



EPAS

Explorer Post Administration System
LawExploring.com, 2016

Foreword

From all of us on the LawExploring.com team, we sincerely thank you for choosing to use EPAS for your department's needs. The EPAS project has been in the works for a long time and we're happy it looks much different now than it did when we started. We continue to add new features, update appearance, and expand to many different platforms as we move forward in an effort to make post administration easy, secure, and responsive to the changing times. We hope you enjoy EPAS – please let us know if you have any questions, comments, or suggestions!

This documentation is meant to provide the user with an overview of EPAS so he or she may use it effectively. The “General Information” section should be read by everyone to get a basic understanding of some key features of EPAS. Past that, each module has its own section and further information about it that users may refer to for specifics.

Revision History

Revision No.	Revision Date	Description of Change	Approver
IR		Initial Release	JP

Contents

- Foreword** ii
- Revision History** iii
- General Information** 1
 - Contact 1
 - Data Structure 1
 - Security..... 2
 - Login* 2
 - Data Transmission* 3
 - Data Storage* 3
 - Access*..... 3
- Events** 5
 - Attendance 5
 - Adding Attendance Records*..... 5
 - Editing Attendance Records*..... 5
 - Department Hours Report* 6
 - Events 6
 - Viewing Shifts for a Specific Event*..... 6
 - Event Report* 6
 - Shift Assignments 8
 - Assigning Shifts*..... 8
 - Approving or Denying Shift Requests*..... 8
- Inventory** 8
 - Inventory Report 8
- Users** 9
 - Permissions 9
 - Group Permission Matrix 10
 - User Reports 11

General Information

Contact

We understand the importance of communication and want to make sure that users are able to get in touch with administrators as necessary. For general contact, e-mail is the best method and will usually get a response within 24 hours for normal inquiries. The general administrator email monitored by the whole team is admin@lawexploring.com and can be used for any issue.

For new feature requests, bugs, or suggestions please use the Issue reporting integrated in EPAS. Click the “Issues” link in the sidebar and open an appropriate ticket through there. These tickets are public so other users having the same experience can see if a ticket has been submitted already. For this reason, be careful about posting private information in tickets.

Data Structure

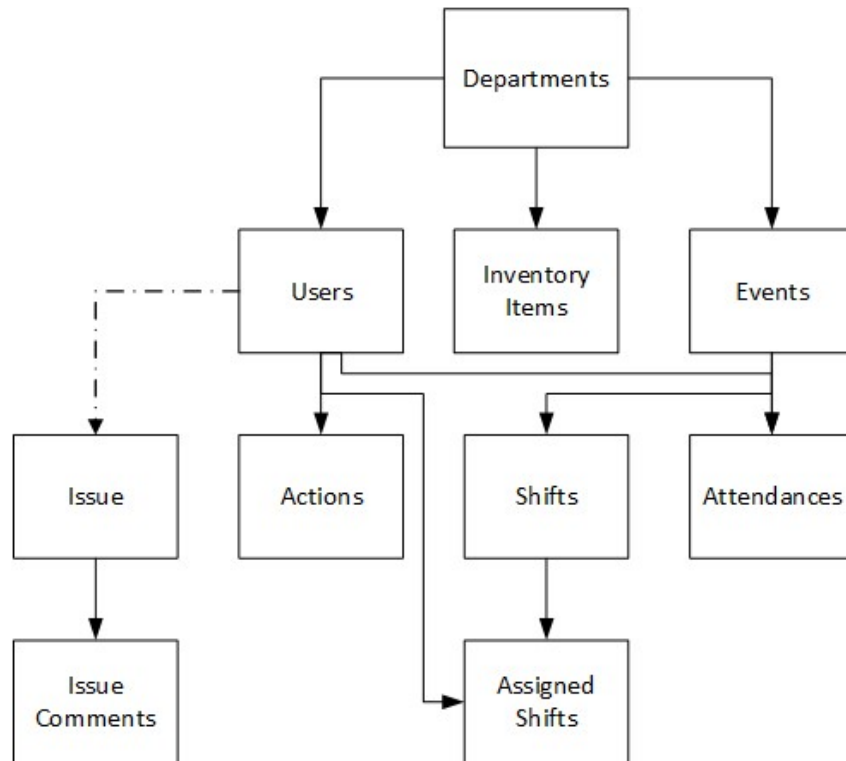
The primary data storage for EPAS is a relational database. The power of EPAS comes from the “relational” aspect, which means that almost all entries for a department are connected in some way. You may notice this through some clever links throughout EPAS or some handy displays on one page that come from a different module; however, the most noticeable aspect of this has to do with deleting data. The figure below shows how each record is related and shows which entries belong to others.

