

atmolytics

Administrative Functions

User Guide v2.60



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1 Introduction

The Administration area of the Atmolytics software enables system administrators to carry out a wide range of activities, including the following:

Access Management

- Setting up **Roles and Permissions**
- Setting up new **Users**
- Viewing information about **Atmolytics Licenses**

Report Management

- Monitoring of **Pending reports** and **Report Schedule**
- Setting up and managing default **Result Bandings** for continuous variables such as costs and length of stay.

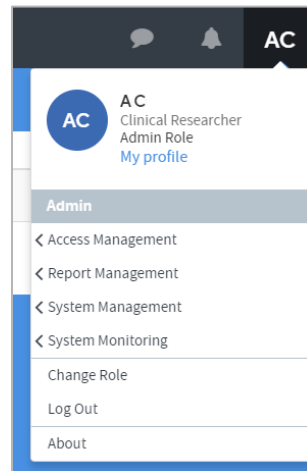
System Management

- Managing **Announcements**
- Managing **Cohort Insights**
- Managing **Cohort Insight Sets** for other users
- Setting up **Personnel Groups** (e.g. all clinicians, all researchers) to make for easy selection and reporting.
- **ETL Overview**
- Carrying out **Housekeeping**
- Management of the **Cultures and Languages** used throughout the system
- Management of the **Resources** (e.g. key terms, screen labels, etc) used throughout Atmolytics
- **System Configuration** of Admission types and Report types

System Monitoring

- **System Status**
- **Quartz Schedule**
- **Queue Status**
- **Data Integrity**
- **Audit Logs**
- **System Logs**

The Administration menu can be accessed by clicking on your initials at the far right of the top menu bar:




2 A Note About Terminology

Because Atmolytics is fully configurable, different organisations may use different terms to describe the individuals and events they are working with, and these will be reflected in the Atmolytics screens. For example, one organisation's **patients**, **admissions** and **reports** may be another organisation's **service users**, **involvements** and **explorations**.

Your organisation may use different terminology in their implementation of Atmolytics, and in later chapters you'll learn how to configure terms to meet your own organisation's requirements.

In this user guide, we've used the terminology **patients**, **admissions** and **reports** throughout.

We refer to the 'start' area of Atmolytics (found by clicking on the  icon) as the **Home** area. You may also see this referred to as **My Hub** in other user guides.

3 Roles and Permissions

Atmolytics has a flexible security system which is based around roles.

A role is a type of profile which specifies the patients, data, reporting Apps and locations that anyone with that role can access. Additionally, permissions are set for reading, creating and sharing both cohorts and reports.

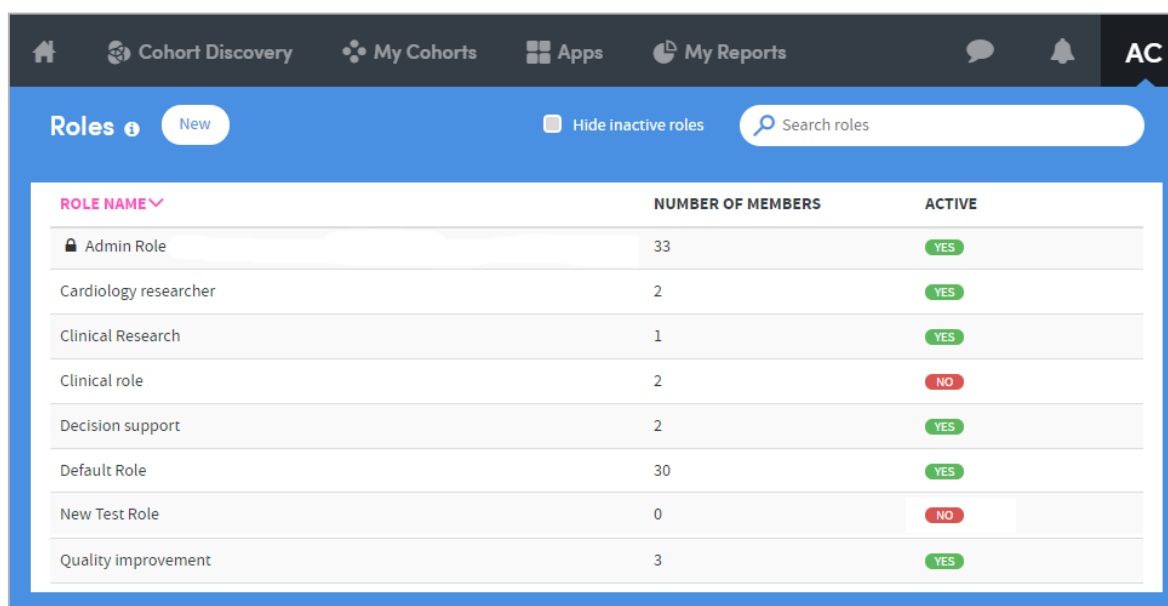
Roles are created by the system administrator. Permissions are assigned to these roles, and roles are assigned to users.

This allows the creation of roles to represent projects, groups, or related staff members who should share certain permissions. In this way, protected health information (or other types of sensitive data) can be restricted to certain roles.

A user can have more than one role. If they do, they will be prompted to select the one they want to use for the current session after they have logged in.

3.1 Managing Roles and Permissions

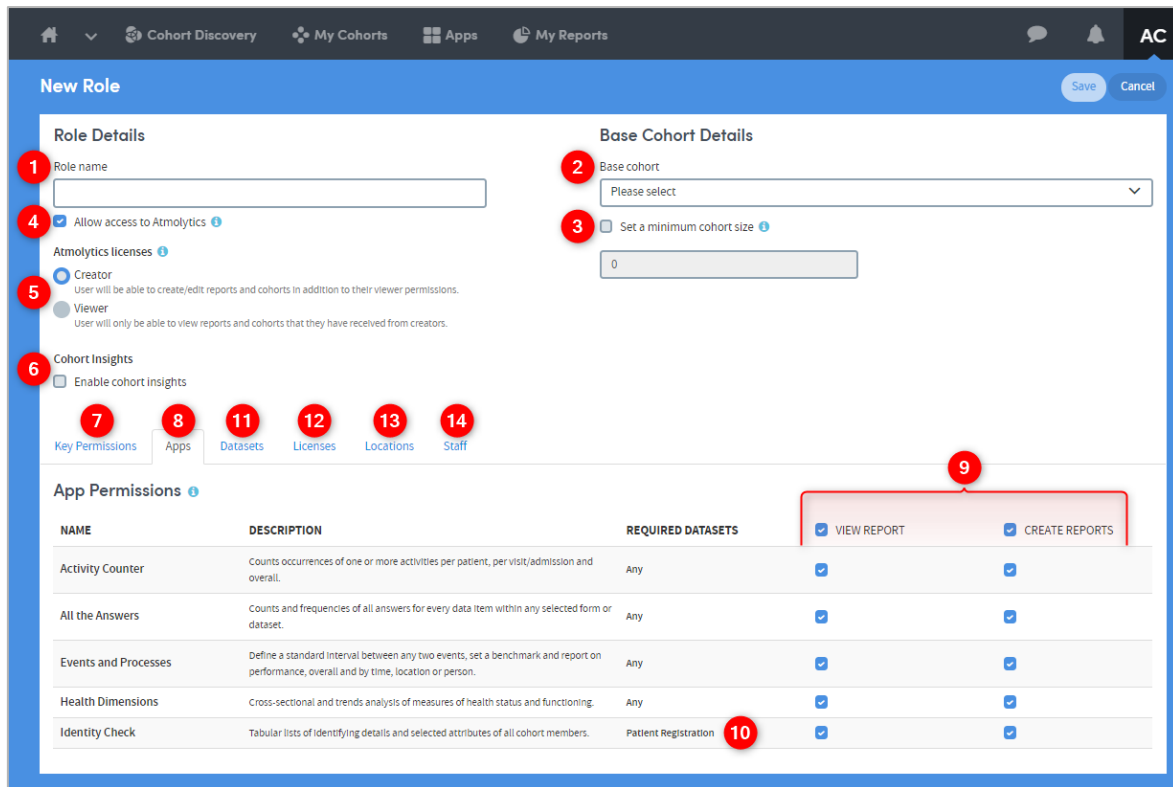
Click on your initials at the top right of the screen and choose **Access Management > Roles & Permissions** from the menu. You will see a screen similar to the one below:



ROLE NAME	NUMBER OF MEMBERS	ACTIVE
Admin Role	33	YES
Cardiology researcher	2	YES
Clinical Research	1	YES
Clinical role	2	NO
Decision support	2	YES
Default Role	30	YES
New Test Role	0	NO
Quality improvement	3	YES

This is a list of all the roles currently available on the system.

Click on **New** on the top left of the screen to add a new role, or click on the name of an existing role to edit it. Whichever you choose, you will be presented with a screen similar to the one below:



Highlighted features are as follows:

- 1 The role can be named.
- 2 Any cohort can be selected as the **Base Cohort** for the role. The base cohort is the entire group of patients that the person with this role can report upon. Atmolytics will not permit users to access any patient data if that data does not belong to a member of their base cohort.
- 3 It is possible to set a minimum cohort size to be included in any report, to prevent identification of individuals by the use of multiple selection criteria. If a minimum number is set, and the user tries to produce a report on a cohort containing less than that number, they are given a message to the effect that they are not permitted to do so, and the report will not run.
- 4 It is possible to prevent access to Atmolytics. This would be used were, for example, an administrator to be given permission to set up roles and manage the system but not to create reports.
- 5 There are two Atmolytics licenses available to assign to a role: **Creator** and **Viewer**.

Selecting one of these imposes a default set of permissions on the role. As well as these 'blanket' licenses, it is possible to further edit the default set of permissions on a role-by-role basis, using the tabs below.

A **Creator** can create and edit reports and cohorts. In addition, a **Creator** can be assigned any or all permissions from the tabs at the bottom of the screen.

A **Viewer** can only view reports and cohorts that they have received from a creator. They cannot edit or change any of the cohorts, report criteria or generated reports made available to them by a creator. In addition, selecting the **Viewer** option means that several permissions from the tabs at the bottom of the screen become unavailable and cannot be assigned to the user.

- 6 **Enable cohort insights** to allow the role to view the Cohort Insights section of Atmolytics.
- 7 This tab contains a list of **Key Permissions** (see section 3.2 for details).
- 8 The **Apps** tab lists all the reporting Apps available in the system.
- 9 Any role can be given **view reports** and/or **create reports** permissions for any App. The permissions available here may be restricted, depending on which Atmolytics license (**Creator** or **Viewer**) has been assigned to the role.
- 10 Some Apps require specific datasets to be available in order to run, e.g. the Identity Check App requires a patient registration dataset.
- 11 The **Dataset** tab allows you to specify which forms/datasets are accessible to users with this role.
- 12 The **Licenses** tab enables you to specify whether roles have a specific license to access particular data.
- 13 The **Locations** tab allows you to specify from which locations (e.g. clinics) a user with this role is allowed to access data. For example, a user may be able to access data collected by their ward or hospital only. Note that in this case the exclusion of a location will logically exclude access to data from that location. Additionally, excluded locations will not appear on the list of locations in **Cohort Discovery** or report creation.
- 14 The **Staff** tab allows you to specify whose data the user is specifically permitted to access. For example, Dr. A may not be allowed to view Dr. B's data. Note that it does this by limiting the list of staff presented on lists, rather than by filtering out the data. Consequently, if a user is not permitted to select Staff X, then they cannot select to see all and only Staff X's data. However, they can still report on Staff X's data in aggregated form along with all other staff members' data. Staff X's data is not being logically excluded from the pool of data available for reporting (unlike Locations above).

