aranzmedical

Silhouette v4.1

Administration User's Guide

Note: This system is developed for use only by qualified medical professionals trained and experienced in its use. Do not use the system before reading and understanding this user's guide.

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Contents

Introduction to Silhouette

This guide is intended for Silhouette administrators and is focused on the SilhouetteCentral administration features.

Document Conventions

Throughout this user's guide, screen, menu, and field names in Silhouette are displayed in a **bold font**. Series of actions are referred to as follows:

Admin > Organization > Settings

which means to select the **Settings** option in the **Organization** menu in the Silhouette Admin section.

The screens your browser displays may differ slightly from the screen captures shown in this document. However, such differences are minor and do not affect the performance of Silhouette.

System Description

SilhouetteCentral is a computerized wound imaging, analysis, and documentation system. SilhouetteCentral enables users to review, report, securely share and analyze the wound data collected by SilhouetteStar 2, SilhouetteLite+ and SilhouetteLite applications. SilhouetteCentral is accessed via a web-based application.

SilhouetteCentral is divided into two parts:

- Clinical UI - Provides access to the patient medical data stored in the Silhouette database for reviewing, editing, and updating. Reports, images, and wound measurement data can also be exported for further processing and importing into other applications.

- Administration - Provides facilities to manage units, groups, patients, and system users. SilhouetteCentral can also be used to configure and customize the Silhouette system.

SilhouetteStar 2 is a camera that captures wound images and non-contact 3D measurements of wounds at the point of care. The images and data captured with SilhouetteStar 2 are uploaded to SilhouetteCentral over a secure Wi-Fi network.

SilhouetteLite+ is comprised of an application and a range finding sensor for Apple® iPhone®, iPod® touch and iPad® iOS 10+ devices. SilhouetteLite+ enables users to take wound images, obtain non-contact 2D measurements, and record patient notes on their mobile device. The data collected at the patient's bedside is synchronized with SilhouetteCentral over a secure connection when available.

SilhouetteLite is an application designed for Apple® iPhone®, iPod® touch and iPad® iOS 10+ devices. SilhouetteLite is a simplified application that enables users to add patients, wound images and simple notes (without measurements) to SilhouetteCentral. The data collected at the patient's bedside is synchronized with SilhouetteCentral over a secure network connection when available.

Topics

This user's guide is divided into the following high level topics:

[Using SilhouetteCentral](#)

[Silhouette Administration](#)

[System Requirements and Operating Conditions](#)

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Using SilhouetteCentral

This section describes the basics of using with SilhouetteCentral. It is divided into the following sections:

[Logging In to SilhouetteCentral](#)   [Navigating in SilhouetteCentral](#)   [Logging Out from SilhouetteCentral](#)

Logging In to SilhouetteCentral

To log in to SilhouetteCentral, navigate to the website address of your SilhouetteCentral instance. The log on screen will appear. Enter the **User Name** and **Password** supplied to you. Select **Login**.

It is important to log on using the **User Name** and **Password** assigned to you. Silhouette records the names of users viewing, creating, and modifying patient records, and using the correct user name ensures accurate auditing.

Many browsers will prompt you to save a **User Name** and **Password** for websites you log on to. If using a shared computer, it is recommended that you do not permit the browser to save your login detail for SilhouetteCentral. Doing so means that anyone using your computer can log on, access and potentially modify patient medical records that will be recorded as having been actioned by you.

While logging on to SilhouetteCentral you may occasionally be prompted to change your password if a system administrator has made use of the password expiry features. In this case you will need to pick a new password that meets the password complexity requirements and enter it before Silhouette will allow you to log on.

Recovering Forgotten Password

If you have forgotten your password, use the **"Forgot your Password?"** link on the log on screen. If you do not see this link, your administrator may have chosen to disable this feature, in which case contact your system administrator for further advice on how to regain access to your account.

Once the "Forgot your password?" link is selected you will be prompted to enter your email address. You should enter the email address that is associated with your Silhouette user name.

In order to reset your password please enter your email address.
Email Address [   ]
❌Cancel 📝Send Password Reset

You will get a message that an email with instructions to reset your password has been sent to the email address you specified.

Password reset request
Information on how to complete your password reset request has been sent to your email address.

Please check the email for instructions on how to complete the password reset.

When you check your email account and receive the email sent by Silhouette you will find a link that can be used to reset your password. Selecting the link will load the Silhouette website and prompt you to enter a new password.

Please enter the new password for 'test'.

The password must match the following criteria:
- A minimum of 3 characters.
- A maximum of 20 characters.

New Password *
[   ]
Confirm Password *
[   ]

✖ Cancel   **Reset Password**

You will receive a confirmation that your password has been changed and you can now proceed to log on with the new password.

Password Reset
Your password has been reset, please proceed to log on with your new password.

If you receive a password reset request email and do not remember requesting it, an additional link in the email may (depending upon system configuration) be provided that allows you to cancel the password reset request so any other person who manages to view the email can not reset your password.

Password reset request canceled. The link can no longer be used to reset your password.

User Name
Password

Login   Forgot your password?

In some circumstances you may get a password reset email that indicates your user account is not able to have its password reset via email. In this scenario contact your system administrator for further instructions on how to reset your password.

Navigating in SilhouetteCentral

Once you have logged on to SilhouetteCentral, your name is shown in the top right-hand corner, with a drop down menu, known as the Application Menu:
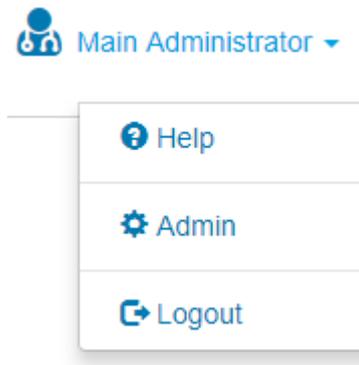
Help
Contains the User Guides to help you use Silhouette.

Admin
Change your account settings such as your name, email address and password.

Also, if your account has the correct permissions: view settings information about the application. See "Silhouette Administration".

Logout
Log out of SilhouetteCentral. See "Logging Out from SilhouetteCentral".

The pages in Silhouette have a sidebar that can be used for navigating between sections.
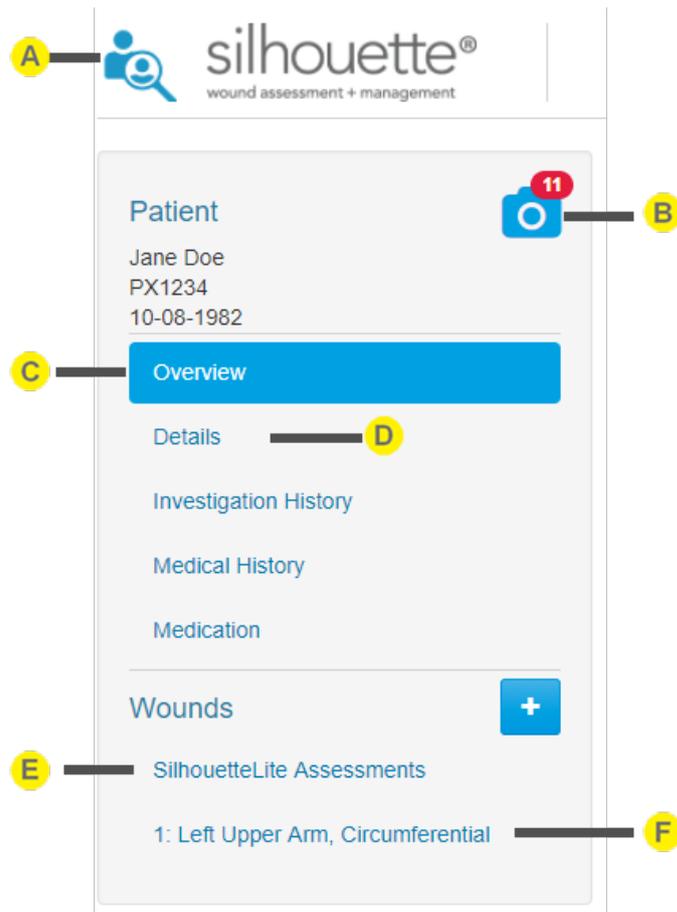
A	Select the logo to go back to the Patient Select screen
B	The camera icon opens the Portfolio dialog
C	Opens the Patient Overview
D	Opens the Patient Details (name, date of birth, etc)
E	View all the **SilhouetteLite** assessments
F	Opens the Wound Overview for the selected wound

Note that it is possible to use multiple tabs to view SilhouetteCentral, however care should be taken to ensure the correct patient data is being reviewed when using this feature.

Identifying Patients

Within the context of a hospital environment there may be two or more patients with the same name or date of birth. Silhouette uniquely identifies each patient via use of a personal identifier, which by default is called the patient's Patient ID.

Within Silhouette it is not possible to create a new patient record without assigning a Patient ID to the patient.

