

# **MEDIC Audit Visualization Inspection Console**











## **User Manual**








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## Versioning History

Version	Date	Author	Notes
1.0	07/26/2017	Justin Fyfe, Nityan Khanna	Creation
1.1	08/04/2017	Lauren Stephen	Refinement and revision

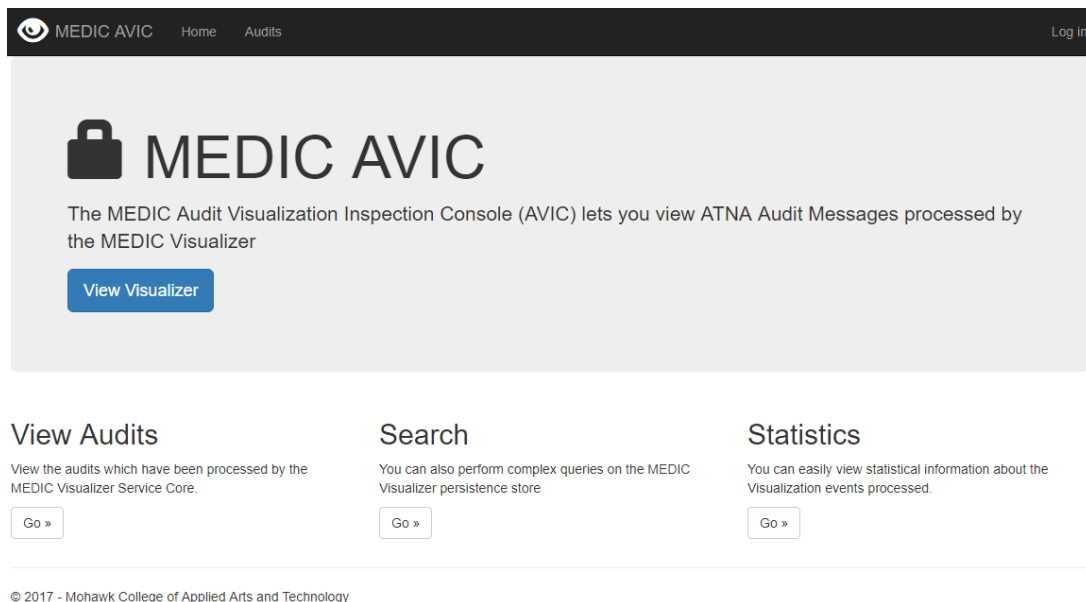
# Chapter 1: Getting Started

## 1.1 Introduction

The MEDIC Audit Visualization Inspection Console (AVIC) lets you view ATNA Audit Messages processed by the MEDIC Visualizer. It is a tool to ensure patient information confidentiality, data integrity, and user accountability.

## 1.2 Browsing to AVIC

AVIC is accessed through a web browser (*such as Internet Explorer, Firefox, or Chrome*). To navigate to the AVIC home page, enter the URL into your browser's address bar. You must log in to access AVIC functionality.



**Figure 1.1 – AVIC Home Page**

## 1.3 Logging In

A Visualizer Audit Viewer account is required to view audits from the system.

To log in to AVIC:

**Step 1:** From the **Home Page**, press the **Log in** button at the top-right corner of the page. You will be taken to the **Log in** page.

**Step 2:** Enter your credentials into the corresponding fields:

- Email/Username
- Password

You can select the **Remember me?** checkbox if you wish your credentials to be remembered. Only select this option on a secure, private computer.

**Step 3:** Press the **Log in** button

The screenshot shows the 'Log in' page of the MEDIC AVIC system. At the top, a dark navigation bar contains the MEDIC AVIC logo, 'Home', 'Audits', and a 'Log in' button (annotated with a red box and the number 1). Below the navigation bar, the heading 'Log in.' is followed by the instruction 'Use a local account to log into the timrdev.marc-hi.ca domain.' The login form (annotated with a red box and the number 2) includes an 'Email/Username' field with 'administrator' entered, a 'Password' field with masked characters '.....', and a 'Remember me?' checkbox. Below the form is a 'Log in' button (annotated with a red box and the number 3). At the bottom, a note states: 'You will require a Visualizer Audit Viewer account to view audits from this system'.

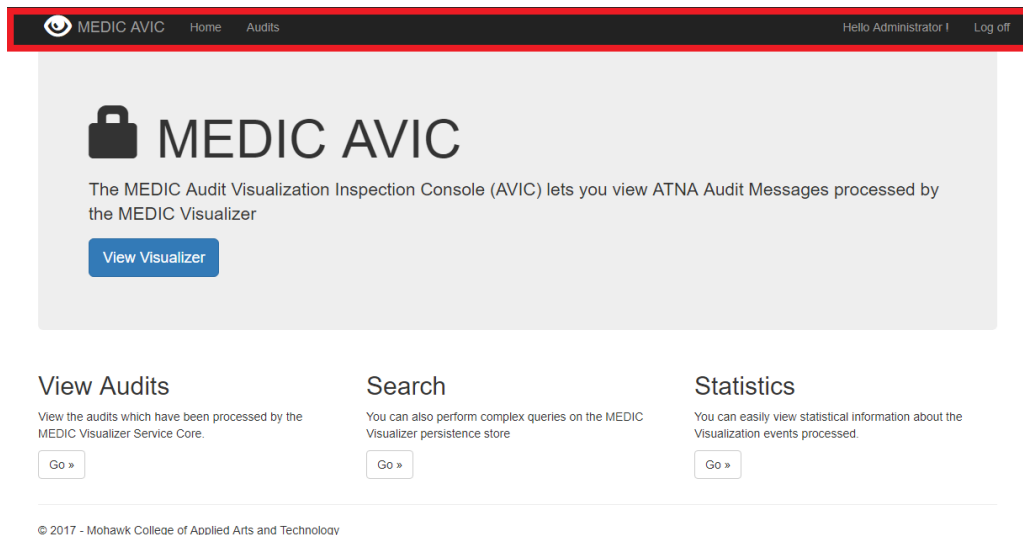
**Figure 1.2 – The Log in page**

# Chapter 2: Home Page and Toolbar

The AVIC **Home Page** provides access to various views, information, and audits. You will be brought to this page after logging in, or if you click the **Home** button on the **Toolbar**.