3.2 Key Permissions

The key functional permissions contained within this tab are listed below:

PERMISSION TYPE	DESCRIPTION	PERMISSION
Access Admin	Allow user to access and change application settings.	<input type="checkbox"/>
Share Cohorts	Allow user to share their cohorts with other users.	<input checked="" type="checkbox"/> 1
Create Cohorts	Allow user to create cohorts	<input checked="" type="checkbox"/> 2
View Cohorts	Allow user to view cohorts	<input checked="" type="checkbox"/> 3
Update Cohorts	Allow user to update cohorts	<input checked="" type="checkbox"/> 4
Run Quick Id Reports	Allow user to access the quick id feature to view identifiable patient data	<input checked="" type="checkbox"/> 5
Share Report Output	Allow user to share report outputs with other users.	<input checked="" type="checkbox"/> 6
Send Reports Definitions	Allow user to share report definitions with other users.	<input checked="" type="checkbox"/> 7
View Financial Data	Allow user to view financial data.	<input checked="" type="checkbox"/>
Share To Other Roles	Allow user to share reports/cohorts with users in other roles.	<input type="checkbox"/> 8

Share Report Output Options 9

Optionally, choose any additional roles that this role should be able to share report outputs with:
(Note - you will not be able to share Data Export reports to these roles)

These are:

1 Share Cohorts. Allows the user to share a cohort with other users of the system. In fact, the user is sharing a **cohort definition**: a set of filtering criteria which are applied to a base cohort to produce a subset of that base cohort. These cohort definitions can be shared with users of any role, which means that the recipient may have a different base cohort from the sending user. However, even when a cohort definition is shared, the receiving user will not be able to use it to produce reports that go beyond the scope of their own base cohort. Note also that because subgroups do not comprise sets of filters but rather lists of IDs, Atmolitics does NOT allow them to be shared, as this could result in the permissions model being broken.

2 Create Cohorts. Allows users to create cohorts using the **Cohort Discovery** and **subgroup** functions. Without this permission, users receive a message stating that they cannot create cohorts. Cloning is not permitted and nor is access to the Cohort Discovery area.

3 View Cohorts. Allows users to view cohorts.

4 Update Cohorts. This allows the user to edit an existing cohort. However, this permission on its own does not enable users to create cohorts, so both **Create** and **Update** options should be enabled in the normal run of things, when setting up a user to work with cohorts.

5 Run Quick ID Reports. The Cohort Discovery section of Atmolitics contains a **Quick ID** function, which enables users to download a list of names and IDs of all the patients belonging to the selected cohort. Access to this function can be controlled here.

6 Share Report Output. This allows users to share **outputs** of reports that they have created. Users can only share outputs with users sharing the same role as themselves, unless their permission level is extended using the **Share Report Output Options** below.

7 Send Report Definitions. Allows the user to share a report **definition** with other users. Report definitions can be shared with users of any role, which means that the recipient may have a different base cohort from the sending user. However, note that when shared, the report definition will not permit the receiving user to run the report on patients to whom they do not have permitted access, nor will the system share a report that uses an App to which the receiving user does not have access.

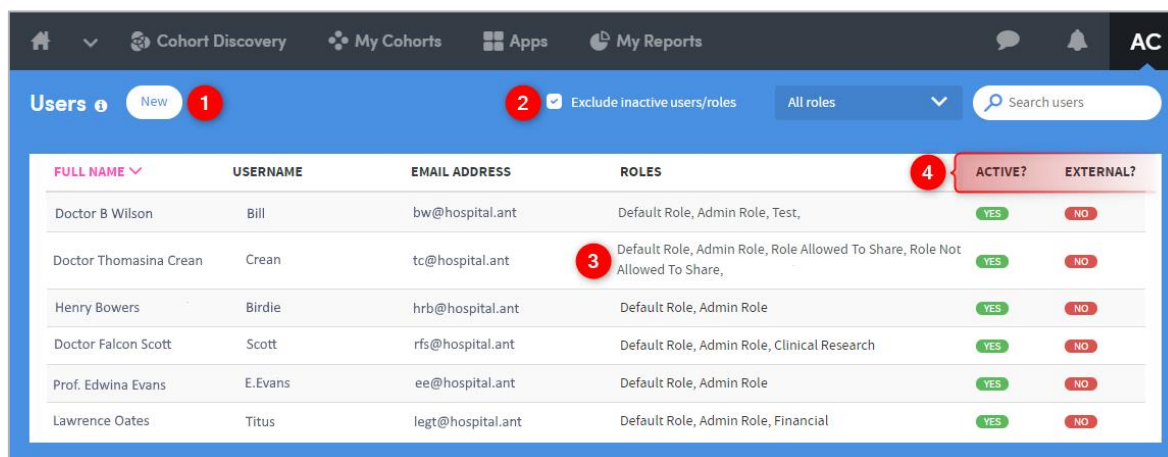
8 Share To Other Roles. Allows users to share report definitions and cohorts with other roles (this works in concert with **Share Cohorts** and **Send Report Definitions** above). If this is unchecked then the user cannot see or access other roles in the system. If they are permitted to share cohorts or report definitions, they can only do so within their own role if this permission is not checked.

9 Share Report Output Options. By default, users can only share report outputs with other users sharing the same role as themselves and, therefore, the same base cohort. This is to prevent the risk of users from other roles receiving and viewing report output data that they should not be permitted to see. However, in some circumstances this is overly restrictive; e.g. it might mean that a junior doctor could not share a worrying finding with his head of department because they had different roles. Hence, the system allows the specification of additional roles that the user can share output data with, over and above their own, as required. **Note that in effect this is potentially overriding other users' role restrictions and so should be used sparingly, and with care.**

4 Users

System administrators can create new users, edit user details, and assign roles to users. Users who are not system administrators cannot view or access this part of the Atmolytics software. They cannot change their usernames, roles or permissions, but they are able to edit some of their own personal details and change their own passwords via the **My Details** option in the drop-down menu below their username.

Click on your initials at the top right of the screen and choose **Access Management > Users** from the menu. You will see a screen similar to the one below:



FULL NAME	USERNAME	EMAIL ADDRESS	ROLES	ACTIVE?	EXTERNAL?
Doctor B Wilson	Bill	bw@hospital.ant	Default Role, Admin Role, Test,	YES	NO
Doctor Thomasina Crean	Crean	tc@hospital.ant	Default Role, Admin Role, Role Allowed To Share, Role Not Allowed To Share,	YES	NO
Henry Bowers	Birdie	hrb@hospital.ant	Default Role, Admin Role	YES	NO
Doctor Falcon Scott	Scott	rfs@hospital.ant	Default Role, Admin Role, Clinical Research	YES	NO
Prof. Edwina Evans	E.Evans	ee@hospital.ant	Default Role, Admin Role	YES	NO
Lawrence Oates	Titus	legt@hospital.ant	Default Role, Admin Role, Financial	YES	NO

1 Click on **Create New** to create a new user. You can also select an existing user from the list if you wish to edit their details, including the roles assigned to them.

2 Include or exclude inactive users from the user list.

3 View the list of roles that each user has assigned to them (any user can have multiple roles).

4 **Active?** Indicates whether users are currently active or inactive.

External? Indicates whether a user has logged-in via external access, using Atmodentity. External users cannot be created in the Users admin area. They are automatically created when they log-in for the first time.

As yet, external user passwords cannot be managed from within Atmolytics. Aside from the log-in process, these users don't differ from regular users in any way.

4.1 Create or Edit Users

Create New User Save Cancel

Personal Details	Account Details
First name*	Username*
<input type="text"/>	<input type="text"/>
Last name*	Password*
<input type="text"/>	<input type="text"/>
Initials*	Confirm password*
<input type="text"/>	<input type="text"/>
Occupation	
<input type="text"/>	
Email address	
<input type="text"/>	
Culture	
EN-US <input type="text"/>	
Roles ⓘ	
<input type="checkbox"/> Role A	<input type="checkbox"/> Role Allowed To Share
<input type="checkbox"/> Role B	<input type="checkbox"/> Role C
<input type="checkbox"/> Role D	<input type="checkbox"/> Role E
<input type="checkbox"/> Role F	<input type="checkbox"/> Role Not Allowed To Share
<input type="checkbox"/> Role X - Can only see 5 locations	<input type="checkbox"/> Test
Permissions ⓘ	
<input checked="" type="checkbox"/> Allow access to Atmolytics	

Use this page to enter or update a user's details. Click on **Save** when finished.

Use the tick boxes to select the **Roles** you wish to assign to this user. The user will only be able to see and access the roles assigned to them here.

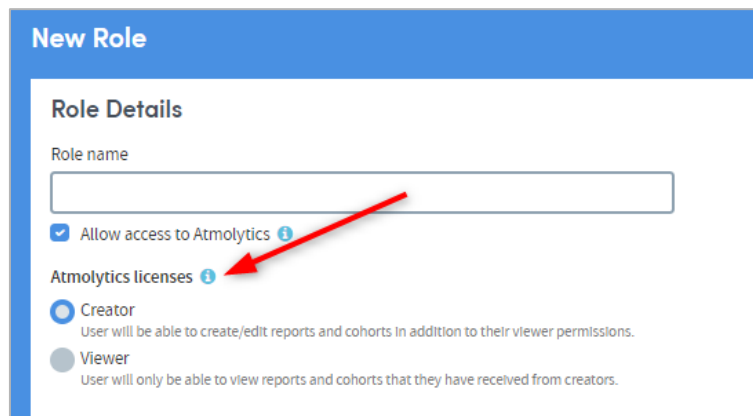
If the **Permissions** box is unticked, the user will not be able to log onto and access the Atmolytics software.

5 Atmolytics Licenses

A system administrator assigns roles to users of Atmolytics. These roles give the user certain permissions when accessing and using the software. Roles are created and edited by the system administrator, and a license must be assigned to every role that is created.

To assign a license, click on your initials at the top right of the screen, and choose **Access Management > Roles & Permissions** from the menu. From the list that appears on screen, click the name of a role to see its details.

There are two Atmolytics licenses available to assign to a role: **Creator** and **Viewer**.



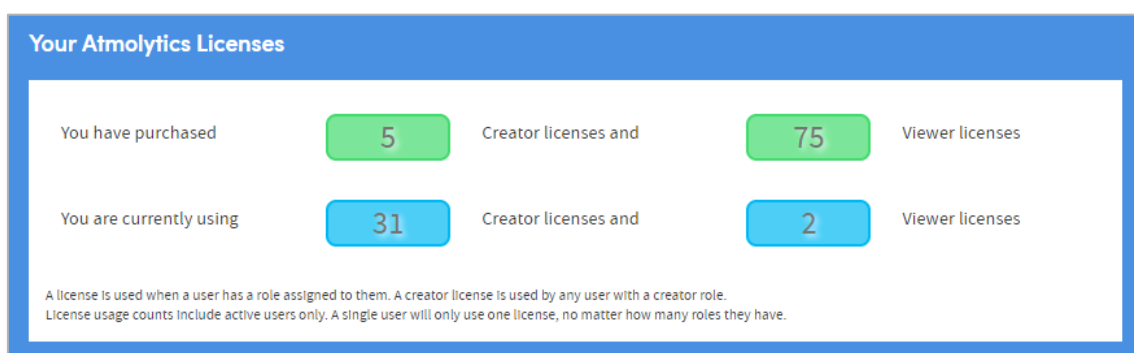
The screenshot shows a 'New Role' form with a blue header. Under 'Role Details', there is a text input field for 'Role name'. Below it is a checked checkbox for 'Allow access to Atmolytics'. The 'Atmolytics licenses' section has two radio button options: 'Creator' (selected) and 'Viewer'. A red arrow points to the 'Atmolytics licenses' label.

Role Name	License	Description
	Creator	User will be able to create/edit reports and cohorts in addition to their viewer permissions.
	Viewer	User will only be able to view reports and cohorts that they have received from creators.

Selecting one of these imposes a default set of permissions on the role. As well as these 'blanket' licenses, it is possible to further edit the default set of permissions on a role-by-role basis.

- A **Creator** can create and edit reports and cohorts. In addition, a **Creator** can be assigned any or all of the permissions available within Atmolytics.
- A **Viewer** can only view reports and cohorts that they have received from a creator. They cannot edit or change any of the cohorts, report criteria or generated reports made available to them by a creator. Assigning a **Viewer** license means that several other permissions become unavailable and cannot be assigned to the user.