Searching for Patients

In some Silhouette screens, you can search for patients by their first name, middle name, last name, or Patient ID.
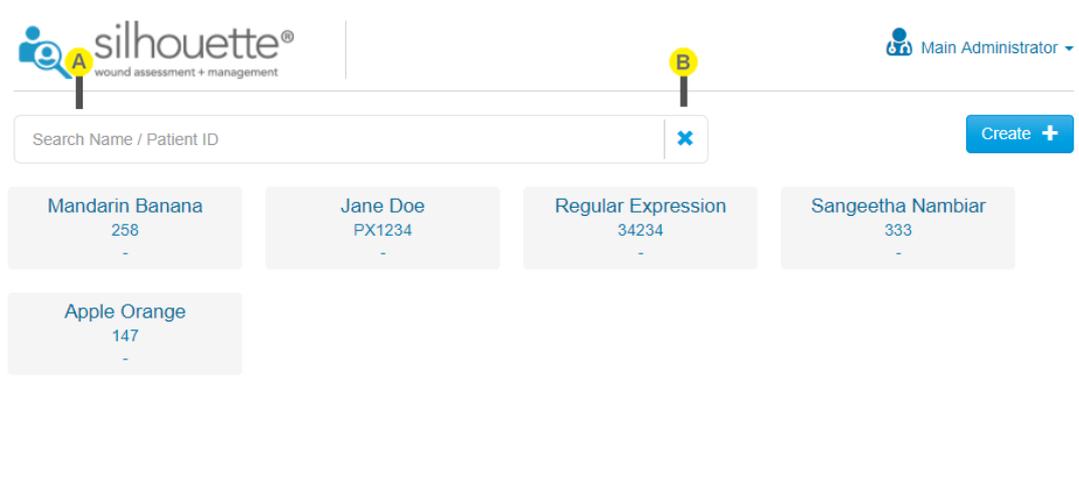
A **Search box**

Enter part of the patient's name or Patient ID. The search will be performed after the typing has stopped.

For example, searching for the letters "an" filters the list so that it displays patients whose name or Patient ID begins with the letter sequence "an".

Narrow the search further by entering more of a patient's name or Patient ID.

B **Clear button**

Select the **x** button to clear the search box and display the full list of patients.

Capturing Wound Images

> To get more comprehensive help with the Clinical UI in Silhouette, please see the Clinical User's Guide.

In order to capture wound images, Silhouette must be connected to a SilhouetteStar 2 camera. For this, Silhouette needs at least one network configured, see Creating a Network Configuration.

Connect the camera by opening the Portfolio dialog. To do this, select the **camera icon** on the Patient sidebar.
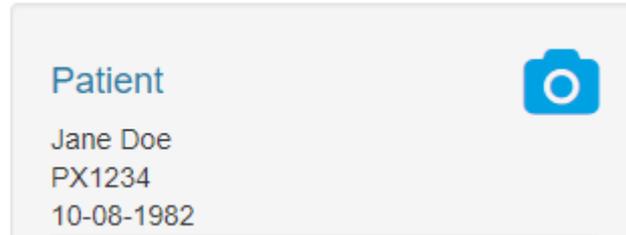
If the Portfolio shows the captured images instead of the networks available, use the **'Connect the SilhouetteStar'** link.

The dialog will display a QR code if there is only one network available. If there are multiple, it will show a dropdown so that the correct network can be selected.

Scan the QR code with the SilhouetteStar 2 camera to connect to Silhouette. Once it has finished, the Patient details will be shown on the camera display, and images can be captured. The camera will remain connected until the Silhouette session ends (e.g. by logging out). Silhouette can switch between patients while the camera is connected.

Logging Out from SilhouetteCentral

You can log out of SilhouetteCentral by using the Application Menu in the upper right-hand corner, and selecting the **Logout** option.

Note that you will be automatically logged out of SilhouetteCentral after a period of inactivity. This period is configurable, but by default is 10 minutes.

Silhouette Administration

Silhouette administration is controlled through SilhouetteCentral, see Using SilhouetteCentral. The admin section is accessed through the **Application Menu** and is organized into sections, which are displayed in the sidebar.
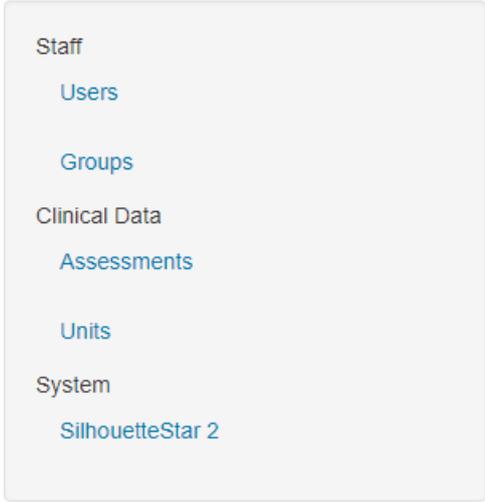
Users

Groups

Assessments

Unit Administration

Network Configurations

> The sections displayed to any given user will depend upon the permissions that have been configured for that users assigned group.

Groups, Users, and Units in Silhouette

Access to the Silhouette data is managed through units and groups. Additionally, the group controls functionality available to the users.
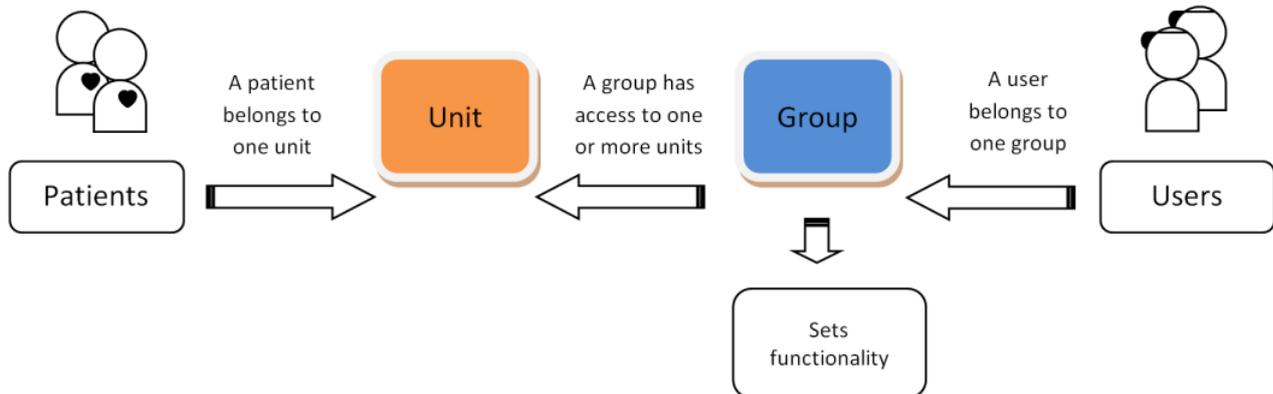
Where:

- Every patient belongs to a single unit. While a patient can only belong to one unit at a time, this can change over time.

- Each user belongs to a single group.

- A group can be associated with one, several, or all units of the organization.

In summary, a user has access to those patients that belong to the unit(s) which the user's group is associated with; additionally, the group defines the actions a user can perform.

Silhouette users can log on to only one unit at a time. In a multi-unit organization that uses different Patient ID identifiers for patients in different units, selection of a unit will control which IDs are displayed on screen and which Patient ID is used in the creation of patient records.

As an example, your organization might have a set of users who belong to the same group that can only log on to a specific unit in the organization. A user might also be limited in what changes they can make to patient records or might be prevented from creating new patients in the system. At the same time, there may be a set of users who belong to a different group that has access to every unit and can use any Silhouette feature available in the system.

Note that different organizations use units in different ways, depending upon how the organization is structured. For example, an organization may use units to differentiate different departments, wards, or facilities.

Units can be defined in the Unit Administration screen. Group settings, including which units members of a group can access, are defined in the Groups screen. Users can be created and edited in the Users screen, which allows assignment of a user to one of the groups defined in the Groups screen.

Users

Users must have a user account to access any of the Silhouette applications (SilhouetteCentral, SilhouetteLite, or SilhouetteLite+). The Users screen allows you to add and manage Silhouette user accounts.

To define and manage users, select **Admin > Users**.
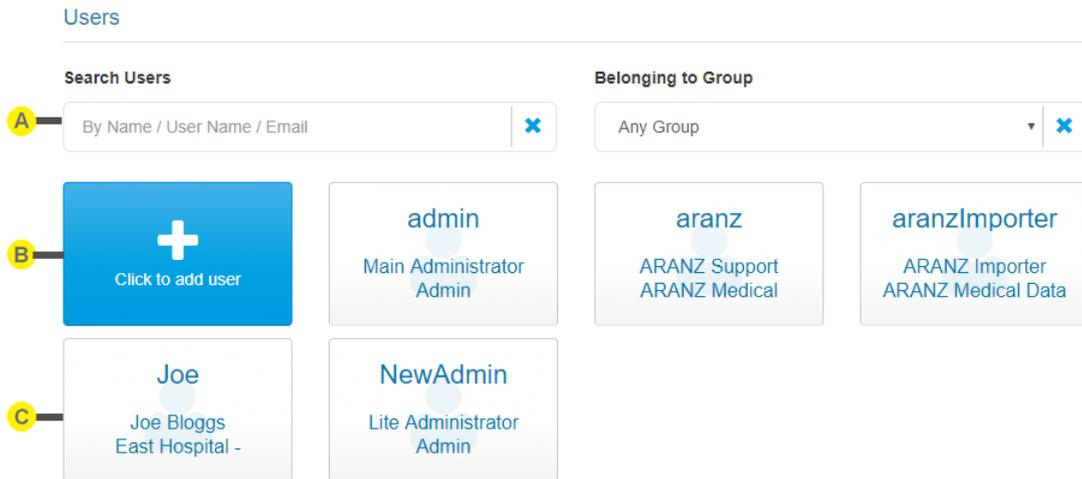
A **Filter options**
Limit the users shown in the list using these options.