## 2.1 Toolbar

The **Toolbar** appears across the top of all AVIC pages and audit views. It provides essential navigation options and login information.



**Figure 2.1 – The Home Page with Toolbar outlined in red**

### 2.1.1 Login Status

The right side of the **Toolbar** displays your current login status. If you are logged in, the **Toolbar** will display *Hello <Your Username> !* indicating the username you are logged in as.



## **Figure 2.2 – Login Status**

### **2.1.2 Home Button**

The **Home** button returns you to the **Home Page** from any page in the system.



**Figure 2.3 – Home button**

### **2.1.3 Audits Button**

The **Audits** button will take you to the **Audit Control Centre** where you can view audits that have been processed by the MEDIC Visualizer Service Core. See the **Audit Control Centre** section below for more information about this feature.



**Figure 2.4 – Audits button**

### **2.1.4 Log Off Button**

The **Log off** button safely logs the user out of the AVIC system.

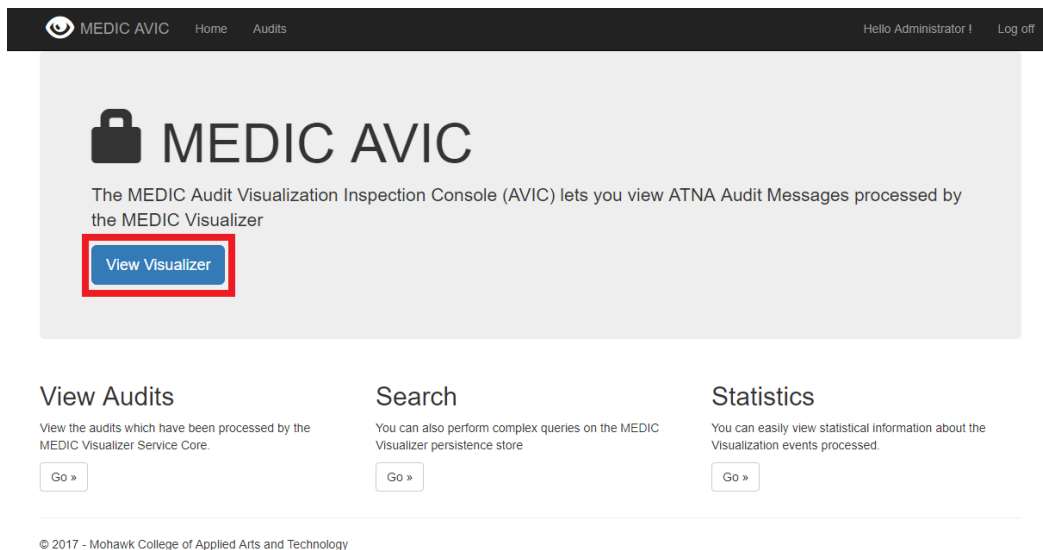


**Figure 2.5 – Log off button**

## **2.2 View Visualizer**

The **View Visualizer** button on the **Home Page** enables you to view the MEDIC Visualizer.

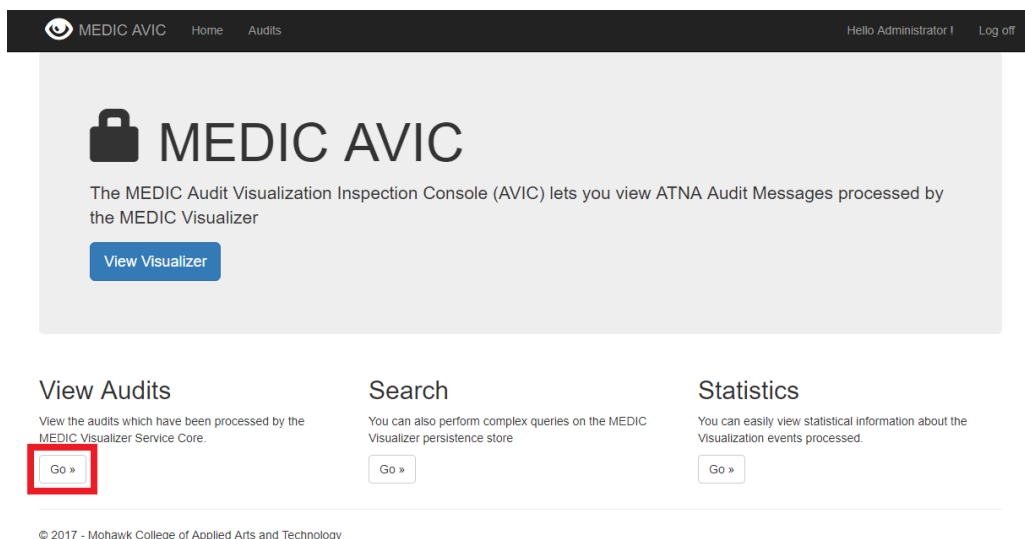




**Figure 2.6 – View Visualizer button**

## 2.2 View Audits

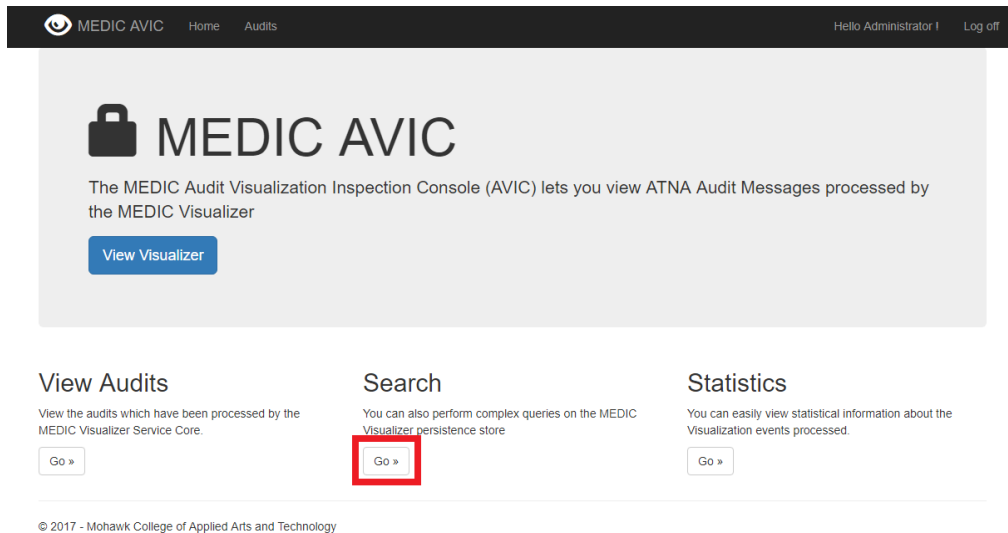
The **Go >>** button beneath **View Audits** will take you to the **Audit Control Centre** where you can view audits that have been processed by the MEDIC Visualizer Service Core. See the **Audit Control Centre** section below for more information about this feature.



