

Spotlight on

Working with Kibana



Working with Kibana - Topics

1. Search Framework, Elasticsearch, and Kibana – An Introduction
2. Installing, Setting Up, and Accessing Kibana
3. Setting Up Applications Index Visualizations
4. Creating Applications Index Visualizations
5. Additional Resources

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The Working with Kibana using PeopleTools 8.59 spotlight covers the following topics:

An introduction to PeopleSoft Search Framework, Elasticsearch, and Kibana where we discuss how Kibana is used in PeopleSoft, specifically in Search Framework.

The installing, setting up, and accessing Kibana topic discusses the installation steps and seamless access to Kibana from PeopleSoft.

The setting up applications-index visualizations topic discusses how you will use the dashboards that are delivered by PeopleSoft applications.

The creating visualizations for applications topic provides a step-by-step instruction on creating new visualizations using application indexes.

And finally the additional resources topic provides links where you can get more information on Search Framework, Elasticsearch, and Kibana.

Search Framework, Elasticsearch, and Kibana – An Introduction

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In this section, we'll learn about Kibana and its implementation in PeopleSoft.

Search Framework, Elasticsearch, and Kibana – An Introduction

Kibana is a Web application and is a component of the Elastic stack.

- Kibana provides visual reports in the form of charts, tables, graphs based on queries.
- In PeopleTools 8.57, Search Framework implemented Kibana to monitor and provide analysis on Search Framework and indices in Elasticsearch.
- In PeopleTools 8.59 and 8.58.13, Search Framework uses Elasticsearch 7.10 and Kibana 7.10 to analyze the PeopleSoft application data through the application indexes in Elasticsearch.
- Data presented in Kibana is based on indices, so the data is as fresh as the last time the index was updated or you can get near real time indexed data by opting for real time indexing. Real time indexing is available from PeopleTools 8.59 and 8.58.13.

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Kibana is a powerful analytic and reporting Web application and is a component of the Elastic stack, which includes Elasticsearch. Kibana provides visual reports in the form of charts, tables, graphs, and so on based on queries that you set up on Elasticsearch indexes.

In PeopleTools 8.57, PeopleSoft Search Framework implemented Kibana to monitor and provide analysis on Search Framework and indexes in Elasticsearch 6.1.2.

In PeopleTools 8.59 and 8.58.13, Search Framework uses Kibana 7.10 as an engine for visualizing and analyzing PeopleSoft application data, which is indexed in Elasticsearch 7.10.

The data exposed to Kibana is based on the user's security that is similar to the security applied in Global Search. Furthermore, access to Kibana visualizations and dashboards is controlled by specifying privileges in PeopleSoft. The analytic data presented through Kibana would be as recent as the application indexes in Elasticsearch. The data in the index is only as fresh as the last time the index was updated. However, you have an option to enable real time indexing on your search definitions that ensures that the analytic data is near real time.

Installing, Setting Up, and Accessing Kibana

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This topic covers installing, setting up, and accessing Kibana.

Installing, Setting Up, and Accessing Kibana

PeopleTools 8.59 delivers the ELK DPK to install Elasticsearch, Logstash, and Kibana. In this presentation, we'll discuss the installation and setup of Kibana for Search Framework. Logstash is implemented for PeopleSoft Health Center and external data integration.

The ELK DPK zip file includes:

- psft-dpk-setup.bat for Microsoft Windows platform.
- psft-dpksetup.sh for Linux platform.

You may:

- Run the script interactively, or run it in silent mode with a prepared configuration file.
- Install Elasticsearch and Kibana together or separately.

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PeopleTools 8.59 delivers the ELK DPK to install Elasticsearch, Logstash, and Kibana. In this presentation, we'll discuss the installation and setup of Kibana for Search Framework. PeopleSoft Health Center and external data integration use Logstash. Refer to the product documentation for more information.

The ELK DPK zip file includes a setup script for the Microsoft Windows platform and a setup script for the Linux platform.

You can run the script interactively, or run it in silent mode with a prepared configuration file.

The DPK gives you the option to install Elasticsearch 7.10 and Kibana 7.10 together or separately. You would install Kibana separately in a scenario where you have already installed Elasticsearch 7.10. In this case, you can skip the installation of Elasticsearch 7.10 and install only Kibana 7.10.

Installing, Setting Up, and Accessing Kibana (cont.)

Installation guidelines for Kibana:

- Use the delivered ELK DPK.
- Install Kibana on the same server where Elasticsearch is installed or install it on a separate server.

Refer to the PeopleSoft Deployment Packages for Elasticsearch Installation (Doc ID 2205540.2) on My Oracle Support for detailed information on the installation process.

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Use the following installation guidelines for Kibana:

Use the delivered ELK DPK to install Kibana. Kibana is delivered as part of ELK DPK because a security module is built into it. Do not install Kibana from the elastic.co Web site.

You can install Kibana on the same server where Elasticsearch is installed or install it on a separate server.

However, Oracle recommends that you install Kibana on one of the Elasticsearch nodes in the cluster to ensure better connectivity between Elasticsearch and Kibana. Refer to the PeopleSoft Deployment Packages for Elasticsearch Installation document on My Oracle Support for detailed information on the installation process.

Installing, Setting Up, and Accessing Kibana (cont.)

After installing Kibana, complete the following tasks to set up Kibana for monitoring:

- Connect Kibana to Elasticsearch.
- Start the Kibana service.

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After installing Kibana, you should complete a few tasks to set up Kibana for monitoring. This includes connecting Kibana to Elasticsearch, starting the Kibana service, and setting up Kibana for application data analytics.

The first task is to connect Kibana to Elasticsearch.

You complete this task during the installation of Kibana when the installation script prompts you to specify the Elasticsearch server to which you want to connect the Kibana server.

The next step is to start the Kibana service, and this process is dictated by the platform on which Kibana is installed.

On the Windows platform, you must start the Kibana service manually by running the `kibana.bat` file.

On the Linux platform, the service starts automatically. If it does not, you should run `kibana.sh` file.

Installing, Setting Up, and Accessing Kibana (cont.)

Set up Kibana for application data analytics by updating the Kibana section of the Search Instance Properties page.

The screenshot displays two configuration interfaces. The top interface, titled "Search Instance Properties", shows a summary for "Search Instance: PTSF_DEFAULT" and "Search Provider: Elasticsearch", with a "Search Options Config" link. Below this is a detailed configuration form for the "Search Instance Properties". It includes fields for "Host Name" (example.com), "Port" (9200), "SSL Option" (Disable), "User Name" (esadmin), "Password" (masked), "Proxy Name" (people), and "Proxy Port" (masked). Action buttons for "Ping", "Test Login", "Proxy Login", and "Elasticsearch Interact" are present. The bottom interface, titled "Kibana", contains fields for "Host Name" (example.com), "Port" (5601), and "SSL Option" (Disable).

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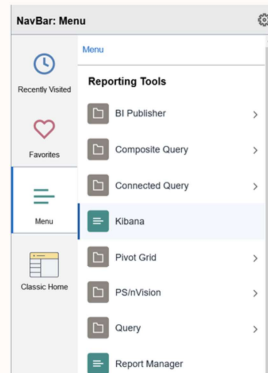
After starting the Kibana service, you enable Kibana to access the application indexes in Elasticsearch.

Navigate to PeopleTools, Search Framework, Search Admin Activity Guide, Configuration, and then select Search Instance.

In the Kibana section, enter the server name of the host where Kibana is running. In the Port field, enter the port number that you specified when installing Kibana. In the SSL field, choose Yes if SSL is enabled for Kibana; if not, choose No.

Installing, Setting Up, and Accessing Kibana (cont.)

PeopleSoft Search Framework implements integrated access to Kibana from PeopleSoft.



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From PeopleTools 8.58, Search Framework implements an integrated access to Kibana that enables users to view dashboards directly in PIA.

As part of the integration, Kibana displays the application search definitions deployed to Elasticsearch, which enables you to create index patterns and create visualizations.

In PeopleTools 8.58.13 and 8.59, Search Framework provides administrators and business analysts direct access to the Kibana home page from PeopleSoft (PIA) using the Kibana menu under Reporting Tools. Access to the Kibana menu is controlled through the Kibana Administrator role.

Installing, Setting Up, and Accessing Kibana (cont.)

Data authorization is based on each user:

- PeopleSoft applies data authorization based on document-level security.
- A user has the same set of data access when they use Global Search and when they use the dashboards or visualizations.

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When you create visualizations and dashboards in Kibana, PeopleSoft applies data authorization based on document-level security set up for the search definition. This ensures that a user has the same set of data access when they use Global Search and when they use the dashboards.