B **Create button**
See "Creating a User".

C **Edit button**
See "Editing a User".

Creating a User

To add a new user to Silhouette, in the **Users** screen select the **Click to add user** button. The **Create User** screen is displayed, with compulsory fields marked with an asterisk. Enter the required information.

Note that every user within the organization must have a unique **User Name**.

The **Group** a user is assigned to determines what Silhouette features and patients the user has access to. See Groups for more information.

When you have entered the user's details, select the **Save** button at the bottom of the screen to save the user's information, and you will be returned to the Users screen.

Editing a User

To edit an existing user's details (including your own), select that user's tile in the **Users** screen. The information for the user is displayed in a read-only view.

⟳ Reset Password	🗑 Delete	✎ Edit	✖ Close

Details

User Name *

Joe

Status *

Enabled

Group *

East Hospital - Clinician - Ward A

First Name *

Joe

Middle Name

-

Last Name *

Bloggs

Phone Number

-

Email Address

joe.bloggs@company.com

Force Password Reset At Next Logon *

No

Select the **Edit** button. The **Edit User** screen is displayed, with compulsory fields marked with an asterisk. When you have finished editing the user's details, select the **Save** button at the bottom of the screen saves the user's information and returns you to the read-only view.

The **Status** drop-down controls if a user can log on to Silhouette (subject to their group permissions). A user will be able to log on when their status is "Enabled". To temporarily stop a user from logging on you can set their status to "Disabled". The system may also automatically disable an account, in which case the status will be "Locked". This distinction can be used to determine which user accounts have been explicitly disabled by a system administrator, and those which a user has accidentally disabled due to entering the incorrect password too many times.

If you wish to change the user's password, use the **Reset Password** button.

To delete the user, use the **Delete** button.

Select **Close** to go back to the Users screen.

Changing Your Password

For administrator users, your own and others passwords are managed via the Users screen.

Note that user names and passwords are used across the Silhouette Product Suite, so you will also need to use the new password when logging in to SilhouetteCentral, SilhouetteLite or SilhouetteLite+.

For non-administator users to change their Silhouette password:

1. Navigate to the **Admin -> Profile** screen.

2. Select the **Change Password** button.

3. Enter your existing password in the **Current Password** box.

4. Enter your new password in both the **New Password** and **Confirm Password** boxes.

5. Select the **Save** button to update the system with your new password.

Groups

To ease support burdens, individual user accounts are assigned to groups based upon similar needs with respect to the features and patients they are allowed to access. This allows the permissions to be configured once and applied immediately across a number of user accounts.

As an example, you may create a group to allow data correction tools to be utilized by research staff, while another group containing your clinical staff would not have access to these tools. Groups can also be used to restrict users to interacting with a subset of patients (via units).

To define and manage groups, select **Admin > Groups**.
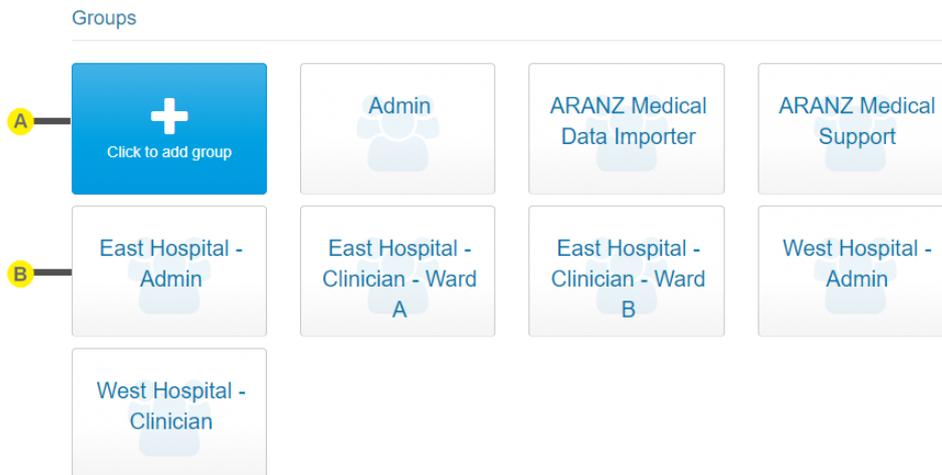
A **Create button**
See "Creating a Group".

B **Edit button**
See "Editing a Group".

Creating a Group

To create a new group, in the **Group Administration** screen select the **Click to add group** button. The **Create Group** screen is displayed, with compulsory fields marked with an asterisk. Enter a **Group Name** and **Description**.

If you check **Force Password Reset**, new users who are assigned to this group will be required to change their password the first time they log on.

This allows you to create all new user accounts with an easily entered password such as "password" or "1234" and ensure users provide a new password only known to themselves when they initially log on.

To defined which units the new group has access to, select **Change**, which reveals a list of all available units the current system administrator has access to. Select the check boxes which represent the units that hold patients the new group should have access to:

If you select the **all and future units** check box then the unit check boxes will be hidden.

Having the **all and future units** check box enabled means that as new units are created within Silhouette permission to access the patients in the newly created units will automatically be assigned to the new group. If the **all and future units** check box was left unchecked a system administrator would need to manually edit each group to add permission to access each new unit.

If you don't select the global access (all units) check box, the **Administrator Permissions** are removed so they can not be enabled. This is because the permissions in this section control the ability to access functionality which allows interaction with any patient within the system, or affects all users. Due to this, these permissions are only assignable to a group if the group has global access to all patients and user accounts.

Below you will find a description of each permission that can be assigned to a group. The permissions in italics below are intended to control features that are not yet implemented in the current version of Silhouette and so do nothing as yet.

Clinical Data Permissions

- **Can Create Patient** - controls if users assigned to this group can create patients.

- **Can Edit Patient** - controls if users assigned to this group can edit patients.

- *Can Delete Patient* - *controls if users assigned to this group can delete patients.*

- **Can Create Wound** - controls if users assigned to this group can create wounds.

- **Can Edit Wound** - controls if users assigned to this group can edit wounds.

- *Can Delete Wound* - *controls if users assigned to this group can delete wounds.*

- **Can Create Assessment** - controls if users assigned to this group can create assessments.

- **Can Edit Assessment** - controls if users assigned to this group can edit assessments.

- *Can Delete Assessment* - *controls if users assigned to this group can delete assessments.*

- **Can Create Report** - controls if users assigned to this group can create reports for assessments.

A group with permissions to a unit can view all patients, wounds and assessments for that unit , i.e. there is no separate view permission above.

Silhouette Permissions

- **Can Synchronize** - *controls if users assigned to this group can synchronize a Silhouette User Application with Silhouette Central.*

- **Can Manage Patients** - *controls if users assigned to this group can add/remove patients currently stored within Silhouette Central with Silhouette User Application.*

Administrator Permissions

- **Can Manage Assessment Types** - controls if users assigned to this group can edit assessment types

- **Can Manage Settings** - controls if users assigned to this group can access the organization settings

- **Can View Logs** - *controls if users assigned to this group can view the logs*

- **Can Manage Units** - controls if users assigned to this group can add/edit/delete units

- **Can Manage Users and Groups** - controls if users assigned to this group can add/edit/delete users and groups

To save the group's settings, select the **Save** button at the bottom of the screen.

Editing a Group

To edit a group to Silhouette, in the **Group Administration** screen, select the group from the groups list. The information for the group is displayed in a read-only view.

	🗑 Delete	✎ Edit	✖ Close

Details

Name *	**Description**
West Hospital - Admin	Administrators for the West Hospital

For The Following Units ▬

All And Future Units

No

East Hospital - Ward A	**East Hospital - Ward B**	**West Hospital - Ward A**	**West Hospital - Ward B**
No	No	No	No

West Hospital - Ward C

No

Clinical Data Permissions		Silhouette Permissions	
Can Create Patient	**Can Edit Patient**	**Can Synchronize**	**Can Manage Patients**
Yes	Yes	Yes	No

Select the **Edit** button. Update the information, as required. To save the group's settings, select the **Save** button at the bottom of the screen.

To delete the group, use the **Delete** button.

Select **Close** to go back to the Groups screen.

Assessments

Silhouette comes with some pre-loaded assessment types such as Patient Assessments and Wound Assessment. Extra Assessment types can be added to the system to suit your organization.