**Figure 2.7 – View Audits**

## 2.3 Search

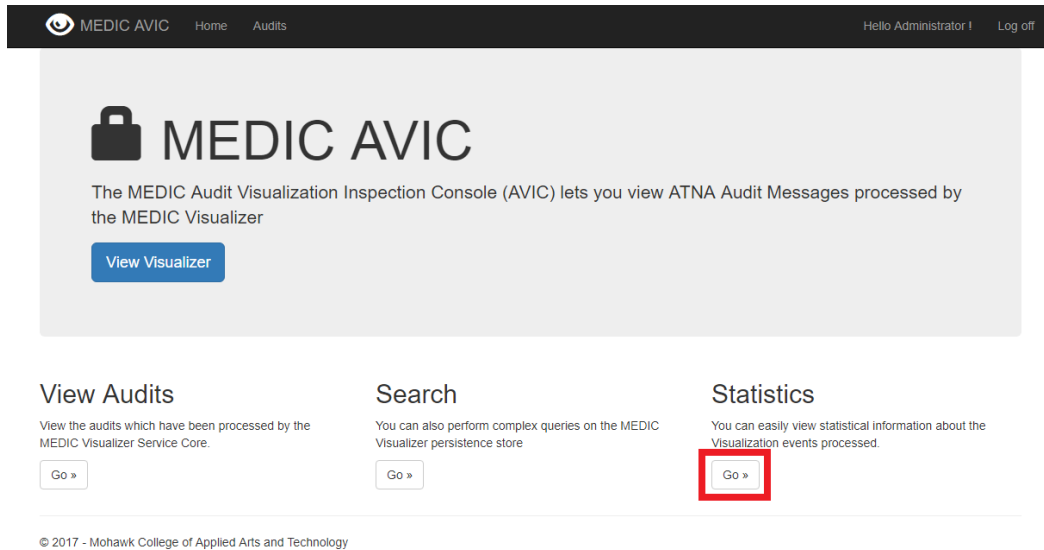
The **Go >>** button beneath **Search** will take you to the **Audit Control Centre: Advanced Search** feature where you can perform sophisticated queries on audits that have been processed by the MEDIC Visualizer. See the **Advanced Search** section below for more information about this feature.



**Figure 2.8 – Search**

## 2.3 Statistics

The **Go >>** button beneath **Statistics** will take you to the **Audit Control Centre: Statistics** feature where you can view statistical information about the Visualization events processed. See the **Statistics** section below for more information about this feature.



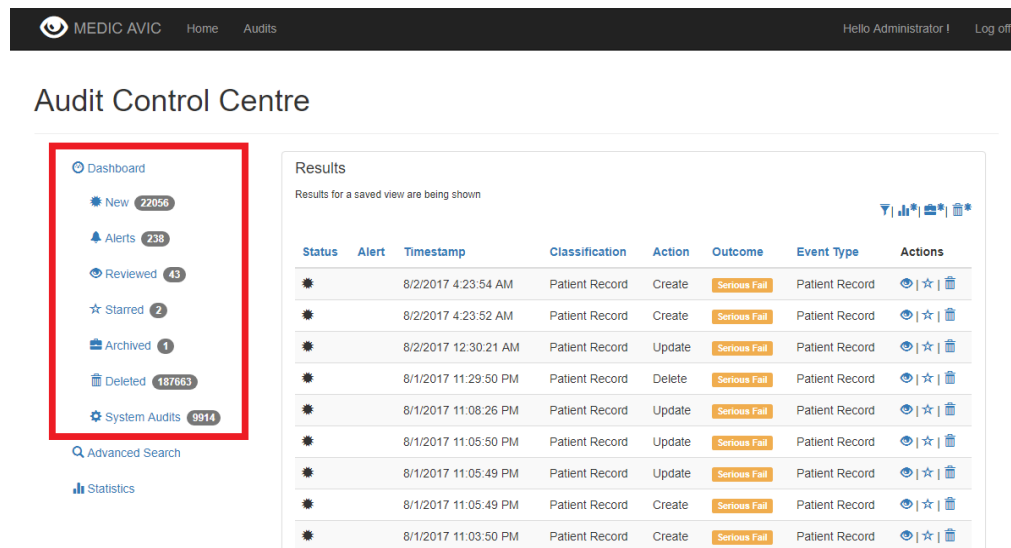
**Figure 2.9 – Statistics**

# Chapter 3: Audit Control Centre

The **Audit Control Centre** allows you to view audits that have been processed by the MEDIC Visualizer Service Core. It contains views, tools, and filters for reviewing and managing audits.

## 3.1 🗙Dashboard

The 🗙**Dashboard** contains options to view audits according to their status and displays the number of audits that match each status.

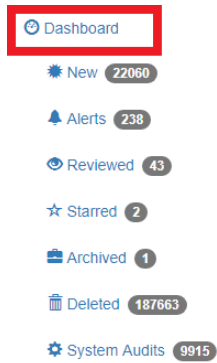


**Figure 3.1 – Audit Control Centre with 🗙Dashboard outlined in red**

### 3.1.1 Summary Page

The **Summary Page** is the default view when you first navigate to the **Audit Control Centre**. Results include audits with a status of *New* or *Starred* where the outcome is not *Success* and the event type is not *Audit Log Used*.

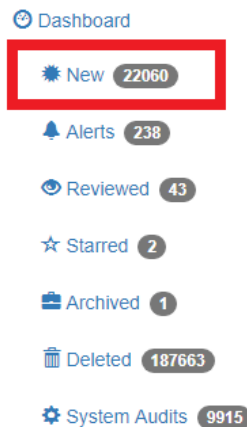
To return to the **Summary Page** from another view, select 🗙**Dashboard**.



