Auditing and Audit Setup

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People-Trak is an extensively customizable HR software product. Screen and report samples rendered in this document reflect the default version of People-Trak. These samples may or may not match the screens and reports within your product if customization has been performed.

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Auditing

People-Trak provides an auditing feature for tracking changes to the database. There is auditing both at the field level (audit history) and at the transaction level (transaction history).

Audit History

Whenever a change to a field is saved to the database, audit history is also saved for that field if either one of the following conditions is met:

- The field is set for auditing in Audit Setup or Field Customization
- The field is included in a workflow that is having transaction history saved for it (Saving transaction history for a workflow is like auditing all fields included in that workflow.)

Audit history contains the following information:

- Company in which the change was made
- Date of the change
- Time of the change
- Source of the change
- Name of the transaction used to make the change
- User ID of user who made the change
- Module in which the change was made
- ID of record that was changed
- Name of record that was changed
- The field changed
- The row changed
- Before value
- After value

Transaction History

Transaction history is saved for all workflows in a module if that module has had the Save Transaction History check box selected in Module Setup. Saving transaction history means that you are both saving audit history for all fields on that workflow and saving transaction history for the transaction itself.

Audit/Transaction History

The Audit/Transaction History option on the Administration menu provides a powerful way of viewing audit history and transaction history. This process also allows you to purge history.

Note: Audit and transaction history for a record are also available for viewing from within that record using the Audit History and Transaction History options on the Audit menu, depending on the user's security settings.

View Audit History Tab

The View Audit History tab allows you to specify criteria to determine the audit history to be displayed. The values are cumulative. If you specify a certain field and a certain record, you will see only the audit history of that field within that record. Or, if you specify a certain field and a date range, you will see changes to that field only during the date range specified.

The sample shown above illustrates changes that have been limited to a single record: Gregory Wilson.

Sample Audit History Report

The information in the Audit History screen can be converted to a report using the Print button at the bottom of the screen. A sample report that matches the screen shown above is shown below.

View Transaction History Tab

The View Transaction History tab allows you to specify criteria to determine the transaction history to be displayed. The values are cumulative. If you specify a certain workflow and a certain record, you will see only the transaction history of that record using that workflow. Or, if you specify a certain record and a date range, you will see changes to that record only during the date range specified.

Sample Transaction History Report

The information in the Transaction History screen can be converted to a report using the Print button. A sample report that matches the screen shown above is shown below.

Zee Technology, Inc.

Transaction Details

Record Name	Wilson, Gregory T.
Workflow Name	Standard - Employee
Status	
Signature Required	
Signature Obtained	

Changes

Field Name	Row	Old Value	New Value
Address 1	0	1329 Sugarbush Drive	1144 Sal Lane

Purge History Tab

The Purge History tab is used to purge audit and transaction history for all transactions within a specified date range. It is normally used when either the history is no longer required or the file has grown to an undesired size. You may want to print an audit report for the timeframe you are about to purge so that you have a permanent record of it.

Audit Reports

The Audit Reports option on the Administration menu is used to produce a wide variety of audit reports. Unlike the view capability in the Audit/Transaction History screen, audit reports can be saved and used again. They can even be scheduled and run automatically at your discretion.

Audit reports work just like adhoc reports in People-Trak, except there are a limited number of fields upon which to base a query or include in a report. These fields are the same fields that are stored in the audit record and include the following, which are listed under the category used in the Select Field popup to differentiate between General (header), and Detail fields.

General

- Company in which the change was made
- Date of the change
- Time of the change
- Source of the change
- Module in which the change was made

- User ID of user who made the change
- ID of record that was changed
- Name of record that was changed
- Signature required flag
- Signature obtained flag

Detail

- The field changed
- The row changed
- Before value
- After value

Audit reports are managed with the Explorer, which is identical to the Explorer used for other documents except only audit reports are listed.

The Audit Reports screen is exactly the same as the Adhoc Reports screen and functions identically. The only difference is the list of fields that are available. Because of the complexity of audit reporting, the "*" row modifier on the query and report definition is automatically defaulted for you on any detail fields that require it.