You can see the number of Atmolytics **Creator** and **Viewer** licenses you have purchased and how many are currently in use, by clicking on your initials at the top right of the screen, and choosing **Access Management > Licenses** from the menu:



6 Report Management

6.1 Pending reports

Click on your initials at the top right of the screen and choose **Report Management > Pending Reports** from the menu. You'll see details of pending reports and their status:

REPORT NAME	REPORT TYPE	CREATED ON	REQUEST MADE	RUN BY	STATUS
<input type="checkbox"/> Demographics: Diabetes Diagnoses	All the Answers	21 May 2018 12:37	3 minutes ago	Anne Currie	Errored
<input type="checkbox"/> All Lab tests	Lab Tests Explorer	11 Jul 2018 11:07	2 minutes ago	Anne Currie	Waiting
<input type="checkbox"/> All Meds	Medications Explorer	11 Jul 2018 11:09	a few seconds ago	Anne Currie	Waiting

6.2 Report Schedule

Click on your initials at the top right of the screen and choose **Report Management > Report Schedule** from the menu. You'll see details of scheduled reports:

REPORT NAME	CREATED BY	CREATED ON	LAST RUN	NEXT RUN
<input type="checkbox"/> All Meds	Anne Currie	11 Jul 2018 12:09	12 Oct 2018 14:00	14 Dec 2018 00:00
<input type="checkbox"/> Demographics - all males	Anne Currie	10 Jul 2018 11:50	12 Oct 2018 14:00	13 Dec 2018 00:00
<input type="checkbox"/> Demographics: Diabetes Diagnoses	Anne Currie	21 May 2018 13:37	21 May 2018 13:38	13 Mar 2019 00:00

6.3 Result Bandings

Where applicable, data can be divided into bands for reporting purposes. Banding can be applied to all data items used to collect numeric data. If banding applies to a particular data item, the details are displayed when the user makes their report output selections.

The **Result Banding** feature enables a system administrator to set default bandings for these data items. Users can also edit bandings if they wish, when making their report output selections.

Click on your initials at the top right of the screen, and choose **Report Management > Result Banding** from the menu:

Bandable questions Search questions

DATASET 1	QUESTION 2	BANDS 3
Clinical Activity Summary	Number of blood sugar readings	6
Clinical Activity Summary	Number of lab tests undertaken	Current bands
Clinical Activity Summary	Number of times vital signs taken	<50,50-100,100-125,125-150,150-200,>200
Lab Result	Result value	6
Medication Prescription	Cost	6
Unit Stay	Order of stay	7
Visit	Height	6
Visit	Weight	6

- 1** The forms/datasets containing bandable questions are listed here. Click on the text in this column to set or modify the bands belonging to the question to the right of this column (see below for more information).
- 2** Each question belonging to the relevant dataset is listed here.
- 3** The number of bands already set for this question is listed here. Hover the mouse over the number to see basic details of these bandings.

6.3.1 Modify or Create Bandings

Once you have clicked on an item in the list, you will see a screen similar to the one below:

Clinical Activity Summary : Number of diagnoses Save Cancel

Modify banding

Start		End	10	Name	<10
Start	10	End	20	Name	10-1 2
Start	20	End	30	Name	20-30
Start	30	End	40	Name	30-40
Start	40	End	50	Name	40-50 4
Start	50	End		Name	>50

Reset bands **Add band** **3**

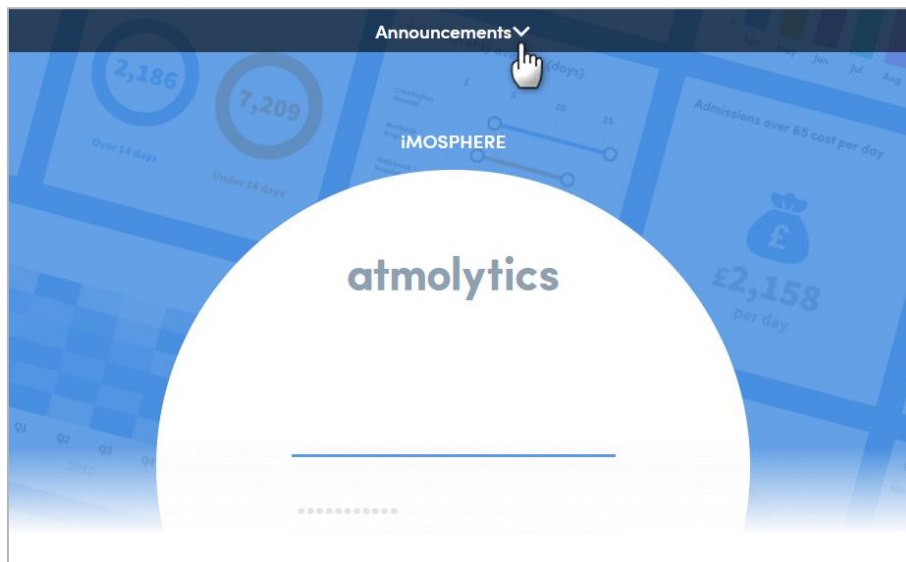
Here you can add, remove and modify bandings, as well as giving them a name.

- 1** Click and type, or click the up and down arrows to set the band limits
- 2** Click and type a name for the band. The name you enter will be used in generated reports as labels for the charts and graphs.

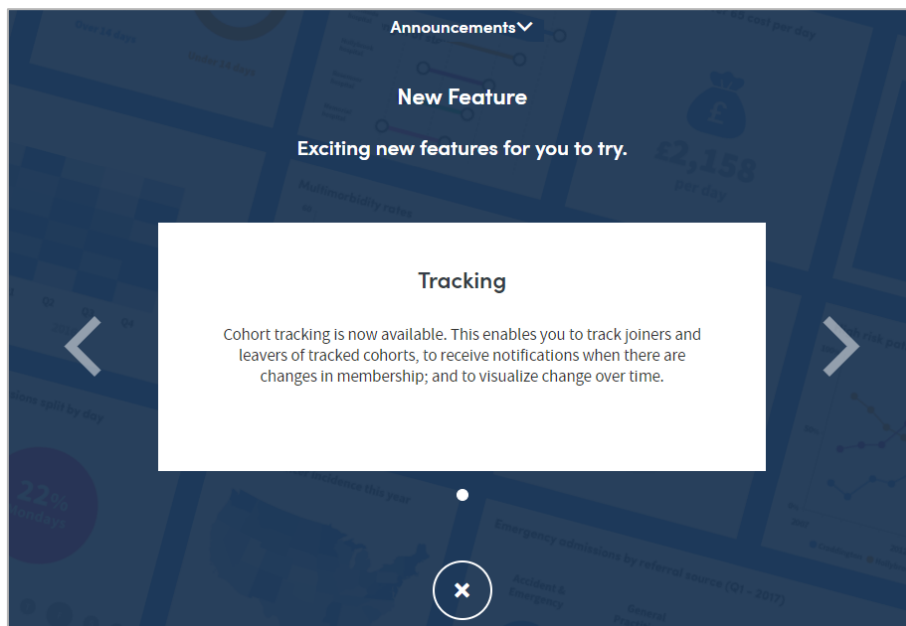
- 3 Click **Add band** to add a band to the list. Click **Reset bands** to revert the bands to their most recently-saved settings.
- 4 Click the cross to delete a band from the list.
- 5 Click **Save** when you have finished, or **Cancel** to discard your changes and go back to the list of bandable questions.

7 Announcements

Atmolytics allows administrators to issue announcements on the login page, offering an ideal way to communicate and engage with users. Announcements appear on the login screen as a bar at the top of the page:

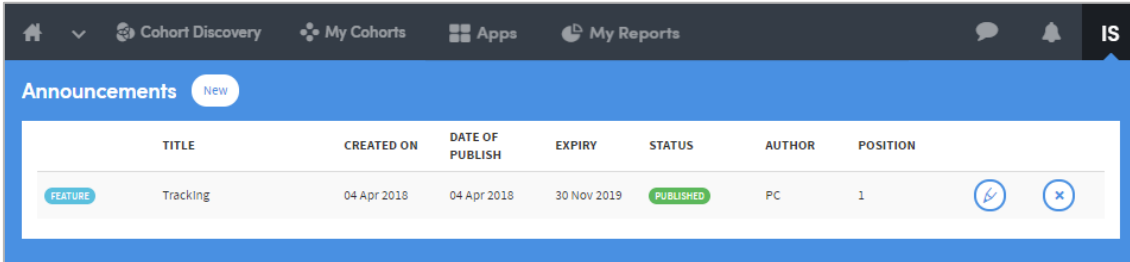


Clicking on the banner expands the panel and displays a carousel of messages:



7.1 Managing Announcements

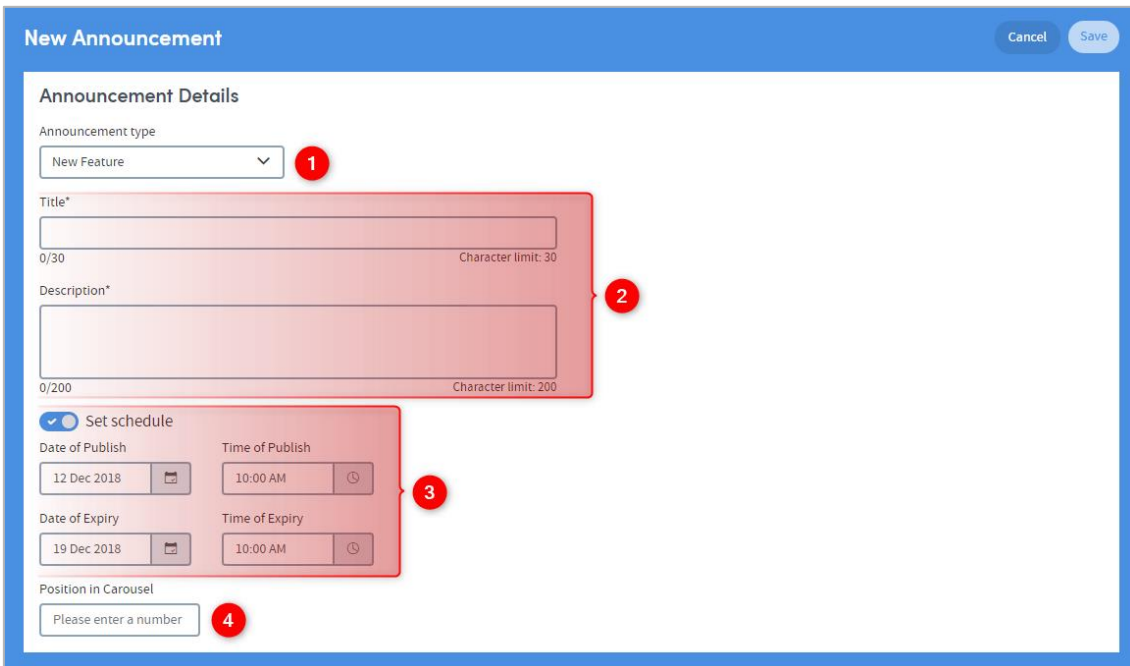
Click on your initials at the top right of the screen, and choose **System Management > Announcements** from the menu:



	TITLE	CREATED ON	DATE OF PUBLISH	EXPIRY	STATUS	AUTHOR	POSITION		
FEATURE	Tracking	04 Apr 2018	04 Apr 2018	30 Nov 2019	PUBLISHED	PC	1		

Use the buttons on the right to  **Delete** or  **Edit** an existing announcement.

Click  to create a new announcement. The following screen will appear:



1 Choose an announcement type:

- Alerts: Use this to alert users of important events. For example, planned system outages or upgrades.
- New feature: Use this to highlight new features or share news about Atmolytics.

2 Add a title and description.

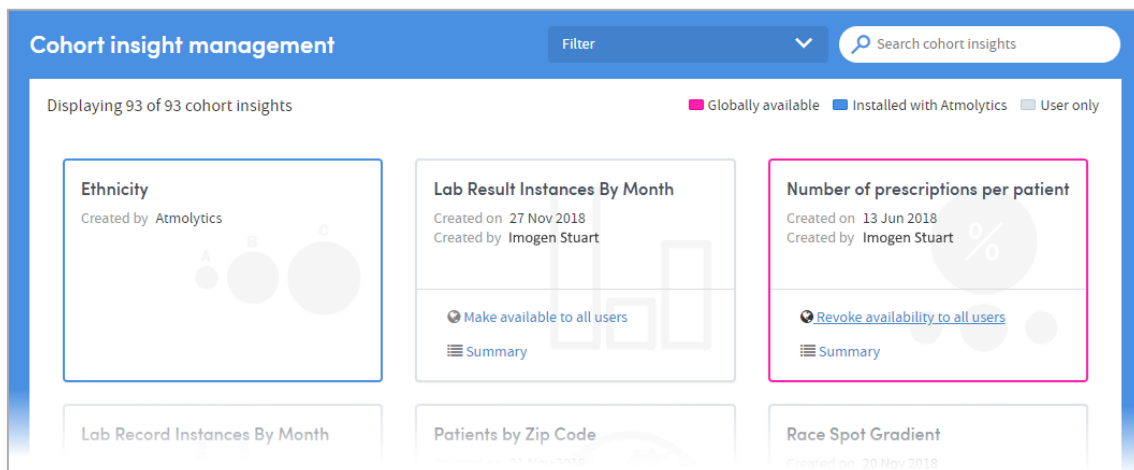
3 You can schedule the announcement to appear and be removed on a date and time of your choosing. If you don't set a schedule the announcement will appear on the login screen until you remove it from the list in **System Management > Announcements**.