When deleting an entry, any item that is connected “down” the diagram will also be deleted. This makes it easy for you to keep your data clean, but also helps maintain performance throughout the database by removing unneeded records. For example:

1. Deleting an Event also deletes any related Shifts, Shift Assignments, and Attendance records.
2. Deleting a User also deletes any User Actions, Attendance Records, and Shift Assignments.

The dotted line from Users to Issues indicates that Issues will not be deleted if the User is, for record keeping purposes.

Keep these relationships in mind when deleting objects as any related objects are automatically deleted and not recoverable!



Security

Security is the top priority for EPAS and this version has been developed with it in mind. We have various methods in place to reduce the risk of your data being accessed by someone who should not.

Login

The easiest way for an attacker to gain access to your data is through a compromised user account. To combat this, we have implemented Two Factor Authentication. When logging in to EPAS, you enter your username and password as with any other website, however, a second step is also required to prove you are the owner of the account. A text message with a unique code will be sent to the cell phone number in your profile that you will have to enter on the next screen.

In this process, even if an attacker gets your username and password combination, they will be unable to log in without the code sent to your phone. The likelihood of an attacker getting your username, password, and cell phone is much less likely than just the username/password combo. There is the option to “Remember this device for the next 15 days” on login, which will stop the text codes only when you log in from the same device. At the end of 15 days, this is reset and you will have to select that option again after verifying your identity.

Data Transmission

On the internet, it is hard to know for sure that the data you are sending is only being seen by the intended recipient. It is possible for attackers to act as a “man-in-the-middle” (MITM) and intercept communications between two parties. To ensure that any MITM attackers don’t receive any sensitive information, data transmissions from your computer to our server are encrypted with Secure Socket Layer (SSL) technology.

Without SSL, data is sent as plain text. This means when you type in “password123” in the password field, it is sent over the internet as “password123.” With SSL, data is encrypted so that the same phrase is sent as something like

“EnCt2bbc929747593056f3c4c41c52504138a56832477bbc929747593056f3c4c41c5eskJODOUlgJ1b6gGo1aDmGldqqTe5QFP8w==lwEmS.”

Without the right key, this data cannot be turned back into a readable form.

Data Storage

Another vulnerability comes from the ability of an attacker to get access to our database containing everyone’s records. Just like in “Data Transmission” above, the solution is to encrypt the data so it is meaningless to anyone other than users with the right access. This means that fields containing sensitive information are encrypted. Our data is encrypted with the Rijndael algorithm, off which the Advanced Encryption Standard (AES) and FIPS 197 are based. Rijndael is a symmetric key encryption algorithm, which means that data can be encrypted and also decrypted back to its plain text form – good news for users!

Unlike the rest of sensitive data, passwords are hashed. Hashing is a one-way method which means once hashed, the original cannot be obtained. This is why we can’t just send you your password if you forget it – you have to create a new one.

Access

EPAS was created in part to bring departments in contact with each other from different regions of the United States; however, the data from each department is not meant to be shared. EPAS has built in access control that allows users from one department to manipulate data from their own department but not others. If an issue occurs wherein a user can see data from another department, it is a bug and should be reported to an administrator immediately.



