

Mobile Launcher User Manual

Version 11.0

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1. Mobile Launcher



For information about the Product environment, precautions, warnings and intended use see USR ENG Digistat Care (for the Digistat Suite EU) or USR ENG Digistat Suite NA (for Digistat Suite NA). The knowledge and understanding of the appropriate document are mandatory for a correct and safe use of the Mobile Launcher, described in this document.

Mobile Launcher is the common environment shared among all the modules of Digistat Mobile. Digistat Mobile is an Android application designed to bring some of the Digistat Suite functionalities directly "in the hands" of nurses and clinicians.

Mobile Launcher acts as a container for the Digistat Mobile modules. Each module is designed to provide specific information and to present it to the staff in a clear and concise way.

1.1 Information for the user

Please read carefully the following warnings.



In case of disconnection of the Mobile Launcher application a specific notification is generated, consisting of a characteristic and persisting sound and vibration. Sound duration is configurable. The sound is repeated until the connection is reestablished. Connection is automatically reestablished as soon as possible.



The mobile device should always be kept by the user either in direct contact or close enough to be clearly audible.



The Mobile Launcher application may display personal and/or confidential information. It is therefore recommended to not leave unattended the handheld device on which the Mobile Launcher application runs or, in case, to always logout before leaving it unattended.



Mobile Launcher can be closed by the user. After that, the application will not send any other notification.



Because of the Android architecture, in exceptional cases, which are hard to foresee, the operating system can close the Mobile Launcher application. After this event, the application will not send any other notification.



The mobile device must support the vibration mode.



Use the sound check procedure to verify if the audio on the workstation/handheld device is correctly working (see related paragraph for the procedure).

1.2 Start-up

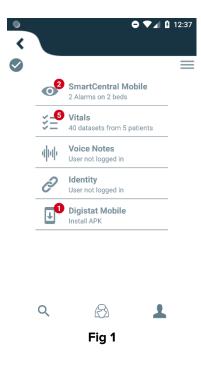


The Ascom Myco Launcher is one possible user interface for the SH1 handset and provides functionality to access central functions such as alert handling, messaging, and launching apps. The Ascom Myco Launcher can replace the standard Android launcher, while still providing access to Android functionality. The Ascom Myco Launcher is only available on SH1 devices when integrated with Unite Product. In these cases Digistat Mobile can run on the rightmost page when configured to do so.



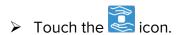
At first run, the user is requested to provide some basic authorizations and then is automatically redirected to the Settings page. Read the related paragraphs in the Digistat Suite configuration and Installation manual. Note: the first run must be performed by technical, authorized and trained personnel.

On the Ascom Myco device, when integrated with Myco Launcher, the Mobile Launcher can run on the rightmost page of the Myco Launcher itself.



The available modules are listed on the page. Touch the row corresponding to the module to open it.

On the handheld device different than SH1 devices with Ascom Myco Launcher integration enabled.



The following screen will be displayed (Fig 2).



Fig 2

The available modules are listed on the page. Touch the row corresponding to the module to open it.



If a module fails to load server-side, the module does not open. A "Wrong configuration" error message is then displayed. In these cases, contact the system administrators.

If the license for a module is not available, the module does not open. In this case a "License not available" indication is displayed below the module's name and a "Refresh" button is displayed on the left. Tap the button to try to load the module again (a license becomes available if another device is disconnected). See Fig 3 for an example.



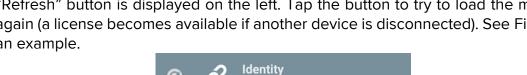


Fig 3

1.2.1 Monitoring of application execution

Once the Mobile Launcher application is started, it is monitored to be ever in execution. Should happen that the application is stopped, it is restarted. Such a restart is immediate and automatic except cases in which the service stop is caused by:

- Configuration procedure. In this cases the service automatically restarts once the configuration procedure ends. See the Digistat Suite configuration manual for more information;
- Manual stopping. In this case the service has to be manually restarted. See the Digistat Suite configuration manual for more information.