**Figure 3.2 – 😊Dashboard (button); select to return to Summary Page**

### 3.1.1 🌟New Audits View

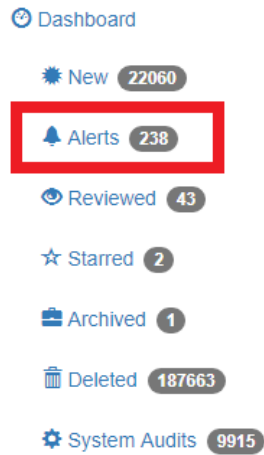
Select **🌟New** on the 😊**Dashboard** to view audits with a status of *New*; these are audits that have not been reviewed or categorized by a user.



**Figure 3.3 – 🌟New button on the 😊Dashboard**

### 3.1.2 🚨Alerts View

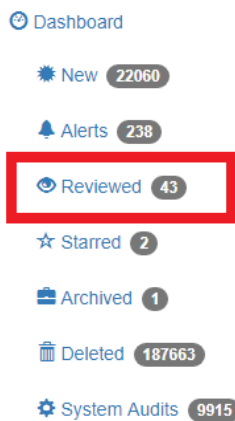
Select **🚨Alerts** on the 😊**Dashboard** to view system alerts. These are important audits and may represent a potential security breach.



**Figure 3.4 – Alerts button**

### 3.1.3 Reviewed Audits

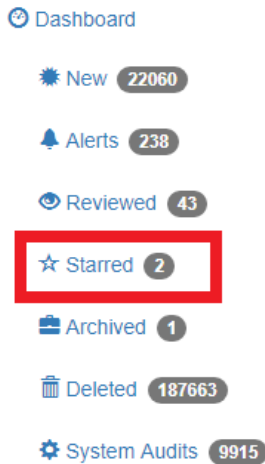
Select **Reviewed** on the **Dashboard** to view audits that have been viewed and marked 'reviewed' by a user.



**Figure 3.5 – Reviewed button**

### 3.1.4 Starred Audits

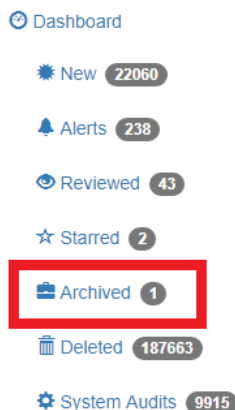
Select ☆ **Starred** on the 🕒 **Dashboard** to view audits a user has marked to be of particular interest. See the **Audit Control Centre: Results** section below for information about setting an audit's status to *Starred*.



**Figure 3.6 – ☆ Starred button**

### 3.1.4 📁 Archived Audits

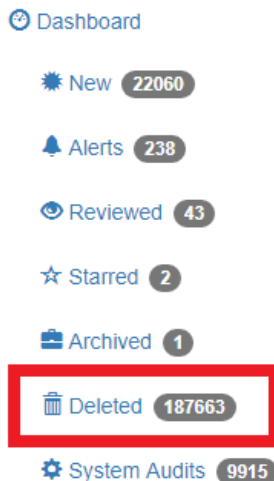
Select 📁 **Archived** on the 🕒 **Dashboard** to view audits that have been archived. These are audits that, while no longer considered operationally useful, may provide some useful history. See the **Audit Control Centre: Results** section below for information about setting an audit's status to *Archived*.



**Figure 3.7 – 📁 Archived button**

### 3.1.5 🗑 Deleted Audits

Select 🗑 **Deleted** on the 🏠 **Dashboard** to view audits that have been deleted. These are audits that are considered to be no longer useful and will not appear in searches or reports. See the **Audit Control Centre: Results** section below for information about setting an audit's status to *Deleted*.

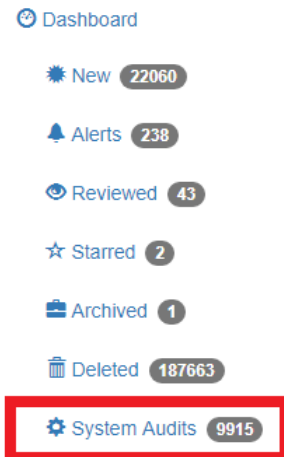


**Figure 3.8 – 🗑 Deleted button**

### 3.1.6 ⚙ System Audits


Select ⚙ **System Audits** on the 🏠 **Dashboard** to view audits generated from internal system functions.

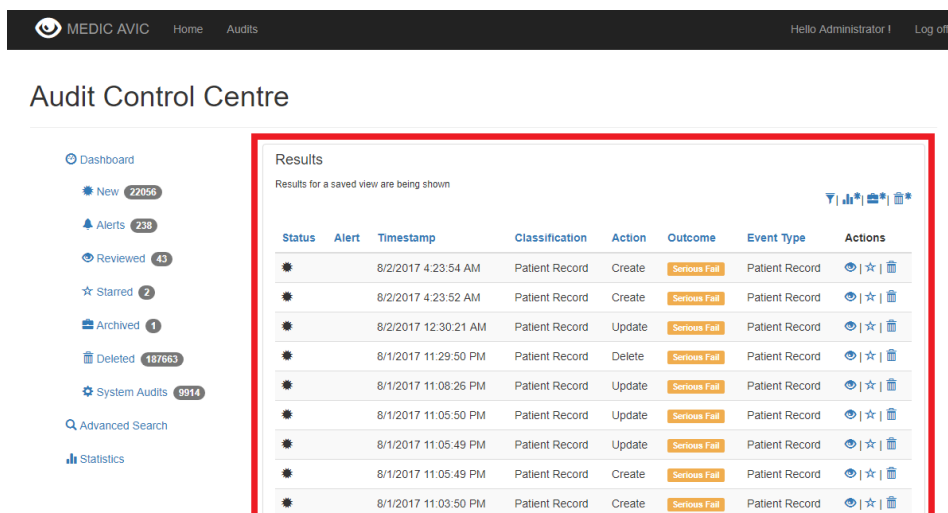




**Figure 3.9 – ⚙️ System Audits button**

### 3.2 Audit Control Centre: Results

**Audit Control Centre** results appear to the left of the  **Dashboard**. Each set of results follows the same layout regardless of view, query, or filter selected. Results display summary information about each audit and present actions that can be performed.