Note: Audit Reports do not appear in the Organizer desktop's Category pane like other documents. The Category assigned to an audit report specification is used only for security purpose

Audit Setup

The Audit Setup process allows you to specify which fields should be audited.
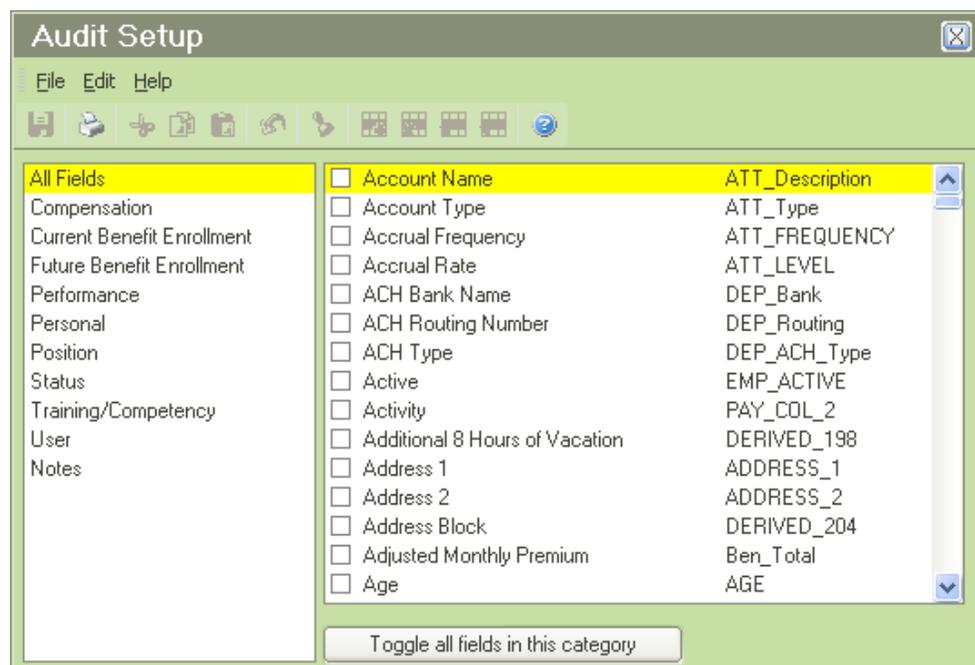
The list on the left includes all of the categories in the current module as well as an All Fields category. The fields in the highlighted category are listed on the right-hand side of the screen. Each field has a check box that allows you to specify whether or not the field should be audited. Select the check box to audit the field. Clear the check box to not audit the field. If you wish to select or clear all fields at once, you can use the "Toggle all fields in this category" button at the bottom of the screen.

Notes

Lesson 1
Audit Setup, History and Reporting

Lesson Contents

This lesson covers how to set up field auditing, create and view audit and transaction history as well as report on that history. It also covers how to periodically purge history.

Tutorials

Set Up Field Auditing: shows how to set up auditing on several fields.

View Audit History: demonstrates how to create audit history on the fields that have been set up for auditing and then how to view that history.

View Transaction History: demonstrates how to create transaction history and how to view that history.

Create Audit Reports: shows how to create audit reports.

Purge Audit/Transaction History: demonstrates how to purge audit/transaction history.

Tutorial 1.1 – Set Up Field Auditing

In order to demonstrate the auditing feature, we need to select some fields for auditing and create audit history. In this tutorial, we'll select fields for auditing. In the next tutorial, we'll create the actual audit history and then view it.

1. Start People-Trak by double-clicking on the **People-Trak Trainee** icon on your desktop (or as instructed).

    The Select Product Option screen is displayed.

2. The **Position Control** and **Attendance** options should be the only options that are toggled on. If not select the Training button to select them.

3. Click **OK**

    The Login screen is displayed.

4. In the **User ID** field, enter **DEMO**.

5. In the **Password** field, enter **DEMO**.

    The Organizer desktop is displayed with the Personnel Management module selected.

6. Open **Donald Stern's** record.

7. In the **Address 1** field, press **F1** to display the **Field Name: Address 1** help screen

    Note that the Audit check box is not selected, indicating that auditing is inactive for the Address 1 field. You can look at the auditing setting for any field in the same way.

8. Look at the auditing setting for **Address 2** and **Last Name**.

    They are currently not set for auditing.