Module Specific Information

The following sections will go into more specific detail about features of each module. The document is laid out to match the order of the sidebar navigation menu in EPAS to make finding matching information easier. For most modules, basic features will not be explained – only those that require special attention have been included below for sake of brevity.

Events

The events module contains everything related to scheduling events, shifts, making shift assignments, and recording attendance after the event has occurred. Several new features have been added over previous version of EPAS that we hope long-time and new users will find useful.

Attendance

Adding Attendance Records

To add an attendance record, start by clicking the orange floating button in the lower right corner of the screen, as shown here. When the page loads, you will be presented with the form to input the attendance data.



Begin by selecting the user or users you wish to record attendance for. Note that when multiple users are selected, all data that is entered will be the same for each selected person including the Position and Comment field. This is done to speed up the process of entering multiple explorers' data, but these records can still be individually edited later.

Next, fill in the rest of the data as needed for the attendance record. After selecting the in and out times, click the "Refresh" icon next to the hours field to automatically calculate and fill the hours value. When done, click the Submit button at the bottom of the form to save.

Editing Attendance Records

Editing a record is the same as with any other item in the program, with one exception to accommodate the multiple entry method explained above. In the dropdown menu for the record, there is an additional "Edit Similar" option which will allow you to edit the group attendance entry.

Edit similar will open all records that share the same In time, Out time, and Event. On this page, the Users dropdown is not shown so that users cannot be changed – if you wish to add or remove a record to this group, you must do so individually. Again, the Position and Comment fields here are currently set up to save to all records in the group.

Department Hours Report

The department hours report is a PDF report that will show a high-level overview of all attendance hours recorded for the department. To access this report, *hover* over the floating “+” button and a smaller blue report icon should appear. Clicking this blue button will open a dialog that allows you to configure the options of the report.

The report can be tabulated over a specified range of dates as entered in the “Range Start” and “Range End” fields, or over the entire lifetime of the department by checking the “Lifetime” box. Also, if your department does not count meeting hours towards hours requirements or you do not wish to have them on the report, you can select “Exclude Meetings” as well. After the options have been configured, click Submit and you will be directed to the report.

The report shows each explorer’s cumulative total broken down by category for the range specified.

Events

Viewing Shifts for a Specific Event

On the shifts home page, all shift entries for all events are shown. If you want to filter that to view only the shifts for a specific event, you can do that from the events home page. Click the three vertical dots next to the event you want to view to open the dropdown menu, and then click “Shifts.” This will take you to the shifts home page, except now only shifts for that event are being shown.

Event Report

The event report contains a summary of all event information, including shifts and shift assignments. It is intended to be used pre-event to ensure everything is prepared for the event, or post event to keep an overview handy when reviewing or debriefing the event.

To access the report, go to the “View” page for the event by clicking the three vertical dots next to the event you wish to view and selecting View. Then, hover over the orange Edit button which will show the blue Event Report button. Simply click this link to be taken to the report. There are currently no options to configure for this report.

Shifts

Creating Shifts with Sign up Option

One of the features new to this version of EPAS is shifts with the ability for explorers to sign up on their own. When creating a shift, the “Signup Limit” field controls this behavior as explained below. The following inputs are accepted:

Input	Explanation
-1	Disables Sign up option.
0	Unlimited Signups
Other Number	Specified number of spots. Signups after this limit are still recorded as explained below.

Signing Up for Shifts

On the Shifts home page, the right-most column shows the signup limit as the event currently stands. The badge color represents different behaviors as explained on the page and below:

- **Green:** The number represents how many signups are left before reaching the limit.
- **Yellow:** The signup limit has been reached; however, signups are still recorded in case event needs change. The number in the yellow badge is how many requests are ahead of yours.
- **Disabled:** Signups are not taken for this event.

To sign up for a shift that has signups enabled, simply open the dropdown menu and select “Sign up.” The page should refresh and the number of slots remaining will update.