**Figure 3.10 – Results area**

### 3.2.1 Actions

There are four actions a user can perform on an audit: review, star, archive, and delete. Performing one of these actions often changes the *Status* of the audit.

👁 **Review** – View the details of an audit. If the audit has a status of *New*, its status will be changed to *Reviewed* and it will be removed from the **Summary Page**.

★ **Star** – Marks the audit as being of particular interest to the user. The audit will remain on the **Summary Page** and appear on the **Starred Audits** page.

🗳 **Archive** – Changes the status of an audit to *Archived*. It will be removed from the **Summary Page** and appear on the **Archived Audits** page.










🗑 **Delete** – Logically deletes the audit so it no longer appears in searches. The audit will appear on the **Deleted Audits** page.

Status	Alert	Timestamp	Classification	Action	Outcome	Event Type	Actions
🌟	🔔	8/3/2017 12:02:50 PM	Query	Read	Minor Fail	Audit Log Used	👁   ★   🗳   🗑
🌟	🔔	8/3/2017 11:57:01 AM	Query	Read	Minor Fail	Audit Log Used	👁   ★   🗳   🗑
🌟	🔔	8/3/2017 11:35:00 AM	User Authentication	Execute	Major Fail	Login	👁   ★   🗳   🗑
👁	🔔	8/3/2017 10:31:04 AM	User Authentication	Execute	Major Fail		👁   ★   🗳   🗑






**Figure 3.11 – Audit Control Centre Actions**

### 3.2.2 🗲 Filter Results

You can click on the 🗲 **Filter Results** button to open a form with options to filter the results of a particular view.

Results							
Results for a saved view are being shown							    
Status	Alert	Timestamp	Classification	Action	Outcome	Event Type	Actions
		8/3/2017 1:17:48 PM	Patient Record	Update	Serious Fail	Patient Record	  

**Figure 3.12 –  Filter Results button**

Results	
Results for a saved view are being shown	
    	
Status (OR)	<input type="text" value="x New"/> <input type="text" value="x Starred"/>
Is Alert	<input type="checkbox"/>
Date	<input type="text"/>
Classification (OR)	<input type="text"/>
Action (OR)	<input type="text"/>
Outcome (OR)	<input type="text" value="x ISuccess"/>
Event Type (TEXT)	<input type="text" value="x IAudit Log Used"/>

**Figure 3.13 – Filter Results form**

The **Filter Results** form contains the following fields:

**Status** (dropdown) – Only audits with the selected *Status* will be included in results. Multiple statuses can be selected.

**Is Alert** (checkbox) – Select this checkbox to include only alerts in filtered results.

**Date** (date picker) – You can select a particular date for which you wish to see results.

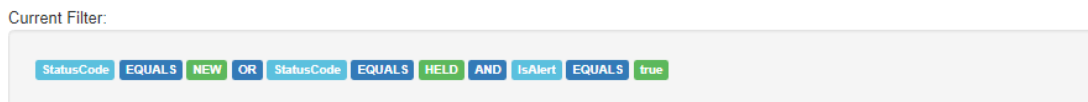
**Classification** (dropdown) – Only audits with the selected *Classification* will be included in results. Multiple classifications can be selected.

**Action** (dropdown) – Only audits of the selected *Action* type will be included in results. Multiple *Action* types can be selected. *!Update* (not Update) can be selected to exclude any audit where Update is the *Action* type.

**Outcome** (dropdown) – Only audits with the selected *Outcome* will be included in results. Multiple *Outcomes* can be selected. *!Success* (not Success) can be selected to exclude any audit where the *Outcome* is not a Success.


**Event Type** (dropdown) – Only audits with the selected *Event Type* will be included in results. Multiple *Event Types* may be selected.

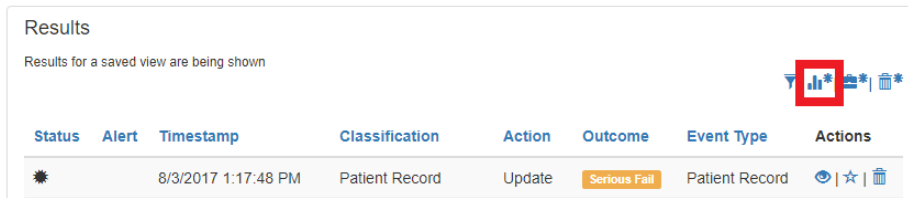
A summary of the filter criteria selected appears in the **Current Filter** area above the filter form. The search in the figure below, for example, return audits with a status of *New* and *Starred* that are also *Alerts*.



**Figure 3.14 – Current Filter area**

### 3.2.3 View List As Chart

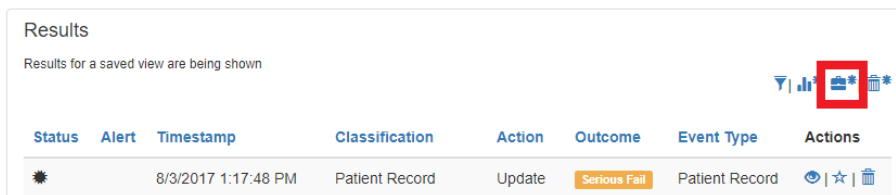
Select the  **View this list as a chart** button to view various graphs of the current results data. See the **Statistics** chapter below for more information on charts.



**Figure 3.15 – 📊 View this list as a chart button**

### 3.2.4 📁 Archive All

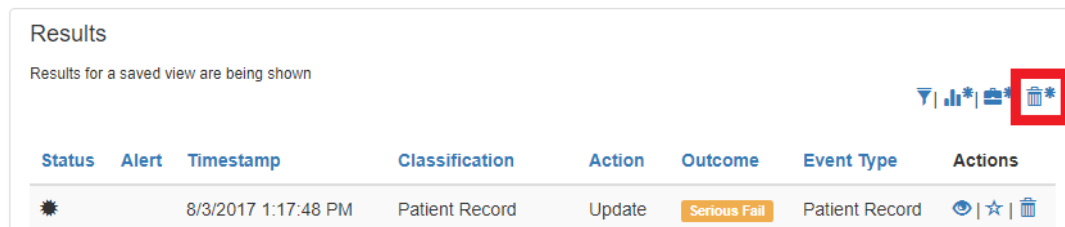
Select the **📁 Archive All** button to archive all audits matching the current query.