When a user accesses the dashboards using the tile on their homepage or by using the related information, data shown is restricted by the document-level security applied on the dashboard.

Installing, Setting Up, and Accessing Kibana (cont.)

Required PeopleSoft roles:

- Kibana Administrator role.
- Search Administrator role.
- Portal Administrator role.

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A user must possess the Kibana Administrator role to access the Kibana home page from PeopleSoft. Only a user with this role can use the Kibana menu under Reporting Tools.

A user requires the Search Administrator role to create visualization in Kibana, perform the tasks of deploying dashboards, importing dashboards, configuring dashboards, and specifying user privileges in PIA. Please note that the Search Administrator role does not have access to data in Kibana. To access data in Kibana, you require the roles created for the purpose in applications.

Additionally, a user must also possess the Portal Administrator role to create content references when you configure dashboards.

Setting Up Applications Index Visualizations

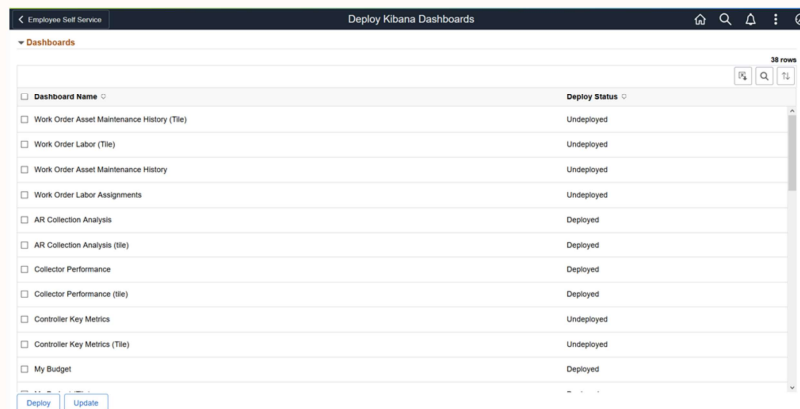
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This section discusses the applications-delivered dashboards and how to use them.

Setting Up Applications Index Visualizations

Deploying a dashboard copies the dashboard from the PeopleSoft database to your instance of Kibana.



Dashboard Name	Deploy Status
<input type="checkbox"/> Work Order Asset Maintenance History (Tile)	Undeployed
<input type="checkbox"/> Work Order Labor (Tile)	Undeployed
<input type="checkbox"/> Work Order Asset Maintenance History	Undeployed
<input type="checkbox"/> Work Order Labor Assignments	Undeployed
<input type="checkbox"/> AR Collection Analysis	Deployed
<input type="checkbox"/> AR Collection Analysis (Tile)	Deployed
<input type="checkbox"/> Collector Performance	Deployed
<input type="checkbox"/> Collector Performance (Tile)	Deployed
<input type="checkbox"/> Controller Key Metrics	Undeployed
<input type="checkbox"/> Controller Key Metrics (Tile)	Undeployed
<input type="checkbox"/> My Budget	Deployed

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Applications deliver dashboards through update images.

The delivered dashboards should be deployed to Kibana.

When you deploy a dashboard, you're copying the dashboard from the PeopleSoft database to your instance of Kibana. The deployed dashboard is then available on the Saved Objects page in the Management section on the Kibana home page.

You use the Deploy Kibana Dashboards page to deploy or update a dashboard.

Navigate to PeopleTools, Search Framework, Administration, and then select Deploy Dashboards to Kibana.

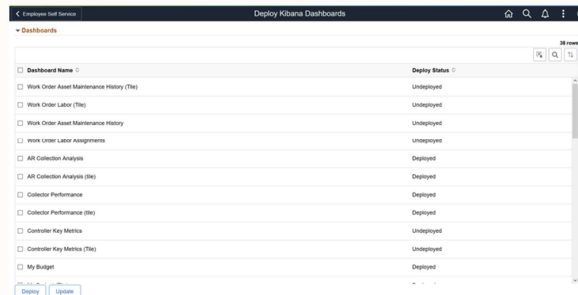
Setting Up Applications Index Visualizations (cont.)

Use the Deploy button:

- When PeopleSoft applications deliver dashboards in a PUM image.
- When you migrate dashboards from one environment to another.

Use the Update button:

- When you make changes to a deployed dashboard.



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Let's understand when we should use the deploy or update options:

When PeopleSoft applications deliver a dashboard in a PUM image, you must use the deploy option.

When you migrate dashboards from one environment to another, for example, from the testing environment to the production environment, you must use the deploy option.

If you make any changes to a deployed dashboard, you should use the update option to synchronize the dashboard in the PeopleSoft database and in the Kibana server.

Oracle recommends that you do not modify or edit a delivered dashboard or visualization. You may clone a delivered visualization or dashboard and modify it to suit your business requirements.

Search Framework enables you to create your own visualizations, and we'll discuss it in a later section in this presentation.

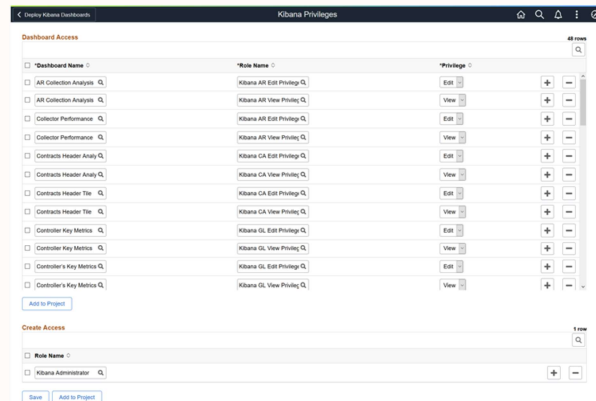
Setting Up Applications Index Visualizations (cont.)

Specifying user privileges for a dashboard.

PeopleSoft provides the required security by mapping the dashboards to PeopleSoft roles.

Specify user privileges in two areas:

- Dashboard Access
- Create Access



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Applications specify certain roles when delivering a dashboard. Administrators and business analysts must verify whether the specified roles are sufficient for their use. If not, additional roles should be specified through the Kibana Privileges page.

You use the Kibana Privileges page to specify user privileges for a dashboard and to create a visualization. PeopleSoft provides the required security by mapping the dashboards to PeopleSoft roles.

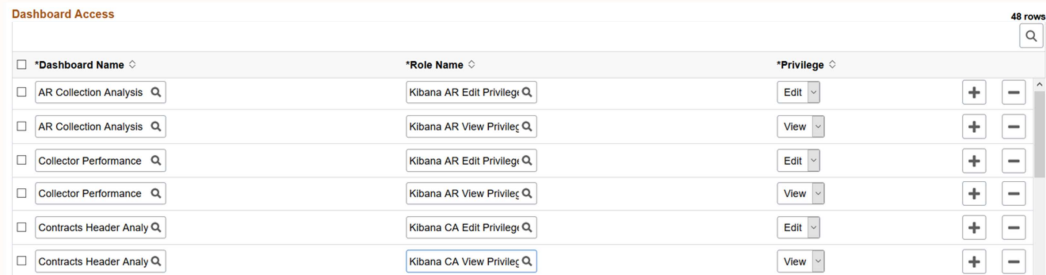
Navigate to PeopleTools, Search Framework, Administration, and then select Assign Kibana Dashboard Roles.

This page has two sections: Dashboard Access and Create Access.

Setting Up Applications Index Visualizations (cont.)

Dashboard Access

Specify roles to edit or view a dashboard.



*Dashboard Name	*Role Name	*Privilege		
<input type="checkbox"/> AR Collection Analysis	Kibana AR Edit Privileg	Edit	+	-
<input type="checkbox"/> AR Collection Analysis	Kibana AR View Privileg	View	+	-
<input type="checkbox"/> Collector Performance	Kibana AR Edit Privileg	Edit	+	-
<input type="checkbox"/> Collector Performance	Kibana AR View Privileg	View	+	-
<input type="checkbox"/> Contracts Header Analy	Kibana CA Edit Privileg	Edit	+	-
<input type="checkbox"/> Contracts Header Analy	Kibana CA View Privileg	View	+	-

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Let's look at the use of the Dashboard Access section. You use this section to map an application specific role to a dashboard and specify edit or view privileges to the role. The edit privilege enables a user to edit a dashboard or visualization in Kibana and save the changes. When a dashboard displays in full view, the Open in Kibana link displays only if the edit privilege is assigned to you so you can open and edit the dashboard.

The view privilege enables a user to open a dashboard or visualization in PeopleSoft and view it. A user with the view privilege can open the dashboard in PeopleSoft where you have options to filter the data or use the time picker to view data based on a time range.