1.3 Login

Login procedure can be handled from Mobile Launcher application itself or from a supported SSO provider (e.g. Unite Product), if present within the hospital organization.



For details regarding the login on the SSO provider in use in your healthcare organization, refer to the instructions for use of the SSO provider

For application versions until 5.1.3, login procedure is strictly related to Myco launcher integration: if mobile application login comes from Unite, only the Myco Launcher mode is available.

Application versions later than 5.1.3 allow login procedure separated from Myco Launcher: Mobile Launcher or Unite login can be used indifferently if mobile application is running with Myco Launcher or not.

The procedure described below is referred to the case in which the Login is performed by means of Mobile Launcher. Such a feature is signaled by the presence in the home page of the usual icons for login and logout:

	Login	Logout
Without Myco launcher	1	
With Myco launcher	1	1

To login to Mobile Launcher

> Touch the Login icon on the lower-right corner of the "Applications list" screen (Fig 4 **A** or Fig 5 **A**)



Fia 4

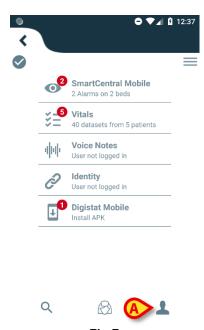
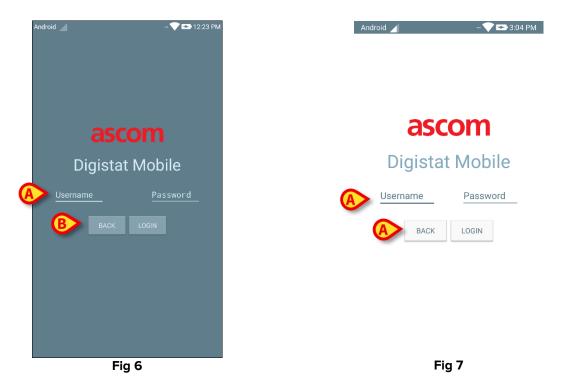


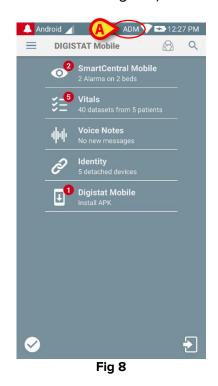
Fig 5

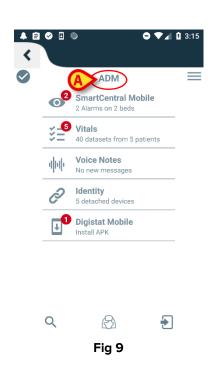
The following screen will be displayed (Fig 6 or Fig 7):



- Insert username and password (Fig 6 **A** or Fig 7 **A**).
- > Touch the **Login** button (Fig 6 **B** or Fig 7 **B**)

The acronym indicating the logged user will then be displayed either on the upper notification bar (for generic Android handheld devices - Fig 8 **A**), or on the "Applications list" screen (for Myco/UNITE version - Fig 9 **A**).





1.3.1 Login with PIN code



The present procedure can be performed only if the login procedure is managed by Mobile Launcher i.e. NOT with Myco Launcher.

The "Login with PIN code" is a login procedure quicker than the usual one. For this purpose the system administrator provides the user with:

- a NFC tag, whose scheme triggers the procedure;
- a PIN code i.e. a numeric code generated when the user account is created.

To Login via PIN code:

Put the NFC tag close to the back of the mobile device.

The following window is shown (the "admin"):



Fig 10

> Touch the "PIN" text field.

The numeric keyboard allowing the PIN code insertion is shown:



Fig 11

Insert the PIN code and touch the **LOGIN** button.



Specific messages alert the user if:

- The procedure is attempted even if the mobile application is not running;
- The user is already logged in.