4 Choose the position of the announcement in the carousel.

8 Cohort Insight Management

This feature allows administrators to view details of every cohort insight in the Atmolytics system. As an admin, you can also choose which insights to make globally available.

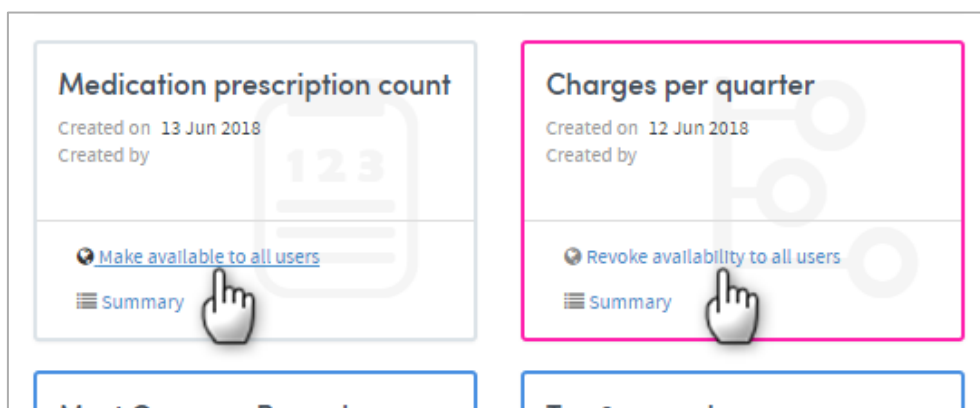
Click on your initials at the top right of the screen, and choose **System Management > Cohort Insight Management** from the menu:



The list of insights can be filtered and searched using the features in the top menu.

The status of an insight is denoted by the colour of its outline:

- **Blue** insights are pre-installed into Atmolytics and automatically available to every user. This availability cannot be changed by an administrator. The only way to restrict access to pre-loaded cohort insights is by creating a **Role** that does not allow access to the cohort insights feature, and assigning that role to users.
- **Grey** insights are user-created insights which can only be accessed by that user.
- **Pink** insights are user-created insights which an administrator has made available across all of Atmolytics, using this Cohort Insight Management feature. Global availability can also be revoked by an administrator:



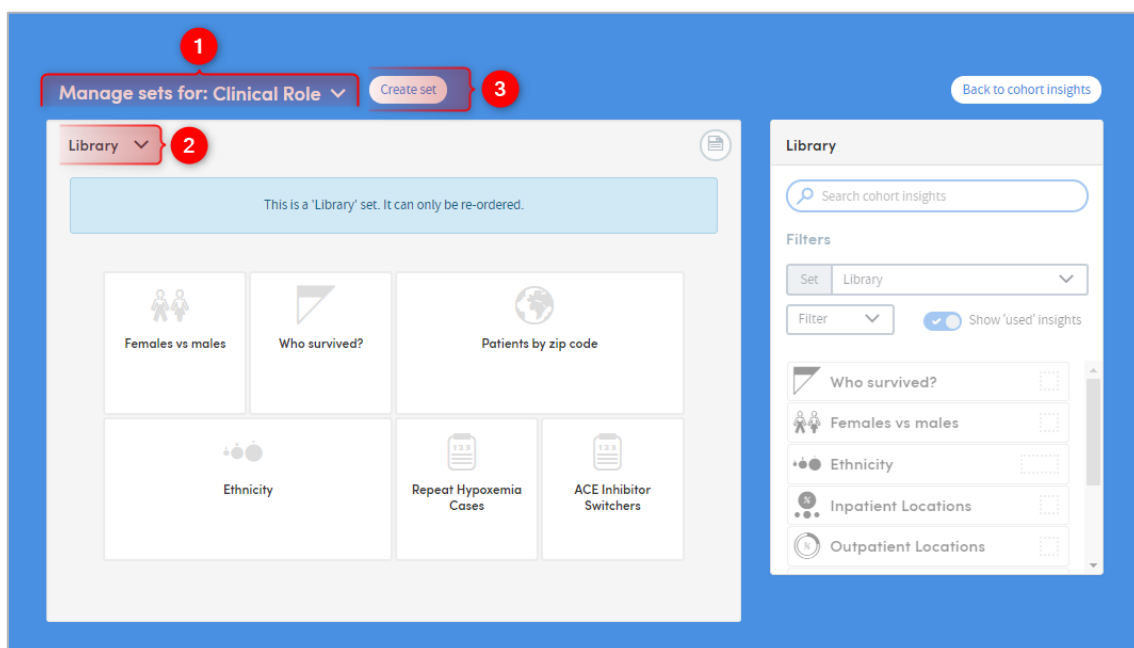
9 Manage Sets For Others

An administrator can create and edit sets of cohort insights which apply to specific **Roles**. Every user who is assigned that role will also be assigned these sets of cohort insights.

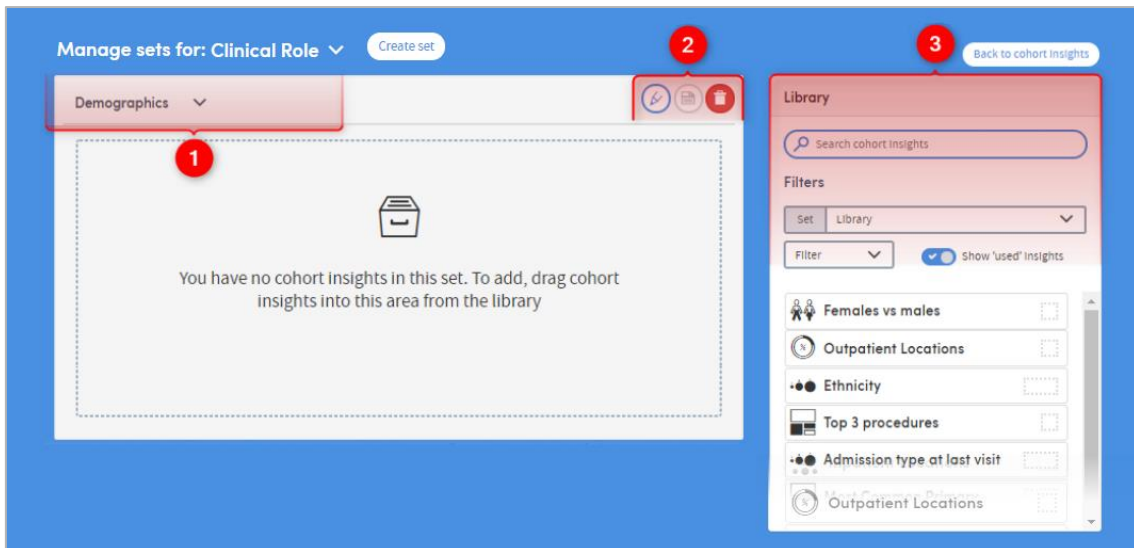
Insight sets can be useful in many ways. For example, as an admin you could create sets including insight types which apply to roles with specific areas of interest (demographics, diagnoses, financial information, etc).

A cohort insight can belong to any number of sets, and there's no limit to the number of sets you can create and assign to a role.


Click on your initials at the top right of the screen, and choose **System Management > Manage Sets For Others** from the menu:

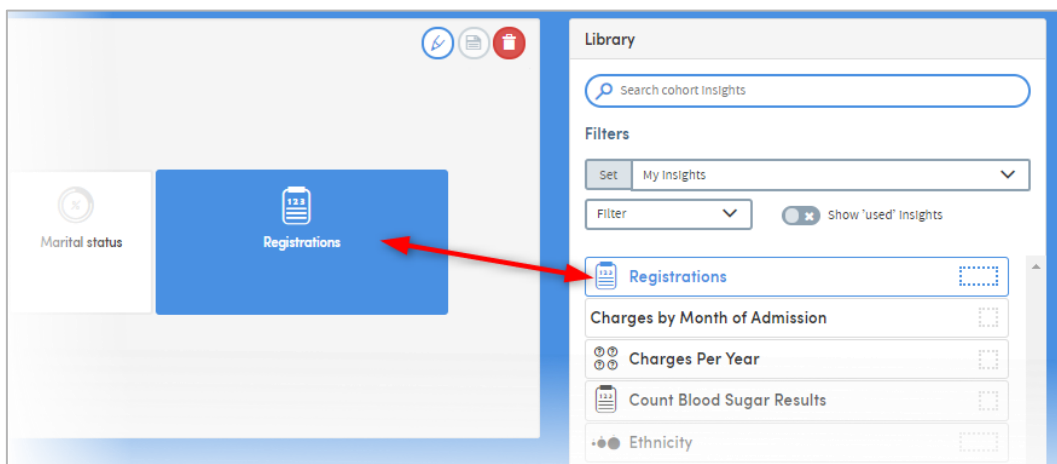


- 1 Click the down-arrow to select a role whose insight sets you want to work with, then:
- 2 Click the down-arrow to choose an insight set for editing, or:
- 3 Click **Create set** to create a new insight set for the role you've selected. You will be prompted to name the new set. Type in a name and click on **OK**:



- 1 Here you can see the name of the set you're working with.
- 2 You can rename a set, save any changes you make, or delete a set here.
- 3 If you have a lot of insights to choose from, you can search by name, or use the **Filters** options to reduce the number of insights in your list and make navigation easier.

To build your set, click and drag insights from the list on the right over to the pane on the left. You can also click and drag the insights within the pane, to arrange them in whatever order you prefer. Click on the **Save** icon  when you have finished.



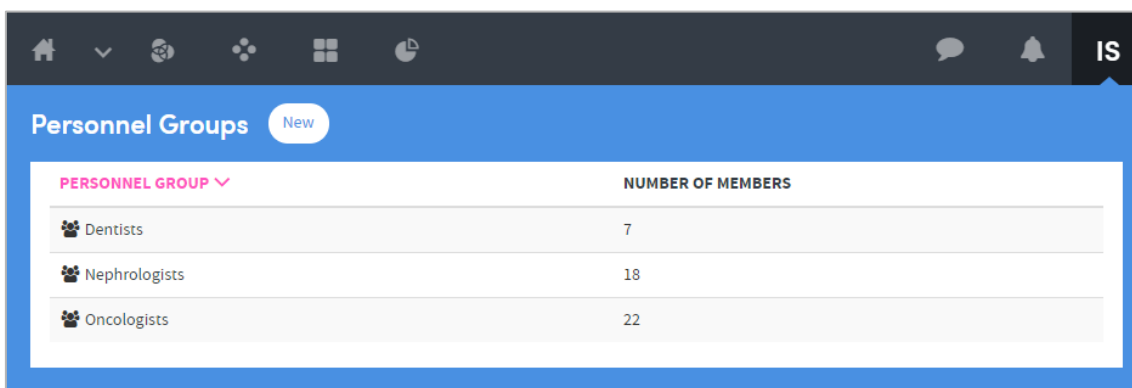
10 Personnel Groups

Selections of staff may be grouped into **Personnel Groups** by Administrative users of the system. Any member of staff may belong to any number of personnel groups.

Currently, such groups are made available for selection in the following areas of the software:

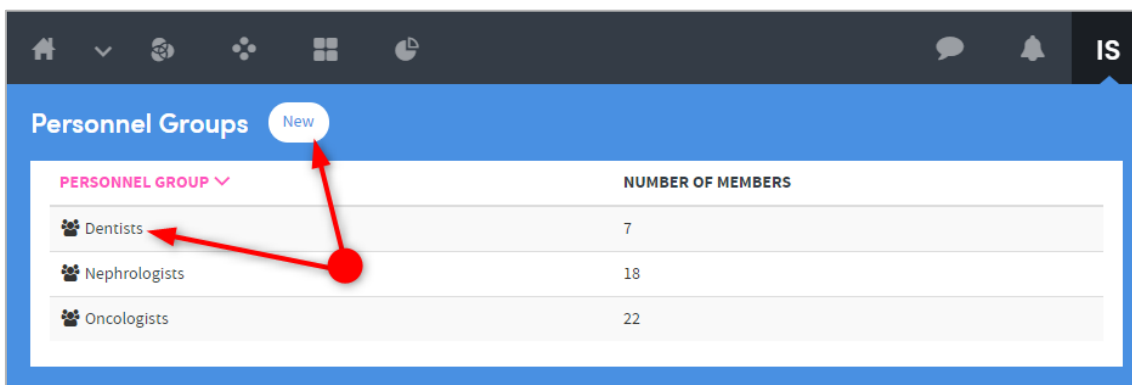
- Selection of clinicians within the **Scope** area of **Cohort Discovery**.
- Within Apps where the option to split the output by staff member/person is available; e.g. within the **Visits Revisited** and **Events and Processes** Apps.