**Figure 3.16 – 📁 Archive All button**

### 3.2.5 🗑️ Delete All

Select the **🗑️ Delete All** button to delete all audits matching the current query.



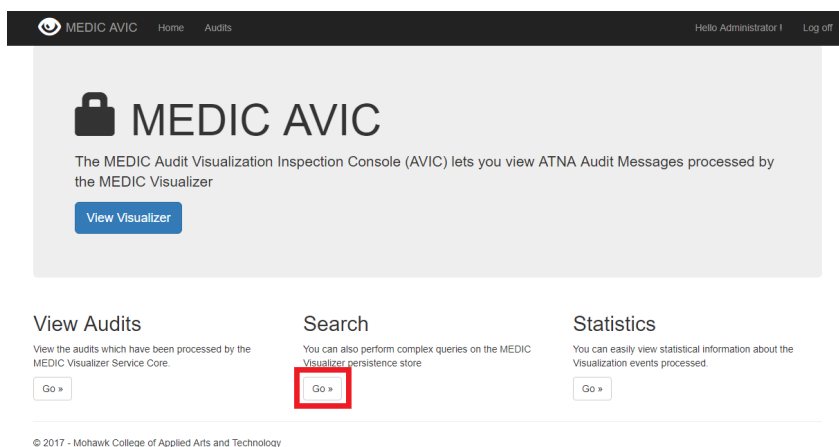
**Figure 3.17 – 🗑️ Delete All button**

## Chapter 4: 🔍 Advanced Search

The **Advanced Search** feature allows you to perform sophisticated queries on the MEDIC Visualizer persistence store.

There are two ways to navigate to 🔍 **Advanced Search**:

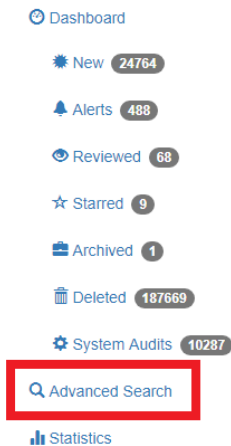
1. From the **Home Page** select the **Go >>** button beneath **Search**



**Figure 4.1 – Accessing 🔍 Advanced Search from the Home Page**

OR

2. From the **Audit Control Centre** select the 🔍 **Advanced Search** button immediately below the 🏠 **Dashboard**



**Figure 4.2 – 🔍 Advanced Search button**

## 4.1 🔍 Advanced Search Filter Forms

The 🔍 **Advanced Search** feature consists of four forms to filter results.

### 4.1.1 Event Criteria

The **Event Criteria** form can filter results based on the following criteria:

**Status** (dropdown) – Only audits with the selected *Status* will be included in results. Multiple statuses can be selected.

**Is Alert** (checkbox) – Select this checkbox to include only alerts in filtered results.

**Date** (date picker) – You can select a particular date range between which you wish to see results

**Classification** (dropdown) – Only audits with the selected *Classification* will be included in results. Multiple classifications can be selected.

**Action** (dropdown) – Only audits of the selected *Action* type will be included in results. Multiple *Action* types can be selected. *!Update* (not Update) can be selected to exclude any audit where Update is the *Action* type.

**Outcome** (dropdown) – Only audits with the selected *Outcome* will be included in results. Multiple *Outcomes* can be selected. *!Success* (not Success) can be selected to exclude any audit where the *Outcome* is not a Success.

**Event Type** (dropdown) – Only audits with the selected *Event Type* will be included in results. Multiple *Event Types* may be selected.

The screenshot shows the 'Advanced Search' interface. At the top, it says 'Enter your search criteria below to initiate a search'. Below this is a section titled 'Event Criteria' with a dropdown arrow. This section contains several fields: 'Status' with a blue '(OR)' button and a text input; 'Is Alert' with a checkbox; 'Date (from)' and 'Date (to)' with date pickers; 'Classification' with a blue '(OR)' button and a text input; 'Action' with a blue '(OR)' button and a text input; 'Outcome' with a blue '(OR)' button and a text input; and 'Event Type' with a blue '(OR)' button and a text input. Below the 'Event Criteria' section are three more sections: 'Source Criteria' with the text 'Is a' audit from', 'Participant Criteria' with the text 'Has A' participant where', and 'Object Criteria' with the text 'Has A' Object where'. The 'Event Criteria' section is highlighted with a red border.

**Figure 4.3 – 🔍 Advanced Search, Event Criteria form**

### 4.1.2 Source Criteria

The **Source Criteria** form filters audits based on their source. It consists of three fields:



**Source Type** (dropdown) – Only audits of the selected *Source Type* will be included in results. Some selections involve the LIKE (~) operator or the NOT EQUAL TO operator (!).

**Source Name** (dropdown) – Only audits with the selected *Source Name* will be included in results. Multiple *Source Names* can be selected.

**Enterprise Site** (dropdown) – Only audits from the selected *Enterprise Site* will be included in results. Multiple *Enterprise Sites* can be selected. Some selections involve the LIKE (~) operator or the NOT EQUAL TO (!) operator.



**Figure 4.4 – Source Criteria form**

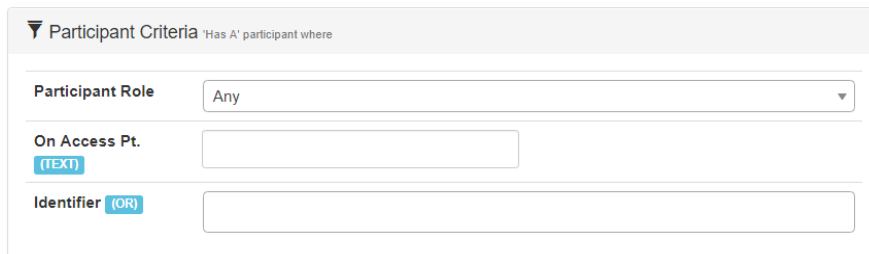
### 4.1.3 Participant Criteria

The **Participant Criteria** form filters audits based on participants. It consists of three fields:

**Participant Role** (dropdown) – Only audits with a selected *Participant Role* will be included in results. Some selections involve the LIKE (~) operator or the NOT EQUAL TO (!) operator.