Note that you can map a dashboard to multiple roles with different privileges for the role.

Remember that with this security layer, end users with the specified role can view or edit a dashboard. That is, if you want to personalize the dashboard as a tile on your home page, it will be listed only if you have the privilege to view it. Therefore, administrators must take into account the end users to whom the dashboards should be available.

Setting Up Applications Index Visualizations (cont.)

Create Access

Specify roles to create a dashboard.



The screenshot shows the 'Create Access' section of a Kibana interface. It features a table with one row containing the role 'Kibana Administrator'. The table has a search bar, a plus button, and a minus button. The text '1 row' is visible in the top right corner of the table area.

Role Name
Kibana Administrator

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Let's look at the use of the Create Access section. You use this page to set the roles to create a visualization. Other than the Search Administrator role, only those users with the specified role or roles can create visualizations.

In the following demonstration, we'll see the process of deploying a delivered dashboard and using the visualizations. While a user with the Search Administrator role performs the task of deploying a dashboard, an end user uses the dashboard if the user has the role specified for the dashboard.

Demonstration: Deploying Dashboards



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This demonstration assumes that you have taken a PeopleSoft applications update image, for example FSCM, which delivers some Kibana dashboards. First, we'll log in as a user with the Search Administrator role to deploy a dashboard and edit the user privileges assigned to a dashboard.

Employee Self Service

Deploy Kibana Dashboards

Home

Search

Alerts

Settings

Help

40 rows

Filter

Search

Sort

<input type="checkbox"/> Dashboard Name	Deploy Status
<input type="checkbox"/> Work Order Asset Maintenance History (Tile)	Undeployed
<input type="checkbox"/> Work Order Labor (Tile)	Undeployed
<input type="checkbox"/> Work Order Asset Maintenance History	Undeployed
<input type="checkbox"/> Work Order Labor Assignments	Undeployed
<input type="checkbox"/> AR Collection Analysis	Deployed
<input type="checkbox"/> AR Collection Analysis (tile)	Deployed
<input type="checkbox"/> Collector Performance	Deployed
<input type="checkbox"/> Collector Performance (tile)	Deployed
<input type="checkbox"/> Controller Key Metrics	Undeployed
<input type="checkbox"/> Controller Key Metrics (Tile)	Undeployed
<input type="checkbox"/> My Budget	Undeployed
<input type="checkbox"/> My Budget (Tile)	Undeployed
<input type="checkbox"/> Financial Performance Analysis	Deployed
<input type="checkbox"/> Financial Performance Analysis (Tile)	Deployed
<input type="checkbox"/> Financial Position Trending	Deployed
<input type="checkbox"/> Financial Position Trending (Tile)	Deployed
<input type="checkbox"/> GL Operational Insights	Deployed
<input type="checkbox"/> GL Operational Insights (Tile)	Deployed

Navigate to PeopleTools, Search Framework, Administration, and then select Deploy Dashboards to Kibana.

The Deploy Kibana Dashboards page displays the delivered dashboards.

Employee Self Service	
Deploy Kibana Dashboards	
40 rows	
Dashboard Name	Deploy Status
<input type="checkbox"/> Work Order Asset Maintenance History (Tile)	Undeployed
<input type="checkbox"/> Work Order Labor (Tile)	Undeployed
<input type="checkbox"/> Work Order Asset Maintenance History	Undeployed
<input type="checkbox"/> Work Order Labor Assignments	Undeployed
<input type="checkbox"/> AR Collection Analysis	Deployed
<input type="checkbox"/> AR Collection Analysis (tile)	Deployed
<input type="checkbox"/> Collector Performance	Deployed
<input type="checkbox"/> Collector Performance (tile)	Deployed
<input type="checkbox"/> Controller Key Metrics	Undeployed
<input type="checkbox"/> Controller Key Metrics (Tile)	Undeployed
<input checked="" type="checkbox"/> My Budget	Deployed
<input checked="" type="checkbox"/> My Budget (Tile)	Deployed
<input type="checkbox"/> Financial Performance Analysis	Deployed
<input type="checkbox"/> Financial Performance Analysis (Tile)	Deployed
<input type="checkbox"/> Financial Position Trending	Deployed
<input type="checkbox"/> Financial Position Trending (Tile)	Deployed
<input type="checkbox"/> GL Operational Insights	Deployed
<input type="checkbox"/> GL Operational Insights (Tile)	Deployed

Select the My Budget and My Budget (Tile) dashboards.
The deploy action copies the dashboard and its visualizations to your Kibana instance.

Deploy Kibana Dashboards

Kibana Privileges

Dashboard Access

48 rows

Dashboard Name	Role Name	Privilege		
AR Collection Analysis	Kibana AR Edit Privilege	Edit	+	-
AR Collection Analysis	Kibana AR View Privilege	View	+	-
Collector Performance	Kibana AR Edit Privilege	Edit	+	-
Collector Performance	Kibana AR View Privilege	View	+	-
Contracts Header Analytics	Kibana CA Edit Privilege	Edit	+	-
Contracts Header Analytics	Kibana CA View Privilege	View	+	-
Contracts Header Tile	Kibana CA Edit Privilege	Edit	+	-
Contracts Header Tile	Kibana CA View Privilege	View	+	-
Controller Key Metrics	Kibana GL Edit Privilege	Edit	+	-
Controller Key Metrics	Kibana GL View Privilege	View	+	-
Controller's Key Metrics	Kibana GL Edit Privilege	Edit	+	-
Controller's Key Metrics	Kibana GL View Privilege	View	+	-
Early Detection and Monitor	Kibana AP Edit Privilege	Edit	+	-
Early Detection and Monitor	Kibana AP View Privilege	View	+	-
Financial Performance Anal	Kibana GL Edit Privilege	Edit	+	-
Financial Performance Anal	Kibana GL View Privilege	View	+	-
Financial Position Trending	Kibana GL Edit Privilege	Edit	+	-
Financial Position Trending	Kibana GL View Privilege	View	+	-
GL Operational Insights	Kibana GL Edit Privilege	Edit	+	-

Navigate to PeopleTools, Search Framework, Administration, and then select Assign Kibana Dashboard Roles.

Applications deliver dashboards with specific roles. You use the Assign Kibana Dashboard Roles page to check the assigned roles and add or remove roles as per your business requirements.

Deploy Kibana Dashboards

Kibana Privileges

Dashboard Access

48 rows

Dashboard Name	Role Name	Privilege		
Controller's Key Metrics	Kibana GL Edit Privilege	Edit	+	-
Controller's Key Metrics	Kibana GL View Privilege	View	+	-
Early Detection and Monitor	Kibana AP Edit Privilege	Edit	+	-
Early Detection and Monitor	Kibana AP View Privilege	View	+	-
Financial Performance Anal	Kibana GL Edit Privilege	Edit	+	-
Financial Performance Anal	Kibana GL View Privilege	View	+	-
Financial Position Trending	Kibana GL Edit Privilege	Edit	+	-
Financial Position Trending	Kibana GL View Privilege	View	+	-
GL Operational Insights	Kibana GL Edit Privilege	Edit	+	-
GL Operational Insights	Kibana GL View Privilege	View	+	-
My Budget	Kibana GL Edit Privilege	Edit	+	-
My Budget	Kibana GL View Privilege	View	+	-
My Proxy Expense Activity	Kibana EX Edit Privilege	Edit	+	-
My Proxy Expense Activity	Kibana EX View Privilege	View	+	-
My Proxy Expense Activity I	Kibana EX Edit Privilege	Edit	+	-
My Proxy Expense Activity I	Kibana EX View Privilege	View	+	-
Performance and Operator	Kibana EX Edit Privilege	Edit	+	-
Performance and Operator	Kibana EX View Privilege	View	+	-
Performance and Operator	Kibana EX Edit Privilege	Edit	+	-

Dashboard Access

For this demonstration, the specified role is sufficient, so we'll not make any change here. The My Budget dashboard is now ready for your end users.