Click on your initials at the top right of the screen, and choose **System Management > Personnel Groups** from the menu:



PERSONNEL GROUP	NUMBER OF MEMBERS
Dentists	7
Nephrologists	18
Oncologists	22

10.1 Create or Edit Personnel Groups



PERSONNEL GROUP	NUMBER OF MEMBERS
Dentists	7
Nephrologists	18
Oncologists	22

Select a personnel group from the list on screen if you wish to edit its name, or add or remove members from the group.

Alternatively, click on **New** to create a new Personnel Group:

Create New Personnel Group Save Cancel

Personnel Group Details

Personnel Group Name
Consultant Physicians

Staff Search
Da Search

- Davis, Virginia
- Garcia, [unclear]
- Hardman, Darrel
- Nunez, Dale
- Tate, David
- Wright, Dawn

Enter the name of the group, then click on **Staff Search** to find and select the staff you wish to add to the group. Click on a name to select it, and it will be added to the list at the bottom of the screen:

Create New Personnel Group Save Cancel

Personnel Group Details

Personnel Group Name
Consultant Physicians

Staff Search
 Search

Davis, Virginia ✕ Wright, Dawn ✕ Malone, Linda ✕

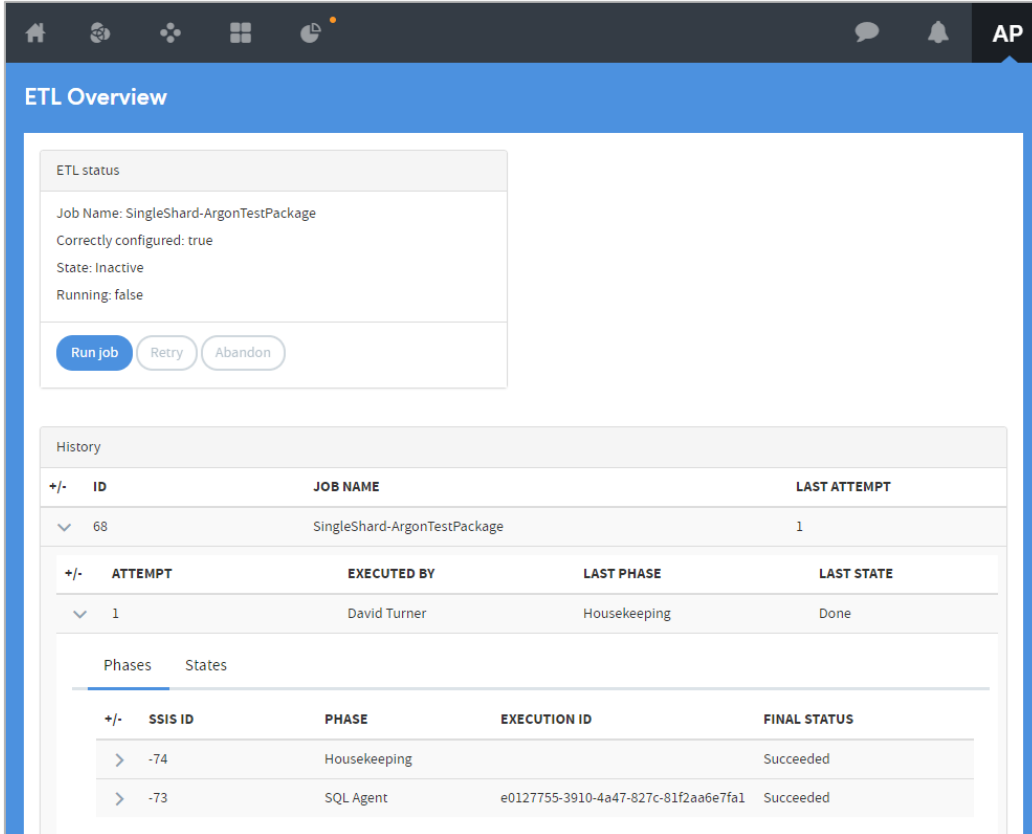
If you want to remove a member, click on the cross on the right of their name.

Click on **Save** when you have finished creating or editing the group.

11 ETL Overview

The ETL Overview screen is an important area for system administrators as it helps manage the loading of patient data into Atmolitics.

Click on your initials at the top right of the screen, and choose **System Management > ETL Overview** from the menu:



The screenshot displays the ETL Overview interface. At the top, there is a navigation bar with icons and the initials 'AP'. The main content area is titled 'ETL Overview' and contains the following sections:

- ETL status:** A summary box showing job details for 'SingleShard-ArgonTestPackage'. It indicates 'Correctly configured: true', 'State: Inactive', and 'Running: false'. Below this are three buttons: 'Run job' (highlighted in blue), 'Retry', and 'Abandon'.
- History:** A table showing the execution history of the job.

+/-	ID	JOB NAME	LAST ATTEMPT
▼	68	SingleShard-ArgonTestPackage	1

+/-	ATTEMPT	EXECUTED BY	LAST PHASE	LAST STATE
▼	1	David Turner	Housekeeping	Done

Phases States

+/-	SSIS ID	PHASE	EXECUTION ID	FINAL STATUS
>	-74	Housekeeping		Succeeded
>	-73	SQL Agent	e0127755-3910-4a47-827c-81f2aa6e7fa1	Succeeded

This feature:

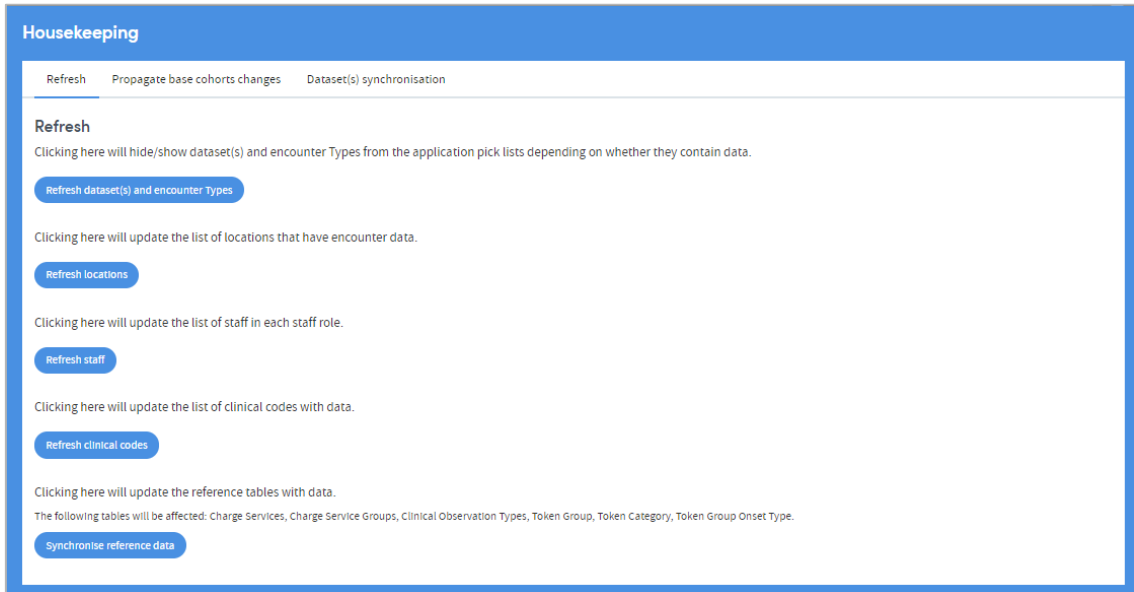
- Gives a clear indication of when the SQL Agent job is correctly configured.
- Allows failed data load attempts to be retried (after manual corrective action has been taken or the cause of the transitive failure has been removed).
- Allows failed data load attempts to be abandoned and the system to be lifted out of maintenance mode.
- Live status updates in the user interface are available to all users in the admin role, not just the user who initiated the ETL.
- Shows a clear breakdown of the data load status (into runs; with attempts under runs, and phases under attempts).

12 Housekeeping

Use these features to refresh and update the data available to Atmolitics users.

Click on your initials at the top right of the screen, and choose **System Management > Housekeeping** from the menu:

12.1 Refresh

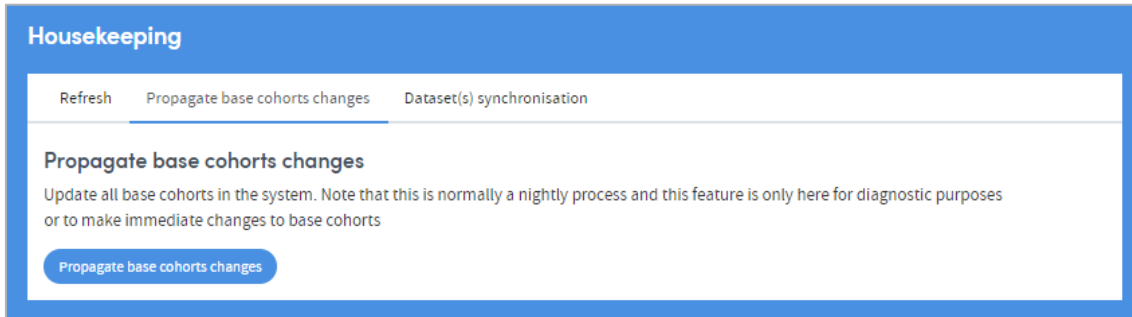


Here you can:

- **Refresh dataset(s) and admission types**
Enables you to hide/show dataset(s) and admission types from the application pick lists depending on whether they contain data.
- **Refresh locations**
Enables you to update the list of locations that have admission data.
- **Refresh staff**
Enables you to update the list of staff in each staff role
- **Refresh clinical codes**
Enables you to update the list of clinical codes with data
- **Synchronise reference data**
Enables you to update the reference tables with data

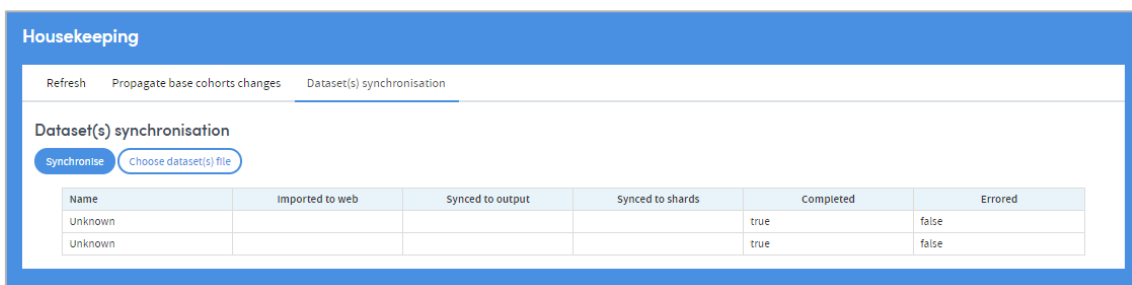
12.2 Propagate Base Cohorts Changes

This feature enables you to update all base cohorts in the system. Note that this is normally a nightly process and this feature is only here for diagnostic purposes, or to make immediate changes to base cohorts:



12.3 Dataset(s) Synchronisation

Use this feature to select and synchronise datasets:



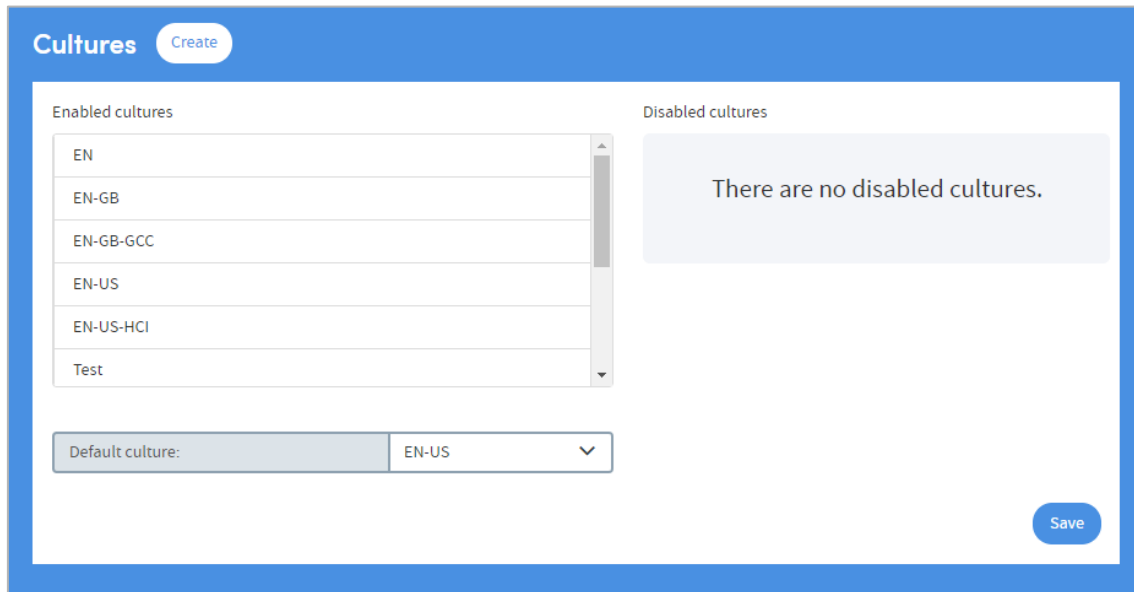
13 Cultures and Languages

The language, terms and even some of the Help images used in Atmolytics are fully configurable. A system administrator can define and select their own terms and images for:

- **Key terms** (such as patient/service user, visit/admission)
- **Labels and buttons**
- **Error messages**
- **Information messages**
- **Help images**

A **Culture** is a collection of these admin-defined **Resources** which is then applied across Atmolytics. Administrators can enable or disable cultures and make cultures available to users. You can copy an existing culture and edit particular resources, either within the software itself, or by downloading and uploading resource information as a .csv file.