**On Access Pt** (text box) – In this field you can select on text semantics: ! means NOT, ~ means LIKE, ' means OR. For example, *Tim,~Jim,!Bob* would mean Tim OR LIKE Jim OR NOT Bob.

**Identifier** (dropdown) – Only audits with the selected *Participant Identifier* will be included in results. Multiple *Participants* can be selected.



**Figure 4.5 – Participant Criteria form**

#### 4.1.4 Object Criteria

The **Object Criteria** form filters audits based on their associated object(s). It consists of five fields:

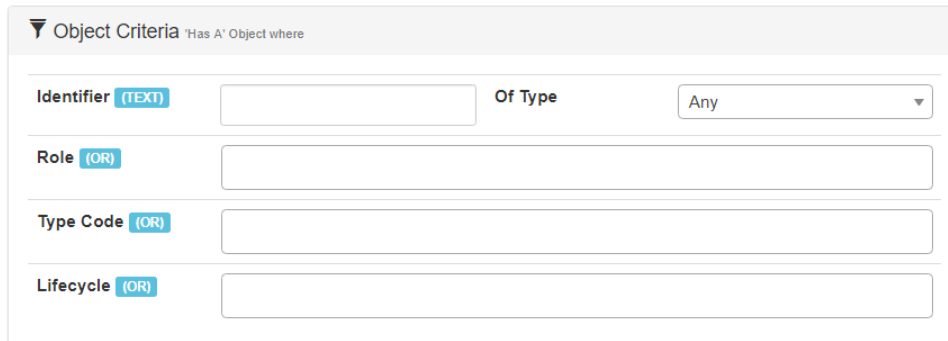
**Identifier** (text) - In this field you can select on text semantics: ! means NOT, ~ means LIKE, ',' means OR. For example, *Tim,~Jim,!Bob* would mean Tim OR LIKE Jim OR NOT Bob.

**Of Type** (dropdown) – Only audits of the *Type* selected will be included in results.

**Role** (dropdown) – Audits with the selected *Role* will be included in results. Multiple *Roles* can be selected. Some selections involve the LIKE (~) operator or the NOT EQUAL TO (!) operator.

**Type Code** – Audits with the selected *Type Code* will be included in results. Some selections involve the LIKE (~) operator or the NOT EQUAL TO (!) operator. Multiple *Type Codes* can be selected.

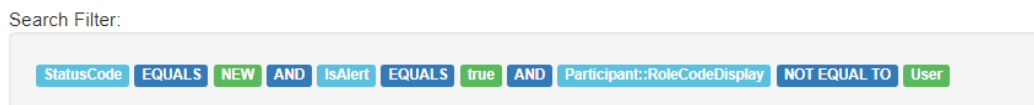
**Lifecycle** – Audits with the selected *Lifecycle* will be included in results. Some selections involve the LIKE (~) operator or the NOT EQUAL TO (!) operator. Multiple *Lifecycles* can be selected.

The image shows a web form titled "Object Criteria" with a subtitle "Has A' Object where". It contains four rows of input fields. The first row has "Identifier" with a "(TEXT)" tag and a text input box, followed by "Of Type" with a dropdown menu showing "Any". The second row has "Role" with an "(OR)" tag and a text input box. The third row has "Type Code" with an "(OR)" tag and a text input box. The fourth row has "Lifecycle" with an "(OR)" tag and a text input box.

**Figure 4.6 – Object Criteria form**

## 4.2 Search Filter (Text Display) Area

A summary of the query criteria selected appears in the **Search Filter** area below the search filter forms. The below search, for example, return audits with a status of *New* that are *Alerts* and where the *Participant* is not a *User*.

The image shows a "Search Filter:" label above a horizontal bar containing a sequence of colored tags representing search criteria: "StatusCode" (blue), "EQUALS" (blue), "NEW" (green), "AND" (blue), "IsAlert" (blue), "EQUALS" (blue), "true" (green), "AND" (blue), "Participant::RoleCodeDisplay" (blue), "NOT EQUAL TO" (blue), and "User" (green).

**Figure 4.7 – Search Filter area**

## 4.3 Displaying Advanced Search Results

Once you have selected your filter criteria, there are two options for displaying results:

Select the **Chart** button to view various graphs of the your results. See the **Statistics** chapter below for more information on charts.

Advanced Search

Enter your search criteria below to initiate a search

▼ Event Criteria

▼ Source Criteria 'Is a' audit from

▼ Participant Criteria 'Has A' participant where

▼ Object Criteria 'Has A' Object where

Search Filter:

ALL AUDITS

Chart Search

Search Results (0 records)

**Figure 4.8 – Advanced Search: Chart button**

Select the **Search** button to view the results of your query. See the **Audit Control Centre: Results** section above for information about working with results.

Advanced Search

Enter your search criteria below to initiate a search

▼ Event Criteria

▼ Source Criteria 'Is a' audit from

▼ Participant Criteria 'Has A' participant where

▼ Object Criteria 'Has A' Object where

Search Filter:

ALL AUDITS

Chart Search

Search Results (0 records)

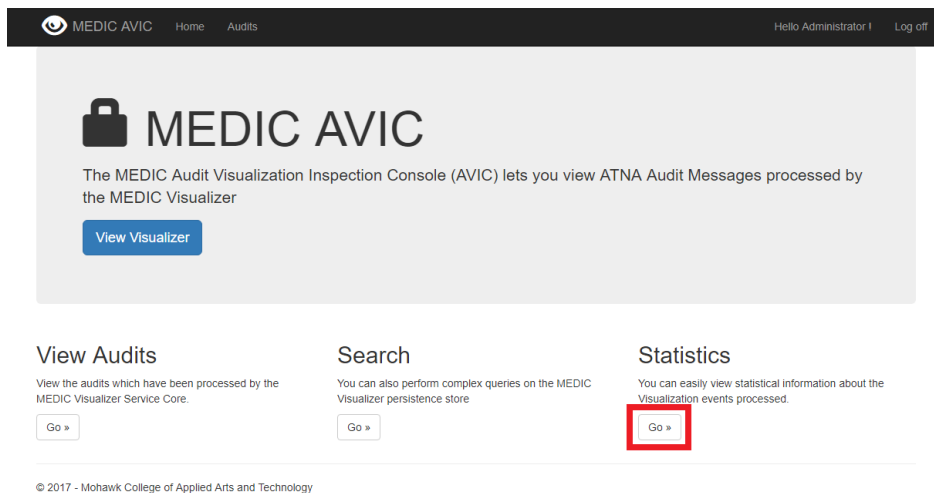
**Figure 4.9 – Advanced Search: Search button**

## Chapter 5: 📊 Statistics

The **Statistics** feature displays various graphical representations of audits in the system.