To define and manage groups, select **Admin > Assessments**.
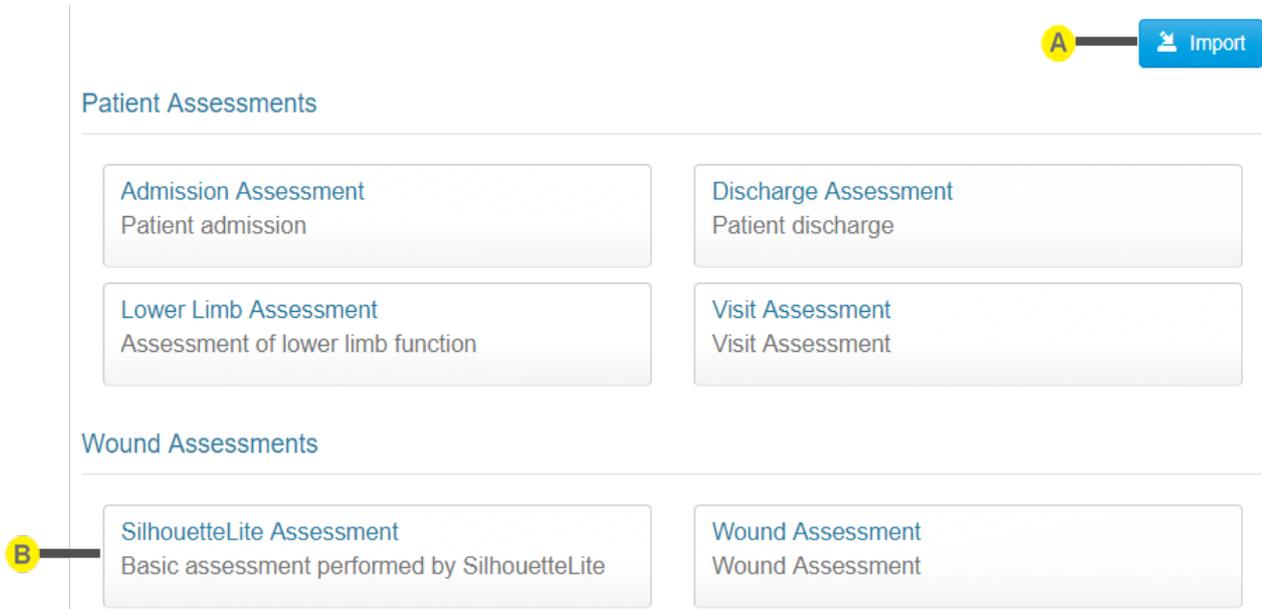
A

Import button

An Assessment type that has previously been created within another Silhouette system can be added by selecting the **Import** button, and browsing to the location of the Assessment to Import.

Contact ARANZ Medical Limited for help to configure the assessments you need.

B

Edit button

See "Editing an Assessment".

Editing an Assessment

To edit an assessment to Silhouette, in the **Assessment Administration** screen, select the assessment from the list. The information for the assessment is displayed in a read-only view.

⬆ Export	🗑 Delete	✏ Edit	✖ Close

Details

Name

Wound Assessment

Description

Wound Assessment

Type

Wound Assessment

Can create within application

SilhouetteCentral, SilhouetteLite+

Select the **Edit** button. Update the information, as required. To save the assessment's settings, select the **Save** button at the bottom of the screen.

To delete the assessment, use the **Delete** button.

To export the type (so it can be imported to another instance of Silhouette), use the **Export** button.

Select **Close** to go back to the Assessments screen.

Unit Administration

A unit defines an entity which patients can be assigned to. Different organizations use units in different ways, depending upon how the organization is structured. For example, an organization may use units to differentiate different departments, wards, or facilities.

To define and manage units, select **Admin > Units**.

Units

A ─ ➕ Click to add unit	East Hospital - Ward A	East Hospital - Ward B	West Hospital - Ward A
B ─ West Hospital - Ward B	West Hospital - Ward C		

A **Create button**

B **Edit button**
See "Editing a Unit".

Editing a Unit

To edit a unit in Silhouette, in the **Unit Administration** screen, select the unit from the units list. The information for the unit is displayed in a read-only view.
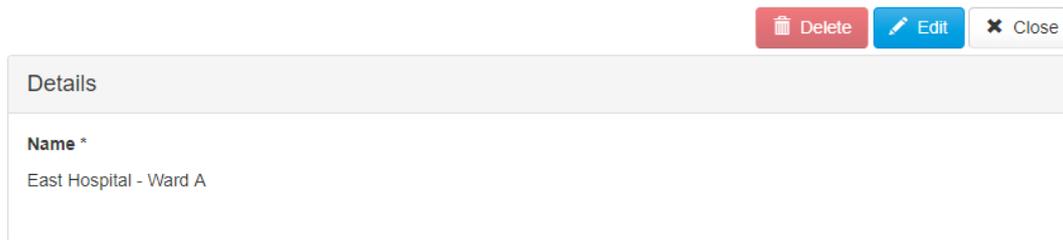
[🗑 Delete] [✏ Edit] [✖ Close]

Details

Name *

East Hospital - Ward A

Select the **Edit** button to change the details.

Details

Name *

A ——— | East Hospital - Ward A |

[✔ Save] [✖ Cancel]

A   **Unit Name**

This is the name of the unit being edited.

To delete the unit, use the **Delete** button.

Select **Close** to go back to the Unit Administration screen.

Network Configurations

The settings in the **SilhouetteStar 2** screen are used to allow the SilhouetteStar 2 camera to connect to the organization's Wi-Fi network.

These settings are displayed within the user application through a QR code which the camera uses to read the network settings and successfully connect.

To define and manage network configurations, select **Admin > SilhouetteStar 2**.

Network Configurations

A ─ **+** Click to add network

Private network

Company network ─ B

Show MAC Address

Scan this barcode to display the mac address of the SilhouetteStar
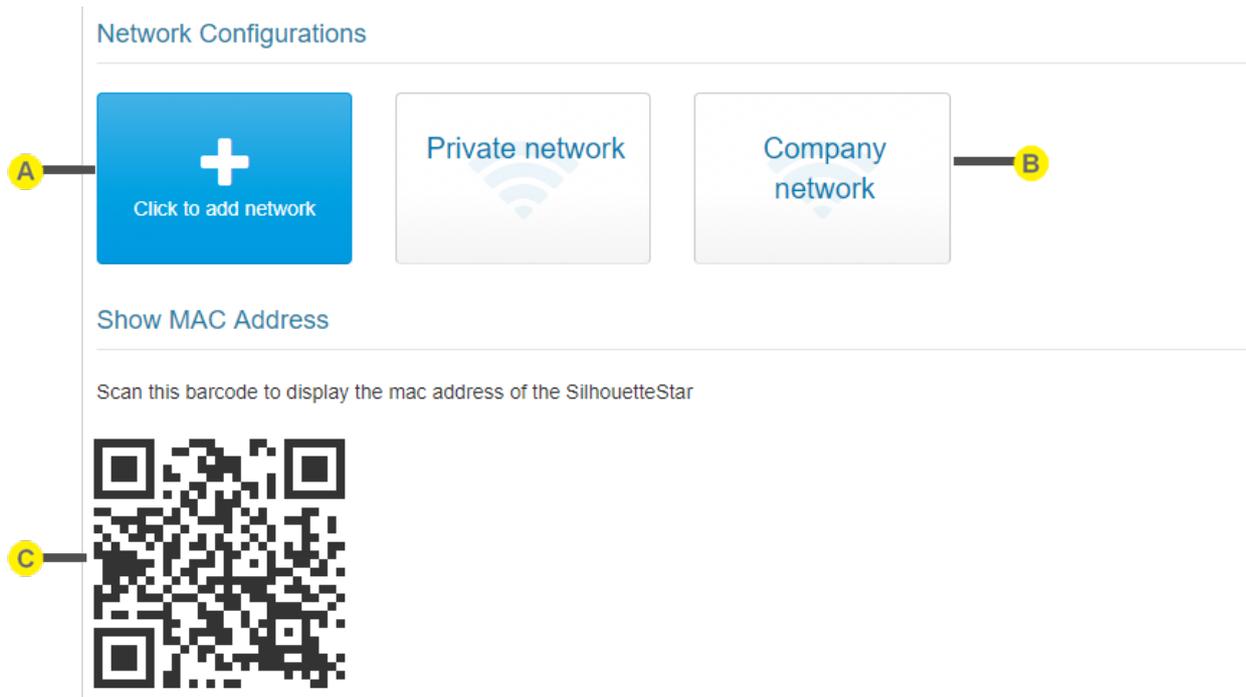
C ─ [QR code]

A **Create button**
See "Creating a Network Configuration".

B **Edit button**
See "Editing a Network Configuration".

C **Show MAC Address**

Scan the QR code with SilhouetteStar 2 camera to show the Wi-Fi MAC address of the camera on the camera display.

Once scanned, the camera will show the Wi-Fi MAC address until it is dismissed with a camera button press.

> The Show MAC Address QR code can only be scanned if the camera is not already connected to a network.

> The Show MAC Address QR code can be printed, or downloaded as images and emailed. This may help if you need Silhouette users without admin access to scan them for diagnostic or setup purposes.

Creating a Network Configuration

To create a new network configuration, in the **SilhouetteStar 2** screen, Select the **Click to add network** button. The **Create Network** screen is displayed, with compulsory fields marked with an asterisk. Enter a **Name**, **Type**, **Network SSID**, and **Network Password**.

To save the network's settings, select the **Save** button at the bottom of the screen.

Editing a Network Configuration

To edit a network configuration, in the **SilhouetteStar 2** screen, select the network from the networks list. The information for the network is displayed in a read-only view.

Select the **Edit** button. Update the information, as required. To save the network's settings, select the **Save** button at the bottom of the screen.

To delete the group, use the **Delete** button.

Select **Close** to go back to the Network Configurations screen.

Automated Installation

If you have access to the physical server running SilhouetteCentral, as an alternative to using the various file upload options within the administration user interface to configure additional users, units or report templates etc, you can alternatively make use of a more direct import process.

Files with the following special filenames can be placed in the Files\Setup folder of SilhouetteCentral's installation folder and will be automatically detected and processed during the next application pool restart. If successfully processed the file will be deleted from the Files\Setup folder to indicate its successful import.

- Units.csv - a list of units to import into Silhouette.