Click on your initials at the top right of the screen, and choose **System Management > Cultures & Languages** from the menu:

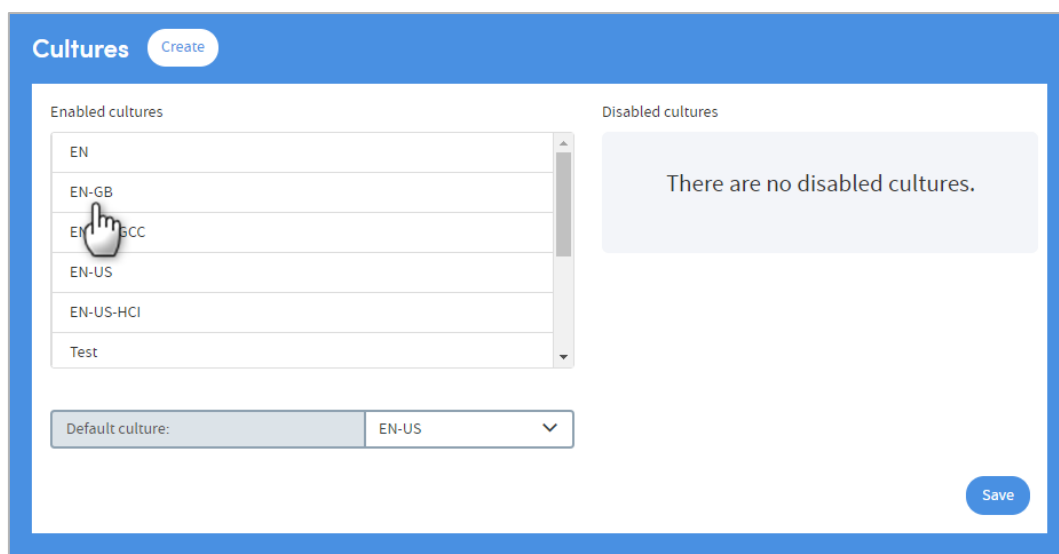


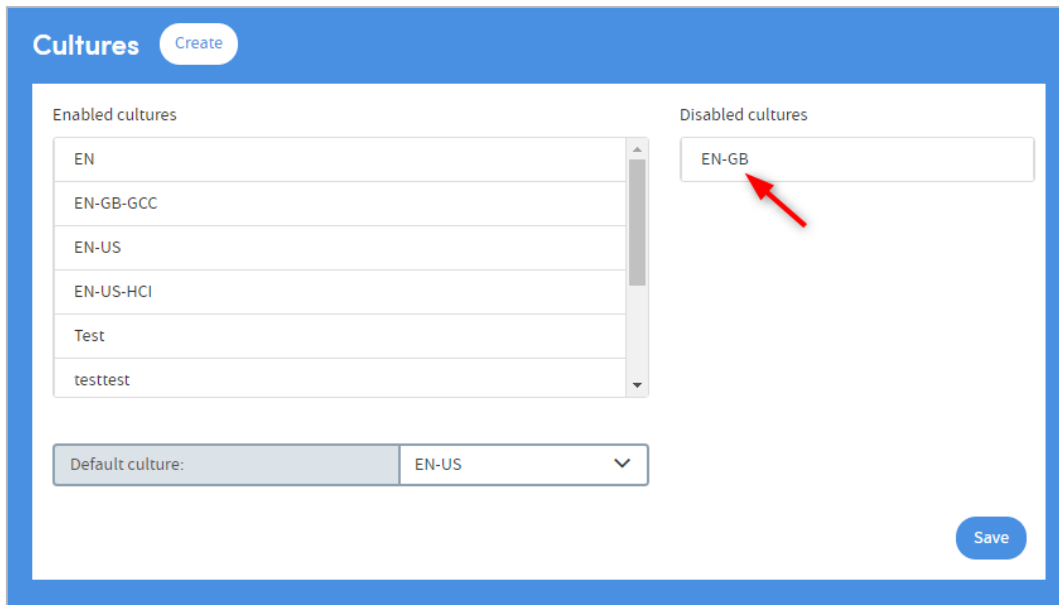
The cultures available in Atmolytics are listed here. They are structured as a nested list: so, for example, EN is a 'parent' of EN-GB, which is a 'parent' of EN-GB-GCC.

The **Default culture** is the culture that is used across your Atmolytics system. You can change this by selecting from the drop-down list.

13.1 Enabling and Disabling Cultures

Disabled cultures cannot be selected as the default culture. If you're editing the resources within a culture, you may prefer to disable it first to prevent it being used before it's ready. Click the name of a culture to move it from enabled to disabled, and vice versa:

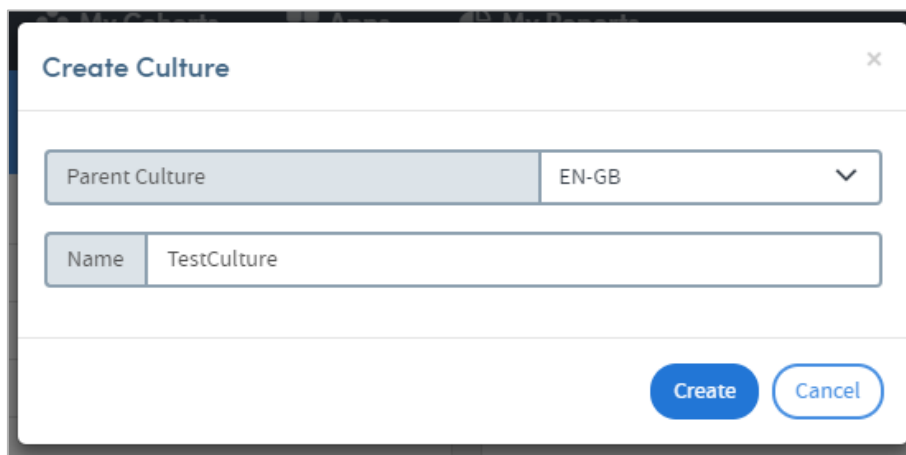




Click **Save** when you've finished.

13.2 Creating a New Culture

Click **Create**. The following panel will appear:



You need to select a Parent Culture from the drop-down list. Your new culture will contain all the resources of the parent culture. You can then edit the resources of the new culture as desired. Click **Create** when you've chosen the parent, and named the new culture.

The new culture will be disabled until you choose to enable it.

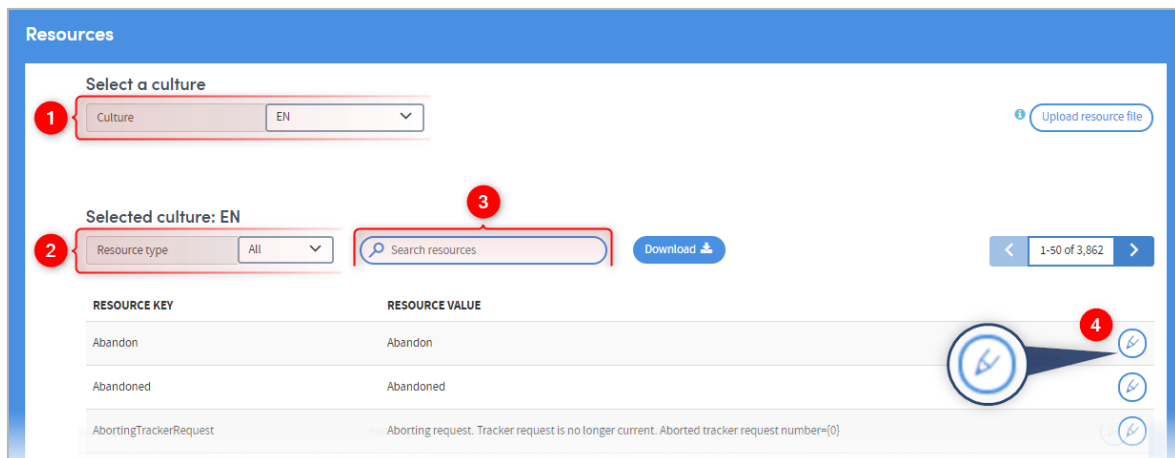
14 Resources

The language, terms and even some of the Help images used in Atmolytics are fully configurable. There are fixed **Resource Keys** which Atmolytics refers to when applying, for example, screen labels or key terms to areas of the software. A system administrator can define their own **Resource Values** for these Resource Keys which will then apply across Atmolytics. The following features can be configured in this way:

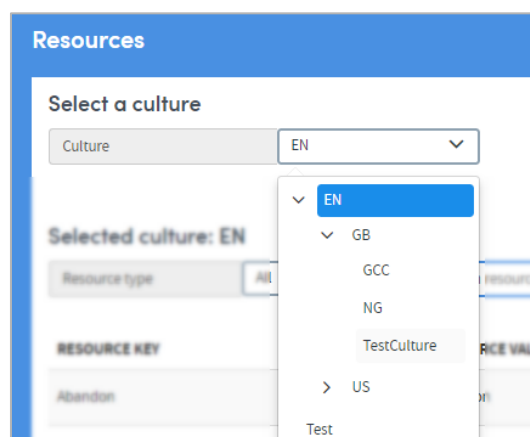
- **Key terms** (such as patient/service user, visit/admission)
- **Labels and buttons**
- **Error messages**
- **Information messages**
- **Help images**

A **Culture** is a collection of these admin-defined **Resources** which is then applied across Atmolytics. The resources defined in each culture can be edited either within Atmolytics itself, or by downloading, editing and uploading resource information as a .csv file.

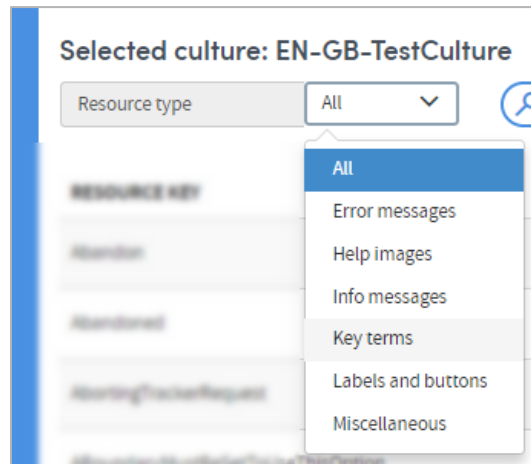
Click on your initials at the top right of the screen, and choose **System Management > Resources** from the menu:



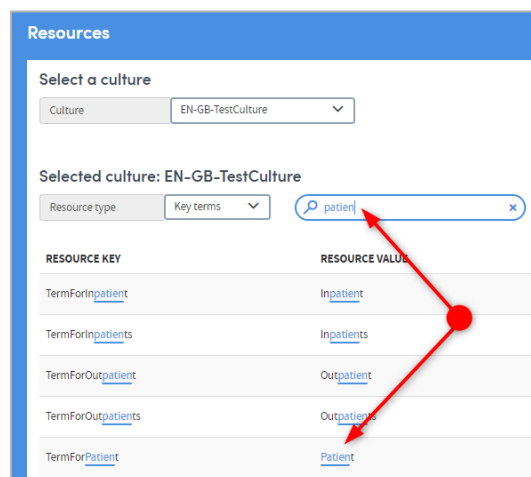
- 1 This shows the **Culture** you are working with. Select from the drop-down list:



2 The **Resource type** you select here is displayed in the list below. Select the type from the drop-down list:



3 You can narrow down the lists by searching for terms in the **Resource Key** and **Resource Value** columns:



4 Click the pencil icon to edit a **Resource Value**. Here, we are editing the Resource Value attached to the Resource Key **TermForPatient**, from **Patient** to **Service User**:

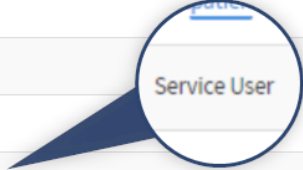


Click **Save** when you've finished. The Resource Value is now **Service User**.

