min  | 31   |              | 97 %  |
| 2kerros                         |  | 7         | 1732   | 19,0         | 366 min | 533          | 5,9          | 16 min   | 8344 min  | 44   |              | 98 %  |
| [-] Site : Hoitokoti Kulta      |  |           |        |              |         |              |              |          |           |      |              |       |
| Kuntoutus                       |  | 9         | 1421   | 15,6         | 74 min  | 476          | 5,2          | 28 min   | 12246 min | 51   |              | 97 %  |

# Customer personal settings

In addition to the customer card fields, each customer has alarm-related technical settings. These can be displayed by clicking on the Settings tab below the customer card. Use the “Show” dropdown menu to select which settings page to view. After making changes remember to click the Apply button on the customer card to save them.

The screenshot shows the 'Technical settings' page for a customer. At the top, there are tabs: 'Additional information for customer', 'Real time curves', 'Wellbeing', 'Latest alarms', and 'Settings' (which is active). Below the tabs is a 'Show:' dropdown menu set to 'Technical settings'. The main content area is divided into two columns. The left column is titled 'Alarm delays' and contains four settings: 'Out of range' (15 mins), 'Watch off wrist' (90 mins), 'Deterioration alarm' (Normal), and 'Manual alarm block time' (90 seconds). Below this is an 'Options' section with a checked checkbox 'Activity curve is collected from the customer'. The right column is titled 'Transfer' and contains three settings: 'Room phone number' (empty), 'Own recipients' (<Num1>), and 'Timetable' (<No>). Below these are 'Modify' and 'Test' buttons. At the bottom of the right column is a checked checkbox 'Enable voice connection in alarm messages'.

## Technical settings

The following settings are for customers using a watch or an Add-On/FIDO unit. Settings for Device Interfaces and LOCATE tracker are described in a separate chapter below.

### Out of range

Sets the delay for “Watch out of range”: how fast the notification is given after the user leaves the range of base stations.

### Watch off wrist /Add-On not in use

Sets the delay for “Watch off wrist”: how fast the notification is given after the user removes his/her watch from wrist.

If the customer is using the Add-On button, this settings (and notification) is called “Add-On not in use”.

### Deterioration alarm

This field selects the sensitivity of the Deterioration alarm for the customer. Possible selections are Fast, Normal, Slow and Slowest. This field/alarm is not available for Add-On.

### Manual alarm block time

With this setting you can select the block time for manual alarms. For example, if “1 minute” is selected, when the customer signals a manual alarm, any new manual alarms re-occurring within one minute, will be prevented from being displayed. Increasing the manual alarm block time is a good method of reducing the amount of unnecessary alarms.

### Activity curve is collected from the customer

This field defines whether the customer’s activity curve info is collected in real-time. Curve collection is on by default and should not be turned off. You should only disable it if you absolutely wish to protect the customer’s privacy. Please note that if you wish to use so-called Curve alarms with the customer, activity curve collection must be enabled for the

customer. If this field is not checked, you cannot see the customer's activity curve in real-time, nor can you analyze it later on.

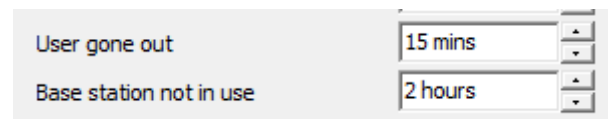
### No wandering detection during daytime

With the help of this field, it is possible to prevent the customer's Wandering detection alarms during daytime. By checking the field, the customer's Wandering detection alarms will not become visible during the daytime hours defined for the institution (e.g. between 10am and 6pm). Institution daytime can be defined on Institutional system alarm profiling settings page. Also see the chapter "Allowed wandering detection base stations" below for more advanced wandering detection settings.

### User gone out

This setting defines the delay for the "User gone out" alarm.

The User gone out alarm is parallel to the Out of range alarm, except that User gone out can be set to trigger faster. To use the User gone out information the customer's door needs to be equipped with a Device interface to detect the door opening. Create a customer card for the Device Interface and set its D connector to "Door magnet". Then select the Device Interface as a Wireless peripheral for the customer in her Settings / Additional devices page. After this, if the customer opens the door and leaves the coverage of her home base station, the User gone out alarm will be triggered after the set delay. When she returns the User come home alarm is triggered.



|                         |         |
|-------------------------|---------|
| User gone out           | 15 mins |
| Base station not in use | 2 hours |

### Base station / phone not in use

This setting is only available for home customers. It defines how fast the "Base station not in use" alarm should be triggered if the customer's home base station has not contacted Vista; or how fast the "MOVE phone not in use" alarm should be triggered if the MOVE phone of the customer has not contacted Vista.

## Alarm transfer settings

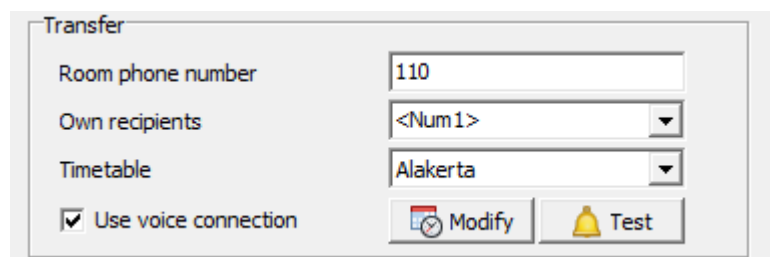
### Room phone number /Domi phone number

This field defines a customer's personal room phone number. If Vista is connected to a Vivago compatible phone system in the institutional system, allowing voice connections, the Room phone number field is utilized when establishing a voice connection. This field shows the phone number to which Vista will establish a voice connection.

If the customer has a home base station this field is called "**Domi phone number**" and you enter the phone number of the SIM inside the home base station. This number can be used when e.g. making a call-back to the unit to establish a voice connection.

### Own recipients

This field designates the alarm recipient for the customer's alarms, if transfer is active and not controlled by a transfer timetable with its own recipients. The field has several options to choose from: "No transfer" (the customer's alarms will not be transferred at all, regardless of the active transfer settings), one of twenty default transfer system specific numbers, a combination of them, or customer-specific number(s).



|  |              |
|--|--------------|
| Transfer   |              |
| Room phone number  | 110          |
| Own recipients   | <Num 1>      |
| Timetable  | Alakerta     |
| <input checked="" type="checkbox"/> Use voice connection | Modify  Test |

Default numbers are described with the text "<Num n>" (n = 1-20). Default numbers refer to the numbers that are designated as an active transferring system's phone numbers. If for example the selected active system is "Voice message" and the system's "Recipient Num 1" phone number is 1234, it can be selected for the customer by selecting "<Num 1>" in the "Own recipient" field. The default numbers may also be combined by separating them with a comma –

e.g. by typing "Num1, Num2, Num3" in the field: this means that Vista will first try to transfer the alarm to the default number Num1, and if that transfer fails, will try Num2 and so on.

In addition to the twenty default numbers the customer can be assigned a personal, freely selected, transferring number. A freely selected number can be entered by simply typing a number into the field – or type multiple numbers separated by commas.

About timetables and recipients: If a transfer timetable (with recipients defined) has been selected for all customers or for this specific customer, the customer's Own recipients field will not be taken into account. The recipients defined in the transfer timetable will be used instead. However, if some of the timetable's rows do not have recipients defined (i.e. the field is empty), the customer's Own recipient field will be used.

### Own timetable

If you wish to use a personal transfer system timetable for the customer, you may select one in this field. You can select any transfer timetable defined on the Alarm transfer settings screen – (or you can define a new one by clicking the Modify button if you have logged in with an administrator user account). This personal selection overrides the system's current active transfer system, and the transfer timetable (if defined). Please see "Alarm transferring" for more information.

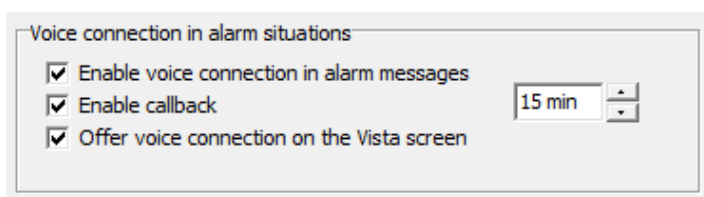
Note that you may define a completely personal timetable with personal transfer systems and personal recipients – OR you may define a timetable that is shared by several customers and define the customers' recipients in the Own recipient's field. In the latter case just leave the Recipients fields in the timetable empty.

### Enable voice connection in alarm messages

Select this field if you wish to be able to open a voice connection to the customer in an alarm situation when the alarm is transferred. Depending on the transfer system the voice connection may either open automatically or for example in the case of SMS the alarm recipient may choose whether she wishes to open the connection.

### Enable callback

This setting is only available for home customers using the Domi base station. If you select this field Vista will always enable the home base station to auto-answer incoming phone calls when an alarm has been received. Set the number of minutes the call-back option is available. You may place multiple call-backs during this time.



### Offer voice connection on the Vista screen

This setting is only available for home customers using the Domi base station. If you select this field you can open voice connection in the Vista Alarm processing window. See more instructions in the chapter "Processing alarms: Voice connection to home".

## Customer's MOBILE accounts

In this section you can define personal user accounts to access the customer's details via the Vivago MOBILE application.

Add a new account by clicking the Add button. Enter an account name and password and select the account type: the MOBILE view displays different things depending on the account type:

- **Relatives account:** the view is for a relative and focuses on the customer's wellbeing
- **End user account:** the view is for the end user and focuses on the customer's wellbeing
- **Classic relatives account:** the view is for a relative and in addition to wellbeing displays customer's alarms, activity curves and notes

If you wish for the relatives to receive alarm notifications from Vista and handle the alarms instead of the site's personnel, select the "In alarm use" field. Also you can set a certain time during which the account should receive alarms; e.g. set it to 09:00 – 17:00 to only receive alarms during the office hours. If the account should receive alarms 24h a day, select 00:00 – 00:00 as the time. Note however that if the "In alarm use" field is selected for any relative account, the personnel of the site will no longer receive alarm notifications at any time of the day. So you can either select to relay the alarms to personnel or relatives but not both.

If you wish to allow the account user to change her password in the MOBILE app, select the field for the account.

The server address of this Vista server is shown on the screen. Give the address to the relative or end user: it should be entered in the Vivago MOBILE app's settings.

Customer's MOBILE accounts

219

User name: seppikuusis

Password: \*\*\*\*\*

Account type: Classic relatives account

☒ In alarm use: 00:00 - 00:00

☒ Allow changing the password in MOBILE app

Last login: -

Enter server address in MOBILE app settings: test2.vivago.com

OK

# Settings for Device Interfaces

## Manual alarm block time

With this setting, you can select the block time for manual alarms. For example, if “1 minute” is selected, when the customer signals a manual alarm, any new manual alarms re-occurring within one minute, will be prevented from being displayed. Increasing the manual alarm block time is a good method of reducing the amount of unnecessary alarms.

The use of the alarm button on the Device Interface is affected by setting. Also the connectors that are defined for “Alarm button” or “Emergency call” use in the customer card are affected.

## Connector usage

Use this section to define the function (usage) for the Device Interface’s Connector A and connector D. Also define the correct type for the Device Interface’s connectors: either closing (NO) or opening (NC). If you select e.g. closing for Connector A, Vista will block the Connector A open alarm type but generate the Connector A closed type. This way the unnecessary signals are blocked.

If a connector is defined for alarm button use (or emergency call use), the manual alarm block time is in effect. Also, you may use the connector for the Watch acknowledgment feature to acknowledge customer alarms.

If a connector is defined for door monitoring use the above features cannot be used but the connector’s signal can be blocked during daytime (or another time); see below.

You can choose from predefined alarm types for each connector and also rename each alarm signal if you wish. Also, you can rename the common alarm types such as “Connector A closed” to match their real use.

The emergency call alarm type can have its own transfer timetable for acute situations.

Note: If you are using the magnetic connector on the side of a Device Interface to detect a door opening, define the D connector as such and rename it if needed.

Using the **Device in Nurse present use** field you can define that the device is mainly used for Nurse present / Nurse departed functionality. When this field is checked, Vista will know to place the device as the Additional devices / Device for Nurse present use slot when automatically assigning additional room devices to a customer when she is moved to a new room.

## No door monitoring during daytime

By checking this field, it is possible to prevent door monitoring; i.e. the Door opened alarms during the daytime; e.g. from 7 am to 9 pm. The institution daytime is defined in the Alarm settings page; see Vista Technical guide. This field affects the Device Interface connectors that have been defined for “Door opened” use.

## No door monitoring during XX:XX – XX:XX

This is an extra option to block door monitoring during another time in addition to institution daytime.

Connector usage

**A** Toilet alarm Closing (NO)  
Toilet alarm

**D/ magn** Door opened Opening (NC)  
Door opened

**Button** Device Interface manual alarm  
Device Interface manual alarm

☐ Unit in Nurse present use

Options

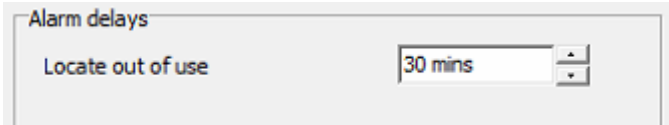
☒ No door monitoring during daytime

☐ No door monitoring during:  
07:00 - 21:00

# Settings for LOCATE

## Locate out of use

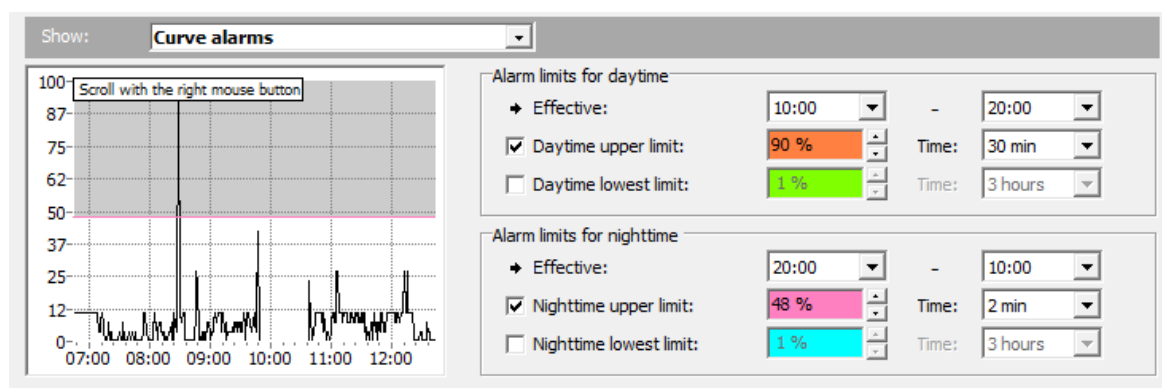
This setting defines how fast the “Locate out of use” alarm should be triggered if the LOCATE tracker device has not contacted Vista for a while.