- Groups.csv - a list of groups to import into Silhouette.

- Users.csv - a list of users to import into Silhouette.

As an example if you wanted to quickly add 50 additional units to a Silhouette installation you could create a Units.csv file describing the details of the 50 additional units and then place this file in the Files\Setup folder. Once the file is in place, restarting the IIS application pool would cause the 50 units to be imported into the system, without needing to even log on to the SilhouetteCentral application.

System Requirements and Operating Conditions

Not all system specifications are listed in this section. See the system specification sheet from ARANZ Medical for further information.

SilhouetteCentral Web Application - Minimum Requirements

Web Browsers Supported

Safari, IE, Edge, Firefox, Chrome

Note: The web application is not designed to work on phone screens. An iPad mini or larger is recommended.

Appendices

The appendices include:

[Getting Support](#)

[Appendix A: Anatomical Sites](#)

[Appendix B: Notes Definitions](#)

[Regular Expressions](#)

Getting Support

You can contact ARANZ Medical support by using the contact information listed below:

Customer Support

Please contact your system administrator for support information.

Sales Enquiries

Phone (International): +64-3-374-6120

Phone (US customers): 866-467-0934

Fax: +64-3-374-6130

Email: sales@aranzmedical.com

ARANZ Medical Website

www.aranzmedical.com

Appendix A: Anatomical Sites

Wounds recorded within SilhouetteConnect and SilhouetteCentral are always assigned to an anatomical site for reporting and identification purposes.

When specifying an anatomical site the user is prompted to select options from a series of hierarchical drop-down lists. The options available in the next drop-down list depend upon the selection the user made in the previous.

The following tables outline the available anatomical sites and the selections a user must make in the Gross Division, Handedness and Location drop-down lists in order to select them.

The anatomical sites described in this appendix reflect the default set of anatomical sites that SilhouetteCentral and SilhouetteConnect are setup with. They do not show any customisations made.

Head & Neck

Gross Division	Handedness	Location	Display within Silhouette
Scalp		Superior	Scalp, Superior
		Posterior	Scalp, Posterior
		Left Lateral	Scalp, Left Lateral
		Right Lateral	Scalp, Right Lateral
Forehead		Anterior	Forehead, Anterior
		Left Lateral	Forehead, Left Lateral
		Right Lateral	Forehead, Right Lateral
Temple	Left		Left Temple
	Right		Right Temple
Orbit	Left	Superior	Left Orbit, Superior
		Inferior	Left Orbit, Inferior
		Eyeball	Left Orbit, Eyeball
		Medial	Left Orbit, Medial
		Lateral	Left Orbit, Lateral
	Right	Superior	Right Superior
		Inferior	Right Inferior
		Eyeball	Right Eyeball
		Medial	Right Medial
		Lateral	Right Lateral

Gross Division	Handedness	Location	Display within Silhouette
Cheek	Left	Superior	Left Cheek, Superior
		Inferior	Left Cheek, Inferior
		Anterior	Left Cheek, Anterior
		Posterior	Left Cheek, Posterior
		Central	Left Cheek
	Right	Superior	Right Superior
		Inferior	Right Inferior
		Anterior	Right Anterior
		Posterior	Right Posterior
		Central	Right
Ear	Left	Superior	Left Ear, Superior
		Inferior	Left Ear, Inferior
		Anterior	Left Ear, Anterior
		Posterior	Left Ear, Posterior
	Right	Superior	Right Superior
		Inferior	Right Inferior
		Anterior	Right Anterior
		Posterior	Right Posterior
Nose		Superior	Nose, Superior
		Inferior	Nose, Inferior
		Anterior	Nose, Anterior
		Left Lateral	Nose, Left Lateral
		Right Lateral	Nose, Right Lateral
Lip		Upper	Lip, Upper
		Lower	Lip, Lower
		Left Angle	Lip, Left Angle
		Right Angle	Lip, Right Angle
Jaw		Anterior	Jaw, Anterior
		Inferior	Jaw, Inferior
		Left Lateral	Jaw, Left Lateral
		Right Lateral	Jaw, Right Lateral

Gross Division	Handedness	Location	Display within Silhouette
Neck		Anterior	Neck, Anterior
		Left Lateral	Neck, Left Lateral
		Right Lateral	Neck, Right Lateral
		Posterior	Neck, Posterior

Torso

Gross Division	Handedness	Location	Display within Silhouette
Thorax	Left	Clavicular region	Left Clavicular region
		Axilla	Left Axilla
		Lateral region	Left Lateral region, Thorax
	Right	Clavicular region	Right Clavicular region
		Axilla	Right Axilla
		Lateral region	Right Lateral region, Thorax
Sternum		Superior	Sternum, Superior
		Inferior	Sternum, Inferior
Breast	Left	Superior	Left Breast, Superior
		Inferior	Left Breast, Inferior
		Anterior	Left Breast, Anterior
		Medial	Left Breast, Medial
		Lateral	Left Breast, Lateral
		Nipple	Left Breast, Nipple
	Right	Superior	Right Superior
		Inferior	Right Inferior
		Anterior	Right Anterior
		Medial	Right Medial
		Lateral	Right Lateral
		Nipple	Right Nipple

Gross Division	Handedness	Location	Display within Silhouette
Abdomen		Right upper quadrant	Abdomen, Right upper quadrant
		Right lower quadrant	Abdomen, Right lower quadrant
		Left upper quadrant	Abdomen, Left upper quadrant
		Left lower quadrant	Abdomen, Left lower quadrant
		Midline - upper	Abdomen, Midline - upper
		Umbilical	Abdomen, Umbilical
		Midline - lower	Abdomen, Midline - lower
		Left flank	Abdomen, Left flank
		Right flank	Abdomen, Right flank
Back	Left	Scapular region	Left Back, Scapular region
		Thoracic region	Left Back, Thoracic region
		Lumbar region	Left Back, Lumbar region
	Right	Scapular region	Right Scapular region
		Thoracic region	Right Thoracic region
		Lumbar region	Right Lumbar region
Spine		Thoracic	Spine, Thoracic
		Lumbar	Spine, Lumbar

Pelvis

Gross Division	Handedness	Location	Display within Silhouette
Spine/Gluteal cleft		Sacrum	Sacrum
		Coccyx	Coccyx
		Peri-anal	Peri-anal
Buttock	Left	Superior	Left Buttock, Superior
		Inferior	Left Buttock, Inferior
		Central	Left Buttock
		Medial	Left Buttock, Medial
		Lateral	Left Buttock, Lateral
	Right	Superior	Right Superior
		Inferior	Right Inferior
		Central	Right
		Medial	Right Medial
		Lateral	Right Lateral

Gross Division	Handedness	Location	Display within Silhouette
Misc. bony prominences	Left	Iliac Crest	Left Iliac Crest
		Greater trochanter	Left Trochanter
		Ischial Tuberosity	Left Ischial Tuberosity
	Right	Iliac Crest	Right Iliac Crest
		Greater trochanter	Right Trochanter
		Ischial Tuberosity	Right Ischial Tuberosity
Groin	Left		Left Groin
	Right		Right Groin
Genital Male		Scrotum	Scrotum
		Penis	Penis
		Perineum	Perineum
Genital Female		Vulva	Vulva
		Labia	Labia
		Perineum	Perineum

Upper Extremity

Gross Division	Handedness	Location	Display within Silhouette
Shoulder	Left	Superior	Left Shoulder, Superior
		Anterior	Left Shoulder, Anterior
		Posterior	Left Shoulder, Posterior
		Lateral	Left Shoulder, Lateral
	Right	Superior	Right Superior
		Anterior	Right Anterior
		Posterior	Right Posterior
		Lateral	Right Lateral

Gross Division	Handedness	Location	Display within Silhouette
Upper Arm	Left	Anterior	Left Upper Arm, Anterior
		Posterior	Left Upper Arm, Posterior
		Medial	Left Upper Arm, Medial
		Lateral	Left Upper Arm, Lateral
		Circumferential	Left Upper Arm, Circumferential
	Right	Anterior	Right Anterior
		Posterior	Right Posterior
		Medial	Right Medial
		Lateral	Right Lateral
		Circumferential	Right Circumferential
Elbow	Left	Anterior	Left Elbow, Anterior
		Posterior	Left Elbow, Posterior
		Medial	Left Elbow, Medial
		Lateral	Left Elbow, Lateral
		Circumferential	Left Elbow, Circumferential
	Right	Anterior	Right Anterior
		Posterior	Right Posterior
		Medial	Right Medial
		Lateral	Right Lateral
		Circumferential	Right Circumferential
Forearm	Left	Anterior	Left Forearm, Anterior
		Posterior	Left Forearm, Posterior
		Medial	Left Forearm, Medial
		Lateral	Left Forearm, Lateral
		Circumferential	Left Forearm, Circumferential
	Right	Anterior	Right Anterior
		Posterior	Right Posterior
		Medial	Right Medial
		Lateral	Right Lateral
		Circumferential	Right Circumferential