1.3.2 Login with BadgePIN code



The present procedure can be performed only if the login procedure is managed by Mobile Launcher i.e. NOT with Myco Launcher.

The "Login with BadgePIN code" procedure is very similar to the "Login with PIN code": indeed the user shall login basically doing the same actions explained in the paragraph 1.3.1.

The login shall be granted once for the user are defined the following information:

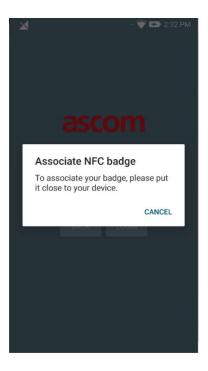
- **BadgeID**. The ID stored in the NFC-equipped badge provided to the user;
- BadgePIN. A numeric code of at least 5 digits.

The main difference is that, if specifically allowed by the Healthcare Organization, the user can set by himself the couple BadgelD / BadgePIN. For more information refer to the Digistat Suite configuration manual.

In case the user has to set by himself the BadgeID / BadgePIN couple, at first login the following actions shall be done:

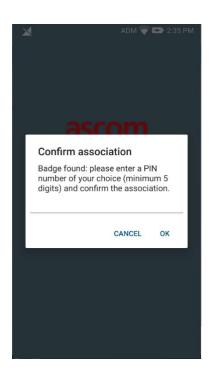
Login via username / password, just as explained in the paragraph 1.3.

The following screen is shown, allowing the user to define his BadgelD via NFC tag scan:



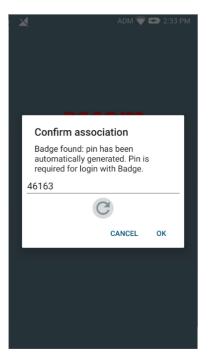
➤ Put the mobile device close to the user badge, in order to scan the NFC tag.

If the NFC tag of the user badge is successfully scanned, the following screen will be shown, allowing the user to define the BadgePIN:



> Set the BadgePIN as desired. Keep in mind it should be a sequence of at least 5 digits.

The procedure can be customized to suggest the user a random BadgePIN however customizable (see the Digistat Suite configuration manual for more information). The above screen will be replaced by the following:





- > Touch the symbol to generate a new random BadgePIN or touch the BadgePIN itself to edit it.
- > Touch the **OK** button to confirm.

In the "Login with BadgePIN code" the user is also allowed to replace a BadgeID / BadgePIN couple: just as example, in case of loss of the physical badge. In this case the user shall do the following actions:

- Login via username / password, as explained in the paragraph 1.3.
 The main page of Mobile Launcher will be shown.
- Touch the icon allowing to open the lateral menu (see paragraph 1.4). The following screen will be shown.

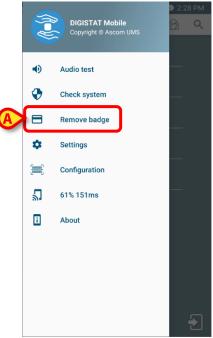
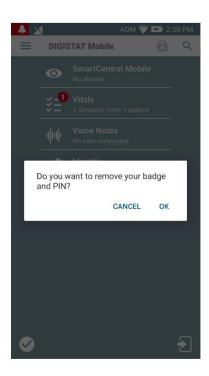


Fig 12

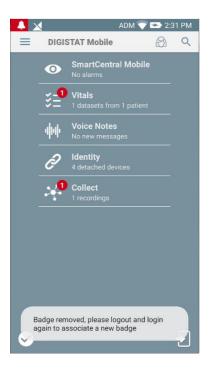
> Touch the **Remove badge** button (Fig 12 **A**) to reset both the BadgeID and the BadgePIN.

The following screen is shown, reporting a dialog window asking the user for confirmation:



> Touch the **OK** button to confirm.