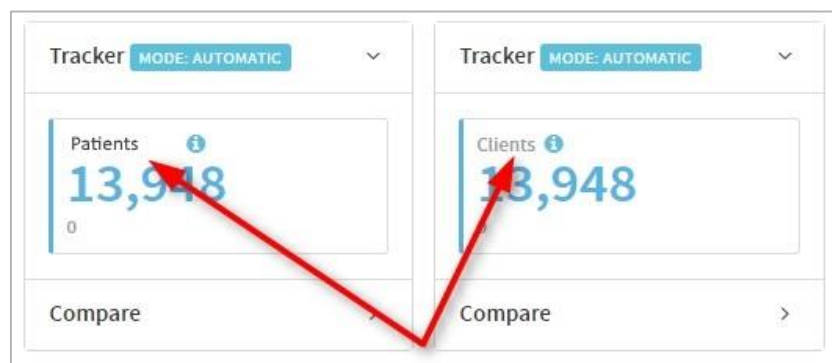
Selected culture: EN-GB-TestCulture

Resource type Key terms Download

RESOURCE KEY	RESOURCE VALUE
TermForInpatient	Inpatient
TermForInpatients	Inpatients
TermForOutpatient	Outpatient
TermForOutpatients	Outpatients
TermForPatient	Service User
TermForPatients	Patients



The Resource Values you create will be applied anywhere they appear in the Atmolitics software, replacing any previous versions:



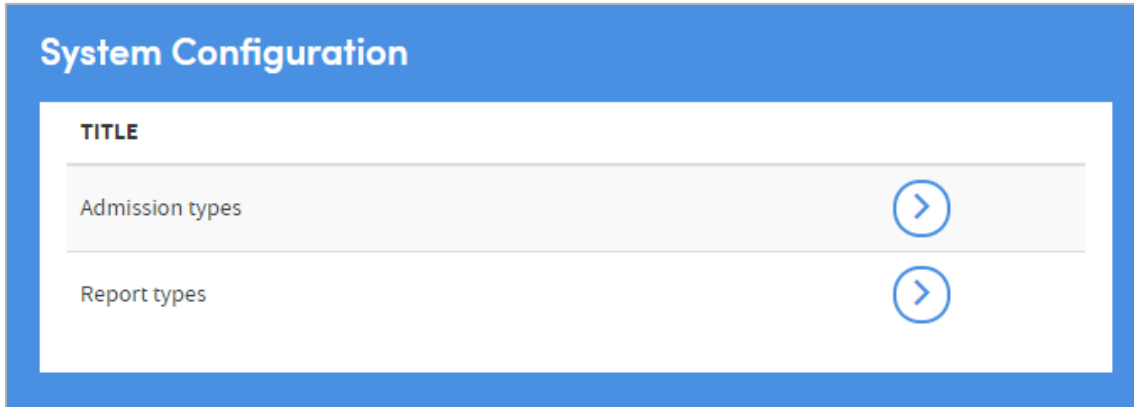
14.1 Downloading and Uploading Resource Files

If you prefer, you can download a complete list of resources as a .csv file and edit it in a separate software package, before uploading it back into Atmolitics. Do this by utilising the **Download** and **Upload resource file** buttons.

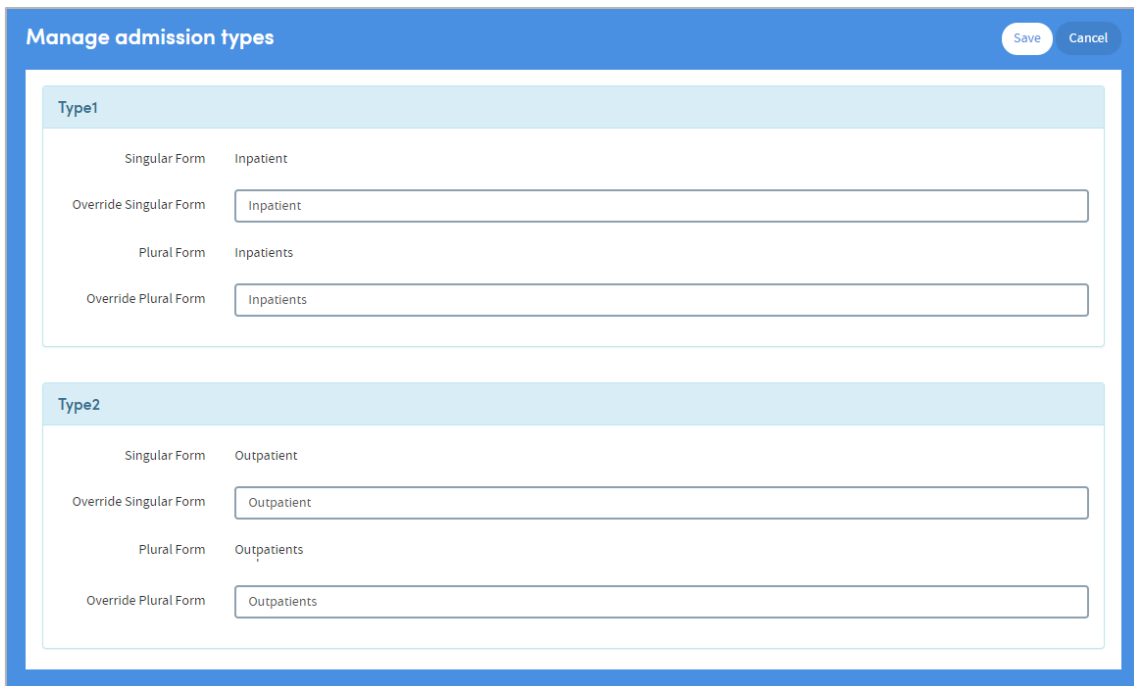
15 System Configuration

Here you can name the admission types used in Atmolitics, and enable or disable individual report types.

Click on your initials at the top right of the screen, and choose **System Management > System Configuration** from the menu:



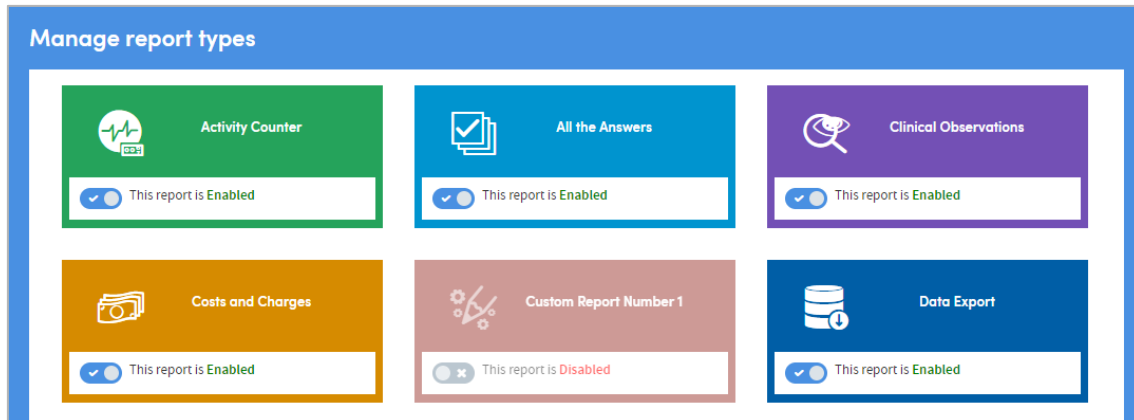
15.1 Manage Admission Types



Type in the name of the admission type(s) if you wish to change them.

15.2 Manage report types

Click the toggle for each report type to enable or disable it:



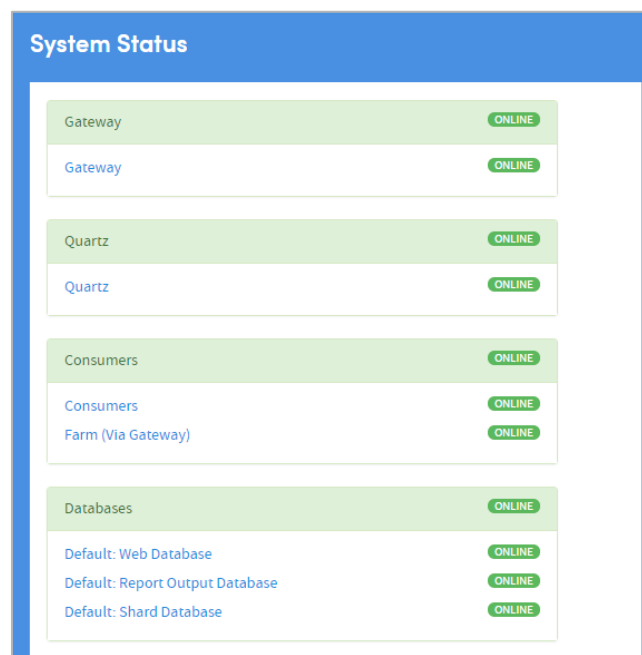
Disabled report types will be removed from users' report lists, and the App will be removed from the App selection screen so cannot be accessed by users. If the report type is re-enabled, the reports are reinstated and the App can be accessed again.

16 System Monitoring

Click on your initials at the top right of the screen, and choose **System Monitoring** from the menu. System monitoring functions include:

16.1 System Status

Atmolytics uses a distributed architecture. The system status page reports on the status of each of the Atmolytics components allowing for outages to be quickly identified:



16.2 Quartz Schedule

This feature indicates which reports and housekeeping jobs are scheduled to run for the next 24 hours:

Quartz Schedule				
JOB NAME	WHICH TIME FRAME?	DESCRIPTION	RECURRING	NEXT
NightlyJob-c4c8279a-efe4-463c-a1b7-61250c10f7ae	10 days ago	GatewayNightlyJobRequest	YES	in 13 hours


16.3 Queue Status

This feature indicates the status of the job queues used by Atmolitics:

QUEUE NAME	MESSAGES			STATE	IDLE SINCE
	TOTAL	READY	UNACKED		
argon_farm_cc_etl	0	0	0	IDLE	28 Jan 2019 02:02
argon_farm_cohort_insight_service	0	0	0	IDLE	28 Jan 2019 13:04
argon_farm_group_service	0	0	0	IDLE	23 Jan 2019 15:02
argon_farm_housekeeping	0	0	0	IDLE	28 Jan 2019 13:12
argon_farm_report_service	0	0	0	IDLE	28 Jan 2019 02:04


16.4 Data Integrity

This feature checks that the patient data is in a consistent and complete state. Running the integrity checks places significant demands on the background services so typically should only be run outside of normal operational hours.