Gross Division	Handedness	Location	Display within Silhouette
Wrist	Left	Anterior	Left Wrist, Anterior
		Posterior	Left Wrist, Posterior
		Medial	Left Wrist, Medial
		Lateral	Left Wrist, Lateral
		Circumferential	Left Wrist, Circumferential
	Right	Anterior	Right Anterior
		Posterior	Right Posterior
		Medial	Right Medial
		Lateral	Right Lateral
		Circumferential	Right Circumferential
Hand	Left	Palm	Left Hand, Palm
		Dorsum	Left Hand, Dorsum
		Medial	Left Hand, Medial
		Lateral	Left Hand, Lateral
		Circumferential	Left Hand, Circumferential
	Right	Palm	Right Palm
		Dorsum	Right Dorsum
		Medial	Right Medial
		Lateral	Right Lateral
		Circumferential	Right Circumferential
Finger	Left	Thumb	Left Thumb
		Index Finger	Left Index Finger
		Middle Finger	Left Middle Finger
		Ring Finger	Left Ring Finger
		Little Finger	Left Little Finger
	Right	Thumb	Right Thumb
		Index Finger	Right Index Finger
		Middle Finger	Right Middle Finger
		Ring Finger	Right Ring Finger
		Little Finger	Right Little Finger

Lower Extremity

Gross Division	Handedness	Location	Display within Silhouette
Thigh	Left	Anterior	Left Thigh, Anterior
		Posterior	Left Thigh, Posterior
		Medial	Left Thigh, Medial
		Lateral	Left Thigh, Lateral
		Circumferential	Left Thigh, Circumferential
	Right	Anterior	Right Anterior
		Posterior	Right Posterior
		Medial	Right Medial
		Lateral	Right Lateral
		Circumferential	Right Circumferential
Knee	Left	Anterior	Left Knee, Anterior
		Posterior	Left Knee, Posterior
		Medial	Left Knee, Medial
		Lateral	Left Knee, Lateral
		Circumferential	Left Knee, Circumferential
	Right	Anterior	Right Anterior
		Posterior	Right Posterior
		Medial	Right Medial
		Lateral	Right Lateral
		Circumferential	Right Circumferential
Lower leg	Left	Shin	Left Shin
		Calf	Left Calf
		Medial	Lower left leg, Medial
		Lateral	Lower left leg, Lateral
		Circumferential	Lower left leg, Circumferential
	Right	Shin	Right Shin
		Calf	Right Calf
		Medial	Lower right leg, Medial
		Lateral	Lower right leg, Lateral
		Circumferential	Lower right leg, Circumferential

Gross Division	Handedness	Location	Display within Silhouette
Ankle	Left	Medial Malleolus	Left Medial Malleolus
		Lateral Malleolus	Left Lateral Malleolus
		Ankle Flexure	Left Ankle Flexure
		Posterior	Left Ankle, Posterior
	Right	Medial Malleolus	Right Medial Malleolus
		Lateral Malleolus	Right Lateral Malleolus
		Ankle Flexure	Right Ankle Flexure
		Posterior	Right Ankle, Posterior
Foot	Left	Dorsum	Left Foot, Dorsum
		Sole	Left Foot, Sole
		Medial	Left Foot, Medial
		Lateral	Left Foot, Lateral
		Heel	Left Foot, Heel
	Right	Dorsum	Right Dorsum
		Sole	Right Sole
		Medial	Right Medial
		Lateral	Right Lateral
		Heel	Right Heel
Toe	Left	Big	Left Toe, Big
		Second	Left Toe, Second
		Third	Left Toe, Third
		Fourth	Left Toe, Fourth
		Fifth	Left Toe, Fifth
	Right	Big	Right Big
		Second	Right Second
		Third	Right Third
		Fourth	Right Fourth
		Fifth	Right Fifth

Appendix B: Notes Definitions

In addition to images and measurements SilhouetteConnect and SilhouetteCentral can be used to capture notes. Notes can be associated with a particular patient, visit or wound assessment. The following section of this document outlines the note fields available for clinicians to enter.

The notes described in this appendix reflect the default set of notes that SilhouetteCentral and SilhouetteConnect are setup with. They do not show any customisations made.

Patient admission

Details

Item	Variable	Data Type	Visibility	
Expected Discharge	expected_discharge_date	Date	Active	Yes
			Required	No
			Visible	Yes
Palliative Care	palliative_care	Boolean	Active	Yes
			Required	No
			Visible	Yes

Physicians

Item	Variable	Data Type	Visibility	
Treating	admission_and_discharge_treating_physician	Text • Max Length: 255 • Multi-Line: No	Active	Yes
			Required	No
			Visible	Yes
Referring	admission_and_discharge_referring_physician	Text • Max Length: 255 • Multi-Line: No	Active	Yes
			Required	No
			Visible	Yes

Patient Details

Details

Item	Variable	Data Type	Visibility	
Patient ID	details_patient_id	Text • Max Length: 128	Active	Yes
			Required	Yes
			Visible	Yes

Item	Variable	Data Type	Visibility	
		• Multi-Line: No		
Unit	details_unit	Unit	Active	Yes
			Required	Yes
			Visible	Yes
Last Name	details_last_name	Text • Max Length: 128 • Multi-Line: No	Active Required Visible	Yes Yes Yes
First Name	details_first_name	Text • Max Length: 128 • Multi-Line: No	Active Required Visible	Yes Yes Yes
Middle Name	details_middle_name	Text • Max Length: 128 • Multi-Line: No	Active Required Visible	Yes No Yes
Date of Birth	details_date_of_birth	Date	Active Required Visible	Yes Yes Yes
Gender	details_is_female	List (single selection)	Active Required Visible	Yes Yes Yes
	• Male • Female			

Address

Item	Variable	Data Type	Visibility	
Street	address_street	Text • Max Length: 255 • Multi-Line: No	Active Required Visible	Yes No Yes
Suburb	address_suburb	Text • Max Length: 255 • Multi-Line: No	Active Required Visible	Yes No Yes

Item	Variable	Data Type	Visibility	
City	address_city	Text • Max Length: 255 • Multi-Line: No	Active Required Visible	Yes No Yes
State	address_state	Text • Max Length: 255 • Multi-Line: No	Active Required Visible	Yes No Yes
Postcode	address_postcode	Text • Max Length: 50 • Multi-Line: No	Active Required Visible	Yes No Yes
Country	address_country	Text • Max Length: 255 • Multi-Line: No	Active Required Visible	Yes No Yes

Contact

Item	Variable	Data Type	Visibility	
Home Phone	contact_home_phone	Text • Max Length: 50 • Multi-Line: No	Active Required Visible	Yes No Yes
Mobile Phone	contact_mobile_phone	Text • Max Length: 50 • Multi-Line: No	Active Required Visible	Yes No Yes
Work Phone	contact_work_phone	Text • Max Length: 50 • Multi-Line: No	Active Required Visible	Yes No Yes

Patient discharge

Details

Item	Variable	Data Type	Visibility	
Reason	admission_status	List (single selection)	Active Required Visible	Yes No Yes

Item	Variable	Data Type	Visibility	
	• Discharged • Lost to follow-up • Deceased			
Comments	discharge_comments	Text • Max Length: 255 • Multi-Line: Yes	Active Required Visible	Yes No Yes

Assessment of lower limb function

Right

Item	Variable	Data Type	Visibility	
Warmth	lower_limb_assessment_ warmth_right_leg	List (single selection)	Active Required Visible	Yes No Yes
	• Cold • Cool • Warm • Hot			
Venous signs	lower_limb_assessment_ venous_signs_right_leg	List (multiple selection)	Active Required Visible	Yes No Yes
	• Varicose veins • Atrophie blanche • Eczema • Lipodermatosclerosis • Hemosiderin staining			
Calf muscle effectiveness	lower_limb_assessment_calf_ muscle_effectiveness_right	Boolean	Active Required Visible	Yes No Yes
Arterial signs	lower_limb_assessment_ arterial_signs_right_leg	List (multiple selection)	Active	Yes

Item	Variable	Data Type	Visibility	
			Required	No
			Visible	Yes
	• Hairless • Shiny • Capillary refill > 3 seconds • Dependent rubor • Atrophic nails • Cyanosis			
Pulses palpable	lower_limb_assessment_ pulses_palpable_right	List (multiple selection)	Active	Yes
			Required	No
			Visible	Yes
	• Dorsalis pedis • Posterior tibial			
Dorsalis pedis pressure	lower_limb_assessment_ dorsalis_pedis_pressure_right	Decimal	Active	Yes
			Required	No
			Visible	Yes
Posterior tibial pressure	lower_limb_assessment_ posterior_tibial_pressure_right	Decimal	Active	Yes
			Required	No
			Visible	Yes
Brachial pressure	lower_limb_assessment_ brachial_pressure_right	Decimal	Active	Yes
			Required	No
			Visible	Yes
Pulse signal	lower_limb_assessment_ pulse_signal_right	List (multiple selection)	Active	Yes
			Required	No
			Visible	Yes
	• Monophasic • Biphasic • Triphasic			
ABPI result	lower_limb_assessment_abpi_ result_right	Decimal	Active	Yes

Item	Variable	Data Type	Visibility	
			Required	No
			Visible	Yes
Toe pressure	lower_limb_assessment_toe_pressure_right	Decimal	Active	Yes
			Required	No
			Visible	Yes
TBPI	lower_limb_assessment_tbpi_right	Decimal	Active	Yes
			Required	No
			Visible	Yes
Thinnest ankle	lower_limb_assessment_thinnest_ankle_right	Decimal (cm)	Active	Yes
			Required	No
			Visible	Yes
Widest calf	lower_limb_assessment_widest_calf_right	Decimal (cm)	Active	Yes
			Required	No
			Visible	Yes