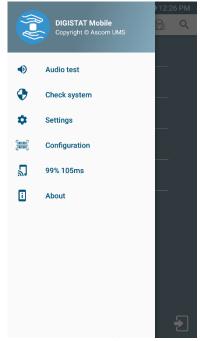
The following window is shown: a toast notification informs the user about the successful reset of BadgeID / BadgePIN credentials:



> Repeat the steps explained above to associate a new BadgeID / BadgePIN couple.

1.4 Lateral Menu

The icon on the home page opens a menu containing different options (Fig 13 or Fig 14).



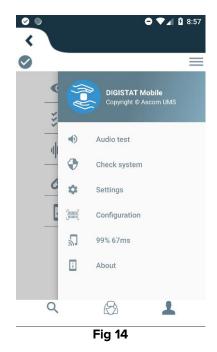


Fig 13

These are:

Audio test

Touch the **Audio Test** button to test the sound-vibration associated to the notifications (see paragraph 1.7).

Check system

Touch this item to perform the Check System procedure (see the Digistat Suite configuration manual).

Remove badge (only present in some configurations of the Mobile Launcher).

Touch this item to remove a registered BadgelD allowing to login via NFC. Read the paragraph 1.3.2 for more information.

Settings

Touch this option to access the Settings screen (see the Digistat Suite configuration manual for more information).

Configuration

Touch this item to access the configuration update feature via QR code (see the Digistat Suite configuration manual for more information).

Wireless connection status

Indicating the wireless connection status.

About

Touch this option to open a screen containing general info about the Product and Manufacturer. Please read the Product Manual for a complete information on this topic.

1.5 Upper notification bar

The upper notification bar (Fig 15) is always visible and displays general information. It is not available when running on Myco launcher.



Fig 15

The red bell icon placed on the top-left corner (only visible in non-Myco/UNITE devices Fig 15 **A**) is displayed if there are notifications for one of the patients, coming from any module. It is also displayed if the module is not active.

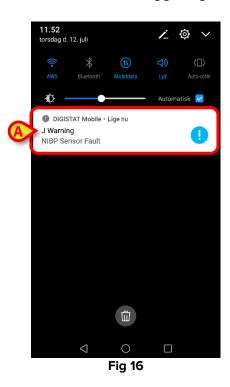
On the top-right corner the following information is displayed (Fig 15 B):

- Acronym of the logged user (non-Myco/UNITE devices);
- Wi-Fi connection status;
- Battery charge status;
- Time.

1.6 General System Notifications

Mobile Launcher provides short notifications of alarms/messages coming from any installed module when the application is not active as well (Fig 16 A). The highest level notification indicates the overall alarm level of the Mobile Launcher application. Actually are implemented three levels of severity for the notifications, each of them corresponding to a different color (red = high priority – yellow = medium priority – cyan = low priority); in addition a purely informative notification is foreseen just as reminder for the user (purple).

For each module a row in the notification area is foreseen. Any change in the notifications is performed within the row related to the module triggering notification change.



- Swipe the notification to make it disappear.
- > Touch the notification to directly access the relevant module/patient (see an example in Fig 17).

If the alarm notification from a module is related to one patient, then by touching it the alarmed patient tab is displayed; moreover, if the alarm notification is raised for more than one patient, by touching it the list of alarmed patient is displayed.



Fig 17

According to the device type, notifications concurrently coming from different applications of the Product mobile suite have a different LED color behavior

- Myco 3. The LED always reflects the higher priority alarm at any time;
- Non Myco 3. The LED reflects the latest notification color.

This means in case of multiple notifications, when swiping the higher priority one on a Myco3 device, the LED color is the one of the next notification. On non Myco3 devices, the LED is disabled after a swipe.

In addition to screen notifications, the Product is able to handle sound notifications by means of the device speaker and light notifications by means of the notification led.