Integrity check	
<input type="button" value="Run checks"/>	
Previous results	
<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Info
<input checked="" type="checkbox"/> Warning	<input checked="" type="checkbox"/> Error

16.5 Audit Logs

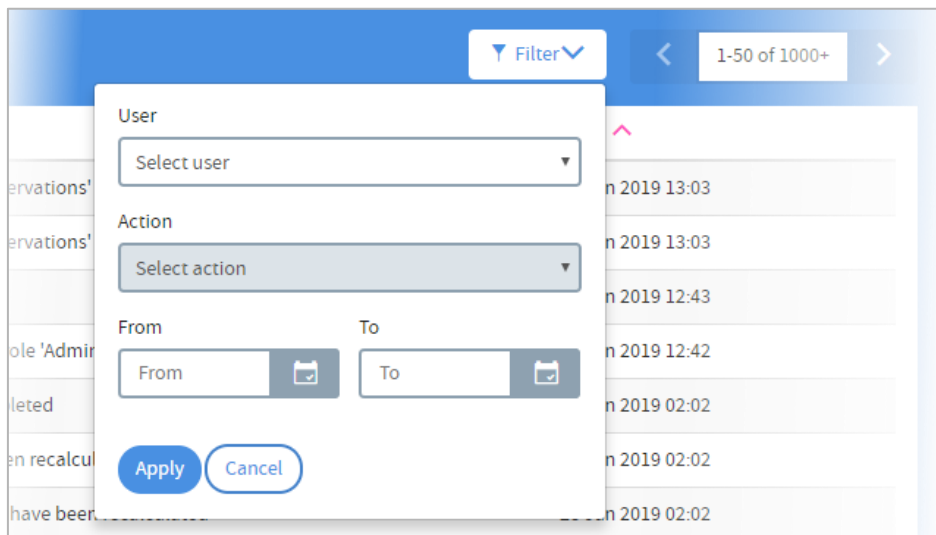
Here, you can view the system's audit log, and monitor user activity:



The screenshot shows the 'Audit' interface with a table of user activities. The table has columns for USER, INFO, and DATE. The data is as follows:

USER	INFO	DATE
System user	Unsaved and temporary cohorts deleted	28 Jan 2019 02:00
System user	Old notifications deleted	28 Jan 2019 02:00
System user	Cohort cache has been cleared.	28 Jan 2019 02:00
System user	Temporary reports deleted	28 Jan 2019 02:00
System user	Quick Id files deleted	28 Jan 2019 02:00

You can filter the information in several ways:

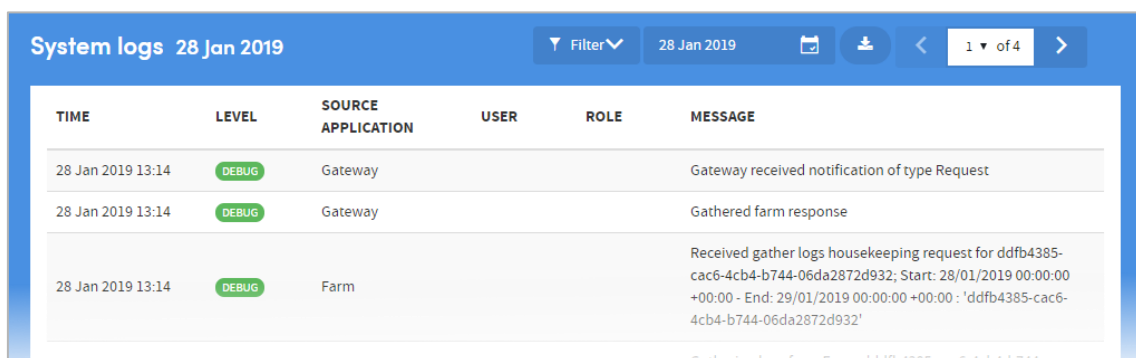


The screenshot shows a filter dialog box overlaid on the audit log table. The dialog has the following fields:

- User: Select user (dropdown)
- Action: Select action (dropdown)
- From: [input field] [calendar icon]
- To: [input field] [calendar icon]
- Buttons: Apply, Cancel

16.6 System Logs

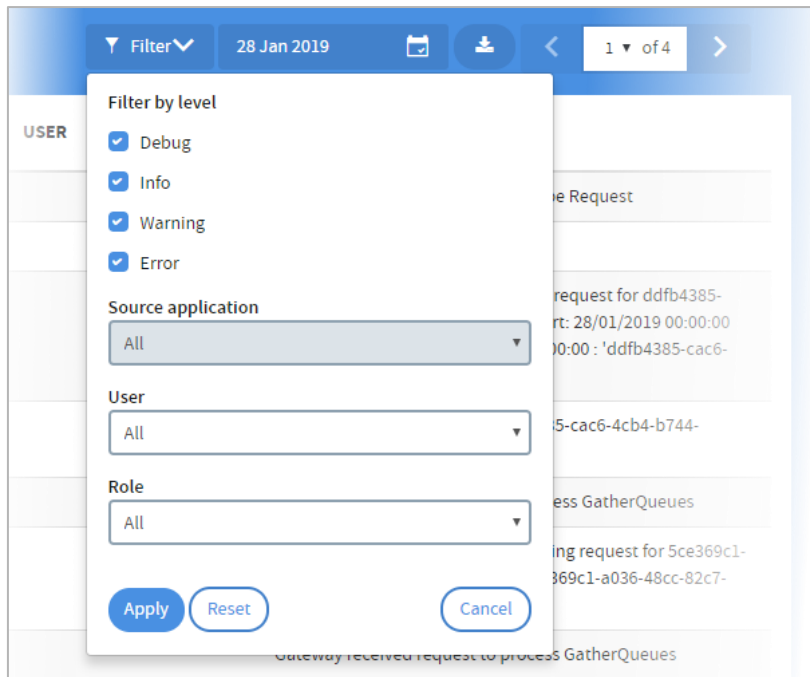
This feature enables you to view the system's log files and filter down the results. The log files monitor general system usage and capture any error conditions that may arise.



The screenshot shows the 'System logs' interface for 28 Jan 2019. The table has columns for TIME, LEVEL, SOURCE APPLICATION, USER, ROLE, and MESSAGE. The data is as follows:

TIME	LEVEL	SOURCE APPLICATION	USER	ROLE	MESSAGE
28 Jan 2019 13:14	DEBUG	Gateway			Gateway received notification of type Request
28 Jan 2019 13:14	DEBUG	Gateway			Gathered farm response
28 Jan 2019 13:14	DEBUG	Farm			Received gather logs housekeeping request for ddfb4385-cac6-4cb4-b744-06da2872d932; Start: 28/01/2019 00:00:00 +00:00 - End: 29/01/2019 00:00:00 +00:00 - 'ddf4385-cac6-4cb4-b744-06da2872d932'

The information can be filtered in several ways:



17 Base Cohorts and Cohort Discovery

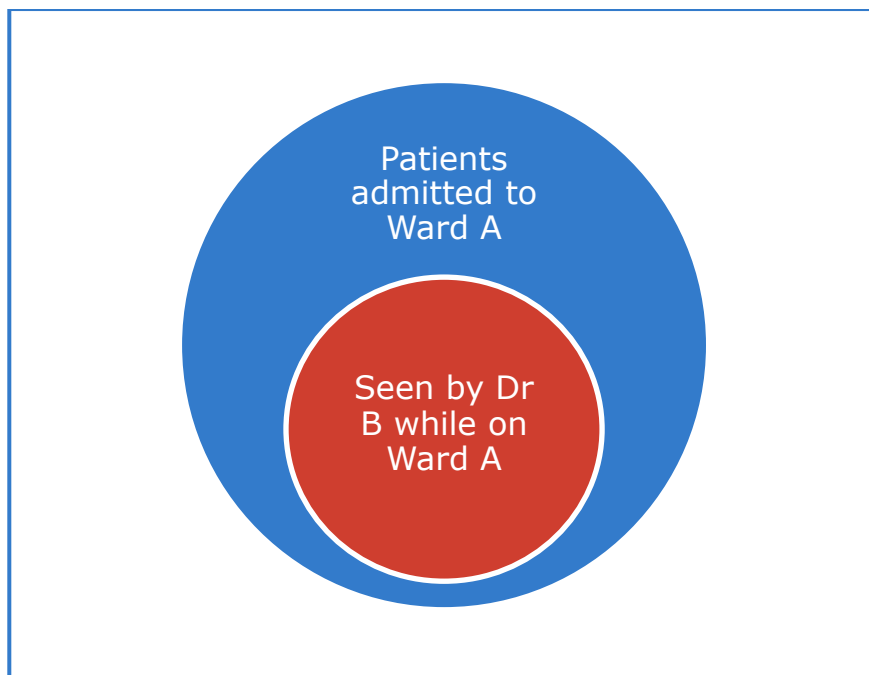
This section provides an advanced explanation of how base cohorts interact with cohorts created in Cohort Discovery.

There is an important difference in the way cohorts function when used as a base cohort, and when used in Cohort Discovery. Suppose we have two base cohorts; one comprising **All patients** and the other **Patients admitted to Ward A**. It may appear as if the following two combinations of a base cohort and a scope applied to that base cohort in Cohort Discovery are (or should be) equivalent:

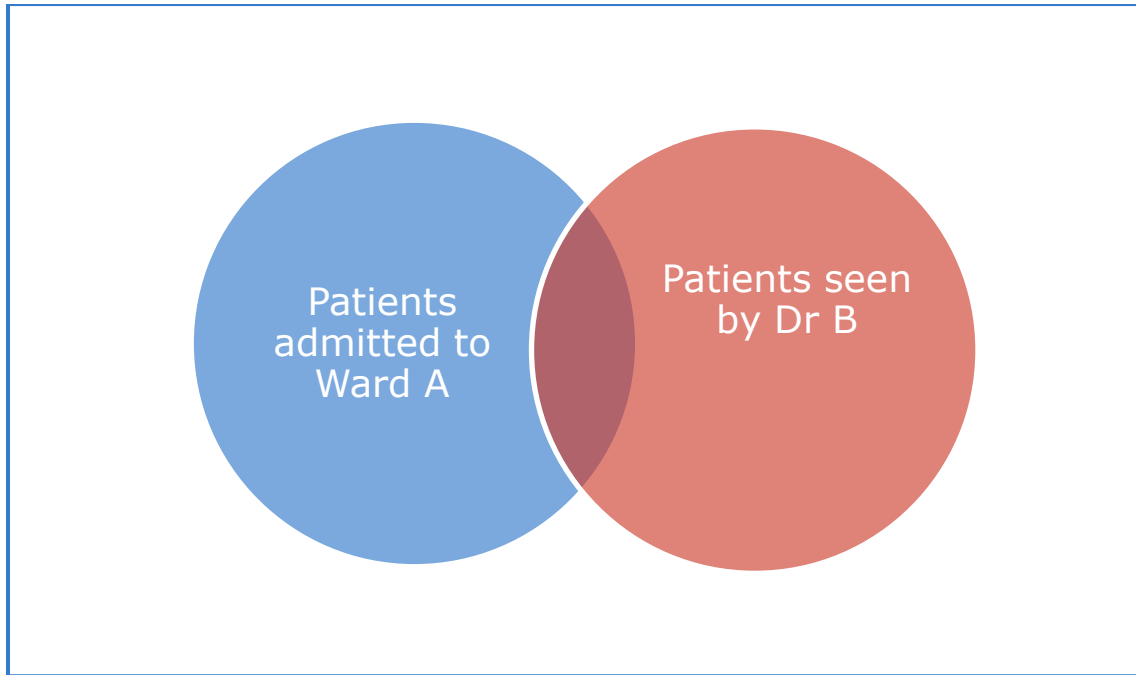
Base cohort = **All patients** & Scope = **Admitted to Ward A**.

Base cohort = **Patients admitted to Ward A** & Scope = **All**.

However, this is not necessarily the case. The reason for this can be seen by adding in an additional scope selection, **Doctor B**, to both examples. In the first case, this will identify all the patients who were seen by Dr. B **while on** Ward A. This is a strict subset of those patients seen on Ward A (first diagram below).



The second case will identify all patients admitted to Ward A **AND** seen by Dr. B; i.e. the intersection between the two cohorts. The difference is that some of these patients may not have been seen by Dr. B on Ward A (second diagram below). They could, for example, have been seen by Dr. B on Ward C but still meet the selection criteria.



The rationale for this difference can be clarified by the following example. As a practitioner on Ward A you would expect to have access to a patient's full casenotes (at least for the service they are involved with) rather than just the notes for admissions to Ward A. If the latter was all you had, you could not begin to undertake analysis of that patient's health history. Similarly with a base cohort; the data available to a base cohort is ALL data for that cohort, not just data for the period in which the patients met the cohort definition. For example, if the base cohort were **patients with a diagnosis of lung cancer** the base cohort permits access to data prior to receiving such a diagnosis. Were such data to be restricted to data collected while they had lung cancer, many analyses would be impossible.

On the other hand, were you to be auditing treatment of lung cancer patients on Ward A, you would only wish to identify patients who saw Dr. B while on your ward – you would not wish to be inadvertently including data from when they saw Dr. B five years ago, on a different ward, and prior to the diagnosis of lung cancer.