Configure Kibana Dashboards

Filter

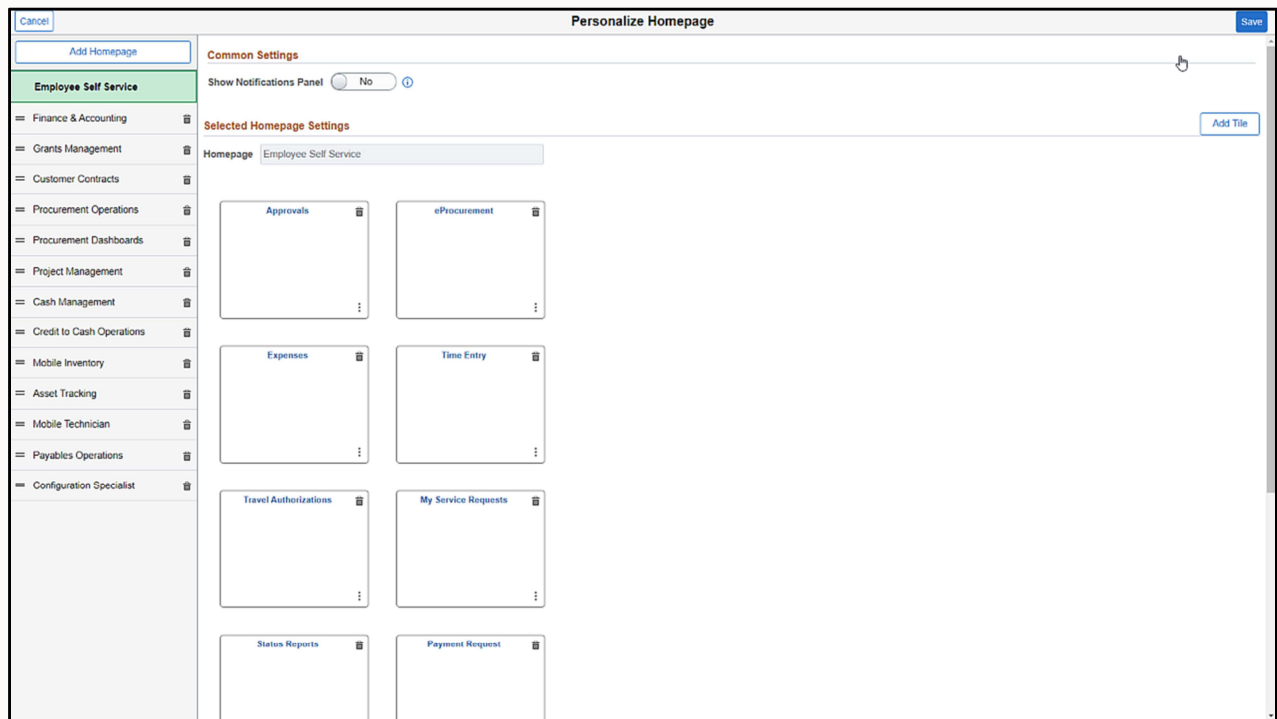
Search Clear

Visualizations

Content Reference	Label	Full View	Full View App Class	Select	Tile View	Tile View App Class	Select	Height	Width
<input type="checkbox"/> EP_AP_KIBANA_TILE_FL_EARLY_DET	Early Detection and Monitoring	Early Detection and Monitor <input type="text"/>		<input type="checkbox"/>	Early Detection (Tile) <input type="text"/>		<input type="checkbox"/>	1	2
<input type="checkbox"/> EP_AP_KIBANA_TILE_FL_TREND_ANA	Trend Analysis	Trend Analysis <input type="text"/>		<input type="checkbox"/>	Trend Analysis (Tile) <input type="text"/>		<input type="checkbox"/>	1	2
<input type="checkbox"/> EP_AR_KIBANA_TILE_FL_COLL_ANA	AR Collection Analysis	AR Collection Analysis <input type="text"/>		<input type="checkbox"/>	AR Collection Analysis (tile) <input type="text"/>		<input type="checkbox"/>	1	2
<input type="checkbox"/> EP_AR_KIBANA_TILE_FL_COLL_PERF	Collector Performance	Collector Performance <input type="text"/>		<input type="checkbox"/>	Collector Performance (tile) <input type="text"/>		<input type="checkbox"/>	1	2
<input type="checkbox"/> EP_CA_HDR_KIB	Contract Analytics	Contracts Header Analytics <input type="text"/>		<input type="checkbox"/>	Contracts Header Tile <input type="text"/>		<input type="checkbox"/>	1	1
<input type="checkbox"/> EP_EX_EXCP_EMP_KIB	My Proxy Expense Activity	My Proxy Expense Activity <input type="text"/>		<input type="checkbox"/>	My Proxy Expense Activity (Tile) <input type="text"/>		<input type="checkbox"/>	2	2
<input type="checkbox"/> EP_EX_EXCP_MGR_KIB	Travel Policy Violations	Travel Policy Violations <input type="text"/>		<input type="checkbox"/>	Travel Policy Violations (Tile) <input type="text"/>		<input type="checkbox"/>	2	2
<input type="checkbox"/> EP_EX_PERF_MGR_KIB	Performance & Operations	Performance and Operation <input type="text"/>		<input type="checkbox"/>	Performance and Operation <input type="text"/>		<input type="checkbox"/>	2	2
<input type="checkbox"/> EP_GL_KIBANA_CONTROLLER_METRIC	Controller Key Metrics	Controller Key Metrics <input type="text"/>	GL_KIB_ADD_FILTER:ControllerFilters	<input type="checkbox"/>	Controller Key Metrics (Tile) <input type="text"/>	GL_KIB_ADD_FILTER:ControllerFilters	<input type="checkbox"/>	1	2
<input type="checkbox"/> EP_GL_KIBANA_DEPT_MANAGER	My Budget	My Budget <input type="text"/>	GL_KIB_ADD_FILTER:MyBudgetFilters	<input type="checkbox"/>	My Budget (Tile) <input type="text"/>	GL_KIB_ADD_FILTER:MyBudgetFilters	<input type="checkbox"/>	1	1
<input type="checkbox"/> EP_GL_KIBANA_TILE_FL_FIN_TREND	Financial Position Trending	Financial Position Trending <input type="text"/>		<input type="checkbox"/>	Financial Position Trending <input type="text"/>		<input type="checkbox"/>	2	2
<input type="checkbox"/> EP_GL_KIBANA_TILE_FL_OPR_INSIG	GL Operational Insights	GL Operational Insights <input type="text"/>		<input type="checkbox"/>	GL Operational Insights (Tile) <input type="text"/>		<input type="checkbox"/>	2	2
<input type="checkbox"/> EP_GL_KIBANA_TILE_FL_PERF_ANA	Financial Performance Analysis	Financial Performance Anal <input type="text"/>		<input type="checkbox"/>	Financial Performance Anal <input type="text"/>		<input type="checkbox"/>	2	2
<input type="checkbox"/> EP_PO_KIBANA_CONTRACTS	Procurement Contracts	Procurement Contracts Das <input type="text"/>		<input type="checkbox"/>	Procurement Contracts (Tile) <input type="text"/>		<input type="checkbox"/>	2	2
<input type="checkbox"/> EP_PO_KIBANA_EFFECTIVENESS	Purchasing Effectiveness	Purchasing Effectiveness D <input type="text"/>		<input type="checkbox"/>	Purchasing Effectiveness (Tile) <input type="text"/>		<input type="checkbox"/>	2	2
<input type="checkbox"/> EP_PO_KIBANA_OPERATIONS	Purchasing Operations	Purchasing Operations Das <input type="text"/>		<input type="checkbox"/>	Purchasing Operations (Tile) <input type="text"/>		<input type="checkbox"/>	2	2

Navigate to PeopleTools, Search Framework, Administration, and then select Configure Kibana Dashboards.