## Curve alarms

If a customer uses a watch and activity curve is collected for him/her, you can enable so-called Curve alarms for him/her.

Personal alarm limits can be set in the customer card's Curve alarms setting page. The alarm is set off when the activity curve raises or drops for a certain period of time under or over a certain limit; separate definitions of limits and times can be made for daytime and night time. The curve alarms can be used alongside or instead of the Deterioration alarm and Passivity notification.



## Setting the alarm limits

You can set four alarm limits on the Curve alarm settings page: upper and lower limits for both day and night. Daytime is by default set to 10am-8pm, night-time between 8pm-10am, but you can change these individually for each customer. You can separately turn on the limits you want by checking the boxes next to them. You can select your own limit value for each limit (percentage of the curve height) as well as the alarm time. The alarm time describes how long the curve height should be above or below the set limit before the alarm is sounded. There are several periods of different lengths to choose from, ranging from 1 minute to 14 hours.

Example: by setting the lower limit for the day to be “2%, 2 hours”, Vista will display a “Low activity” notification if the customer’s activity curve drops below two per cent (from the maximum height of the curve screen) for at least two hours.

Please note that a new “Low activity” notification will not be displayed if the curve remains below the two per cent limit. In order for a new notification to be given, the height of the curve must rise at least temporarily OVER that limit, and drop beneath it again for two hours. Respectively, Vista’s “High activity” notification also requires the curve to drop BELOW the alarm limit before sounding a new upper limit alarm.

The screen for the curve alarms displays approximately the last six hours of the customer’s activity curve, thus making it easier to set limits. As said earlier, this curve is unsoftened. Abrupt changes in activity will quickly show in an unsoftened curve, which is why alarms can be sounded quickly.



Each alarm limit on the curve screen is displayed in its own color on the activity screen. You can change the limits directly on the curve screen by dragging them with the mouse. You can utilize the curve's history information to help you set the limits.

Other points to note about Curve alarms:

- If the customer's activity curve breaks, the Curve alarm monitoring starts from the beginning. This can happen, e.g., when the customer leaves the area covered by base stations. If the curve counts down to "zero" and breaks, the "Low activity" alarm will not be sounded.
- If you change the settings of the customer's Curve alarms, the monitoring begins anew.

## Long-term alarms

Vista offers long-term activity data analyses for customers' activity data recorded using the Vivago watches. Each customer may be set his/her personal long-term analysis options. Using these options, Vista constantly analyses the customer's activity data in order to detect abnormal situations, and to generate alarms accordingly. For each customer, different sensitivities may be selected for the analysis for generating the alarms.

The long-term alarms can be used alongside the Deterioration alarm, Passivity notification and the short-term curve alarms. The main purpose of the long-term alarms is to notify of long-term deteriorating changes in the customer state. They do not necessarily notify of an acute situation in the customer's wellbeing, but rather that the customer's condition should be checked more carefully. This can be done for example by reviewing the customer's activity curve in the Curve analysis view.

The analyses are based on two parameters calculated for each day of a customer's activity:

- The daytime activity level mean: daytime is the period from 8am to 8pm. The lower the value, the weaker it is considered.
- The circadian rhythm: i.e. the night-time (11pm to 5am) activity level mean divided by the daytime activity level mean. The higher the value, the weaker the rhythm.

There are three types of automatic analyses – or alarm algorithms - for both parameters. Two of these are trend analyses, which detect fast or slow changes in the trends of the parameters. The third algorithm is a threshold alarm.

### Trend analyses

These analyses require at least 14 of days of data before detecting trends. Up to 100 latest days are analysed as data becomes available.

#### Fast change

This analysis compares the latest three days to the historical data. If at least two of the latest three days show an abnormal parameter value (such as an abnormal daytime activity) as compared to the customer's history, an alarm is generated. The algorithm compares the most recent values to the level and variation of the historical data by using two statistical methods: Rosner- and t- tests.

The sensitivity of the analysis may be adjusted personally for each customer: as the sensitivity is decreased, the detected abnormal change needs to be more significant to generate an alarm.

Example of fast change: the latest two days of a customer show a much lower (or "weaker") daytime activity level mean value than what is typical for the customer, as analysed from his/her history data.

#### Slow change

This analysis calculates the trend of the data values during the latest 30 days. If the analysis shows a statistically significant deteriorating trend in the values, an alarm is generated. The sensitivity may be adjusted: a more/less significant trend may be required for the alarm. The trend is calculated by using a linear regression model and the alarm decision is made with a statistical F- test.

Example of slow change: the circadian rhythm values of the latest 30 days show a notable increasing trend.

## Alarm Threshold

There is also a threshold alarm algorithm available: each parameter may be compared against a set fixed threshold, not taking into account the historical trend or statistics of the parameter.

Each parameter may be selected:

- The maximum/minimum allowed value the parameter
- The number of days the parameter must remain above/below this value, before an alarm is generated; this is called the delay

Example for alarm threshold: a customer may be selected a maximum value of 1.0 for his/her circadian rhythm, and a delay of three days. If the circadian rhythm parameter has stayed above the value of 1.0 for the latest three days, an alarm is generated.

## The alarm settings

Use the checkboxes on the left to select which long-term alarms you wish to enable. Fast and slow change alarms are enabled by default while the threshold alarms are disabled.

Show: **Long-term alarms**

**Circadian rhythm weak**

- ☒ Fast change alarm (Normal)
- ☒ Slow change alarm (Normal)
- Discard alarms below level: 0,80
- ☐ Threshold alarm (Level: 1,00)
- Must remain above level for 3 days

**Daytime activity low**

- ☒ Fast change alarm (Normal)
- ☒ Slow change alarm (Unresponsive)
- Discard alarms above level: 4
- ☐ Threshold alarm (Level: 3)
- Must remain below level for 3 days

- Fast change: at least 2 out of 3 last days show a decreasing trend, compared to last 30 or 100 days.  
- Slow change: last 30 days show a clear decreasing trend.  
- Threshold: you can manually set an alarm limit (non-trend); e.g. to generate an alarm if circadian rhythm exceeds 1.0 for 3 consecutive days.

You can select the fast and slow trend change alarm sensitivities. There are three sensitivity levels for each. Also, there is a "safety level" setting for the trend alarms: use it to discard alarms that are generated for days that show a deteriorating trend but are still actually above a certain level. Because the trend alarms detect deteriorating trends, if the initial level for a signal is good, a deteriorating trend may be detected even if the end level is still OK. For example, to tell the analysis that a circadian rhythm level of 0.8 can always be considered "good enough" for this customer, input 0.8 there. Days with circadian rhythm below that will not generate an alarm. The same goes for daytime activity mean, except that you select the level ABOVE which alarms are not generated.

The threshold alarms should be used when the customer's circadian rhythm or daytime activity is usually within known limits. They also useful for customers that need to be monitored with special care. You can use the activity curves view to check the customer's usual values for them.

# Alarm block table

Each customer has his/her own alarm-blocking table. The table can be displayed by clicking on the Settings tab below the customer card, and then selecting the **Alarm block table** page.

Non-accepted alarm types can be defined for each customer individually in the alarm-blocking table. In other words, certain alarms can be totally disabled for certain customers; when the alarm in question is received from the customer, it is not displayed. All checked alarm types in the table are blocked for the selected customer.

Show: **Alarm block table**

|  |   |
|--|---|
| <input type="checkbox"/> 01: Manual alarm                      | <input type="checkbox"/> 57: Nurse present                |
| <input checked="" type="checkbox"/> 02: Passivity notification | <input type="checkbox"/> 60: WristCare red. battery empty |
| <input type="checkbox"/> 03: Deterioration alarm               | <input type="checkbox"/> 61: WristCare battery full       |
| <input type="checkbox"/> 04: WristCare off wrist               | <input type="checkbox"/> 62: WristCare charging           |
| <input type="checkbox"/> 21: Access control alarm              | <input type="checkbox"/> 67: Circadian rhythm weak        |
| <input type="checkbox"/> 22: WristCare back in range           | <input type="checkbox"/> 68: Daytime activity low         |
| <input type="checkbox"/> 23: WristCare back on wrist           | <input type="checkbox"/> 69: Test alarm                   |
| <input type="checkbox"/> 24: WristCare out of range            |   |
| <input type="checkbox"/> 37: WristCare malfunction             |   |
| <input checked="" type="checkbox"/> 41: Hypothermia alarm      |   |
| <input type="checkbox"/> 48: WristCare loose                   |   |
| <input type="checkbox"/> 49: WristCare connection failure      |   |
| <input type="checkbox"/> 51: High activity                     |   |
| <input type="checkbox"/> 52: Low activity                      |   |

The alarms marked up on the adjacent list are blocked. If such an alarm is received from the customer, it will not be displayed at all. You are free to choose which alarms you block for each customer.

**Block all**

**Allow all**

## Additional Devices

On this page, you can associate Device Interfaces and a Room station (or a home base station) as Additional devices for a customer. You can either manually click the plus button to add a device or they can be associated automatically: if you have entered the same room number for the Device interfaces and the Room station installed in the customer's room as for the customer herself Vista will automatically offer to associate those units for the customer when you add her as a new customer or when you change her room number later on.

### Wireless peripherals

You can associate three personal additional wireless Device Interface units. The units must be already defined in Vista. When an alarm is made from such a personal unit the alarm will be shown as originating from the customer herself, not the Device interface "customer". Still, if a technical alarm such as a battery notification is received from the Device interface it will be shown as originating from the unit itself.

Show: **Technical settings**

**Wireless peripherals**

Door (28511) [minus]

<Not selected> [plus]

<Not selected> [plus]

**Room station**

Room (40277) [minus] **Settings..**

☐ Room station door monitoring disabled during daytime

**Unit for Nurse present**

<Not selected> [plus]

**Voice connection device**

<Not selected> [minus]

### Unit for Nurse present

In this field you can associate a predefined Device Interface as the customer's personal "Nurse present" Device Interface unit. The "Nurse present" unit may be used for acknowledging the customer's alarms as well as informing other nurses that an alarm from the customer is already being handled. Also, the time spent visiting the customer can be recorded. Please see the chapter "Nurse present" for more detailed information.

## Room station

If the customer has a Room POINT base station ("Room station") installed in her room, select it in this field. The Room station must have been already entered in the Vista Base stations list.

You can change the Room station's settings by clicking the Settings.. button (only visible if you have logged in with an administrator account that has the right to change technical settings). When the room stations settings have been changed or when the customer's wireless peripherals have been changed Vista will display the text "Sending commands to station" on the screen until it has programmed the new settings to the Room station. When the text disappears the Room station has taken the new settings into use.

If door monitoring has been connected to the Room station but you wish to allow passage through the door during daytime, check the corresponding field on the Room station box.

## Home base station

If the customer has a Domi POINT home base station, it will be visible in this field. The Domi POINT function the same as the Room station; see the above chapter.

## Voice connection device

If you wish to use the same room station as a voice connection device for multiple customers, select it in this field. Vista will open the voice connection to the room station in case of an alarm.

# Allowed wandering detection base stations

If a customer is wearing a wandering detection watch or Add-On, usually a Wandering detection alarm is shown each time s/he passes by a wandering detection base station. However, it is possible to define that during specific times of day, some base stations should not raise an alarm for the customer. This way you can e.g. allow a customer to use certain doors during the institution daytime, but disallow them during the night-time. You can build zones in which certain customers can move while others cannot.

There is a table available for controlling the behaviour of wandering detection base station, individually for each customer. The customer's table can be displayed by clicking on the Settings tab below the customer card, and then selecting the **Allowed wandering detection base stations** page.

| Unit number | Name    | Area | Allow during day                    | Allow during night                  | Also allowed |
|-------------|---------|------|-------------------------------------|-------------------------------------|--------------|
| 5705        | Base 13 | 5    | <input type="checkbox"/>            | <input type="checkbox"/>            | ...          |
| 5706        | Base 14 | 0    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | ...          |
| 5707        | Base 15 | 0    | <input type="checkbox"/>            | <input type="checkbox"/>            | ...          |
| 5708        | Base 16 | 0    | <input type="checkbox"/>            | <input type="checkbox"/>            | 11:00-12:00  |
| 5709        | Base 17 | 9    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | ...          |
| 5710        | Base 18 | 0    | <input type="checkbox"/>            | <input type="checkbox"/>            | ...          |

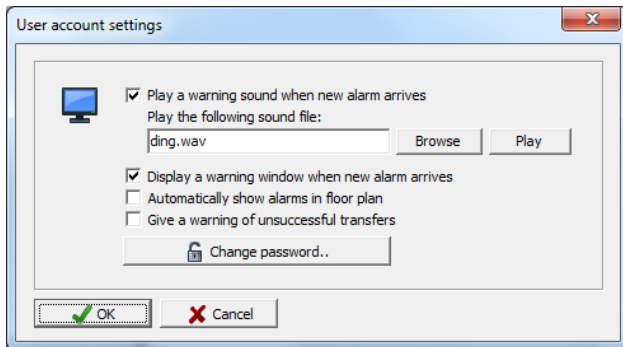
There are separate columns to allow a customer to pass by a certain base station during day and during night. Or, you can even define special times such as lunch that certain base station areas are allowed: click the "Also allowed" field of a base station's row in the table and enter free-form list of allowed times.

If a Wandering detection base station has been connected to control an electrical lock of a door next to it, Vista can command the base station to open the door if a customer has the right to pass by that base station. If she has no right, the door is kept locked. These base stations capable of controlling a locked door are marked as "Locking" type in the Vista base station list.

If a watch of a certain customer card is defined for personnel use, that watch can be used for escorting a non-allowed customer through a locked door. Vista will open the lock and not display the Wandering detection alarm for the customer when accompanied by the member of the personnel. You must define the base stations ("doors") the member of personnel is allowed to use and escort customers through in the customer card defined for personnel use.

# User account settings

You can change the account settings of your user account by clicking the Settings icon on the grey sidebar. If you have an administrator account that has the right to change settings of the system, the icon will take you to system settings instead; choose your account name on the Site settings tab and click View options to the change these settings.



## Change password

In user account settings, you can change your password by clicking the Change password button.

In addition, you change the way you are notified of new alarms:

### Play a warning sound when new alarm arrives

This defines whether a beeping warning sound is emitted with the alarm. If the notification window (see below) is turned off, the sound notification will only be emitted once. However, if the window is in use, the beeping sound will repeat itself with the blinking of the notification window.

### Play the following sound file

In this field you can assign a notification sound which will be played upon an alarm situation. You can select any sound file with a duration of under one second.

### Display a warning window when new alarm arrives

This defines whether or not a blinking notification window is displayed. A received alarm can be selected for handling directly from the notification window.