Ambulation

Item	Variable	Data Type	Visibility	
Ambulation	lower_limb_assessment_ambulation	List (single selection)	Active	Yes
			Required	No
			Visible	Yes
	• Independent - no aid or assistance • Independent with mobility aid or assistance • Chair bound • Bed bound			
Client report of walking duration (minutes)	lower_limb_assessment_client_report_of_walking_duration_minutes	Decimal	Active	Yes
			Required	No
			Visible	Yes

Left

Item	Variable	Data Type	Visibility	
Warmth	lower_limb_assessment_	List (single	Active	Yes

Item	Variable	Data Type	Visibility	
	warmth_left_leg	selection)	Required	No
			Visible	Yes
	• Cold • Cool • Warm • Hot			
Venous signs	lower_limb_assessment_ venous_signs_left_leg	List (multiple selection)	Active	Yes
			Required	No
			Visible	Yes
	• Varicose veins • Atrophie blanche • Eczema • Lipodermatosclerosis • Hemosiderin staining			
Calf muscle effectiveness	lower_limb_assessment_calf_ muscle_effectiveness_left	Boolean	Active	Yes
			Required	No
			Visible	Yes
Arterial signs	lower_limb_assessment_ arterial_signs_left_leg	List (multiple selection)	Active	Yes
			Required	No
			Visible	Yes
	• Hairless • Shiny • Capillary refill > 3 seconds • Dependent rubor • Atrophic nails • Cyanosis			
Pulses palpable	lower_limb_assessment_ pulses_palpable_left	List (multiple selection)	Active	Yes
			Required	No
			Visible	Yes

Item	Variable	Data Type	Visibility	
	• Dorsalis pedis • Posterior tibial			
Dorsalis pedis pressure	lower_limb_assessment_ dorsalis_pedis_pressure_left	Decimal	Active Required Visible	Yes No Yes
Posterior tibial pressure	lower_limb_assessment_ posterior_tibial_pressure_left	Decimal	Active Required Visible	Yes No Yes
Brachial pressure	lower_limb_assessment_ brachial_pressure_left	Decimal	Active Required Visible	Yes No Yes
Pulse signal	lower_limb_assessment_ pulse_signal_left	List (multiple selection)	Active Required Visible	Yes No Yes
	• Monophasic • Biphasic • Triphasic			
ABPI result	lower_limb_assessment_abpi_ result_left	Decimal	Active Required Visible	Yes No Yes
Toe pressure	lower_limb_assessment_toe_ pressure_left	Decimal	Active Required Visible	Yes No Yes
TBPI	lower_limb_assessment_tbpi_ left	Decimal	Active Required Visible	Yes No Yes
Thinnest ankle	lower_limb_assessment_ thinnest_ankle_left	Decimal (cm)	Active Required Visible	Yes No Yes
Widest calf	lower_limb_assessment_ widest_calf_left	Decimal (cm)	Active	Yes

Item	Variable	Data Type	Visibility	
			Required	No
			Visible	Yes

Comments

Item	Variable	Data Type	Visibility	
Comments	lower_limb_assessment_ comments	Text • Max Length: 255 • Multi-Line: Yes	Active	Yes
			Required	No
			Visible	Yes

Visit Assessment

Vital signs

Item	Variable	Data Type	Visibility	
Weight	vital_signs_weight	Decimal (kg)	Active	Yes
			Required	No
			Visible	Yes
Height	vital_signs_height	Decimal (cm)	Active	Yes
			Required	No
			Visible	Yes
Pulse rate	vital_signs_pulse_rate	Decimal (/min)	Active	Yes
			Required	No
			Visible	Yes
Respiration rate	vital_signs_respiration_rate	Decimal (/min)	Active	Yes
			Required	No
			Visible	Yes
Blood pressure, systolic	vital_signs_blood_pressure_ systolic	Decimal (mmHg)	Active	Yes
			Required	No
			Visible	Yes
Blood pressure, diastolic	vital_signs_blood_pressure_ diastolic	Decimal (mmHg)	Active	Yes
			Required	No
			Visible	Yes

Item	Variable	Data Type	Visibility	
Temperature	vital_signs_temperature	Decimal (C)	Active	Yes
			Required	No
			Visible	Yes
Blood glucose level	vital_signs_blood_glucose_ level	Decimal (mmol/L)	Active	Yes
			Required	No
			Visible	Yes

Related Pain (Non-Wound)

Item	Variable	Data Type	Visibility	
Location	related_pain_nonwound_ location	Text • Max Length: 255 • Multi-Line: No	Active Required Visible	Yes No Yes
Scale (0-10)	related_pain_nonwound_ scale_010	Integer • Interval: 1 • Range: 0 to 10	Active Required Visible	Yes No Yes
Occurrence	related_pain_nonwound_ occurrence	List (multiple selection)	Active Required Visible	Yes No Yes
	• At dressing change • Night pain • On walking • On elevation • Dependent • Other			
Comments	related_pain_nonwound_ comments	Text • Max Length: 255 • Multi-Line: Yes	Active Required Visible	Yes No Yes

Edema

Item	Variable	Data Type	Visibility	
Pitting	edema_pitting	Boolean	Active	Yes
			Required	No
			Visible	Yes
Location (right)	edema_location_right	List (multiple selection)	Active	Yes
			Required	No
			Visible	Yes
	- Toes - Foot - Gaiter - Above gaiter - Knee - Thigh			
Location (left)	edema_location_left	List (multiple selection)	Active	Yes
			Required	No
			Visible	Yes
	- Toes - Foot - Gaiter - Above gaiter - Knee - Thigh			
Location: Other	edema_location_other	Text - Max Length: 255 - Multi-Line: No	Active	Yes
			Required	No
			Visible	Yes
Comments	edema_comments	Text - Max Length: 255 - Multi-Line: Yes	Active	Yes
			Required	No
			Visible	Yes

Edema

Factors Affecting Healing

Item	Variable	Data Type	Visibility	
Impaired sensation (left)	factors_affecting_healing_ impaired_sensation_left	Boolean	Active	Yes
			Required	No
			Visible	Yes
Impaired sensation (right)	factors_affecting_healing_ impaired_sensation_right	Boolean	Active	Yes
			Required	No
			Visible	Yes
Braden outcome	factors_affecting_healing_ braden_outcome	List (single selection)	Active	Yes
			Required	No
			Visible	Yes
	• Low risk • Mod risk • High risk • Very high risk			
PURA outcome	factors_affecting_healing_ pura_outcome	List (single selection)	Active	Yes
			Required	No
			Visible	Yes
	• Low risk • Mod risk • High risk • Very high risk			
Nutritional Risk screen	factors_affecting_healing_ nutritional_risk_screen	List (multiple selection)	Active	Yes
			Required	No
			Visible	Yes
	• Obvious underweight-frailty • Unintentional weight loss • Reduced appetite or food and fluid intake • Mouth teeth problems • Swallowing problems			

Factors Affecting Healing

Item	Variable	Data Type	Visibility	
	• Follows a special diet • Needs assistance to shop for food • Needs assistance to prepare food • Needs assistance to feed self • Obvious overweight affecting life quality • Unintentional weight gain			
BMI outcome	factors_affecting_healing_ bmi_outcome	List (single selection)	Active Required Visible	Yes No Yes
	• Underweight (<18.5) • Normal (18.5 - 24.9) • Overweight (25 - 29.9) • Obese (>30)			

Wound Assessment

Images

Item	Variable	Data Type	Visibility	
Wound Images	images_wound_images	Image Capture	Active Required Visible	Yes No Yes
	Trace images screen is enabled.			

Details

Item	Variable	Data Type	Visibility	
Etiology	wound_history_etiology	List (single selection)	Active Required Visible	Yes No Yes
	• Pressure Ulcer: Stage 1 • Pressure Ulcer: Stage 2 • Pressure Ulcer: Stage 3			

Item	Variable	Data Type	Visibility	
	• Pressure Ulcer: Stage 4			
	• Pressure Ulcer: Unstageable (dressing/device)			
	• Pressure Ulcer: Unstageable (eschar/slough)			
	• Deep Tissue Injury			
	• Venous Ulcer			
	• Arterial insufficiency			
	• Mixed Venous/Arterial			
	• Diabetic			
	• Neuropathic: Non-diabetic			
	• Surgical: Closed			
	• Surgical: Full thickness			
	• Surgical: Partial thickness			
	• Surgical: Dehiscence			
	• Drainage Device			
	• Trauma: Full thickness			
	• Trauma: Partial thickness			
	• Trauma: Superficial			
	• Skin tear: Category 1			
	• Skin tear: Category 2a			
	• Skin tear: Category 2b			
	• Skin tear: Category 3			
	• Burn: Superficial thickness			
	• Burn: Partial thickness			
	• Burn: Full thickness			
	• Cancerous: Fungating lesion			
	• Cancerous: Ulcerating lesion			
	• Cancerous: Other			
	• Skin graft			
	• Donor site			
	• Pilonidal wound			
Wound Margins	wound_margins_sloping	List (multiple selection)	Active	Yes