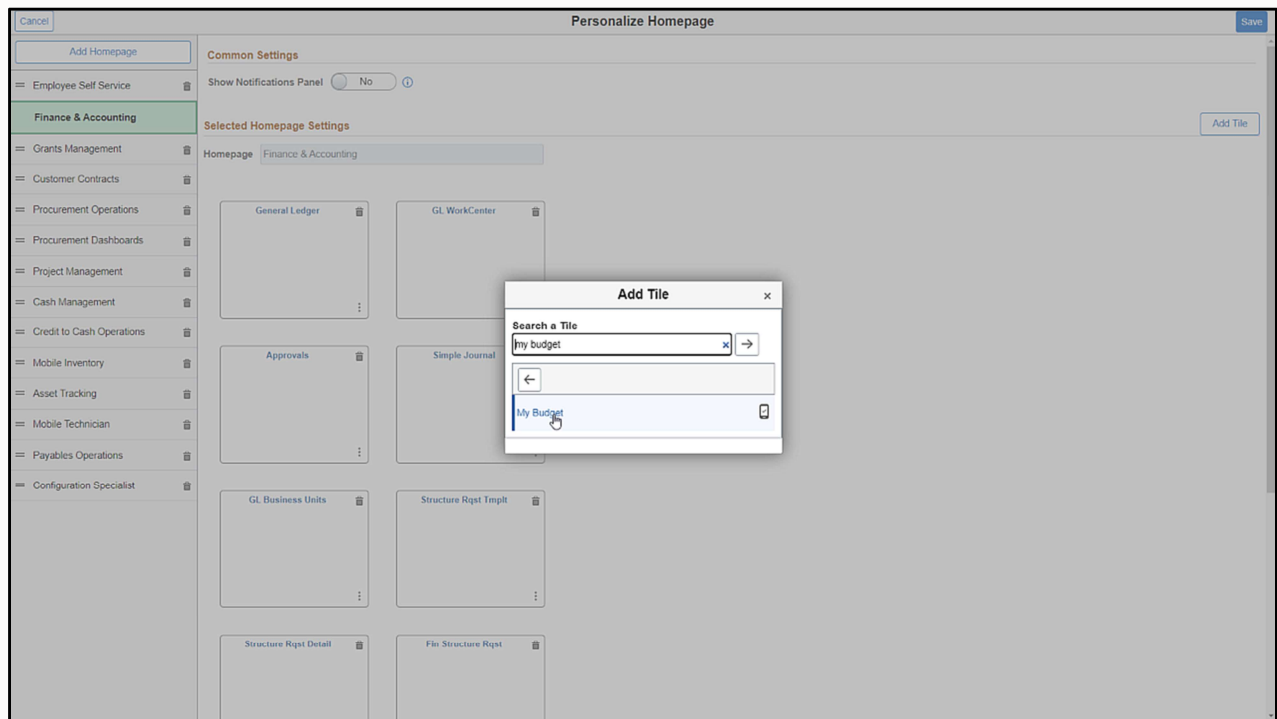
Applications deliver dashboards and set it up as tiles or related information or both. You should access the Configure Kibana Dashboards page and verify whether the dashboard is set up as a tile or related content or both and make changes if required. The dashboards delivered as tiles are listed under the Tile tab, and the dashboards delivered as related information are listed under the Component tab. The My Budget dashboard is set up as a tile, so your end users can add the tile to their homepages.



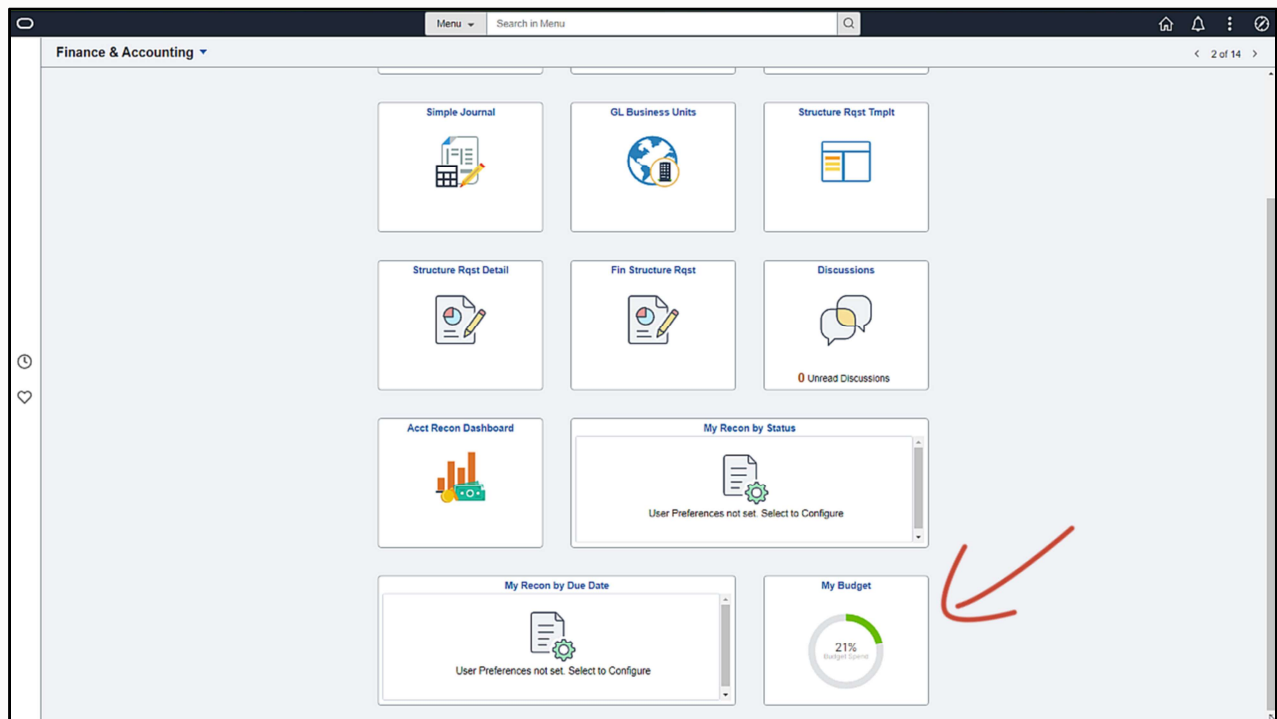
Log in as a user who wants to add the tile to her home page to view the visualizations. For the purpose of this demonstration, we'll use GLS2 as the user who has the required role for the My Budget dashboard.

On the home page, select Actions, Personalize Homepage. Then select Finance & Accounting homepage, and select Add Tile.

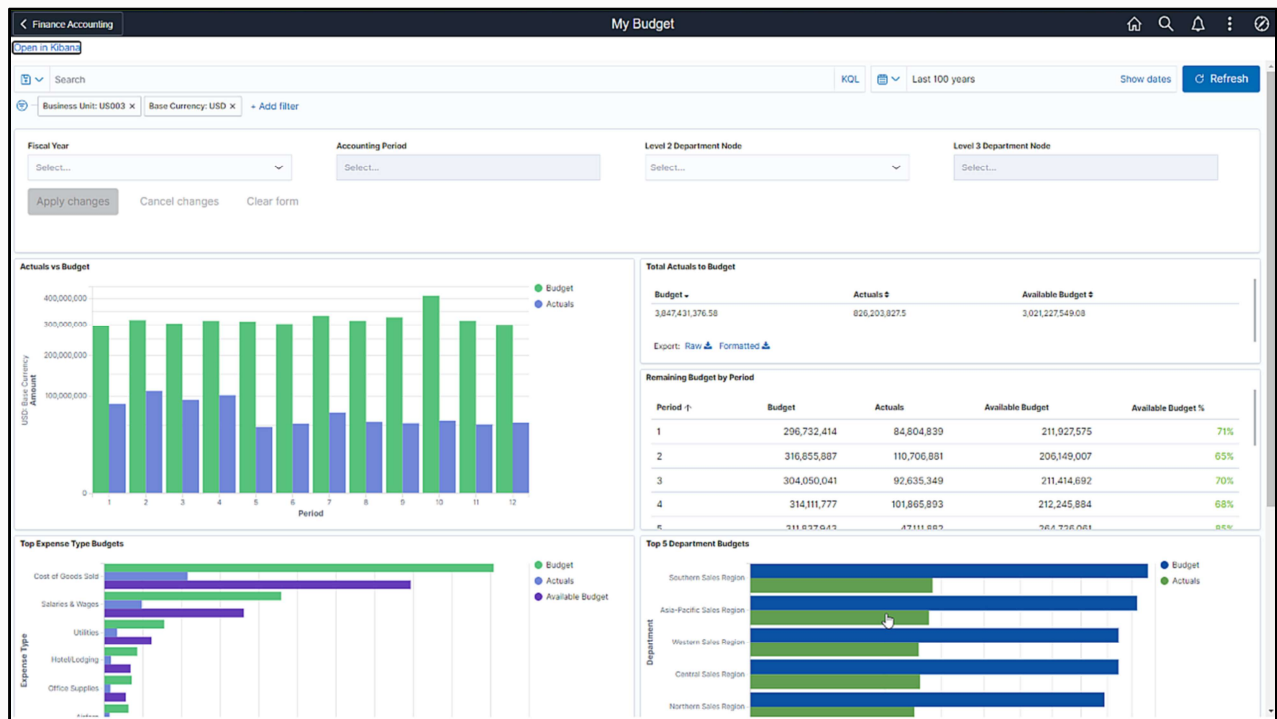
All the applications-delivered tiles are listed on the Add Tile dialog box.



Enter my budget in the Search a Tile bar and select the My Budget dashboard. Select Save.



The saved tile displays on the homepage and begins loading the first visualization in the dashboard.



On the Finance & Accounting home page, select the My Budget tile.
The tile opens in PeopleSoft to display all the visualizations of the My Budget dashboard.