### Automatically show alarms in floor plan

This option is visible if your Vista has the **MAP Floor plans module** installed. Use this option to select whether Vista should automatically switch to show the corresponding floor plan in case of an alarm.

### Give a warning of unsuccessful transfers

This defines whether Vista should show the blue error message dialog "The transfer of one or several alarms has failed".

# Technical specifications

Supported operating systems: Microsoft Windows 7 Professional/Ultimate, Windows 8/8.1 Pro/Enterprise, Windows 10 Pro/Enterprise, Windows Vista Business/Ultimate (SP1 or later), Windows Server 2003, Server 2008 R2, 2012 or 2012 R2, Server 2016; both 32-bit and 64-bit operating system versions are allowed.

## Customer support and manufacturer's information

### **Manufacturer**

Vivago Ltd  
Itsehallintokuja 6  
02600 Espoo, Finland  
[www.vivago.com](http://www.vivago.com) – [www.vivago.fi](http://www.vivago.fi)

### **Customer support**

Email: [support@vivago.com](mailto:support@vivago.com)  
Telephone: +358 10 2190 610

**Vivago®** develops smart safety and wellbeing solutions for preventive care. The innovative solutions cover the whole chain of care from home care to assisted living, care homes, hospitals and rehabilitation.

Vivago's solutions increase the feeling of safety with automatic alarms and by providing wide range of wellbeing information to support daily care and to follow-up the effectiveness of care. Real-time notifications inform about changes in the person's wellbeing and it enables care providers to react proactively and focus on individual care. Wellbeing information can also be shared with relatives.

As a pioneer in health care technology, Vivago already ensures safety for tens of thousands of individuals in Europe. Vivago's unique solutions are patented and have been awarded with several international recognitions. The high-quality products are manufactured in Finland. With the help of Vivago solution, people can get better care and live longer and safer at home. Vivago provides better care and enables remarkable savings in rehabilitation and home care.

**Vivago – Right care, at the right time, in the right place**

# Vivago



**Vivago Oy**

Itsehallintokuja 6, FI-02600 Espoo, Finland

Tel. +358 10 2190 610

[info@vivago.com](mailto:info@vivago.com)

[www.vivago.com](http://www.vivago.com)

# Vivago



## Vivago Vista 7

Version 7.3

User Manual/ Technical Guide AEN0001-08 (2020-03-25)



# Contents

|  |           |
|--|-----------|
| <b>THE SETTINGS VIEW .....</b>                     | <b>50</b> |
| <b>SITE SETTINGS .....</b>                         | <b>51</b> |
| Basic settings .....                               | 51        |
| User accounts .....                                | 52        |
| <b>ALARM SETTINGS .....</b>                        | <b>54</b> |
| <b>ALARM TYPES .....</b>                           | <b>59</b> |
| Alarm types list .....                             | 59        |
| List of alarm types by device .....                | 60        |
| <b>ALARM TRANSFERRING .....</b>                    | <b>61</b> |
| Common .....                                       | 61        |
| Transfer settings .....                            | 62        |
| Simulating transfer and Creating test alarms ..... | 63        |
| Transfer systems .....                             | 63        |
| Transfer timetables .....                          | 65        |
| <b>BASE STATIONS .....</b>                         | <b>67</b> |
| Institutional base station list .....              | 67        |
| Home base station list .....                       | 68        |
| Room station settings .....                        | 69        |
| Additional setting for GSM base stations .....     | 69        |
| Common base station settings .....                 | 70        |
| Home base station settings .....                   | 71        |
| <b>CONNECTED DEVICES .....</b>                     | <b>71</b> |
| <b>MAINTENANCE .....</b>                           | <b>73</b> |
| <b>SYSTEM .....</b>                                | <b>73</b> |
| Server settings .....                              | 73        |
| <b>PROTECTION AND MODULES .....</b>                | <b>75</b> |
| Copy protection .....                              | 75        |
| Vista's licences .....                             | 75        |
| <b>EDITING FLOOR PLANS .....</b>                   | <b>76</b> |
| <b>ERROR SITUATIONS .....</b>                      | <b>77</b> |

# Introduction

## Intended use

Vivago Vista is intended for monitoring, storing and analysing the data from the acceleration device to aid for the diagnosis of sleep disorders and to help in adjusting treatment plan if user has been diagnosed with a sleep disorder.





As an addition, Vivago Vista is intended for storage and analysis of physical movement and physical function related to Residence Assessment Instrument (RAI), to aid healthcare professionals in review, analysis and evaluation of body activity, sleep parameters and circadian rhythm.

The analysis is intended to notify and alarm relevant changes in user's activity, sleep, circadian rhythm and health status. Changes in medication, which have effect to body activity, sleep and circadian rhythm, can be reviewed, analysed and evaluated from measurement data and notifications.

Vivago Vista is also intended to transfer manual alarms from alarming devices to nursing staff to call for help. In addition, Vivago Vista sends automatic alarm, if user is not following normal movement patterns for prolonged period. The automatic alarms are generated by Vivago's unique adaptive algorithms. The analysis can send automatic notification for increased risk of falling, if user's normal circadian rhythm is weakened.

The device is intended to be used by healthcare professional – nurses and doctors.

## Clarification of the symbols

|   |  |   |                                       |
|---|--|---|---------------------------------------|
|  | Consult instructions for use   |  | Caution, consult instructions for use |
|  | CE marking. The product fulfils the MDD requirements for directive 93/42/EEC |  | Manufacturer                          |

## Product and safety information

Vivago Vista is the service software for Vivago systems.

Vivago Vista receives, analyses, and transfers alarms, notifications, activity curves and wellbeing information from Vivago watches and their peripherals. It stores information on customers and devices connected to the system. The user can access this information in a number of different formats: for example, the user can monitor the customers' activity curves, or print various reports.

### Warnings



No alarms are delivered during break in communication



The system might underestimate the Apnea-Hypopnea Index (AHI)

# The Settings view

All of Vista's settings are gathered into one single view. You can access the Settings view by clicking on its icon in Vista's gray sidebar. You must be logged into Vista with an administrator account that has the right to change system settings.

On Vista setting screens, the settings are changed directly to the page, and then finalized by clicking on the Apply button at the bottom of the screen. The settings will only become effective once you have clicked on the Apply button.

Different settings have their own dedicated screens in the Settings view. The setting screens are listed in the box on the upper left side of the view. By clicking in the box, you can switch between the different screens.



## Setting screens

The Vista setting screens are:

- **Site:** Basic site information such as name of the site, Vista's language and installed licences. Also allows you to set up customer groups and Vista user accounts.
- **Alarm settings:** Alarm related settings
- **Alarm types:** Alarm types installed in Vista, and their colors, transfer timetables, MOBILE and corridor display settings
- **Transfer:** Alarm transferring settings, such as alarm transfer protocols and their routing timetables
- **Base stations:** Connected base stations information
- **Connected devices:** The Vista computer hardware, i.e. information about serial ports and devices connected to them, as well as modem settings
- **Maintenance:** Screen for monitoring communications, not an actual setting screen
- **System:** Service providers and sites installed on the server. This screen is only visible when logged in with a system administrator account

# Site settings

This setting tab used is used to specify site(s) basic details along with customer groups and Vista client and MOBILE user accounts.

## Basic settings

### Site name

Name of site: shown in Vista's top title bar and in reports and alarm lists.

### Short name

Abbreviation for the site. Used in Customers view to distinguish customer groups of several sites.

### Language

Vista's language for the site. Notice that changing the language has no effect on date or time presentation formats. These formats are obtained directly from Windows' country settings.

### Customer groups

The customer list can be split into groups: you can freely name groups such as Floor 1, Floor 2, Nurses, Device Interfaces, and select for each customer (or device) which group she/he/it belongs to. Use the tabs at the top of the customer list to change between groups.

Use this part of the screen to modify your customer groups. Use the arrow buttons to reorder them if necessary. You can also select a default timetable for new customers in each group.

### Unit types available in the customer card

Use this field to remove unnecessary unit types from the customer card and the New customer dialog. E.g. if your system does not use the Device Interface units you can remove that type from the unit types.

### Own selection lists

Use this dialog to define your own texts for dropdown selection lists used when adding a nurse visit reason or an event type, and when choosing an acknowledgment or actions taken for an alarm.

### Licences

You can display the modules and licenses installed to the site by clicking on the Licences.. button. Please see "Protection and modules" for an explanation on Vista's licences.

## User accounts

Use this part of the screen to add your Vista user accounts.

There are four kinds of accounts, each on their own tab:

- **User account** for logging in to the Vivago Vista Windows **client** application.
- **INFO account** for logging in to the Vivago Vista **INFO corridor** displays
- **MOBILE account** for logging in to the Vivago **MOBILE** application
- **Relatives accounts** for relatives to log in to the Vivago **MOBILE** application

In addition, a fifth tab called **System accounts** will be visible if you have logged into Vista with a **system administrator** account.

Note that each Vista user must be given a personal user account. User accounts cannot be shared.

Note that you can search for accounts using the Search field above the user account lists. By clicking the magnifying glass icon next to the field you can search from all types of accounts at once, and even search from multiple sites.

### Vista client application user accounts

Use the Add button to add a new account. Give a user name and password for the account. Note that the password must be strong: at least 12 characters long and include uppercase and lowercase letters (A-Z) and numbers.

Select a correct account type:

- **Basic account** for accessing customers, alarms, curves etc.; the user has rights to everything expect modifying Vista's settings
- **Administrator account** has all the rights of the basic account and the right to change Vista's settings
- **Multi-site basic account** for basic access to data of multiple sites
- **Multi-site administrator account** has full rights to multiple sites, including changing the sites' settings
- **Service provider administrator account** can access and change settings of all of the sites of the service provider.
- **Service provider technical administrator account** can access and change settings of all of the sites of the service provider but cannot see customer names

Depending on the user account used to log into Vista, some of these types might not be available in the Account type menu.

In addition to selecting the account type, use the User rights box to select extended rights for the account.

In the Allowed customer groups and Allows floor plans boxes, select which customer groups and which floor plans the user account is allowed to see. Note that you can select customer groups from several sites if the user account has the right to access multiple sites.

If you have DOMI home base stations connected to Vista and you wish to make it possible to open a voice connection to home straight from the Vista screen, **enter a phone number for each user account**. Now, when the user has logged into Vista using the account and when an alarm is received from a home base station it is possible to open the voice connection from the Alarm handling screen. Click the Open voice connection button on the screen to order Vista to make the home base station call the phone number associated with the user account. The voice connection is opened automatically when the phone call is answered. See the Vista User guide for more instructions.

## INFO accounts

Use the Add button to add a new account. Give a user name and password for the account. Select which customer groups' alarms the INFO display should show.

If you want to enable alarm notification sounds in the corridor display that uses the INFO account, select the "Enable sounds" field. You can set a certain time during which the sounds are in use, e.g. set it to 07:00 – 21:00 to only enable sounds during the daytime. If you want to have sounds 24h a day, select 00:00 – 00:00 as the time.

## MOBILE accounts

Use the Add button to add a new account. Give a user name and password for the account. Note that the password must be strong: at least 12 characters long and include uppercase and lowercase letters (A-Z) and numbers. Select which customer groups and their alarms the account should be able to see. Note that you can select customer groups from several sites if the user account has the right to access multiple sites.

If the MOBILE account is used in a phone or tablet that has a voice connection available, also enter the phone number of the device. Alternatively, you can define the phone number in the MOBILE app's settings. After adding the phone number, you can request a voice connection to the device when acknowledging an alarm from it. Vista will command the customer's voice device (base station) to call the acknowledging device. The voice connection can be opened by simply answering the incoming call.

| Allow                               | Name           |
|-------------------------------------|----------------|
| <input checked="" type="checkbox"/> | 1kerros        |
| <input type="checkbox"/>            | 2kerros        |
| <input checked="" type="checkbox"/> | Hoitajat       |
| <input checked="" type="checkbox"/> | Laiteliittimet |

If the MOBILE account is used for receiving alarm notifications from Vista, select the “In alarm use” field. Also you can set a certain time during which the account should receive alarms; e.g. set it to 09:00 – 17:00 to only receive alarms during the office hours. If the account should receive alarms 24h a day, select 00:00 – 00:00 as the time.

If you want to disable the possibility for the account to acknowledge alarms unselect the “Allow alarm acknowledgment” field.

If you want to enable the account to create personnel Panic alarms from the MOBILE app, select the “Allow making a Panic alarm” field and using the button next to it define the customer the alarm will be created for. I.e. you need a customer card as a pair for the Panic alarm.

## Relatives accounts

This is a list of all relatives and end user accounts for using the Vivago MOBILE use. Usually you would add these accounts in a customer’s customer card, but they are shown here to help in e.g. searching for the correct account. You can add a new account or change accounts settings here too.

Click the Show logged in users.. button to see a list of Client, INFO and MOBILE accounts currently logged in.

# Alarm settings

## Daytime

Vista can be set to follow the so-called institution daytime. A part of Vista’s alarms can be set to function in a different manner during the day and night. For example, “Out of range” can be suspended for some customers during the night. Furthermore, some of Vista’s alarms function in such a way that alarm situations that have taken place during the night are only reported in the morning when the institution’s daytime begins (e.g. at 8:00 am). For example, if the “Watch off wrist” alarm is suspended for the night and the customer takes the watch off at night, the “Watch off wrist” alarm will only be shown in the morning. See “Alarm settings for unit types” below for more details.

The screenshot displays the 'Alarm settings' interface, which is divided into three main sections:

- General:** Contains settings for daytime (07:00 - 21:00), long-term alarm display (12:30), and checkboxes for 'Generate "Alarm acknowledgment" messages', 'Only for Wandering detection alarm acknowledgments', 'Enable alarm reservation feature', and 'Alarms must be reserved before acknowledging'.
- Home base stations:** Includes a checkbox for 'Offer voice connection on the Vista screen' (45 sec) and a dropdown for 'Base station / phone not in use alarms' (Once per day) with a time setting (12:00).
- Watch acknowledgment:** Features a checked checkbox for 'Care personnel can acknowledge alarms with their watches', a dropdown for 'Change the color of acknowledged alarms' (Green: alarm is acknowledged), a dropdown for 'Acknowledgment is available for..' (10 minutes.. after alarm transfer), a dropdown for 'The carer and the customer must push their buttons within..' (10 seconds of each other), and a checkbox for 'Care personnel emergency call with watch / Add-On' (Two successive button pushes generate an emergency call).

## Show long term alarms at

Vista analyses the customers’ long-term curve information and will generate alarms when it detects abnormal situations. This analysis takes place once a day. Use this setting to select the when the long-term alarms should be analysed and shown in Vista. Also, the Wellbeing information of each customer card will be updated at this moment. You should select a moment of time that suits the customs of the institution best, so that the right person to handle and review the alarms is present.