In the case of sound notifications, the Product ever plays the notification with higher priority; if a notification is being executed and a new alarm has to be raised, then the Product restarts the notification with higher priority. Notifications with low priority level don't have any sound associated.

In case of service stop, a notification is provided to the user: it has the highest level of severity and it's not swipable.

In case of disconnection, the Product mobile client attempts to reconnect to the Product server. If this attempt fails, a not-swipable system notification is provided to the user, according to the following two different options:

- **Android previous than 8.0**. One notification, non swipable, highest priority level. The user can mute it by pushing the **Mute** button;
- Android 8.0 and later. Two notifications, one non swipable without sound or LED color, the second one swipable with the highest priority level, reporting useful information about the cause of the disconnection. Moreover, the second notification will not be shown anymore since the user pushes the Mute button.

1.7 Sound Check procedure



The Sound Check procedure shall be performed at least once per shift.

The Sound Check Procedure makes it possible to verify if the sound notification of alarms is working properly.

To perform the "Sound Check" procedure

Activate the main screen of Mobile Launcher application (Fig 18).

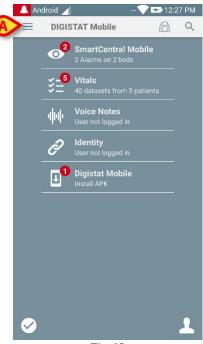


Fig 18

➤ Touch the = icon on the top-left corner of the screen (Fig 18 A)

The following menu will be displayed (Fig 19).

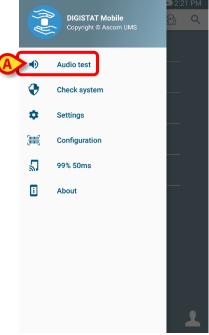


Fig 19

> Touch the **Audio test** option (Fig 19 **A**).

A test notification/sound will be this way provided (Fig 20 A).



Fig 20



Do not use the device if you do not hear the alarm sound and/or feel the device vibration.

1.8 Patient search functionalities

The Product implements several patients search tools. These tools can be accessed from the Patients List screen.

To access the search functionalities

Touch the icon indicated in Fig 21 **A** for devices without Myco/Unite integration or in Fig 22 **A** for devices with Myco/Unite integration.



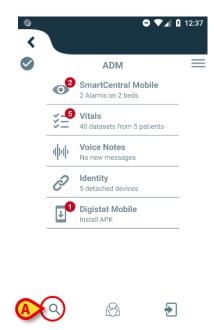


Fig 22

The following screen will open (Fig 23).



Fig 23

Three search options are available:

- 1. Textual search (see paragraph 1.8.1);
- 2. Barcode scan (see paragraph 1.8.2);
- 3. NFC code scan (see paragraph 1.8.3).



It is possible to configure the Patient Search functionality to limit the search of dismissed patients to a fixed time interval. Read the documentation related to the Digistat Suite *System Options*.

1.8.1 Textual search

➤ Insert patient data in the fields indicated in Fig 24 A (name, surname, code), then click the **Search** button (Fig 24 B). Partial information is allowed.

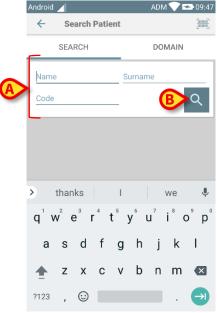


Fig 24

The list of patients whose data match those specified will be displayed (Fig 25).



Fig 25

The search is performed among all patients, both belonging and not belonging to the device domain. If the patient is currently in bed, the bed number is displayed on the left.

➤ Touch the box corresponding to a patient to select the patient. User confirmation is required (Fig 26).

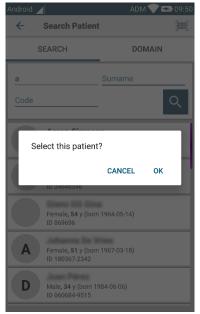


Fig 26

> Touch **Ok** to confirm.

The patient will be this way selected (Fig 27).