9. Close the record for **Donald Stern**.

10. On the **Setup** menu, select **Audit Setup**.

    The Audit Setup screen is displayed with a list of categories in the current module (as well as an All Fields category) on the left and the fields in the highlighted category on the right.

11. Click on the **Personal** category to select it. Using the check boxes, activate auditing for the following fields:

    Address 1
    Address 2
    Last Name

12. Close the **Audit Setup** screen, saving your changes.

    The Audit Setup process is just one of the ways you can set audit fields. If you prefer to set auditing by example, while actually seeing the fields on the screen, you can perform that task using the Screen/Field Customization feature and selecting the Audit field for

the field to be audited. You will learn more about Screen/Field Customization in later training, but we'll show you just enough here so that you can set audit fields.

13. On the **Administration** menu, select **Screen/Field Customization**.

    The Screen/Field Customization popup screen is displayed, which allows you to select the workflow to use for field customization.

14. Highlight **Standard - Employee** and click **Customize** to use that workflow for customization.

15. Select the **First Name** field if it is not already selected and press **F1** to display the **Field Properties For: First Name** screen

    In the list of properties and attributes on the left side of the screen, there is an Audit check box indicating the audit status for this field. The check box is not currently selected.

16. Select the **Audit** check box to activate auditing for this field and select it again to deactivate auditing.

17. Close the **Field Properties** screen.

18. Close **Screen/Field Customization**

19. Continue with the next tutorial.

Tutorial 1.2 – View Audit History

Audit history can be viewed within the current record by using the Show Audit History feature. Audit History can also be viewed for groups of records. This is performed by using the Audit/Transaction History process. We have already activated auditing for the Last Name and address fields. Now let's make some changes so we have audit history to view.

1. Open the record for **Penny Armstrong**. To create audit history, edit the fields on the **Personal** screen as shown below.

Last Name	**Lane**
Address 1	**100 First Street**
Address 2	**Apt 1**

2. Close **Penny's** record, saving your changes.

3. Open the record for **Julie Carrington** and change the same fields to any value you desired. Close **Julie's** record, saving your changes.

    Now we have audit history for more than one record.

4. On the **Administration** menu, select **Audit/Transaction History**.

    The Audit/Transaction History screen is displayed. This screen has three tabs: one for viewing audit history, one for viewing transaction history and one for purging history. We'll work with the View Audit History tab.

    Let's begin by showing all audit history for all available records in the current company.

5. Simply click the **View** button.

    The Field Audit History screen is displayed. You should see all of the changes you have made, with the most recent change at the top.

    Note that the Source column says "Standard - Employee", which is the workflow under which you made the change. Audit history is also captured when using the Batch Processing, Database Manager and Import processes. The Source column here and in other audit history displays allows you to easily see the source of the change.

6. Close the **Field Audit History** screen.

    Now let's explore some of the filtering features of this process.

    The By Company field defaults to your current company, but can be changed to another company to which you have access. If you clear the By Company field, all companies to which you have access will be included.

7. Clear the **By Company** field, so we will see transactions from all companies.

8. In the **By Field** field, enter **Address 1**. Then click the **View** button again.

    This time, the Field Audit History screen will show the changes made to the Address 1 field for all records in all companies (which includes Penny Armstrong and Julie Carrington). We have effectively limited the history to changes made to the Address 1 field.

9. Close the **Field Audit History** screen.

   Several selection fields may be used together and are cumulative.

10. In the **By Record** field, use the popup button to select **Penny Lane** (formerly **Armstrong**). Then click the **View** button.

    Only changes made to the Address 1 field for Penny Armstrong are displayed.

11. Close the Field Audit History screen.

12. Clear the **By Field** entry, but leave the **By Record** entry. Click the **View** button.

    The audit history is for all fields, but is limited to Penny Armstrong.

13. Close the **Field Audit History** screen.

    The filtering process works similarly for all of the criteria fields. You can limit or expand the records you wish to see. The results in the Field Audit History screen can be printed if you wish to have a hard copy of the results. Here's how to do it.

14. Clear the **By Record** field and click the **View** button.

    You now have all of the audit history, however modest, showing.

15. Click the **Print** button at the bottom of the screen.

    The contents of the Field Audit History screen will become a nicely formatted report showing in the Document Viewer. From the Document Viewer, you can output the report to any available destination.