### **Generate “Alarm acknowledgment” messages**

Use this setting to turn on generation of Alarm acknowledgment notifications when alarms are acknowledged. For example, if Vista sends an alarm to multiple isolated recipients using SMS, you may want to notify the other recipients that the alarm was acknowledged once one of them starts to take care of the issue. You should create an own transfer timetable for Alarm acknowledgment notifications: one that does require the acknowledgments to be acknowledged.

### **Enable alarm reservation feature**

Use this setting to make it possible to reserve alarms from the Vivago MOBILE app or the alarm handling window in Vista. A new “Reserve” button will appear in both, as long as the used user account has the “Enable alarm reservation” field selected in its User rights box in the user accounts list.

If you want to specify that alarm should always first be reserved, select the field “Alarms must be reserved before acknowledging”.

### **Offer voice connection on the Vista screen**

This setting is related to DOMI home base stations. If you wish to offer the possibility to open voice connection to the home base station from the Vista screen; i.e. the Alarm processing screen, select this field and select a suitable time to offer voice connection after a new alarm has been received. See the instructions in Site settings / User account above on how to define the phone numbers the voice connection can be opened to.

### **Show base station/phone not in use alarms**

Select when Vista should check the connection to home base stations and MOVE phones and generate “Base station not in use” / “MOVE Phone not in use” alarms if necessary: once per hour; once per hour but only during daytime; once per day at specific time.

### **Care personnel emergency call with watch / Add-On / FIDO: Two successive button pushes generate an emergency call**

Select this field if you wish to make it possible for care personnel to generate two kinds of alarms with their wireless device: if they press the button once, a Panic alarm is generated; if they press it twice within 8 seconds, an emergency call is generated.

### **Watch acknowledgement**

Watch acknowledgement functionality means that members of care personnel can use their own watches to acknowledge alarms received in Vista. The use of the watch acknowledgement function is described in the Vista User’s guide. The following describes settings related to the feature:

#### **Care personnel can acknowledge alarms with their watches**

If this selection is checked, members of care personnel can use their watches (or Add-Ons/FIDOs) to acknowledge alarms. Care personnel must be marked with the “watch used by care personnel” selection in their customer cards.

#### **Change the color of acknowledge alarms**

With this setting, you can select how Vista handles alarms acknowledged with a watch. The options are:

- Vista acknowledges the alarm, i.e. the alarm turns green, and the name of the person who acknowledged the alarm is automatically entered in the “Acknowledgement” field.
- Vista turns the alarm into a yellow low priority alarm. In this case the alarm must be re-acknowledged manually on the Vista screen.

Whichever setting you use, Vista always records the alarm, the time it was acknowledged with a watch and who acknowledged it. This information is visible in the “Alarm time stamps” tab in the “Alarm processing” window.

#### **Acknowledgement is available for X minutes after alarm transfer/reception**

You may either enable watch acknowledgement for all received alarms or only for alarms that have been transferred. The latter is recommended. This means that the alarm must be transferred to care personnel, e.g. as a voice or text message. Alarms can only be acknowledged with a watch for a limited time, e.g. ten (10) minutes, after the alarm was transferred. By requiring alarms to be transferred, you can ensure that care personnel will not acknowledge alarms they have not been properly informed of.

Choose either a) acknowledgement is available “after alarm transfer” or b) “after alarm reception” in the drop-down menu on the Vista screen. Also, you must specify the time of availability, i.e. for how long will watch acknowledgement be available after alarm reception/transfer.

Please note the following regarding transfers:

- If you have selected the Reminder option (see “Alarm transferring”), you will receive more time for watch acknowledgement every time the alarm is transferred. If the reminder function transfers the alarm at ten (10) minute intervals, the watch can be used to acknowledge the alarm for a limited time (specified in the “Acknowledgement is available for . . .” field) after each transfer. It is advisable to specify the same time limit for both “Reminder” and “Acknowledgement is available for X minutes” fields.
- If you have selected the “Acknowledge transferred alarms” option on the Alarm transferring screen, watch acknowledgement is not available. Watch acknowledgement can only be used for alarms that have not yet been acknowledged.

Therefore, the “Acknowledgement is available for X minutes” field also defines which alarms are acknowledged in Vista through watch acknowledgement. For example, if you select “15 minutes” and acknowledge a customer’s alarm with a watch, Vista acknowledges ALL alarms triggered by that customer received/transferred in the previous 15 minutes and moves them to the upper alarm list. If a customer has triggered one or several unacknowledged alarms, watch acknowledgement acknowledges them all.

### **The carer and the customer must push their buttons within X seconds of each other**

This setting defines the time period within which the buttons in the watches of the member of care personnel and the customer must be pressed, so that the system interprets the signals as a watch acknowledgement. The carer can press the button on his/her own watch again to get more time for pressing the customer’s button. It is advisable to select a relatively short time period. The longer the time, the more likely it is that another customer will press his or her watch’s button during the interval. Note that if you select, e.g., “15 seconds” in this field and a member of care personnel triggers a manual alarm by pressing his or her button (i.e. NOT to acknowledge an alarm), it takes 15 seconds before Vista displays the alarm. When a watch used by care personnel is used for acknowledgement, the acknowledgement takes place immediately after pressing the customer’s watch button.



## Door locking

Vista can control the door locking of Vivago Go POINT wandering detection base stations if they are connected to control an electrical lock.

These base stations must be added to the Vista base station list and their type must be set to "Locking".

In each customer's card you it is possible to define that during specific times of day, some base stations should not raise a wandering detection alarm for the customer. Also, if the base station is connected to control the locking, Vista will automatically open the door locking for the customer if passage is allowed.

| Unit number | Name    | Area | Allow during day                    | Allow during                        |
|-------------|---------|------|-------------------------------------|-------------------------------------|
| 5705        | Base 13 | 5    | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5706        | Base 14 | 0    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 5707        | Base 15 | 0    | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5708        | Base 16 | 0    | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5709        | Base 17 | 9    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5710        | Base 18 | 0    | <input type="checkbox"/>            | <input type="checkbox"/>            |

**Door locking**  
☒ Control door locking of Go POINT base stations  
  
Open door locking for  seconds  
Allow passage for  seconds  
  
Open door again when the area has been clear for  seconds

Door locking control is also available for care personnel. Members of personnel that are using a wandering detection watch can freely use doors that have been selected as allowed for them. The door locking will open automatically. Personnel can also escort customers through doors allowed for personnel even if normally an alarm would be raised for the customer and the door would be locked.

The locking feature has these settings in the Vista Alarm settings screen:

### Open door locking for X seconds

Defines how many seconds the door lock will be opened in case of allowed passage. The door lock is opened after the base station receives a message from a wandering detection watch.

### Allow passage for X seconds

Defines the blocking time for wandering detection messages when a door lock is opened. This is used when a member of personnel escorts a wandering detection customer through a door.

### Open door again when the area has been clear for X seconds

By increasing this setting, you can define that the allowed person must leave the door area for X seconds before the lock is opened again.

## Alarm settings for Watch types

The functions of some of Vista's alarms can be tailored to different unit types. For example, the "Watch off wrist" alarm of the customers using the basic watch can be suspended for the night, whereas it can be switched on for customers using the Wandering detection watch.

Use the table on the Alarm settings page to specify default and common settings for different unit types.

Some of the settings are default for the types: you can specify default "Watch off wrist", "Out of range", "Deterioration alarm" and Manual alarm block time settings (for home customers also "User gone out" and "Base station not in use"). Once a new customer is added into Vista these default settings are automatically taken into use. Naturally these settings can be adjusted later in each customer card as and when necessary.

All other settings in the table are centralized settings for the different Watch types – that is, they affect all customers using the watch type in question. For example, by selecting the option "No" in the "Watch loose alarm used" item in the column "Watch", this alarm will be blocked for all users of the basic Watch type.

### Out of range: usage

This setting defines the times of the day when the "Out of range" notification is in use for the customers using the watch type in question. You may select the option "Not used" (corresponds to the blocking of the notification in the alarm

blocking table on the customer card), “Day only”, “Night only” and “Day and night”. Please note: if, for example, you select “Day only” and the connection to the customer’s watch is lost at night, the notification will not be shown immediately. If the connection is restored before morning, the notification will not show; instead, if the connection is still broken in the morning, the notification will be shown as soon as the institution’s daytime begins. The institution’s daytime is defined at the top of the screen.

### Watch off wrist: usage

This setting defines the times of the day when the “Watch off wrist” notification is in use for the customers using the Watch type in question. The setting functions in the same way as the “Out of range: usage” setting described above.

Alarm settings for unit types

| Setting  | Time       | Watch Wandering | Add  |
|--|------------|-----------------|------|
| Out of range: delay (default for customers)        | 15 mins    | 15 mins         | 15 m |
| Out of range: usage                                | Night only | Day and night   | Day  |
| Watch off wrist: delay (default for customers)     | 90 mins    | 30 mins         | Not  |
| Watch off wrist: usage                             | Not used   | Day and night   | Day  |
| Watch connection failure alarm in use              | Yes        | Yes             |      |
| Watch loose alarm in use                           | No         | No              |      |
| Deterioration alarm: delay (default for customers) | Normal     | Normal          |      |
| Manual alarm block time (default for customers)    | 3 min      | 3 min           | 3 mi |
| User gone out: delay (default for customers)       | Not used   | Not used        |      |
| Base station / phone not in use: delay (default)   |            |                 |      |

>> For all customers >> For all customers >>

### Watch connection failure alarm used

This setting defines whether Vista’s notification “Watch connection failure” will be shown for the customers using the Watch type in question. The “Watch connection failure” notification will be given when there have been interruptions in the radio connection between the watch and the base station network during the night. For the notification to be shown there must have been at least two longer periods during which the watch had not been in contact with any base station during the night. These periods must have lasted a minimum of 60 minutes, or have been equal to the customer’s “Out of range” delay, if the delay is set to less than 60 minutes. Please notice that the “Out of range” delay selected for the customer has an impact on this alarm. The purpose of this notification is to warn about the insufficient coverage of the base station network or a defect in the watch. The “Watch connection failure” notification will only be given when the institution’s daytime begins.

### Watch loose alarm used

This setting defines whether Vista’s notification “Watch loose” will be shown for the customers using the Watch type in question. The “Watch loose” notification will be given when the watch has not been properly attached during the night. The watch has not been able to measure properly for several periods lasting for 30 minutes or longer. The purpose of this notification is to inform the customer that the watch is incorrectly attached. The “Watch loose” notification will only be given when the institution’s daytime begins.

### Please note

When you define the alarm settings for the different types of units, please pay attention to the following issues:

- We recommend that you use the “Day only” setting in the fields “Out of range: usage” and “Watch off wrist: usage”. This will reduce the number of irrelevant notifications made during the night. Should a customer remove the watch for the night, the notification will be made early in the morning. It is often unnecessary to respond to the “Watch off wrist” notification during the night.
- Instead, we recommend that you install the “Watch connection failure” and “Watch loose” alarms. These settings monitor Vista’s night-time contact with the watch and notify possible problems in the morning. These measures ensure the minimum amount of alarm information received during the night.

- We do not recommend that you select “Day and night” in the “Out of range: usage” field and set the “Watch connection failure” alarm. In this case, the number of notifications about connection failures would be double. Similarly, the “Watch loose” notification replaces the night-time use of the “Watch off wrist” alarm.

# Alarm types

Vista has dozens of various alarm types. Alarm types are for example, “Manual alarm” and “Passivity notification”. Each alarm type has its own name and number. The alarm type color codes are described in the Vista User Guide.

## Alarm types list

You can change Vista's alarm type information in the Alarm types settings screen.

| #  | Alarm name                | Short name | Status | Voice | Corridor | MOBILE sound | INFO sound | Timetable |
|----|---------------------------|------------|--------|-------|----------|--------------|------------|-----------|
| 1  | Manual alarm              | Manual     | Red    | Yes   | Yes      | 1            | 1          | <No>      |
| 2  | Passivity notification    | Passivity  | Yellow | Yes   | Yes      | 3            | No         | <No>      |
| 3  | Deterioration alarm       | Deterior   | Red    | Yes   | Yes      | 1            | No         | <No>      |
| 4  | Watch off wrist           | OffWrist   | Red    | Yes   | Yes      | 3            | No         | <No>      |
| 11 | Fire alarm                | Fire       | Blue   | Yes   | Yes      | 4            | 4          | <No>      |
| 17 | Alarm acknowledgement     | Acknowl    | Red    | No    | Yes      | 3            | No         | <No>      |
| 18 | User come home            | UserHome   | Red    | Yes   | Yes      | 3            | No         | <No>      |
| 19 | User gone out             | UserOut    | Red    | Yes   | Yes      | 2            | No         | <No>      |
| 21 | Wandering detection alarm | Wander     | Red    | No    | Yes      | 2            | 2          | <No>      |
| 22 | Back in range             | UserBack   | Red    | Yes   | Yes      | 3            | No         | <No>      |
| 23 | Watch back on wrist       | OnWrist    | Red    | Yes   | Yes      | 3            | No         | <No>      |

Each alarm type has the following settings:

### Alarm name

This name is visible in the alarm lists on the Vista screens and in SMS and ESPA4.4.4 alarm messages.

### Short name

This field displays the short name (abbreviation) for the name of the alarm. Short names will be used when Vista transfers alarms onwards DECT phones as a short message.

### Status (color)

This field displays the alarm type classification. You can choose from one of the colors described in the Vista User Guide (and also described on the right side of the screen) - or “blocked”, in which case Vista will not display the alarm at all.

### Voice

Select the alarms for which you wish to enable voice connection when the alarm is processed on the Vista screen or when it is transferred to an alarm recipient.

### Corridor

Select the alarms you wish to see on the Vivago Vista INFO corridor displays. The corridor display shows all yellow, red and blue alarms that have “Yes” in this field. For example, if you wish to see the “Nurse present” notification on the corridor displays but do not wish to transfer to the personnel’s phones, select “Yes” in the alarm’s Corridor field and change its color to Yellow.

### MOBILE sound

Select the tone to play in the Vivago MOBILE application in a phone/tablet when this type of alarm is received. You can e.g. give different priorities to alarms via changing the tone.

### INFO sound

Select a tone if you want the alarm to play a sound on the Vivago INFO corridor displays. Select either "No" to disable the sound or choose one of the four tones.

### Timetable

If you wish to always transfer alarms of certain type with a specific transfer timetable (protocol or recipient), select a timetable for the alarm type here. The timetable must be pre-defined in the Alarm transferring screen. For example: you might want to transfer technical alarms using an email protocol while the rest of the alarms should be transferred using voice messages: define a timetable that uses the email protocol only and select it for each technical alarm type. Note that these alarm type specific timetables override the system's current active transfer system and timetable.