Item	Variable	Data Type	Visibility	
			Required	No
			Visible	Yes
	• Sloping • Punched out • Rolled • Everted • Undermining • Sinus • Inflamed			
Surrounding Skin	surrounding_skin_tissue_paper_skin	List (multiple selection)	Active Required Visible	Yes No Yes
	• 'Tissue paper' skin • Peri-wound edema • Macerated • Erythema • Inflammation • Pustules • Eczema • Dry/scaly • Healthy			
Signs of Critical Colonization or Infection	signs_of_critical_colonization_or_infection_cellulitis	List (multiple selection)	Active Required Visible	Yes No Yes
	• Cellulitis • Suppuration • Lymphangitis • Sepsis • Bacteremia • Granulation changes			

Item	Variable	Data Type	Visibility	
	• Exudate increase • Increase/new pain • Impaired/delayed healing • Wound breakdown/new slough			
Exudate Volume	exudate_volume	List (single selection)	Active Required Visible	Yes No Yes
	• None • Low • Moderate • High			
Exudate Type	exudate_type	List (single selection)	Active Required Visible	Yes No Yes
	• Serous • Serosanguineous • Sanguineous • Purulent			

Wound Pain

Item	Variable	Data Type	Visibility	
Frequency	wound_pain_frequency	List (single selection)	Active Required Visible	Yes No Yes
	• Absent • Intermittent • Continuous			
Nature of pain	wound_pain_nature_of_pain	List (multiple selection)	Active Required Visible	Yes No Yes

Item	Variable	Data Type	Visibility	
	• Throbbing • Shooting • Stabbing • Sharp • Cramping • Gnawing • Hot/burning • Aching • Heavy • Tender • Splitting • Tiring/exhausting • Sickening • Fearful • Cruel/punishing • Other			
Current interventions	wound_pain_current_ interventions	List (multiple selection)	Active Required Visible	Yes No Yes
	• Pharmacological • Non-pharmacological • Dressing/removal technique • Other			
At dressing change (0-10)	wound_pain_at_dressing_ change_010	Integer • Interval: 1 • Range: 0 to 10	Active Required Visible	Yes No Yes
Night pain (0-10)	wound_pain_night_pain_010	Integer • Interval: 1 • Range: 0 to 10	Active Required Visible	Yes No Yes
On walking (0-10)	wound_pain_on_walking_010	Integer • Interval: 1	Active	Yes

Item	Variable	Data Type	Visibility	
		• Range: 0 to 10	Required	No
			Visible	Yes
On elevation (0-10)	wound_pain_on_elevation_010	Integer • Interval: 1 • Range: 0 to 10	Active Required Visible	Yes No Yes
Dependent (0-10)	wound_pain_dependent_010	Integer • Interval: 1 • Range: 0 to 10	Active Required Visible	Yes No Yes
Other (0-10)	wound_pain_other_010	Integer • Interval: 1 • Range: 0 to 10	Active Required Visible	Yes No Yes
Comments	wound_pain_other_description	Text • Max Length: 255 • Multi-Line: Yes	Active Required Visible	Yes No Yes

Comments

Item	Variable	Data Type	Visibility	
Comments	assessment_comments	Text • Max Length: 255 • Multi-Line: Yes	Active Required Visible	Yes No Yes

Investigation History

Investigation History

Item	Variable	Data Type	Visibility	
Diagnostic	investigation_history_diagnostic	List (multiple selection)	Active Required Visible	Yes No Yes
	• Venous duplex • Arterial duplex • Angiogram			

Item	Variable	Data Type	Visibility	
	• X-ray			
Pathology	investigation_history_pathology	List (multiple selection)	Active	Yes
			Required	No
			Visible	Yes
	• Wound biopsy • Hb • Thyroid function • Albumin • Creatinine • HbA1c • FBC			
Comments	investigation_history_comments	Text • Max Length: 255 • Multi-Line: Yes	Active	Yes
			Required	No
			Visible	Yes

Medical History

Medical History

Item	Variable	Data Type	Visibility	
Current conditions	medical_history_current_conditions	List (multiple selection)	Active	Yes
			Required	No
			Visible	Yes
	• Diabetes • Cardiac condition • Anemia • COAD • Rheumatoid arthritis • Autoimmune disorder • Hepatic failure • Malignancy • Peripheral vascular disease			

Item	Variable	Data Type	Visibility	
	• Neurological disorder • Inflammatory bowel disease • Renal disease • Other			
Contributing factors	medical_history_contributing_factors	List (multiple selection)	Active Required Visible	Yes No Yes
	• Reduced mobility • Pressure • Shearing • Friction • Impaired sensation • Edema • Nutritional factors • Obesity • Radiotherapy • Smoking • Venous hypertension • Ischemia • Other			
Smoking History	smoking_history	List (single selection)	Active Required Visible	Yes No Yes
	• Smoker • Past smoker • Never smoked			
Current cigarette consumption	current_cigarette_consumption	List (single selection)	Active Required Visible	Yes No Yes
	• 1-10 per day			

Item	Variable	Data Type	Visibility	
	• 11-20 per day • 21 or more per day			
Past medical history	medical_history_past_medical_history	Text • Max Length: 255 • Multi-Line: Yes	Active Required Visible	Yes No Yes
Comments	medical_history_comments	Text • Max Length: 255 • Multi-Line: Yes	Active Required Visible	Yes No Yes

Medication

Medication

Item	Variable	Data Type	Visibility	
Medicines	medication_medicines	List (multiple selection)	Active Required Visible	Yes No Yes
	• NSAIDS • Cytotoxics • Anti-coagulants • Beta blockers • Immune suppressants • Steroids • Antibiotics • Other			
Comments	medication_comments	Text • Max Length: 255 • Multi-Line: Yes	Active Required Visible	Yes No Yes

Sensitivities

Item	Variable	Data Type	Visibility	
Medicines	medication_sensitivities_medicines	Text	Active	Yes

Item	Variable	Data Type	Visibility	
		• Max Length: 255 • Multi-Line: No	Required Visible	No Yes
Dressings and adhesives	medication_sensitivities_ dressings_and_adhesives	Text • Max Length: 255 • Multi-Line: No	Active Required Visible	Yes No Yes
Other	medication_sensitivities_other	Text • Max Length: 255 • Multi-Line: No	Active Required Visible	Yes No Yes

Regular Expressions

Regular Expressions are a tool which allow a description of how a piece of information should be structured, for example a phone number or email address. This allows computer software to process the information reliably as it conforms to a pre-defined pattern.

Note: For the examples that follow, square brackets [] are used to specify the range of characters required to be used in that group and curly brackets {} to specify the quantity of characters that are required.

Patient Identifier Examples for Silhouette

Example A

A 5 digit patient number would be written as:

- [0-9]{5}
- Values satisfying this regular expression include 12345 and 75319

Example B

A 3 digit unit ID, a dash, then a 3 digit patient number would be written as:

- [0-9]{3}-[0-9]{3}
- Values satisfying this regular expression include 147-963 and 456-321

Example C

Two upper-case alphabetic character unit ID, then 4 digit patient number would be written as:

- [A-Z]{2}[0-9]{4}
- Values satisfying this regular expression include ZK1648 and VT7642

Example D

 A three-digit unit ID, a dash, a patient number comprising 4, 5 or 6 numeric digits, and the last character being an upper-case A, B, or C to indicate three different study groups would be written as:

- [0-9]{3}-[0-9]{4, 6}[ABC]{1}
- Values satisfying this regular expression include 010-01934A and 110-50012C

Through the simple use of regular expressions you can control the accuracy of information entered into a system and hence improve reliability and reduce errors.

Further reading and an interactive tutorial can be found here: http://regexone.com/

Other examples include:

- International phone numbers should begin with a plus "+" character – e.g. +64 for New Zealand.

- An email address should contain only one "@" character

- A bank account number should begin with a two-digit bank identification number

- A credit card number comprises four groups of four digits

- A financial amount can comprise numeric digits, decimal point, commas, and the dollar sign e.g. $41,031.64

- A patient name comprising first name, optional middle name, and surname.

Using Regular Expressions the following types of structures can be specified:

- A character from a group of characters, e.g.:

  - A lower-case alphabetic character [a-z]

  - An upper-or-lower case alphabetic character [a-zA-Z]

  - A numeric digit [0-9]

  - Alphanumeric characters comprising lower-case alphabetic or numeric digits [0-9a-z]

  - Commonly occurring punctuation characters such as dash "-", comma ",", period ".", brackets "[", and braces "(", etc.

- A character can occur a fixed number of times, e.g.:
  Three characters which can be either a, b or c would be written as: [abc]{3}

- A single optional character is indicated by the question mark "?", e.g.:
  An optional uppercase alphabetic character would be written as: [A-Z]?

- 1 upper-case alphabetic or 2 numeric digits could be required using the special or operator "|":
  such as: [A-Z]|[0-9]{2}

Some real-world examples include:

- A credit card number - four groups of four digits separated by a dash:
  [0-9]{4}-[0-9]{4}-[0-9]{4}-[0-9]{4}

- A New Zealand national phone number - a two digit area code in brackets, followed by three digits, then a dash, then four digits:
  \(0[1-9]\)[0-9]{3}-[0-9]{4}

Things to Note

- The special treatment of the "(" and ")" characters –these have special meaning within Regular Expression language so when they need to be used as normal characters this needs to be indicated. Preceding special characters with the "\" ("slash") character tells the computer to treat the character as regular text - this is referred to as "escaping" a character. Other characters that may need escaping include "[", "]", even the slash itself requires escaping using a slash. "\\".

- The dash "-" character generally doesn't require escaping, although it does have special meaning when used to designate a character range within the square brackets. If a dash is used outside a character range statement then it will be interpreted as a normal character.