16. Close the **Document Viewer** and any open screens.

    In order to see how saving transaction history works in the next tutorial, we need to have all auditing turned off. Let's clear auditing now.

17. On the **Setup** menu, select **Audit Setup**.

    The Audit Setup screen is displayed with the All Fields category selected. An easy way to clear auditing for all fields is to use the Toggle all fields in this category button. Since we have some fields selected, the toggle button will select all fields the first time it is clicked. Let's give that a try.

18. Click the **Toggle all fields in this category** button.

    As expected, all fields are now selected.

19. Click the **Toggle all fields in this category** button again.

    Now, all fields are cleared, which is what we want.

20. Close the **Audit Setup** screen, saving your changes.

21. Continue with the next tutorial.

Tutorial 1.3 – View Transaction History

Transaction history is saved for all workflows in a module if that module has had the Save Transaction History check box selected in the Module Setup process. Saving transaction history means that you are both saving audit history for all fields on that workflow and saving transaction history for the transaction itself. Transaction history can be viewed within the current record by using the Show Transaction History feature. Like Audit History, Transaction History can also be viewed for groups of records using the Audit/Transaction History process.

First, we need to create some transaction history.

1. On the **Setup** menu, select **Module Setup**.

2. Select the **General** tab.

3. Select the **Save Transaction History** check box in the Settings frame.

   When you save transaction history for a workflow, you also have the option of adding a link to that transaction history in the notes for the record being updated. We'll demonstrate that as well.

4. Select the **Link History to Notes** check box.

5. Close the **Module Setup** screen, saving your changes.

6. Open the record for **Gregory Wilson**. To create transaction history, change all of his address information, not just **Address 1** and **Address 2**.

7. Click the **Save** button on the Tool Bar and stay in **Gregory's** record.

8. On the **Audit** menu, select the **Audit History** menu option.

   This time you will find that all of the fields have been audited. Remember that you turned off auditing for all fields in Audit Setup in the last tutorial. The reason the changes you just made are showing up is because saving transaction history for a workflow includes auditing all field changes made using that workflow. Even if we had left some of these fields set for auditing and some not, saving transaction history for a workflow would have audited all fields that were changed.

   Saving transaction history also captures key transaction history as well. Let's take a look.

9. Close the **Field Audit History** screen.

10. On the **Audit** menu, select the **Transaction History** menu option.

    The Transaction History screen is displayed, and you can see Standard - Employee listed in the workflow listing. Since your transaction should be the only one, your transaction is automatically selected. The transaction history for the changes you just made are displayed in the Changes grid.

11. Close the **Transaction History** screen.

12. On the **Category Bar**, select the **Category Notes** button.

The Notes for Personal Category are displayed because that is the category assigned to the Personal screen. Our transaction history and document were attached to the User category of notes because that was the category assigned to the Standard - Employee workflow.

13. Close the **Notes for Personal Category** screen.

14. In the **Screen** dropdown, select the **User** screen. On the Category Bar, select the **Category Notes** button

    The Notes for User Category displayed, and you should see a Transaction History Link entry for today's date with an attachment. This note was created because you selected the Link History to Notes check box.

15. Click anywhere in that **Transaction History Link** row, and then click the **Show** button.

    The Transaction History screen is displayed with the changes you just made.

16. Close the **Transaction History** screen.

17. Close the **Notes for User Category** screen.

18. Close **Gregory's** record.

    Now on to another way to view this information.

19. On the **Administration** menu, select **Audit/Transaction History**.

    The Audit/Transaction History screen is displayed with the View Audit History tab open. Let's first view Audit History to see how saving transaction history affects that.

20. Click the **View** button.

    The Field Audit History screen is displayed, with the most recent change at the top. You should see the Gregory Wilson address changes you just made followed by all of the changes you made in the last lesson.

    You can print this information if you wish.

21. Click the **Print** button.

    The audit history information is displayed in the Document Viewer and can be output using various options from there.

22. Close the **Document Viewer**.

23. Close the **Field Audit History** screen.

    Now, let's take a look at the transaction history.