Shift Assignments

Assigning Shifts

Shifts can be assigned manually simply by clicking the orange action button and filling out the information on the form. Begin by selecting an Event to assign shifts. After an event is selected, the Shift dropdown will populate with all shifts for that event. The User selection allows you to select multiple users to assign as many explorers to a shift as is required.

Approving or Denying Shift Requests

Shift requests made from the Shifts section will show up on the Assigned Shifts home page with a status of “Requested.” When you first navigate to the page, any outstanding requests are highlighted in orange to help keep track of items that need attention. These requests can quickly be approved or denied by selecting the appropriate action from the dropdown menu next to the item to be addressed.

To only view items that need approval, you can click the link on the dashboard page next to “Unapproved Shift Requests.” This link will directly show only those shift assignments that have the status “Requested.”

Inventory

Inventory Report

The Inventory Report shows a summary of all items for the department, including if they are checked in or out, and to whom it is checked out as well as details about every item. To access the report, hover over the floating “+” button on the Inventory home page. Then, click on the blue report button that comes up to be taken to the report. Currently this report has no options to configure.

Users

Permissions

As EPAS has evolved to add more features, one of the necessary steps from a development standpoint was to implement a way to control access to actions within a department. Previously, only ranking members of the post would use EPAS to input and retrieve data; now, our goal is for posts to use EPAS as a central hub for all members of the department. What resulted from this vision is a simple group-based permission system to help posts maintain control of their records.

Each user is assigned to one of three groups – Post Administrator, Manager, or Standard – and each group can perform certain actions. Post Administrators are the top level and can add and delete data, view records of all post members, and approve and deny requests. Managers are the next level, and are intended to help distribute some responsibilities to other explorers capable of giving some extra help. Managers have limited delete powers, but can still view other explorers' records and approve sign-up requests. Finally, Standard is the most basic level of access to EPAS. These explorers can only view records related directly to them (user information) or records intended to be seen by the whole department (events and meetings) as shown in the table by yellow "Own" cells. They do not have any delete powers and cannot approve sign-up requests.

See the table below for a full overview of each group's permissions.

Group Permission Matrix

		Add	Edit	View	Delete	Index ¹		
USERS	Post Administrator	+	+	+	+	+		
	Manager	+	+	+	-	+		
	Standard	-	Own	Own	-	+		
ACTIONS	PA	+	+	+	+	+		
	M	+	+	+	-	+		
	S	-	-	Own	-	Own		
DEPARTMENTS	PA	-	Own	+	-	+		
	M	-	-	+	-	+		
	S	-	-	Own	-	+		
EVENTS	PA	+	+	+	+	+		
	M	+	+	+	+	+		
	S	-	-	+	-	+		
SHIFTS	PA	+	+	+	+	+	+	Sign Up
	M	+	+	+	+	+	+	
	S	-	-	+	-	+	+	
ASSIGNED SHIFTS	PA	+	+	+	+	+	+	Approve Deny
	M	+	+	+	-	+	+	
	S	-	-	Own	-	Own	-	
INVENTORY	PA	+	+	+	+	+		
	M	+	+	+	-	+		
	S	-	-	Own	-	Own		
ISSUES	PA	+	Own	+	-	+		
	M	+	Own	+	-	+		
	S	+	Own	+	-	+		
ATTENDANCE	PA	+	+ ²	+	+	+		
	M	+	+	+	-	+		
	S	-	-	Own	-	Own		

¹ “Index” refers to the home page of each module that simply lists all the records as an overview.

² The “Edit Similar” option is grouped in with “Edit” for the attendance module.

User Reports

The User report is a comprehensive report that includes all of the user's personal information, all actions tracked for the user, all attendance information, and any inventory items checked out to the user.

To access the report, first navigate to the Users home page, then go to that users' view page. Next, hover over the floating orange Edit button to bring up the blue report link. Click the link to be taken to the user report. There are currently no options to configure for this report.