Creating Applications Index Visualizations

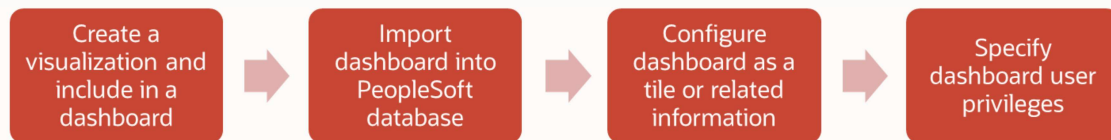
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In this topic we'll discuss creating an applications-data index visualization.

Creating Applications Index Visualizations

Search Framework enables you to create visualizations in Kibana based on PeopleSoft application-data indexes in Elasticsearch.



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Search Framework enables you to create visualizations in Kibana based on PeopleSoft application-data indexes in Elasticsearch. Typically, a PeopleSoft user with the Search Administrator role or a user with Create Access privilege performs the task of creating a visualization and adding it to a dashboard.

After creating a dashboard in Kibana, a PeopleSoft user with the Search Administrator role can proceed with importing the dashboards, configuring the dashboards as tiles or related information, and specifying user privileges for a dashboard on PIA.

Creating Applications Index Visualizations

Step 1: Creating a visualization.

- Creating a visualization from scratch involves creating an index pattern.
- An index pattern is associated with a search definition.
- An index pattern identifies the mapping of the indexed fields.
- Using field aliases.

An example of technical field name: APP_PER_STATUS_ORCL_ES_ENG_NA

An example of field alias: Applicant Status

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Step 1 covers creating an index pattern, visualization, and dashboard in Kibana. You access the Kibana home page using the Kibana menu under Reporting Tools. You require the Kibana Administrator role to access the Kibana menu.

In the PeopleSoft implementation of Kibana, an index pattern is associated with a search definition, so a visualization is based on a search definition. The index pattern identifies the mapping of the indexed fields.

Prior to PeopleTools 8.59.03, in Kibana, fields were displayed with their technical names. Beginning with 8.59.03 and 8.58.13, you'll see field aliases instead, making it easy for you to choose the fields you require.

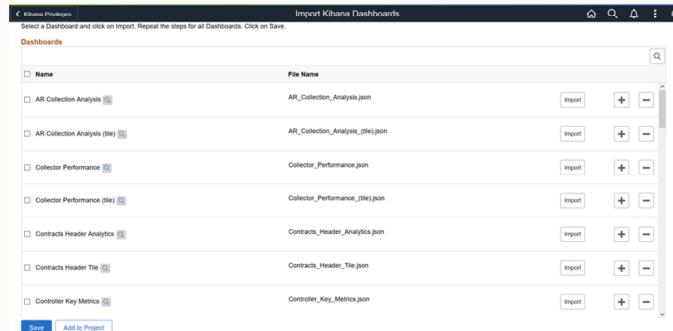
In Kibana, the Management page displays existing index patterns.

Remember that you should specify one of the index patterns as the default index pattern. If you do not set a default search pattern, you may see error messages when your users attempt to view any of the dashboards.

Creating Applications Index Visualizations

Step 2: Importing a dashboard.

- Copies the dashboard to the PeopleSoft database.
- Enables user to apply the required user privileges.



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Step 2 goes over importing a dashboard into the PeopleSoft database in order to apply the needed user privileges and to configure it as a tile or related information. As mentioned previously, the Search Administrator role is required to perform all these tasks.

Navigate to PeopleTools, Search Framework, Administration, and then select Import Dashboards from Kibana page.

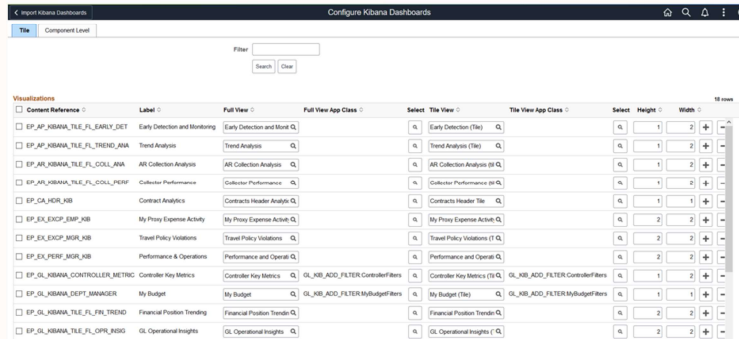
The page lists the applications-delivered dashboards that you deployed and any new dashboards that you create. Choose a dashboard or dashboards that you want to import. When you select the Import button, the file name field is populated with the actual file, which is a JSON file. You'll notice that the file name typically takes the name of the dashboard and adds .json as an extension.

Remember that if you modify a dashboard in Kibana that has been imported, you should reimport the dashboard to get the latest metadata copied to the PeopleSoft database.

Creating Applications Index Visualizations

Step 3: Configuring a dashboard as a tile or related information.

The dashboard can be configured as a tile or related information in a component to enable end users to use the dashboard directly from PeopleSoft.



Content Reference	Label	Full View	Full View App Class	Select	Title View	Title View App Class	Select	Height	Width
EP_AP_KIBANA_TILE_FI_EARLY_DET	Early Detection and Monitoring	Early Detection and Monitoring		...	Early Detection (Tile)		...	1	2
EP_AP_KIBANA_TILE_FI_TREND_ANA	Trend Analysis	Trend Analysis		...	Trend Analysis (Tile)		...	1	2
EP_AP_KIBANA_TILE_FI_COLL_ANA	ARL Collection Analysis	ARL Collection Analysis		...	ARL Collection Analysis (Tile)		...	1	2
EP_AP_KIBANA_TILE_FI_COLL_PERF	Collector Performance	Collector Performance		...	Collector Performance (Tile)		...	1	2
EP_CA_KIBANA_TILE	Contract Analytics	Contract Header Analysis		...	Contract Header Tile		...	1	1
EP_EX_EXP_KIBANA_TILE	My Proxy Expense Activity	My Proxy Expense Activity		...	My Proxy Expense Activity		...	2	2
EP_EX_EXP_KIBANA_TILE	Travel Policy Violations	Travel Policy Violations		...	Travel Policy Violations (Tile)		...	2	2
EP_EX_PERF_KIBANA_TILE	Performance and Operations	Performance and Operations		...	Performance and Operations		...	2	2
EP_GL_KIBANA_CONTROLLER_METRIC	Controller Key Metrics	Controller Key Metrics	GL_KIB_ADO_FILTER_ControllerFilters	...	Controller Key Metrics (Tile)	GL_KIB_ADO_FILTER_ControllerFilters	...	1	2
EP_GL_KIBANA_DEPT_MANAGER	My Budget	My Budget	GL_KIB_ADO_FILTER_MyBudgetFilters	...	My Budget (Tile)	GL_KIB_ADO_FILTER_MyBudgetFilters	...	1	1
EP_GL_KIBANA_TILE_FI_FIN_TREND	Financial Position Trending	Financial Position Trending		...	Financial Position Trending		...	2	2
EP_GL_KIBANA_TILE_FI_OPR_INSIG	GL Operational Insights	GL Operational Insights		...	GL Operational Insights (Tile)		...	2	2

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After importing the dashboard to the PeopleSoft database, the dashboard can be configured as a tile or related information in a component to enable end users to use the dashboard directly from PeopleSoft.

Navigate to PeopleTools, Search Framework, Administration, and then select the Configure Kibana Dashboards page.

When you configure a dashboard as a tile, you're creating a content reference for the tile. Please note the content reference name should be unique. It should not contain spaces and it should not begin with a digit. You could use underscore. An end user does not see the name of the content reference.

The label appears as a tile header and is seen by an end user. You can use spaces in a label.

The content reference is stored at this location: Fluid Structure Content, Fluid Pages, PeopleSoft Applications

In addition to the Search Administrator role, you must also have the Portal Administrator role, which is required to create content references.

Creating Applications Index Visualizations

Guidelines for setting full view and tile view.

- Full view and tile view are mandatory.
- Tile view – displays the first visualization in a dashboard.
- Full view – displays all the visualizations in a dashboard.

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When you set a dashboard for tile view, the tile displays a visualization when the tile is loaded. If you have multiple visualizations in a dashboard, the first visualization on the dashboard is displayed on the tile. Note that the loading of the visualization on the tile may be delayed because even though only the first visualization is displayed on the tile, the system loads all the visualizations in that dashboard.

When you set a dashboard for full view, it displays all the visualizations in it. You access the full dashboard by selecting the tile or related information.

Creating Applications Index Visualizations

Configure a dashboard as related information.