### Operating instructions

Every alarm type has its own operating instructions. These operating instructions are always displayed when handling an alarm. Operating instructions are visible to the right of the alarm type list. You can change the instructions for each alarm.

## List of alarm types by device

### Watches

|    |                              |
|----|------------------------------|
| 1  | Manual alarm                 |
| 2  | Passivity notification       |
| 3  | Deterioration alarm          |
| 4  | Watch off wrist              |
| 22 | Back in range                |
| 23 | Watch back on wrist          |
| 24 | Out of range                 |
| 37 | Watch malfunction            |
| 41 | Low temperature              |
| 48 | Watch loose                  |
| 49 | Watch connection failure     |
| 51 | High activity                |
| 52 | Low activity                 |
| 60 | Watch recharg. battery empty |
| 61 | Watch battery full           |
| 62 | Watch charging               |
| 67 | Circadian rhythm weak        |
| 68 | Daytime activity low         |

|    |                                |
|----|--------------------------------|
| 26 | Base station mains failure     |
| 27 | Base stations mains OK         |
| 30 | Base station not in use        |
| 36 | Base station OK                |
| 37 | Watch malfunction              |
| 41 | Low temperature                |
| 42 | Door opened                    |
| 48 | Watch loose                    |
| 49 | Watch connection failure       |
| 51 | High activity                  |
| 52 | Low activity                   |
| 57 | Nurse present                  |
| 60 | Watch recharg. battery empty   |
| 61 | Watch battery full             |
| 62 | Watch charging                 |
| 67 | Circadian rhythm weak          |
| 68 | Daytime activity low           |
| 74 | Base station batt nearly empty |
| 82 | Innohome alarm                 |

### DOMI

|    |                        |
|----|------------------------|
| 1  | Manual alarm           |
| 2  | Passivity notification |
| 3  | Deterioration alarm    |
| 4  | Watch off wrist        |
| 11 | Fire alarm             |
| 18 | User come home         |
| 19 | User gone out          |
| 22 | Back in range          |
| 23 | Watch back on wrist    |
| 24 | Out of range           |

### MOVE

|    |                        |
|----|------------------------|
| 1  | Manual alarm           |
| 2  | Passivity notification |
| 3  | Deterioration alarm    |
| 4  | Watch off wrist        |
| 22 | Back in range          |
| 23 | Watch back on wrist    |
| 24 | Out of range           |
| 30 | MOVE phone out of use  |
| 36 | MOVE phone back in use |
| 37 | Watch malfunction      |
| 41 | Low temperature        |

|    |                              |
|----|------------------------------|
| 48 | Watch loose                  |
| 49 | Watch connection failure     |
| 51 | High activity                |
| 52 | Low activity                 |
| 60 | Watch recharg. battery empty |
| 61 | Watch battery full           |
| 62 | Watch charging               |
| 67 | Circadian rhythm weak        |
| 68 | Daytime activity low         |

#### **Add-On**

|    |                           |
|----|---------------------------|
| 1  | Manual alarm              |
| 21 | Wandering detection alarm |
| 22 | Back in range             |
| 24 | Out of range              |
| 37 | Watch malfunction         |
| 64 | Add-On not in use         |
| 65 | Add-On back in use        |
| 66 | Add-On battery empty      |

#### **FIDO**

|    |                  |
|----|------------------|
| 1  | Manual alarm     |
| 22 | Back in range    |
| 24 | Out of range     |
| 86 | Battery empty    |
| 87 | Battery full     |
| 88 | Battery charging |

#### **Device Interfaces**

|    |                                |
|----|--------------------------------|
| 11 | Fire alarm                     |
| 22 | Back in range                  |
| 24 | Out of range                   |
| 25 | Device Interface battery alarm |
| 42 | Door opened                    |
| 43 | Door closed                    |

|    |                               |
|----|-------------------------------|
| 45 | Device Interface manual alarm |
| 46 | Connector A closed            |
| 53 | Connector A open              |
| 54 | Connector D closed            |
| 55 | Connector D open              |
| 70 | Emergency call                |
| 71 | Device Interface malfunction  |
| 72 | Peripheral alarm              |
| 73 | Toilet alarm                  |

#### **LOCATE**

|    |                             |
|----|-----------------------------|
| 1  | Manual alarm                |
| 75 | Locate out of use           |
| 76 | Locate back in use          |
| 77 | Left control area           |
| 78 | Entered control area        |
| 79 | Locate battery almost empty |

#### **Nursing staff alarms**

|    |                     |
|----|---------------------|
| 50 | Panic alarm         |
| 57 | Nurse present       |
| 58 | Call for extra help |
| 59 | Extra help present  |
| 70 | Emergency call      |
| 83 | Nurse visit         |

#### **System alarms**

|    |                         |
|----|-------------------------|
| 11 | Fire alarm              |
| 17 | Alarm acknowledgement   |
| 30 | Base station not in use |
| 34 | Bus network broken      |
| 35 | Bus network OK          |
| 36 | Base station OK         |

# Alarm transferring

## Common

Vista has a built-in transferring feature that allows transferring of received alarms to care personnel or technical staff. For example, alarm information can be transferred to a phone as a voice message, or to a DECT phone as an SMS message. A

forwarded alarm message can display the same information as Vista's screen: the name of the customer who signalled the alarm, the alarm type, and the name or area of the base station that transferred the alarm.

Vista's transferring feature is based on the use of so called transfer systems. With transfer systems, Vista can be told what form the alarm message should be sent in (the protocol), and whom it should be sent to. Vivago **MOBILE** is also available as a transfer option.

The active transferring system and recipients can be timed using timetables. For example, alarms can be sent to different recipients during day and night-time. Also weekends can use different recipients or different systems. Timetables can be used so that

- The whole system uses the one and same timetable: by choosing "Always use" a certain timetable on the transfer settings page
- So that some customer may use their own timetable: choose a personal timetable in his/her customer card
- So that some alarm types may have a special timetable: e.g. technical alarm could be transferred via email while customer alarms could use SMS. Select alarm type specific timetables in the Alarm types settings screen, Timetable column.

First create your desired timetables on the Transfer settings screen, then take them into use on different screens such as customer card.

## Transfer settings

You can change alarm transferring settings as on the Transfer settings tab in Settings view.

From the setting screen, you can change common transferring settings and define timetables (upper screen area) as well as individual transfer system information (lower screen area). Notice that all of the screen's settings will only be saved once you have clicked on the Apply button.

### Common options

**Transfer ON:** Defines if transferring is turned on or off. If transferring is turned on, Vista will transfer all high priority alarms, according to the defined transferring settings. If some of the transferring settings have been left undefined (for

The screenshot shows the 'Transfer settings' interface. It is divided into two main sections: 'Options' on the left and 'Active system' on the right.

**Options section:**

- ☒ **Transfer ON**
- Delay before transfer start: 0 sec
- Maximum number of attempts: 10
- Settings for MOBILE transfer:
  - Delay between attempts: 60 sec
  - Maximum number of attempts: 20
- ☒ Only MOBILE used: hide transfer options from users
- ☐ Show timetables in customer card

**Active system section:**

- Transfer system for customer alarms:
  - ☒ Always use: <MOBILE>
  - ☐ Use timetable:
- Transfer system for system alarms:
  - ☐ Same as for customer alarms
  - ☒ Use timetable:
    - Own recipient: <Num 1>
    - Tech email: Tech email
- HiPath/OpenScape PBX IP address for MOBILE use: (empty text field)

example, recipient phone numbers are missing), transferring will be activated but the alarm will not necessarily be transferred. Be sure to define all necessary settings.

**Delay before transfer start** defines the time from alarm reception to alarm transferring. If you, for example, select 30 sec, Vista will wait half a minute before transferring. If the alarm is acknowledged within the defined delay, no transferring will be done.

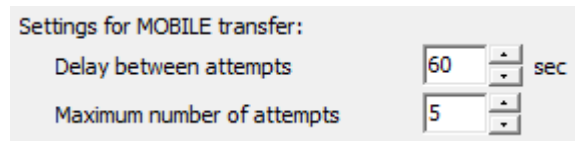
**Maximum number of attempts** defines how many attempts Vista will make to transfer an alarm. Default is 10. An attempt may fail due to an error in the equipment, but most likely because the recipient of the alarm could not be reached: for example s/he did not answer a voice message call. Note that this setting is overridden if you use a timetable for transferring alarms. In that case you define the attempts for each system/recipient in the timetable.

**Settings for MOBILE transfer: Delay between attempts:**

defines the interval between MOBILE notifications; i.e. how often the alarm recipient should be reminded to acknowledge the alarm.

**Settings for MOBILE transfer: Maximum number of attempts:**

defines how many times Vista should remind the alarm recipient to acknowledge the alarm. Note that this setting applies to all MOBILE transfer: you cannot define the number of attempts in a transfer timetable.



**Only MOBILE used: hide transfer options from users:** select this field if the site uses only MOBILE for transfer; e.g. not SMS nor DECT. Once this field is selected, Vista will hide all settings related to transfer settings in each customer card and in the New customer dialog. This is because MOBILE does not need any settings in them for transfer. If you still wish to use customer-specific special MOBILE transfer rules, you can select the **Show timetables in customer card** field so that the Own timetable selection will be available in customer cards.

**Transfer system for customer alarms**

Defines which transferring system or timetable should be used for transferring alarms from Vista customers (non-system alarms). You can either select to always use a certain transfer system or define a timetable so that different systems will be used on different days or times. Also you can select MOBILE as the transfer method (system).

**Transfer system for system alarms**

Defines the transfer of Vista's system alarms – alarm from base stations and buses that are not linked to any customer. You can select to use the same transfer system or timetable that Vista uses for customer alarms or define an own timetable. Even if you use the same as for customer alarms, you can still define an own recipient for system alarms in the Own recipient field. For example, you may wish to use the same transfer system for customer and system alarms but in such a way that recipients 1 to 3 may be selected for customers while recipient 4 is reserved for system alarms. Note that the used transfer system may change if you have defined a timetable – the recipient for system alarms will change too.

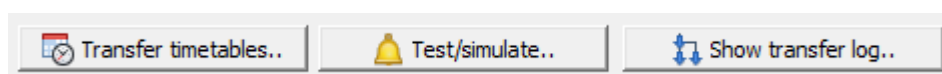
**HiPath/OpenScope PBX IP address for MOBILE use**

Defines the IP address of a HiPath/OpenScope PBX if one is used for creating a voice connection with MOBILE.

## Simulating transfer and Creating test alarms

During the installation stage of Vista you may wish to simulate and create test alarms e.g. to verify the operation of transfer settings. Remember to always click the Apply button on Transfer settings page before trying.

Click the **Test/Simulate.. button**, then select the customer and alarm details on your test alarm or simulation. Once you have created a test alarm you can follow the transfer by clicking the **Show transfer log.. button**.



When **simulating** you can also choose the simulation day and time to verify the transferring at different stages of the week – if you have different transfer systems and recipients for different times. The transfer simulation feature displays information on all of the attempts that would be made to transfer the alarm, should all attempts fail. Of course, the alarm transferring would actually stop at the first successful attempts.

## Transfer systems

Alarms transferred by Vista are always controlled by so-called transfer systems. You can create and remove transfer systems.

A transfer system includes a description of the transferring form and reception type, i.e. a specific protocol, such as "transfer to GSM phone using SMS" or "Short message transfer to DECT phone". Transfer protocols are ready-made Vista modules, which you cannot create. Instead, you can choose what protocol your own transfer system will use. Transfer

protocols and the additional information required by them are described in separate instructions called “**Vivago Vista transfer protocols**”.

Along with Name and Protocol you can select the following settings for your transfer system:

### Transfer device

Select one of the transferring devices defined in Connected devices settings or predefined Telnet or Email.

### Don't transfer similar alarm in queue

This setting is for defining whether Vista will separately transfer all similar queued alarm messages. If you check this field, Vista will function as follows: if Vista has several similar alarms queued and waiting to be transferred (for example, three manual alarms from the same customer), only one of them will be transferred. This feature is recommended for minimizing the recipients' workload by removing unnecessary repeated notifications. Notice that if this setting, as well as the Acknowledge transferred alarms setting (see below) are turned on, one completed alarm transfer will also acknowledge all other similar queued alarms.

### Delay between attempts (sec)

If an alarm transfer fails, Vista will attempt to transfer the alarm again. Use this setting to define the delay between the attempts. For example, when a voice message transfer is made, Vista wait for an answer from the recipient for about 45 seconds, then stop and pause – and after the delay set by this setting - try again. Use a sensible value so that recipient(s) will have enough time to handle the alarms.

### Wait for answer (sec)

This setting is available for systems that use a protocol to transfer alarms using the Siemens HiPath PBX. The setting defines how long Vista will wait for answer for alarm messages.

**Transfer systems**

Voice Message  
Voice + autocalback  
**HiPath / voice conn**  
HiPath / text message  
ESPA4.4.4  
Email  
SMS  
Voice + HiPath digi

**Options**

System name: HiPath / voice conn  
Transfer protocol: HiPATH-VCE  
Transfer device: Telnet  
☒ Don't transfer similar alarms in queue  
Delay between attempts (sec): 20  
Message center: 100  
Calling number: 40000  
Password/code/PIN:  
Server: 192.168.210.127  
Wait for answer (sec): 45

**Recipients**

| Num | Phone number / email |
|-----|----------------------|
| 1   | 771                  |
| 2   | 772                  |
| 3   | 773                  |
| 4   |                      |
| 5   |                      |

**After transfer**

☐ No action  
☒ Acknowledge transferred alarms (not blue)  
☐ Reminder; transfer again:

Interval (min): 10  
Repetitions: 3

**Add** **Remove**

### After transfer

Vista can be set to automatically process all alarms in a specified way after they have been successfully transferred. If the transfer fails, further attempts are made to transfer the alarm. After a successful transfer the alarm can be processed in one of the following ways:

- **No action:** The alarm is not processed in any way after a successful transfer, except that it will not be transferred again.
- **Acknowledge transferred alarms (not blue):** If this setting is enabled, Vista will acknowledge all transferred alarms except blue ones. Blue alarms, i.e. system alarms, must always be manually acknowledged from Vista's alarm list as well
- **Reminder; transfer again:** If you wish, Vista can remind you of alarms at specific intervals. This means that Vista simply transfers the alarm again, even though the previous transfer was successful. The reminder transfer will not be stopped until the alarm is acknowledged on the Vista screen or using watch acknowledgment. Two reminder settings are available: "Interval (min)" is used to specify the interval between transfers, while "Repetitions" indicates the maximum number of times the alarms is transferred. If the number of repetitions is, for example, three (3), the alarm is initially transferred and then followed by three reminder transfers. If the alarm remains unacknowledged after the last reminder, Vista displays a blue message indicating "The reminder



transfer of one or several alarms has been stopped". Note that the reminder function can be used in association with the watch acknowledgement function. (See "Institutional system alarm profiling"). Also note that the reminder function cannot be used if the transfer system is used in a transfer timetable that has backup systems for the transfer system: Vista will always use reminder function and will not jump to the next system in the timetable even if the reminding fails.