Fig 27

Patient data are on top of the page (Fig 27 **A**). All the data in all the Mobile Launcher modules are now filtered by patient (i.e. all and only the selected patient alarms/notifications are displayed).

➤ Touch the cross indicated in Fig 27 **B** to deselect the patient and turn to "All Patients" mode again.

1.8.2 Barcode Scan search

The Barcode Scan functionality makes it possible to select a patient by scanning his/her code.

To access the Barcode Scan functionality on non-Myco 3 devices:

- Access the search page as described in paragraph 1.8.
- > Touch the <a> icon indicated in Fig 28 A



Fig 28

The device camera will be in this way activated.

Scan the wanted patient's barcode.

To access the Barcode Scan functionality on Myco 3 devices:

- Access the search page as described in paragraph 1.8.
- ➤ Touch the side button dedicated to barcode scan (the button indicated in Fig 28 A is not present in this case);

The flash camera turns on to help the user to shoot the barcode. At the same time, a message is shown to the user signaling the barcode scanning (Fig 29 **A**):

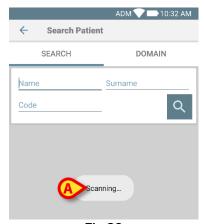


Fig 29

The patient will be this way selected. The screen shown in Fig 27 (example) will be displayed.

The barcode scanning can be done within a certain configured time; if such a time elapses and no barcode is recognized then a message is shown to the user (Fig 30 **A**):

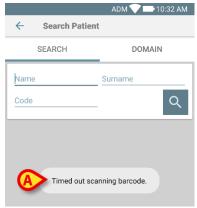


Fig 30

1.8.3 NFC Reader search

The NFC Scan makes it possible to select a patient using the device's own Near Field Communication sensor.

To do that:

Access the search page as described in paragraph 1.8.

The device NFC reader will be this way activated.

Position the device close to the patient's Tag.

The patient will be this way selected. The screen shown in Fig 27 will be displayed.

1.8.4 Single Patient Selection

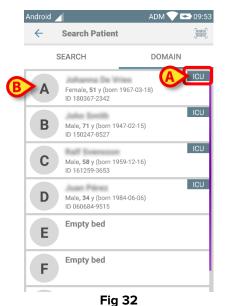
To select a single patient:

➤ Touch the icon indicated in Fig 21 **A** for devices without Myco/Unite integration or in Fig 22 **A** for devices with Myco/Unite integration. The following screen will appear (Fig 31 **A**):



Fig 31

> Touch the "**DOMAIN**" tab. The following window shall appear (Fig 32)



- · •

In Fig 32 all the patients are listed, without regard to their domain. The label on the top right corner of each tile highlights the domain of the patients (Fig 32 $\bf A$).

One single patient can be selected by touching the tile corresponding to his/her bed. Just for example:

➤ Touch the tile indicated in Fig 32 **B**. User confirmation is required (Fig 33).

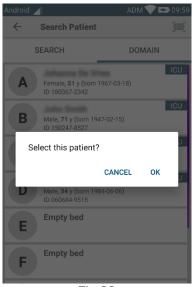


Fig 33

> Touch **Ok** to confirm. After confirmation, the following screen is displayed.

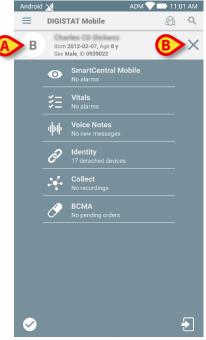


Fig 34

Patient data are on top of the page (Fig 34 **A**). All the data in all the Mobile Launcher modules are now filtered by patient (i.e. all and only the selected patient alarms/notifications are displayed).

➤ Touch the cross indicated in Fig 34 **B** to deselect the patient.

1.9 Patients Assignment Functionality

Patient's assignment makes it possible for a user to select one or more patients and create a group of patients who are under his charge. The name of this group in the Mobile Launcher application is "My Patients".