Component Name	Content Reference	Full View	Full View App Class	Select	Tile View	Tile View App Class	Select
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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When you configure a dashboard as related information of a fluid component, the dashboard appears in the right panel of the component. However, access to the component and dashboard data are controlled by the security privileges assigned to a user. You can map dashboards as related information only to fluid components. The guidelines surrounding full view and tile view are applicable to related information dashboards too.

Use an application class (containing PeopleCode) to filter data based on context and display visualization data accordingly. Ensure that you set the filters on the fields that are part of the visualization.

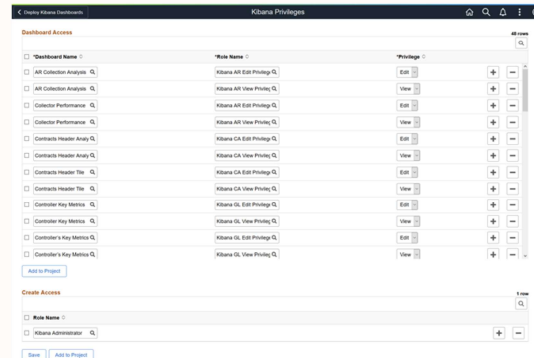
Try out the component by selecting the Test Content button.

Creating Applications Index Visualizations

Step 4: Specifying user privileges for a dashboard.

PeopleSoft provides the required security by mapping the dashboards to PeopleSoft roles.

- Specify roles to edit or view a dashboard.
- Specify roles to create a dashboard.



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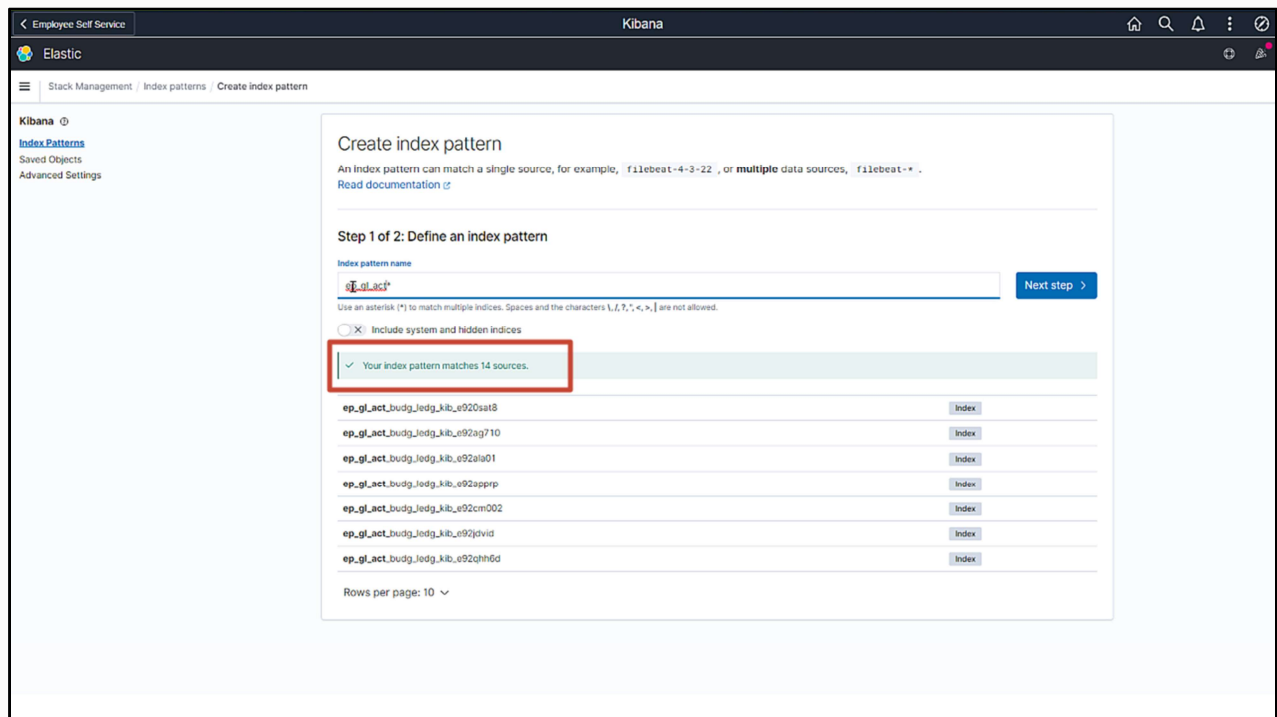
In step 4, you use the Kibana Privileges page to specify user privileges for a dashboard and to create a visualization. PeopleSoft provides the required security by mapping the dashboards to PeopleSoft roles. We discussed the user privileges topic previously in this video.

Demonstration: Creating Applications Index Visualizations

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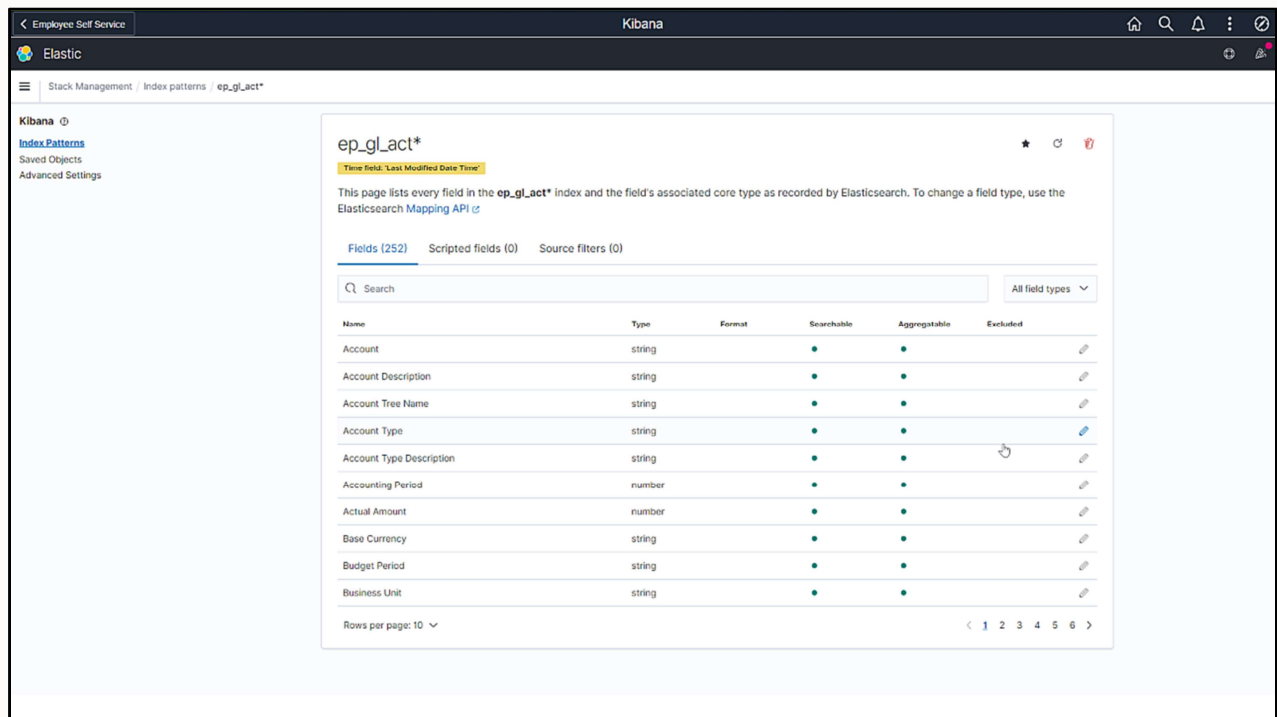
In the following demonstration, we'll create a visualization and a dashboard, and go through the process of importing the dashboard, setting the dashboard as a tile or related content, and specifying user privileges.