24. Click the **View Transaction History** tab.

    This tab uses a filtering feature similar to the one you saw on the View Audit History tab in that several selection fields may be used together and are cumulative. We won't go into making a lot of field selections since you already saw how that worked with audit

history. This time, we just want to do a simple search so we can focus on looking at what the transaction history looks like.

25. Click the **Search** button to look for all transactions in the **ACTIVE** company.

In the list box at the bottom of the screen, a line is displayed for the record that you changed and that line is highlighted. If there were more transactions, you would need to find the transaction you wanted to view and highlight it.

26. Click **OK** to view the highlighted transaction.

The Transaction History screen is displayed with transaction details at the top and a list of changes made in the grid at the bottom. You should see the address changes listed there. If an approval was tied to the transaction, that information would be in the middle grid. Approvals is a topic for another day.

You can print this information if you wish.

27. Click the **Print** button.

The transaction history information is displayed in the Document Viewer and can be output using various options from there.

28. Close the **Document Viewer**.

29. Close the **Transaction History** screen.

30. Click the **Clear** button.

As you can see, this clears all search criteria fields and you could do another search at this point. We have seen what we came to see, so we will just close the screen and head to the next tutorial.

31. Close the **Audit/Transaction History** screen.

32. Continue with the next tutorial.

Tutorial 1.4 – Create Audit Reports

Unlike the view capability in the Audit/Transaction History process described in the last two tutorials, audit reports can be saved and used again. They can even be scheduled and run automatically at your discretion. Let's create an audit report.

1. On the **Administration** menu, select **Audit Reports**.

   The Explorer for Audit Reports is displayed. This screen looks and works just like the Explorer for other documents. You can create, organize, and run audit reports from here.

   Note: Audit reports work just like adhoc reports. You will learn more about creating adhoc reports in the Query and Reporting class. For this tutorial, you will just be given instructions as to how to create some simple audit reports. You won't be able to see a wide variety of data in these reports because the audit data was created by you for today's date only, but you can learn how to create the reports nonetheless.

2. On the Tool Bar, click the **New Audit Report** button to start a new audit report.

   The Audit Reports screen is displayed.

3. Enter **Test Audit Report** for the **Document Name**.

   First, we will specify what fields we would like to see on the report.

4. Click the **Report Definition** tab. In the **Field Name** field on the first row of the grid, click the popup button to display a list of the available fields.

   The Select Field screen is displayed. The available fields are not the many fields in the Personnel Management module, but the fields available from audit and transaction history. The categories listed are special ones for audit reports: General, Detail and Approval (if the Approval Toolkit is implemented).

5. In the **General** category, select **Audit User ID**. Then add the following **General** category fields to the report: **Created Date**, **Created Time** and **Record Name**.

6. Then add the following **Detail** category fields to the report: **Audit Field Name**, **Prior Value** and **New Value**.

   The Row Modifier is defaulted to "*" for all of the detail fields but not the general fields, which are single value fields from the header. The asterisk in the Row Modifier field returns all rows of data, so all audited changes to a record will be displayed. The asterisk is defaulted for ease of knowing what fields are multiple row fields from the detail. You can change the row modifier to "=" whenever you want the report to only show detail lines that match the query.

   Let's run our simple audit history report.

7. On the **File** menu, select **Run Audit Report** or on the Tool Bar, click the **Run Audit Report** button to run the report.

   The report is displayed in the Document Viewer like all other documents. The report pulls each record from the audit history and displays the user that changed the record, when the change was made, the name of the record changed, the name of the field changed, the value before the change, and the value after the change.

8. Close the **Document Viewer**.

9. In the **Created Date** row, change the **Sort Type** to **Sort**. Run the report.

   The records are now sorted by date. This report might be useful to display the changes made on a given date.

10. Close the **Document Viewer**.

11. In the **Created Date** row, change the **Sort Type** to **None**. In the **Created Time** row, change the **Sort Type** to **Sort**. Run the report.

    This report might be used to check the time when certain changes were made.

12. Close the **Document Viewer**.

13. Click the **Query** tab.

    Let's enter a query equation in the first row that will specify the records we want to include in the report.

14. In the **Field Name** field, click the popup button to display a list of the available fields.

    The list of fields you can use to query is the same list you can use to report.