Since the user assigns himself some patients, the following notifications can be displayed on the handheld device:

- a. The notifications related to the patients assigned (i.e. in the group "My patients");
- b. The notifications related to the patients assigned (i.e. in the group "My patients") and those related to the patients that no one has explicitly taken in charge;
- c. The notifications related to the patients assigned (i.e. in the group "My patients"), those related to the patients that no one has explicitly taken in charge and those related to other patients if the devices which had them in charge "lose" them (for any reason, low Wi-Fi signal for instance).



To select the list of patients a user assigns himself and forming "My patients" list, on Mobile Launcher Central screen,

> Touch the licon (Fig 35 A).

The following screen will be displayed (Fig 36 - "Setup My Patients").



Fig 36

A patient can be selected/deselected by touching the corresponding "tile". Each tile corresponds to a bed. In addition, the user can select or deselect all the patients by checking the box on the top right corner (Fig 37 **D**).



Fig 37

The icons on the right of the patient names (Fig 37 **A**) have the following meanings:

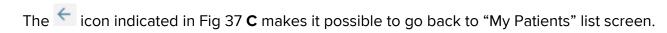
Patient is part of "My patients" of another user. It is still possible to select the patient. If two users select the same patient, the patient will be grouped under "My patients" for both users.

- Patient is not monitored. I.e. another user has him/her in charge, but at the moment, due (for example) to Wi-Fi connection failure, no one is monitoring him/her.

No icon means that no one has the patient in their "My patients" list, so the patient is not monitored.

The filters indicated in Fig 37 **B** make it possible to display:

- All patients;
- Only the assigned patients;
- Only the patients that are not monitored.





It is possible to configure the Mobile Launcher to automatically assign to the mobile device all patients belonging to the device domain. In this case, it is not necessary to manually handle the "MyPatients" group; the () icons are not displayed. Read the documentation related to the Digistat Suite *System Options* for more information.

1.9.1 Patient selection/assignment, modules and domain

In the present document the phrase "patient selection/assignment" was used to generically refer to the operations in which a patient is selected in order to perform some operations on him within the Mobile Launcher environment. Nonetheless, for some of the modules detailed below it would be preferable to talk about "bed selection/assignment".

The main differences are detailed as follows:

- An application can operate within the domain or without the domain;
 - The Smart Central, Vitals and Voice Notes module operate within the domain.
 This implies that they can select beds or patients within the same domain of the user:
 - The Identity module operates without the domain. This means that Identity can establish an association patient/device even for patients outside the user domain;
- An application operating in the domain can handle beds or patients;
 - The Smart Central module handles a bed selection (because it could be important to track data from devices coming from a bed occupied by a patient not yet identified). This implies that Smart Central can select or assign empty beds;
 - The Vitals and Voice Notes modules handle a patient selection (because it is supposed that planned parameter acquisition is performed on patients yet admitted and identified). This implies that Vitals and Voice Notes cannot select an empty bed.

1.10 Device Availability

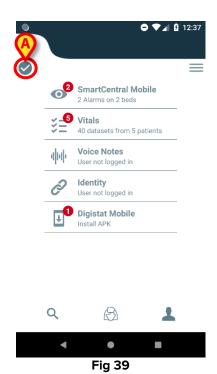
The setting of device availability is useful if the user has to be considered as "unavailable" for a temporary condition. This can be triggered from the user by proper actions in the mobile application or (if configured) by placing the device in its Docking Station.

1.10.1 Setting by the User

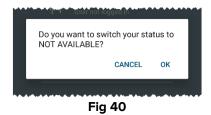
Within the product mobile application the user can set the device as "unavailable". For all devices of its ward, the beds owned by the "unavailable" device will be considered as "unattended". Nonetheless, the device set as "unavailable" continues receiving alarms and messages. In this case such alarms will continue triggering sounds and/or vibration.