### Message center, Calling number, Password/code/PIN, Server

The use of these fields is individual for each transfer protocol. See the chapter "Transfer protocols".

### Recipients Num 1-20

Enter the recipients of alarm transfer. The recipients can be GSM phone numbers, DECT or DECT group short numbers or email addresses. By default, Vista will use the recipient defined in the Num1 field for transferring customer alarms. You can enter multiple recipients and select one or multiple of them; e.g. to use recipients Num1, Num2 and Num3 in order, select the option Num1-3 in a customer's card.

If you are using email for transferring alarms, enter the recipient's email address here. Note that you can enter multiple email recipients in one recipient field, just separate them with the plus "+" sign, e.g. "abc@def.com+ghi@jkl.net". They will all be sent the alarm information at the same time.

## Transfer timetables

You can create a new timetable or modify existing ones by clicking the Add / modify timetables.. button on the Vista Settings / Transfer screen.

The top of the Transfer system timetables can be used to add, remove or rename timetables as well as for simulating transfer.

Use the Selected timetable dropdown box to select the timetable you wish to modify. To add a new timetable, click the Add button. When adding a new timetable, you may wish to select an existing timetable as a template for the new ones; this is useful if you wish to have several timetables that resemble each other.

The TIMETABLE and EXCEPTIONS part of the screen is used to define the actual timetable:

In the TIMETABLE rows ("rules"), define the main and backup transfer systems (and recipients) used for transferring alarms. The rules are interpreted from top to bottom. Each rule in which the Days and Time field match those of the

moment an alarm transfer attempt is made, will be used one after another, if necessary. If the alarm attempts to all of the recipients of the first rule fail, the recipients of the second rule will be attempted etc. Attempts will be stopped once the alarm is successfully transferred.

For each row, you define **when the rows is in effect** - the weekday(s), starting and ending times - as well as the **system to use for transfer** during that time. Use the Add button below the rows to add a new one. Using the arrow buttons at the right side of the row you may change the order or the rows. Use the trash can button to remove a row.

**Note: Timetables rows cannot use transfer systems that have the “Reminder” function set on, because when encountering such a system Vista will stop processing any further rows.**

**Only selected type:** You can define that the row should apply to certain alarm types only. For example, you can create an own rule for Panic alarms while others alarms would use different rules. Select the “Only selected types” field and then click the filter button to select the alarm types for the rule.

**Recipients:** You can enter any (combination) of the transfer system’s predefined recipients Num1, Num2 etc., or any freely selected phone numbers / email addresses, separated by commas. For example, you may define “Num1, Num2, Num2” or “Num5, 12345, Num2, 98765” in the recipients field. If the recipient field is left empty, the recipients defined in the customer’s Own recipients field will be used instead.

When you have selected MOBILE as the transfer system you can choose from these options in the Recipients field:

- **Default:** transfer to default MOBILE recipients. If the customer has relatives’ accounts with “In alarm use” selected, the alarm will be transferred to them. Otherwise it will be transferred to those nurse accounts that have access to the customer’s group
- **Own recipients:** click the adjacent ... button to freely define special recipients for the alarm. E.g. if a customer’s group is A, you can select to transfer to nurses that usually have access to group B only. Or you can select individual nurse or relative accounts as recipients.
- **Default nurses:** transfer to those nurses that have access to the customer’s group. This will override transferring to relative accounts.
- **All site’s accounts:** transfer to all nurse accounts in the site, even those that usually do not have access to the customer’s group

**Repetitions:** Define how many attempts will be made to each of the recipients defined for the rule. If there are e.g. three recipients “Num1, Num2, Num3”, and repetitions are set to 5, a total of 15 attempts are made: Num1, Num2, Num3, Num1, Num2 etc.

**Continue even if successful:** Select this field if you want Vista to continue the transfer even if the alarm was successfully transferred. Vista will then look for the next rule that is currently in effect and use that to transfer the alarm. Using the “Continue even if successful” field, you can e.g. transfer the same alarm by voice message and email.

**The EXCEPTIONS part:** These rules may be used to override the rules defined in the TIMETABLE part. These rules are interpreted from top to bottom. If for any rule the Days and Time fields match those of the moment an alarm transfer attempt is made, that rule will be used. No attempts using any other Exception or Timetable rules will be made.

**Example:** The timetable below would specify the following transfer plan:

- Monday to Friday, during morning from 8 to 12, the Day Voice Message system is used, and alarms are only transferred to the phone number 070123456. A maximum of 10 attempts is made, after which the alarm transfer will fail
- During all other times the Voice transfer system is tried first, with maximum of 3 attempts to the same number. If they all fail, then 5 attempts using the HiPath protocol are made to the phone number 12345.
- If those attempts fail too, during the daytime Vista stops the transfer. During night time however, there is an additional row in effect: as a last resort Vista would try to transfer the alarm using SMS, to phone number 080123456. After 10 attempts the transfer fails.

| TIMETABLE  |               | Only selected types      | System              | Recipients | Repetitions | Continue even if successful |
|------------|---------------|--------------------------|---------------------|------------|-------------|-----------------------------|
| Days       | Time          |                          |                     |            |             |                             |
| Always     | 00:00 - 00:00 | <input type="checkbox"/> | Voice               | 070123456  | 3           | <input type="checkbox"/>    |
| Always     | 00:00 - 00:00 | <input type="checkbox"/> | HiPath / voice conn | 12345      | 5           | <input type="checkbox"/>    |
| Night time | 21:00 - 07:30 | <input type="checkbox"/> | SMS                 | 0801234567 | 10          | <input type="checkbox"/>    |
|            |               |                          |                     |            |             |                             |

| EXCEPTIONS |               | Only selected types      | System    | Recipients | Repetitions |
|------------|---------------|--------------------------|-----------|------------|-------------|
| Days       | Time          |                          |           |            |             |
| Mon-Fri    | 08:00 - 12:00 | <input type="checkbox"/> | Day Voice | 070123456  | 10          |
|            |               |                          |           |            |             |

# Base stations

All base stations connected to Vista must be entered to the list on the Base stations settings screen. Vista uses this information to monitor the working of the units and to name the locations the base stations are installed to.

There are two different base stations lists: one for institutional base stations and one for home base stations. Use the dropdown menu at the top of the screen to select the correct list.

The base station list can be grouped into tabs based on e.g. their location. Institutional base stations could be grouped by their floor number and home base stations by their geographical area. Use the **Tabs button** at the bottom of the screen to define the tab names and place base stations in their correct tabs.

Note that you can **sort the base station list** by clicking the field headers of the list.

## Institutional base station list

You can add or remove base stations by clicking on the buttons below the list. Once you have finished making your changes to base station information, remember to click on the Apply button.

To export the base station list to Excel or text file, click the Export button at the bottom of the screen. To search for a base station in the list, type its unit number (or in the case of home base stations its phone number or address) in the "Search.." field at the bottom right corner. Each base station has the following settings:

|       |                  |            |           |            |   |     |                 |                     |       |
|-------|------------------|------------|-----------|------------|---|-----|-----------------|---------------------|-------|
| 47197 | Room station GSM | os_SB 01:1 | Osasto SB | os_SB 01:1 | 0 | Yes | 93.106.60.217   |                     | 4,10v |
| 47198 | Room station GSM | os_SB 01:2 | Osasto SB | os_SB 01:2 | 0 | Yes | 188.238.103.235 | su 11.11.2018 20:35 | 4,10v |
| 47199 | Room station GSM | os_SB 01:3 | Osasto SB | os_SB 01:3 | 0 | Yes | 188.238.107.217 |                     | 4,10v |
| 47194 | Room station GSM | os_SB 02:1 | Osasto SB | os_SB 02:1 | 0 | Yes | 93.106.189.175  |                     | 4,10v |
| 47195 | Room station GSM | os_SB 02:2 | Osasto SB | os_SB 02:2 | 0 | Yes | 93.106.253.196  |                     | 4,10v |
| 47196 | Room station GSM | os_SB 02:3 | Osasto SB | os_SB 02:3 | 0 | Yes | 93.106.118.116  |                     | 4,10v |
| 47192 | Room station GSM | os_SB 03:1 | Osasto SB | os_SB 03:1 | 0 | Yes | 93.106.246.181  |                     | 4,10v |
| 47193 | Room station GSM | os_SB 03:2 | Osasto SB | os_SB 03:2 | 0 | Yes | 188.238.88.174  |                     | 4,10v |

### Unit number

This field shows the base station's number. The number is fixed and can be found on the sticker at the back of the base station.

### Type

This field defines the base station type: whether it is a common base station ("Common"), a wandering detection base station ("Wandering"), a wandering detection base station connected to an electrical door ("Locking") or a "Room station").

If the type is set to "Locking" Vista will control the door lock connected to the base station when a customer or member of personnel wearing a wandering detection watch approaches the door. You can define settings related to door locking on the Vista Alarm settings screen.

Base station settings can be changed by clicking the Base station settings.. button below the Vista base station list; see below for more.

### Name

For this field, you can freely pick a name that describes the base station. This name is visible in the alarm lists on the Vista screens and in SMS alarm messages to define the customers' location.

### Customer group

This field defined the customer group the base station belongs to. When you are adding a new customer to a certain customer group, Vista automatically helps you to select a correct room for the customer among those rooms defined for room stations in that customer group. Also when you are assigning a room station for a customer, you are automatically offered room stations defined for her customer group.

### Room

Room number/name of a Room station.

### Short message

Use this field to assign the base station an own short name for use with DECT and ESPA4.4.4 alarm text messages. If no text message name is assigned, alarms received from the base station will be indicated with the Area code – see above. The short message field is most useful for naming wandering detection base stations – in their case it is useful to receive the exact name of the base station a wandering detection alarm was received from (such as a door name).

### Area

This field shows which area the base station belongs to. This is used as an aid when targeting alarms to the correct area of the site. You should define the area names using the **Tabs/Areas** button at the bottom of the screen and then select the correct area for each base station to group them. An area could be e.g. a floor of the site, so you could name the areas "Floor 1", "Floor 2" etc. or you could split a floor to smaller areas to enhance accuracy. Make sure the base station area does not span multiple floors.

### SIP port

This field is for Room stations only. If the Room station needs to be controlled via a TCP port other than 23, enter the port number here.

### Additional information

Free field for any own comments.

### Monitored?

This field defines whether Vista should monitor the connection to the base station. If monitoring is turned on, Vista will report any interruptions in the base station's data communications with "Base station not in use" and "Base station OK" notifications. Those base stations that are not in use have a red "out of use" symbol in their row after this field.

### IP Address

In this field, Vista will automatically show the IP addresses of IP base stations.

### Latest contact

In this field, Vista shows the latest contact date and time for base stations that are not in use.

### GSM

In this field Vista shows the GSM signal strength for Viva POINT GSM and Room POINT GSM base stations. The strength is from 1 to 5. It is updated every 4 minutes. Those signals that are too weak are marked in red. Change the place of the base station.

### Batt

In this field Vista shows the battery voltage level for Viva POINT GSM and Room POINT GSM base stations. Maximum voltage is 4.1 volts.

### ".." button

Use this button to move the base station to another tab.

## Home base station list

| Unit number | Domi phone number | Customer         | Address                        | Additional info | Latest contact     |
|-------------|-------------------|------------------|--------------------------------|-----------------|--------------------|
| 50014       | +358504567890     |                  |                                |                 |                    |
| 50017       | +358501234567     | Birgitta Donnell | Itsehallintokuja 6 02660 Espoo |                 | pe 16.5.2014 15:47 |

You can add or remove base stations by clicking on the buttons below the list. Once you have finished making your changes to base station information, remember to click on the Apply button.

If you add a new home customer in the customer list and define a new base station number for him/her, Vista will automatically add the new base station to this home base station list. So you do not need to define the base stations before taking them into use.

The list shows for each base station: the unit number, its phone number (same as in the customer card's Dome phone number field), the name and address of the customer using the unit; an additional information field and information on the base stations' status.

## Room station settings

The usage of Room stations' input connectors can be defined in the Base station settings window. Click the correct room station on the base station list and then click the Base station settings.. button at the bottom of the screen. Vista will display settings of the selected room station.

In the settings window, you can use the dropdown menu at the top to also view settings of other room stations. At the top of the list you can select Default settings: these are the settings sent to each new room station automatically.

You should define the default settings before adding any room stations to Vista. Usually the connections are the same for all room stations so plan which alarm input is connected to which input connection.

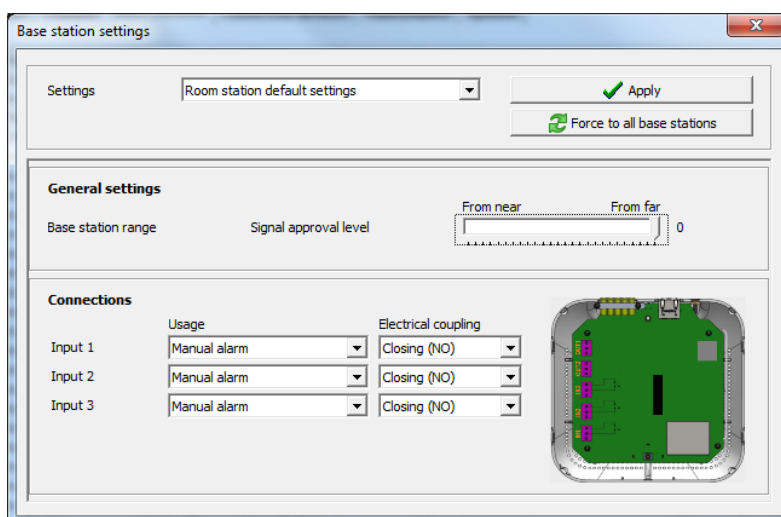
You can select among these alarm inputs: Manual alarm, Door opened, Door opened (with delay of 15 seconds time for the personnel to push the Nurse button on the room station to cancel the alarm), Connector A opened/closed and Connector D opened/closed. Just as with Device interfaces you should rename the Connector X alarm types to match their real use. For example, you could rename Connector A closed to "WC pull cord" and then select it for each room station that has such a cord connected.

For each input, you need to select the electrical coupling type: "closing" (normally open) or "opening" (normally closed). For example, a door connection is usually NC because the door is normally closed and an alarm should be generated if it is opened.

All other usage selection except the Door opened selections are considered as acute alarms by the room station so they will light up the alarm button and the possible corridor light connected to the room station.

After you are done changing the default settings click the Apply button. All new added base stations will receive these settings. Still it is possible to change settings of each room station afterwards: just select the correct room station, change the settings on the screen and click the Save and send button.