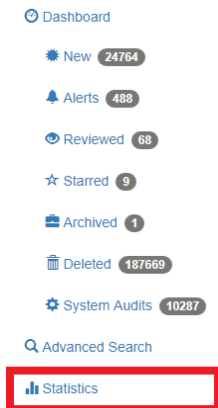
There are two ways to navigate to 📊 Statistics:

1. From the **Home Page** select the **Go >>** button beneath 📊 Statistics



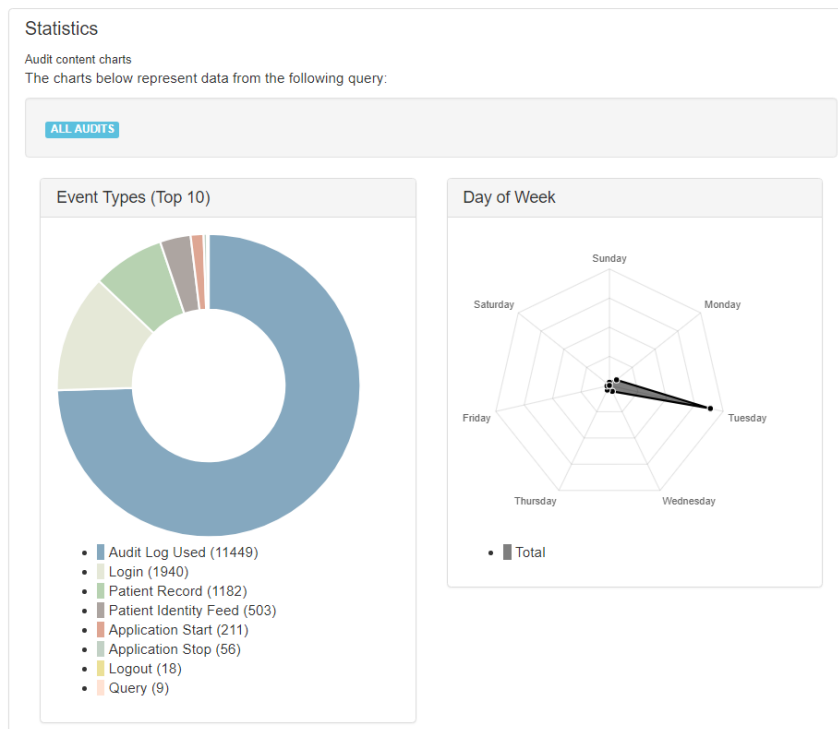
**Figure 5.1 – Accessing 📊 Statistics from the Home Page**

2. From the **Audit Control Centre** select the 📊 Statistics button immediately below the 🏠 Dashboard

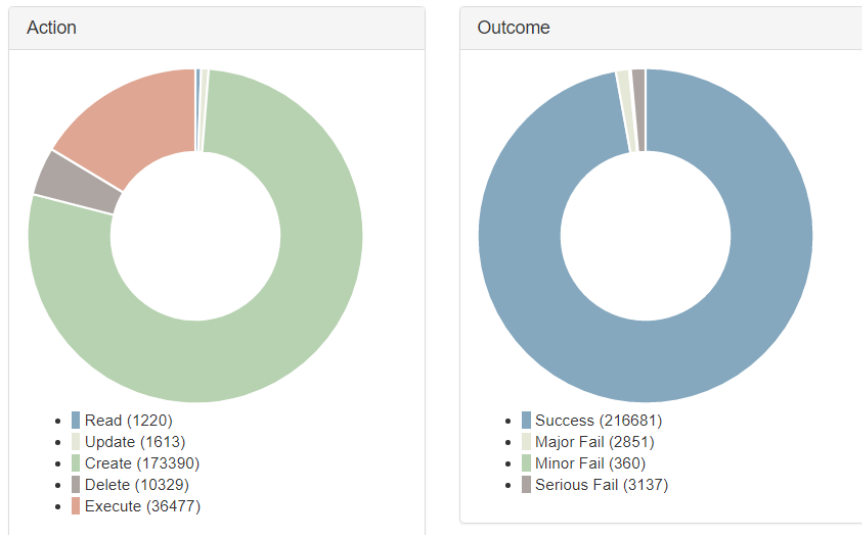


**Figure 5.2 – Statistics button**

Statistics are displayed for multiple criteria and in different graph types. Scroll down to see all graphs.



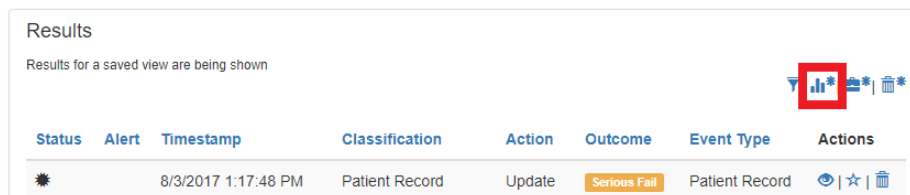
**Figure 5.3 – Statistics: Event Types and Day of Week**



**Figure 5.4 – 📊 Statistics: Action and Outcome**

## 5.1 Displaying Statistics for Particular Results

You can display statistics for a particular view, query, or set of results. In the **Results** area of the **Audit Control Centre** select the 📊 **View this list as a chart**.



**Figure 5.5 – 📊 View this list as a chart button**

## 5.2 Displaying Advanced Search Statistics

You can display statistics for an 🔍 **Advanced Search**. Select the 📊 **Chart** button to view various graphs of your results.

Advanced Search

Enter your search criteria below to initiate a search

▼ Event Criteria

▼ Source Criteria 'Is a' audit from

▼ Participant Criteria 'Has A' participant where

▼ Object Criteria 'Has A' Object where

Search Filter:

ALL AUDITS

Chart Search

Search Results (0 records)

**Figure 5.6 – Advanced Search:  Chart button**