Touch the symbol in Fig 38 A or Fig 39 A to set the device as "unavailable";





The following dialog message will appear, asking a confirmation from the user:

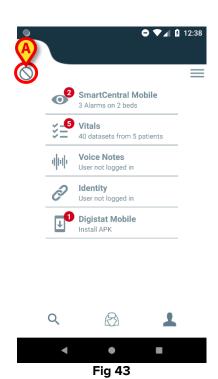




> Touch **OK** to set the device as unavailable.

The launcher home page will change as shown in Fig 42.





Touch the symbol in Fig 42 A or Fig 43 A to set the device as "available";

The following dialog message will appear, asking a confirmation from the user:



Do you want to switch your status to AVAILABLE?

CANCEL OK

Digistal mobile
Install APK

Fig 45

> Touch **OK** to set the device as unavailable.

The launcher home page will change as shown in Fig 38.

1.10.2 Setting by Docking Station

The Docking Station is an accessory device able to charge mobile devices and maintain network connection. It can host a certain number of mobile devices, thus allowing the user to change an uncharged device with a full charged one.

A specific configuration parameter has to be set in order to consider the device as "unavailable" if placed in the Docking Station.

The beds owned by the "unavailable" device will be considered as "unattended" and user will be logged out. Nonetheless, the device set as "unavailable" remains connected to mobile server and continues receiving alarms and messages.

In this case such alarms will not trigger any sound or vibration.

1.11 Widgets

The Product implements a set of widgets i.e. graphic controls intended to facilitate some specific actions from the user.



Fig 46

In the present paragraph will be showed the widget related to the overall Product mobile environment.

1.11.1 Login Widget

The Login Widget allows the user to authenticate in the Product mobile application and to search and select patients. To use such a feature the user has to do the following actions:

➤ Push the icon shown in Fig 46 **A** and release it on the device screen.

The Login Widget as default will be placed on the device screen with size 1 x 1 (Fig 47)



Fig 47

➤ Push the icon in Fig 47 A to authenticate in the Product (Fig 48).



Fig 48

After the authentication, the Login Widget shows the user currently logged in:

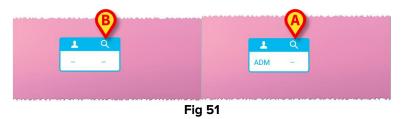


Fig 49

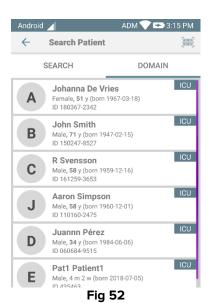
➤ Long press the icon in Fig 47 **A** or Fig 49 **A** and then release to show grab points for widget resize (Fig 50 – left if user is not logged, right if user is logged):



Touch and move one of the two grab points and then push the desktop background to resize the widget to the size 2 x 1:



➤ Touch the icon in Fig 51 **A** or **B** to access the Patient Search & Selection functionality (Fig 52).



Such a feature is accessible only if the user is logged in. If the user is not logged in and the icon in Fig 51 **B** is pressed, then the authentication window is moreover displayed.

After the Patient Selection, the Login Widget shows the patient currently selected (Fig 53):



Fig 53

In this situation, touch again the Login Widget to show the main page of the Mobile Application (Fig 54):

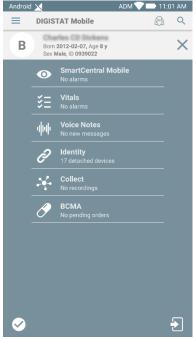


Fig 54

Please note that in the Widget's size 2 \times 1 some patient names could result too long to be correctly displayed. In this case, it is suggested to extend again the size of the Widget. The Login Widget can be indeed resized to 3 \times 1, 4 \times 1 and 5 \times 1:



Fig 55

If the user logs out while a patient is currently selected, the Login Widget will show a "blank view" i.e. no user and no patient will be shown.