**Note: it takes a few dozen seconds for Vista to program the settings in the room station. The room station must be active and in connection to Vista.**

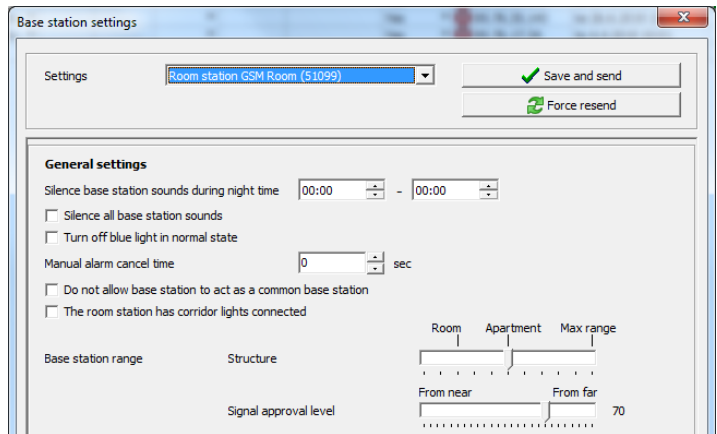


## Additional setting for GSM base stations

The GSM based room base stations used both in an institution and at home have more settings in addition to the room station settings described above. You can e.g. disable base station sounds during nighttime, set the alarm cancel time for a manual alarm, disable the blue standby light in the base station etc.

For Room GSM base stations, you need to define whether the base station has corridor lights connected.

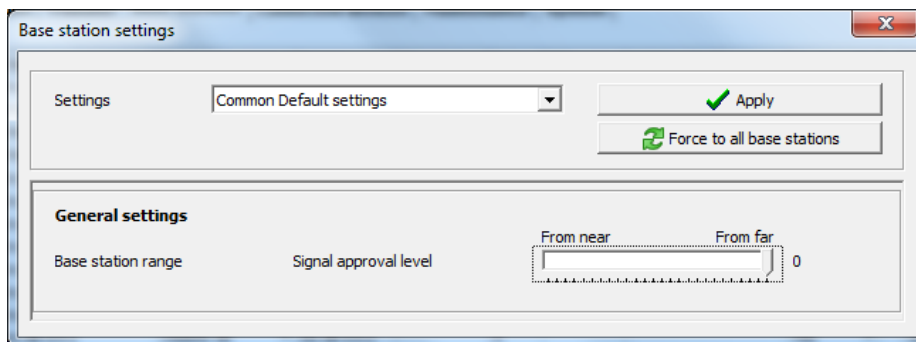
In the Room station settings dialog, GSM room stations in an institution have additional settings for adjusting the base station's range; see separate work instructions document intended for technicians.



## Common base station settings

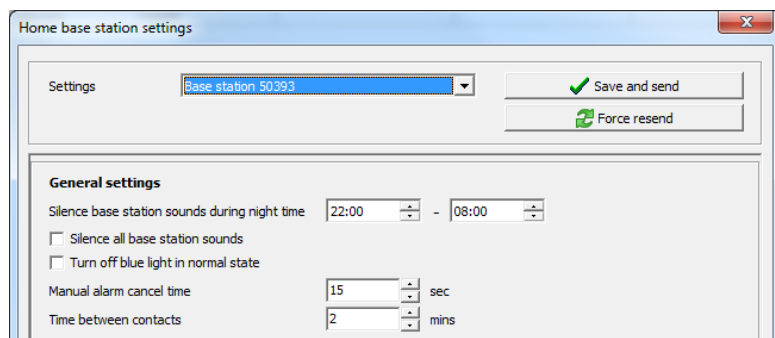
You can change the settings of the institutions' base stations by selecting the base station in the base stations list and then clicking the Base station settings.. button at the bottom of the screen.

In the Base station settings window, you can adjust the base station range; the range change is described in a separate work instructions document for technicians.



# Home base station settings

Each home base station can be set its own configuration in Vista. In a customer card, select the Additional Devices settings tab and then click Home base station / Settings button to change the configuration of a home base station.



You can change the settings described above for GSM based base stations.

Also if any of the input connectors in a home base station have been used to connect e.g. a door connector at home, use the Connections settings to define these. Please see the Room station settings chapter earlier for an explanation on how to configure the inputs.

When you are done changing the settings click the Apply button and Vista will send the new settings to the home base station. You will hear a beep in the base station once it has received the new settings.

## Connected devices

Vista's connections to various auxiliary devices are defined in the Connected devices settings screen. Device Settings include the settings for devices connected to Vista through serial ports. These are modems, base stations, busses, and various auxiliary devices.

Vista will automatically receive messages from Vivago IP base stations connected to it. They do not need any settings.

Notice specifically that when you switch to the Connected devices screen, Vista will close all of the computer's ports, making it impossible to receive or transfer alarms. Vista will re-open the ports and take the changed settings into use once you click on the Apply button.

### Serial ports and connected devices

Vista can automatically detect all serial ports connected to the computer. Use the Detect ports button to rerun the detection. Your task is to define the type of device connected to each serial port:

#### Unit

This field displays the type of the device connected to a serial port. Available options are a MultiLink base station, a modem, an SMS module or an ESPA4.4.4 alarm input. A bus is also described as "MultiLink".

#### Speed

The Speed field is defined only for modems and some alarm transferring auxiliary devices. Always select 115200 for modems. For other devices such as an ESPA4.4.4 connection select the correct speed of the connected equipment.

#### Receive

This field defines what type of alarms or status information the device in question should receive. A device can only receive alarms of one certain type. If you select "No" as the type the device will not receive alarms. Following is a summary of different reception types:

| Alarm transferring device  | Reception type  |
|--|-----------------|
| MultiLink ML4012-X, standard home unit, dialing, HDP communication | Modem, HomeData |

|  |                       |
|--|-----------------------|
| MultiLink ML4012-X, activity curve home unit, dialing, HDP communication           | Modem, HomeData       |
| MultiLink ML4004, institutional system common base station, bus model              | MultiLink, Bus/Direct |
| MultiLink ML4005, institutional system combo base station, bus model               | MultiLink, Bus/Direct |
| MultiLink ML4006, institutional system wandering detection base station, bus model | MultiLink, Bus/Direct |
| MultiLink ML4001, multi-user demo base station, direct + RS232                     | MultiLink, Bus/Direct |
| Fire alarm system  | ESPA4.4.4 input       |

### Version

Defined only for ESPA4.4.4 input for fire alarm system integration. The field defines the fire alarm message frame version used by the system. Usually selecting "Default (0)" is enough; if not, please contact Vivago to select the correct version.

### Can transfer?

The field displays if the modem in question (or similar auxiliary device) can be used for alarm transferring and thus selected for a transfer device on the Transfer settings page.

### Port OK? and Signal?

These fields display whether a connection link can be established with the serial port or not.

### Site

This field defines the site the port belongs to, if Vista has several sites installed. This is especially for ESPA4.4.4 ports: if e.g. a Fire alarm is received via the serial port, the alarm is determined to belong to the site defined in this field.

For outbound traffic such as transferring an alarm via an SMS module, several sites can share one port and this field has no effect.

### Modem settings

Use these fields to modify the initialization and dialling command of modems connected to Vista. Notice that:

- For initialization, do not use the **ATZ** command, use **AT&F**.
- Do not set the modem to automatically answer incoming calls (S0=nn). The only acceptable answering setting is "S0=0", in other words, "no answering".
- The "X3" command ensures that the application functions with a switch-board. Do not change it.
- You may freely change the modem speaker settings.
- If the modem uses the HomeData receive type you should always make sure Init string 1 includes the command "S91=10".

The Volume setting affects the volume level of Vista's spoken voice alarm messages used for transferring alarms.

You can test the functionality of the modems by clicking Test Modems button. If Vista tells you that the modems you defined responded to commands, modem installation is complete. If however, all modems did not respond, at least verify the following:

- Is the modem's serial port number correctly chosen? Have you incorrectly configured the modems' initialization commands?
- Is the modem's speed selection correct? Try different settings.
- Has the modem locked up during installation? If the modem is an external model, try switching the power off for a moment. If the modem is an internal model, restart the computer.

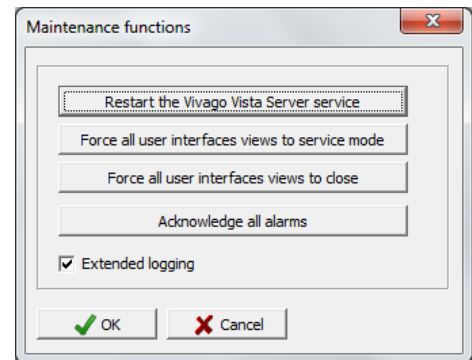
Notice that even if you have not defined any modems for Vista use, Vista will still report that all modems are responding to commands, when you test the modems.



# Maintenance

Vista has a Maintenance screen for monitoring and controlling the server part of Vivago Vista.

Use the **Inbound traffic** box to see all watch, Device Interface, Add-On and base station messages coming to Vista. Use the **Outbound traffic** table to view progress on alarm transfer. The **Server status** box displays the latest status messages from the Vista server service. The latest “alive” message timestamp from the server is displayed above the box. It should be updated once a minute.



## Server maintenance functions

You can use the Server maintenance button/window to:

- Should there be an error situation in Vista’s operating, you can restart the Vivago Vista Server service
- Force all Vista user interface applications to service mode for a while to free the Vista database on the server to perform maintenance operations on it
- Force all Vista user interface applications to close in order to update the user interface application on the Vista server
- Acknowledge all alarms of a site
- Turn on Vista’s extended logging to analyze error situations

# System

The system settings screen displays the service providers using Vista, and their sites installed into Vista. Also, the page shows the server’s settings.

## Server settings

### Server name

Name for server.

### Server address for MOBILE

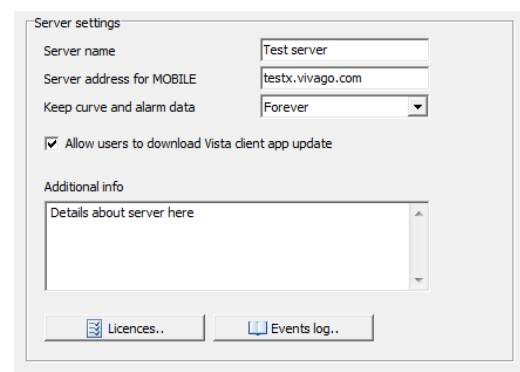
Enter the external Internet server address of the server in this field. This address is used in Vista’s MOBILE settings as the MOBILE Server address. This address is shown on various Vista screen in which you define MOBILE user accounts.

### Keep curve and alarm data

This field defines for how long Vista should keep customer activity curve and alarm data. You can select to keep it “Forever” if you do not wish Vista to automatically remove old data, or e.g. you can select to keep the data “For latest year”. On servers with many customers, old curve and alarm data should be removed to keep the server performance adequate.

### Allow users to download Vista client app update

Select this field to allow Vista client to provide a download link to update their Vista client application if they try to log in to this server with an outdated client version.

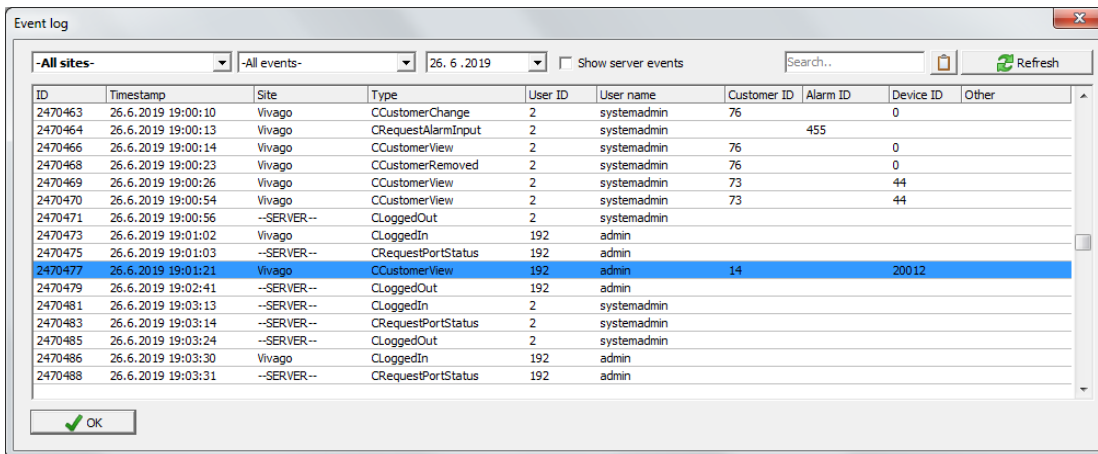


## Licences

To view and modify the server's Vista licences, click the **Licences..** button. Please see the "Protection and modules" chapter for more details.

## Events log

To view the server's event log, i.e. log of user interface and server actions, click the Event log.. button. You can browse and search for events based on date, site, event type, user ID, customer ID etc. The log can be for example used to search for information on when a customer card was removed and who removed the card; or when a customer's device ID was changed etc.



| ID      | Timestamp          | Site       | Type               | User ID | User name   | Customer ID | Alarm ID | Device ID | Other |
|---------|--------------------|------------|--------------------|---------|-------------|-------------|----------|-----------|-------|
| 2470463 | 26.6.2019 19:00:10 | Vivago     | CCustomerChange    | 2       | systemadmin | 76          |          | 0         |       |
| 2470464 | 26.6.2019 19:00:13 | Vivago     | CRequestAlarmInput | 2       | systemadmin |             | 455      |           |       |
| 2470466 | 26.6.2019 19:00:14 | Vivago     | CCustomerView      | 2       | systemadmin | 76          |          | 0         |       |
| 2470468 | 26.6.2019 19:00:23 | Vivago     | CCustomerRemoved   | 2       | systemadmin | 76          |          | 0         |       |
| 2470469 | 26.6.2019 19:00:26 | Vivago     | CCustomerView      | 2       | systemadmin | 73          |          | 44        |       |
| 2470470 | 26.6.2019 19:00:54 | Vivago     | CCustomerView      | 2       | systemadmin | 73          |          | 44        |       |
| 2470471 | 26.6.2019 19:00:56 | --SERVER-- | CLoggedOut         | 2       | systemadmin |             |          |           |       |
| 2470473 | 26.6.2019 19:01:02 | Vivago     | CLoggedIn          | 192     | admin       |             |          |           |       |
| 2470475 | 26.6.2019 19:01:03 | --SERVER-- | CRequestPortStatus | 192     | admin       |             |          |           |       |
| 2470477 | 26.6.2019 19:01:21 | Vivago     | CCustomerView      | 192     | admin       | 14          |          | 20012     |       |
| 2470479 | 26.6.2019 19:02:41 | --SERVER-- | CLoggedOut         | 192     | admin       |             |          |           |       |
| 2470481 | 26.6.2019 19:03:13 | --SERVER-- | CLoggedIn          | 2       | systemadmin |             |          |           |       |
| 2470483 | 26.6.2019 19:03:14 | --SERVER-- | CRequestPortStatus | 2       | systemadmin |             |          |           |       |
| 2470485 | 26.6.2019 19:03:24 | --SERVER-- | CLoggedOut         | 2       | systemadmin |             |          |           |       |
| 2470486 | 26.6.2019 19:03:30 | Vivago     | CLoggedIn          | 192     | admin       |             |          |           |       |
| 2470488 | 26.6.2019 19:03:31 | --SERVER-- | CRequestPortStatus | 192     | admin       |             |          |           |       |

## Service providers

This top part of the settings page lists the service providers using the Vista server. You can add and remove service providers. Once a service provider is selected in the list, you can see the provider's individual sites at the bottom part of the page.