15. In the **General** category, select **Created Time**.

16. In the **Operator** field, enter <.

17. In the **Contents** field, use the popup to enter **8:00 AM**.

18. Run the report.

    This report, which won't have any data unless you are taking this class really early, could be used to show any changes made prior to 8:00 AM. If you see salary changes made at unusual times, you just might have someone tampering with data.

19. Close the **Document Viewer** if you did have records on which to report.

20. Replace the query equation we just entered with the one shown below.

    Audit User ID   =   DEMO

21. Click the **Report Definition** tab.

22. In the **Created Date** row, change the **Sort Type** to **Sort**.

    This will cause the report to be sorted by date and then by time.

23. Run the report.

    The report is a now a list of the changes made by a specific user. If you were to add another query line stating a particular date, the report would be a list of all changes (those audited) made by a specific user on a specific date.

24. Close the **Document Viewer**.

    Let's replace the query equation once again.

25. Click the **Query** tab.

26. In the **Field Name** field, replace **Audit User ID** with **Audit Field Name** (in **Detail** category).

    Like in the Report Definition, the Row Modifier here is defaulted to "*" because this is a multiple row field. We want to check all rows, so we will leave this set to "*".

27. Leave the **Operator** field set to =.

28. In the **Contents** field, click the popup to display a list of the available fields.

    The list supporting the Contents column for the Audit Field Name field is a list of all of the fields in the module. Also notice how the popups vary depending on the type of field entered in the Field Name field. When we entered a time, the Contents field had a time popup. Now, when we entered a field name, the Contents field has a field popup.

29. Select **Address 1**.

    Let's say we only want to see changes to the Address 1 field, not any other fields that might have been changed in the same transaction. This requires a special row modifier on the Report Definition.

30. Click the **Report Definition** tab.

31. In the **Row Mod** column, change all "*" to "=".

    This will only show the detail lines that meet the query requirements. You will learn more about this modifier in the Query and Reporting class.

32. Run the report.

    The report should now only include audit history for the Address 1 field. This includes audit history that was created by flagging the Address 1 field for auditing as well as saving transaction history for a workflow.

33. Close the **Document Viewer**.

    You can create very complex audit reports. If you are using approvals and saving transaction history, you can generate audit reports that give you a complete picture of what was changed, by whom and the approvals required and made.

34. Close the **Audit Reports** screen.

    When the Explorer screen is displayed, you can see that the report we just created is now listed. We can edit the report further or we can run the report directly from here. Try it now.

35. Highlight the new report and click the **Run Audit Report** button on the Tool Bar.

    The same report will be displayed directly in the Document Viewer.

36. Close the **Document Viewer**.

   In virtually every way, the audit reporting feature works just like the adhoc reports feature. The only difference is the fields upon which we are sorting and reporting.

37. Close the **Explorer**.

38. Continue with the next tutorial.

Tutorial 1.5 – Purge Audit/Transaction History

Audit/transaction history accumulates indefinitely. Eventually, there may be more history than you actually need. Thus, you can purge audit/transaction history at any time. This is how you do it.

1. On the **Administration** menu, select **Audit/Transaction History**. Click the **Purge History** tab.

   The Purge History tab has two date fields. These date fields are used to set a range of dates in which audit/transaction history is to be purged. For example, if you set a Starting Date of 01-01-2006 and Ending Date of 12-31-2006, all history that was created between these dates will be purged.

   We have accumulated a little history and now it is no longer needed.

2. Set the **Starting Date** to the earliest you have seen while reviewing the audit history. (That date is probably today.) Set the **Ending Date** to today.

3. Click the **Purge** button to purge all of the accumulated audit/transaction history based on the date range entered.

   A message of the format shown below is displayed.

   ## records purged between *<start date>* and *<end date>*

4. Click **OK** and then click the **View Audit History** tab. Click the **View** button to display any remaining audit history.

   If we set the dates correctly, a message should indicate that there is no audit history to display.

5. Click the **View Transaction History** tab. Click the **Search** button to display any remaining transaction history.

   Again, there should be no transaction history to display.

6. Close the **Audit/Transaction History** screen.

   Before purging history, you may want to print an audit report for the timeframe you are about to purge so that you have a permanent record of it.

7. Exit **People-Trak**.

8. This concludes this tutorial and lesson.