Service providers is a top-level hierarchy object. You can add several sites for a single service provider and create user accounts that can view details such as customer and alarm data from multiple sites at a time. However, you cannot add accounts to access data from sites of different service providers.

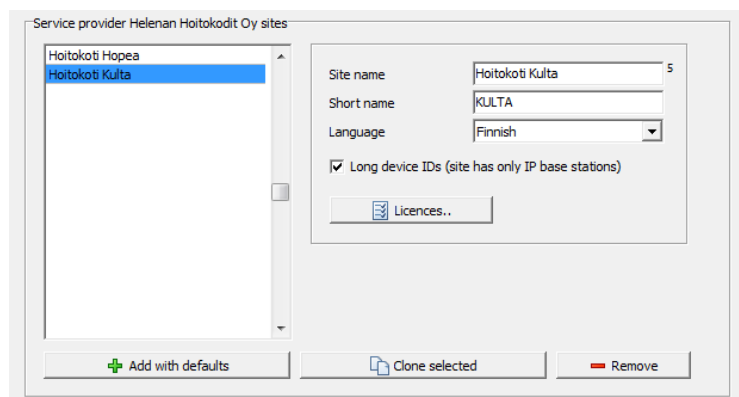
## Sites

Once you have selected a service provider at the top part of the settings page, you can modify its sites at the bottom part.

To add a new site with Vista's default settings (such as alarm settings, alarm types and transfer settings) click the **Add with defaults** button. To use settings from an existing site instead, select the previous site from the sites list and click the **Clone selected** button.

Enter a name and a short name for the site. Select the site language.

You can remove a site by clicking the **Remove** button. However, you cannot remove a site that has customers.



Service provider Helenan Hoitokodit Oy sites

| Site name       | Short name | Language |
|-----------------|------------|----------|
| Hoitokodi Hopea |            |          |
| Hoitokodi Kulta | KULTA      | Finnish  |

Site name: Hoitokodi Kulta  
Short name: KULTA  
Language: Finnish  
☒ Long device IDs (site has only IP base stations)  
Licences..

+ Add with defaults   Clone selected   Remove

To view and modify the site's Vista licences, click the **Licences..** button.

If the site is fully equipped with IP base stations, you can take long device IDs into use by selecting the **Long Device IDs** field. After this the longer IDs used by e.g. FIDO devices, such as "5-12345", are used.

# Protection and modules

## Copy protection

This chapter only applies to the Vista standard version. Users of the Demo version may skip it: the demo version is not copy-protected.

Vivago Vista's operation is protected with a so-called "protection module" (HASP, see picture). The module is a small purple connector that must always be plugged into one of the Vista server computer's USB ports when Vista is running. The protection module holds information on which software licences (such as "Wandering detection module") have been delivered to you. Also it holds information on maximum number of customers available for use and the Vista license validity period, i.e. last validity date. Without the protection module, Vista will function as if no software modules are included!



The protection module is always supplied with Vista, with information on the modules already built in. **After installing Vista, the protection module must be plugged into one of the Vista server computer's USB ports, and it must never be remove it at any stage, for any reason!** If you were not delivered the Vista protection module, immediately contact your Vista supplier to get the module.

Should you ever want to or have to re-install Vista on another server computer, note that the modules are stored inside the protection module. You can safely re-install Vista, and then simply plug the protection module, and the licences will be enabled in Vista.

## Vista's licences

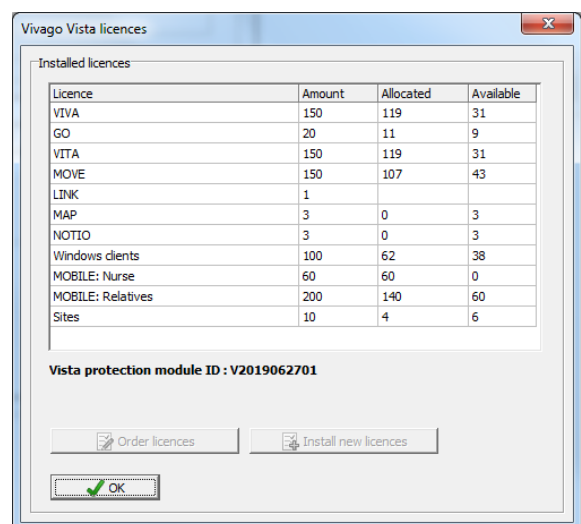
To check which Vista modules and licenses you have, go to the System settings screen and click the Server settings / **Licences..** button. A window will appear with a listing of the modules and licenses. Using the window, you can order and install new licenses.

### Ordering new licences

Click the **Order licences** button. Vista will save a C2V ("customer to vendor") file that holds information on your protection module and Vista's current software licences. Send the C2V file to your Vista supplier along with your order for new licences. Note that the C2V file is specific to your Vista protection module. It cannot be used for ordering updates to any other Vista.

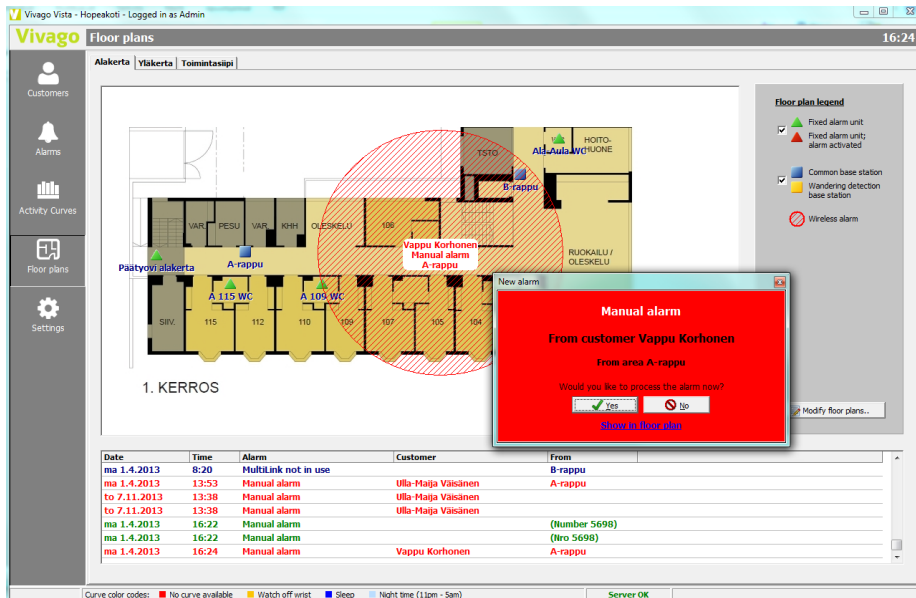
### Installing new licences

When you are supplied new licences for Vista, you will be given a V2C file ("vendor to customer"). You will need the file to update your Vista. Click the **Install new licences** button. Tell Vista where to find the file, and click the Open button. Vista will read the V2C file (with information on which licences to update) and write the updated information in the protection module. The new licences will be automatically enabled in Vista. Please note that the C2V file is specific to your Vista protection module. It cannot be used to update any other Vista.



# Editing floor plans

The Floor plans view is visible if your Vista has the **MAP Floor plans module** installed. Basic instructions for using the Floor plans view can be found in the Vista User guide.



You can edit the floor plans if you have logged in with an account that the right to change settings of the system. In this case there will be a Modify floor plans button visible in the bottom right corner. It will take you to **floor plans editing mode**: new options will be shown on a sidebar at the right side of the screen:

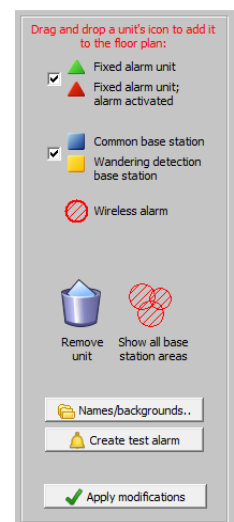
If you have not yet defined floor plans or wish to add new plans, click the **Names/backgrounds..** button. Give each floor plan a name such as "Floor 1" and import a JPEG image as a background image for it. You should select an image that has 777x490 pixels. You can also reorder the floor plans if needed.

**To add base stations** to the floor plan drag either the Common base station or Wandering base station icon from the sidebar on top of the floor plan image. Select which base station you wish to add; the base stations must have been already defined in the Base stations setting screen. Next select an imaginary range for the base station; this has very little to do with the real range but can be used to approximate the location of the customer in an alarm situation.

To add a fixed alarm device (usually a Device Interface) to the floor plan drag its icon from the sidebar. After this the Device interface will start to blink on the floor plan when an alarm is received from it.

You can **remove devices** by dragging them away from the floor plan to the Remove unit icon on the sidebar. To **check that the base station ranges cover the whole institution** place the mouse cursor on top of the Show all base station areas icon.

To **test the floor plan** use the Create test alarm button. Once you are done modifying the floor plans click the **Apply modification button** to return to normal Floor plans operating mode.

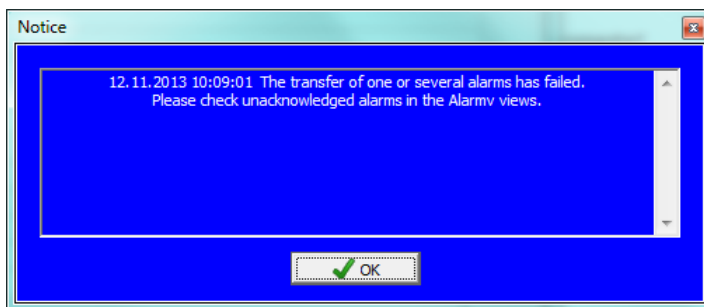


# Error situations

If an error situation occurs in Vista's alarm reception or transfer functions, Vista emits a beeping sound and displays a blue, flashing error message on the screen. The message may be caused by any of the following reasons:

## **The transfer of one or several alarms has failed**

When Vista fails to transfer an alarm, it will try to transfer the alarm again and again until a set maximum amount of retries is reached. After this Vista will display an error message indicating that "The transfer of one or several alarms has failed". You can browse for these alarms (see "Alarm date stamps" above) to determine why their transfer failed. Typically, such alarms are listed at the end of the lower list in the "Alarms" view. Transfer may fail due to a hardware error, e.g. modem or serial port lockup. The most common reason however is that simply the alarm recipient(s) could not be reached, i.e. nobody acknowledged the alarm and Vista stopped trying to transfer it. Check your Vista transfer settings and make sure all alarm recipients are prepared to receive alarms.



## **The reminder transfer of one or several alarms has been stopped**

Vista includes a feature that enables successfully transferred alarms to be transferred again to serve as reminders. The reminder transfer will not be stopped until the alarm is acknowledged on the Vista screen. If the alarm remains unacknowledged regardless of the reminder, you will receive the message shown above. This indicates that Vista has stopped reminding of an alarm, i.e. the maximum number of repetitions defined has been reached. Check your transfer system settings: you could set the reminding repetitions to a higher value to make sure the reminding sequence does not to its end "too soon" before the recipients can handle the alarm. For more information, see "Alarm transferring: After transfer: Reminder". You can browse for the alarm or alarms that caused the error message. Typically, such alarms are listed in the lower list in the "Alarms" view.

## **The Vivago Vista protection module is not plugged into the Vista computer!**

Vivago Vista's operation is protected with a so-called "protection module" (HASP). The module is a small purple connector that must always be plugged into one of the Vista computer's USB ports when Vista is running. If Vista does not detect the protection module, you will receive the above error message. Please see "Protection and modules" chapter in this document for more information.

## **Vista is unable to receive alarms because of a database error!**

You will receive this error message when Vista has not been able to record an incoming alarm in the database. Alarms cannot be received. This error could be a result of temporary hardware or operating system failure. Check the Maintenance screen for any further hints, then immediately shut down Vista and restart the computer. If the error message is repeated, check the Vista database file. Also make sure the Vista PC meets Vista's system requirements (see the "Vivago Vista requirements and installation" document), and make sure all power saving features are disabled.

# Technical specifications

Supported operating systems: Microsoft Windows 7 Professional/Ultimate, Windows 8/8.1 Pro/Enterprise, Windows 10 Pro/Enterprise, Windows Vista Business/Ultimate (SP1 or later), Windows Server 2003, Server 2008 R2, 2012 or 2012 R2; Server 2016; both 32-bit and 64-bit operating system versions are allowed.

## Customer support and manufacturer's information

### **Manufacturer**

Vivago Ltd  
Itsehallintokuja 6  
02600 Espoo, Finland  
[www.vivago.com](http://www.vivago.com) – [www.vivago.fi](http://www.vivago.fi)

### **Customer support**

Email: [support@vivago.com](mailto:support@vivago.com)  
Telephone: +358 10 2190 610

**Vivago®** develops smart safety and wellbeing solutions for preventive care. The innovative solutions cover the whole chain of care from home care to assisted living, care homes, hospitals and rehabilitation.

Vivago's solutions increase the feeling of safety with automatic alarms and by providing wide range of wellbeing information to support daily care and to follow-up the effectiveness of care. Real-time notifications inform about changes in the person's wellbeing and it enables care providers to react proactively and focus on individual care. Wellbeing information can also be shared with relatives.

As a pioneer in health care technology, Vivago already ensures safety for tens of thousands of individuals in Europe. Vivago's unique solutions are patented and have been awarded with several international recognitions. The high-quality products are manufactured in Finland. With the help of Vivago solution, people can get better care and live longer and safer at home. Vivago provides better care and enables remarkable savings in rehabilitation and home care.

**Vivago – Right care, at the right time, in the right place**

# Vivago



**Vivago Oy**

Itsehallintokuja 6, FI-02600 Espoo, Finland  
Tel. +358 10 2190 610

[info@vivago.com](mailto:info@vivago.com)

[www.vivago.com](http://www.vivago.com)