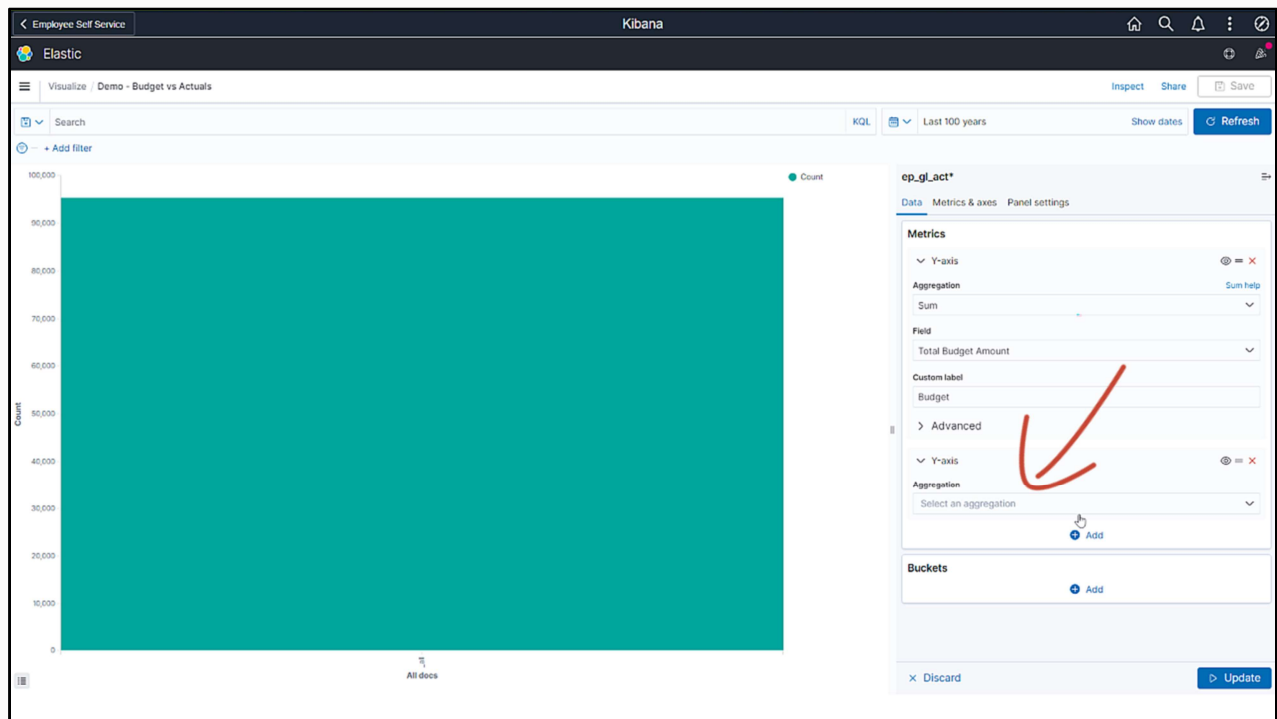
Navigate to Reporting Tools, Kibana. The Manage page enables you to view index patterns, saved objects, and advanced settings.

The Create index pattern page displays the application data indexes that are indexed in Elasticsearch. The indexes are suffixed with a database name.

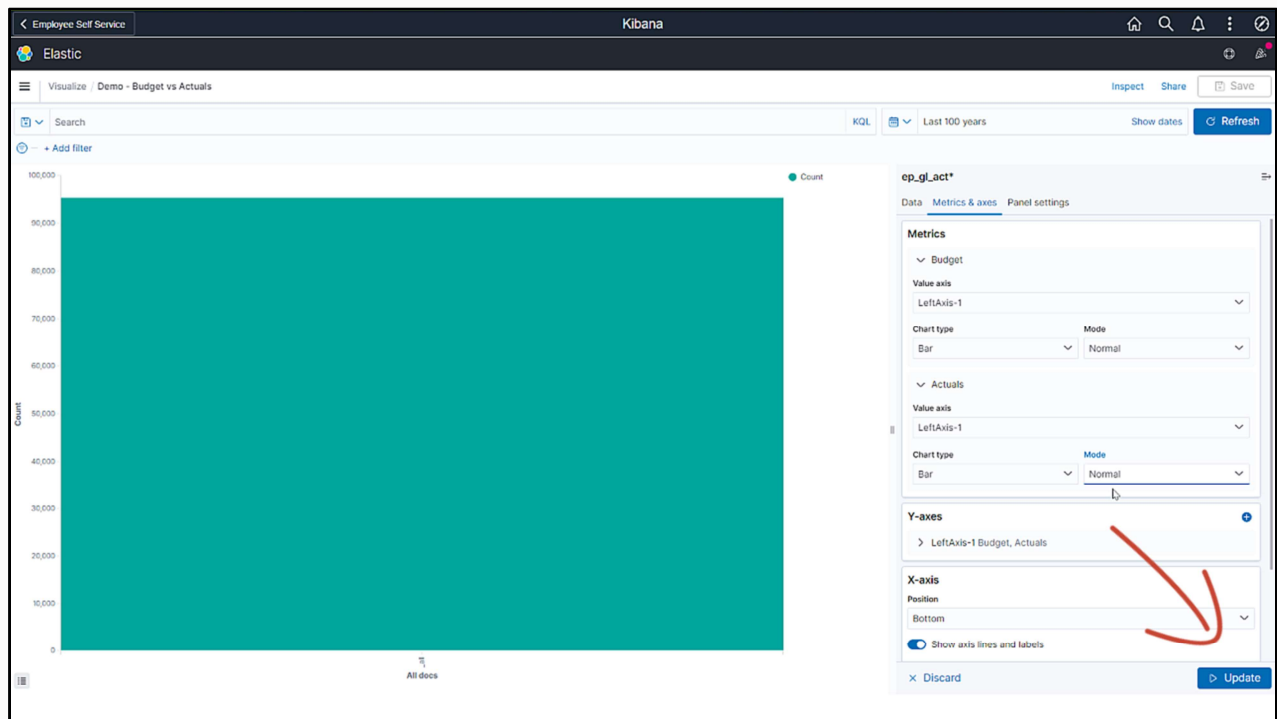
If the search definition name that you entered matches the indexed search definition, a message displays the number of sources that match the search definition.



On creating an index pattern, Kibana displays the mapping of all the fields in the index pattern.



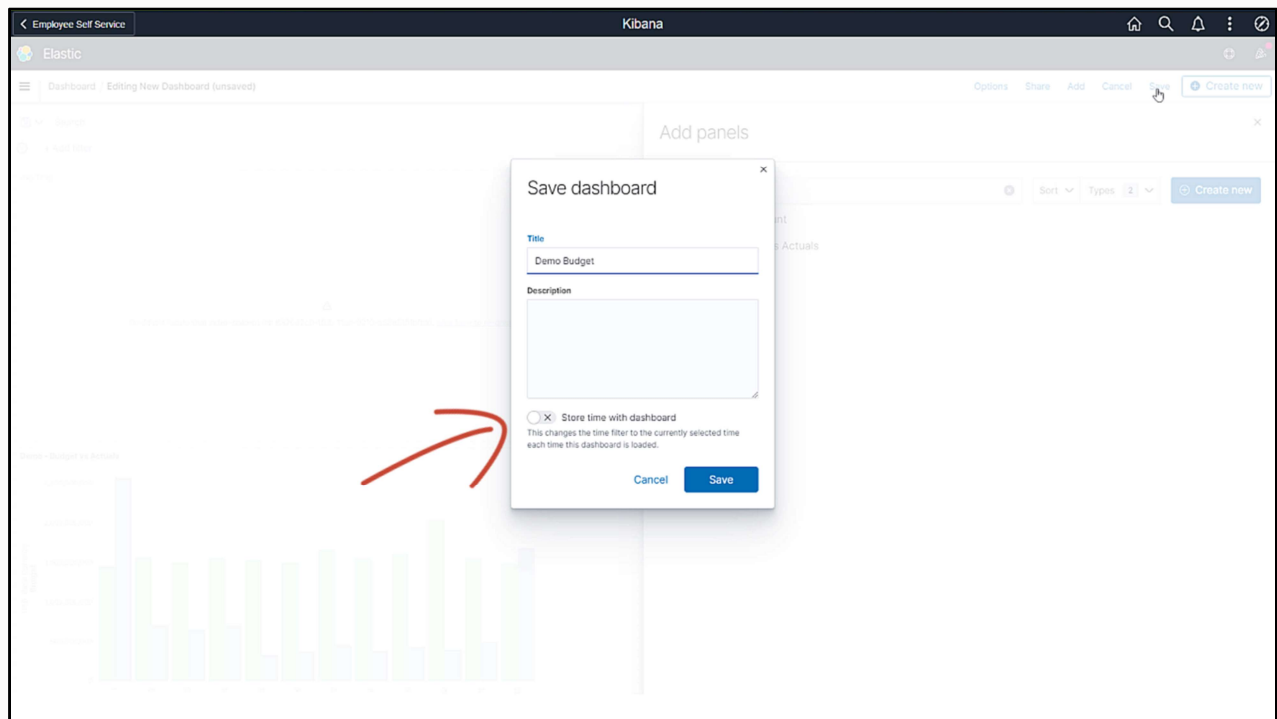
For the first visualization we'll use the vertical bar type. We'll use the index pattern that we initially created as the source for this visualization. We'll name the visualization as Demo – Budget vs Actuals. In this visualization we'll depict the budget and the actual allocated amount – where the vertical bars depict the budget and actual allocated amount.



Specify the following:

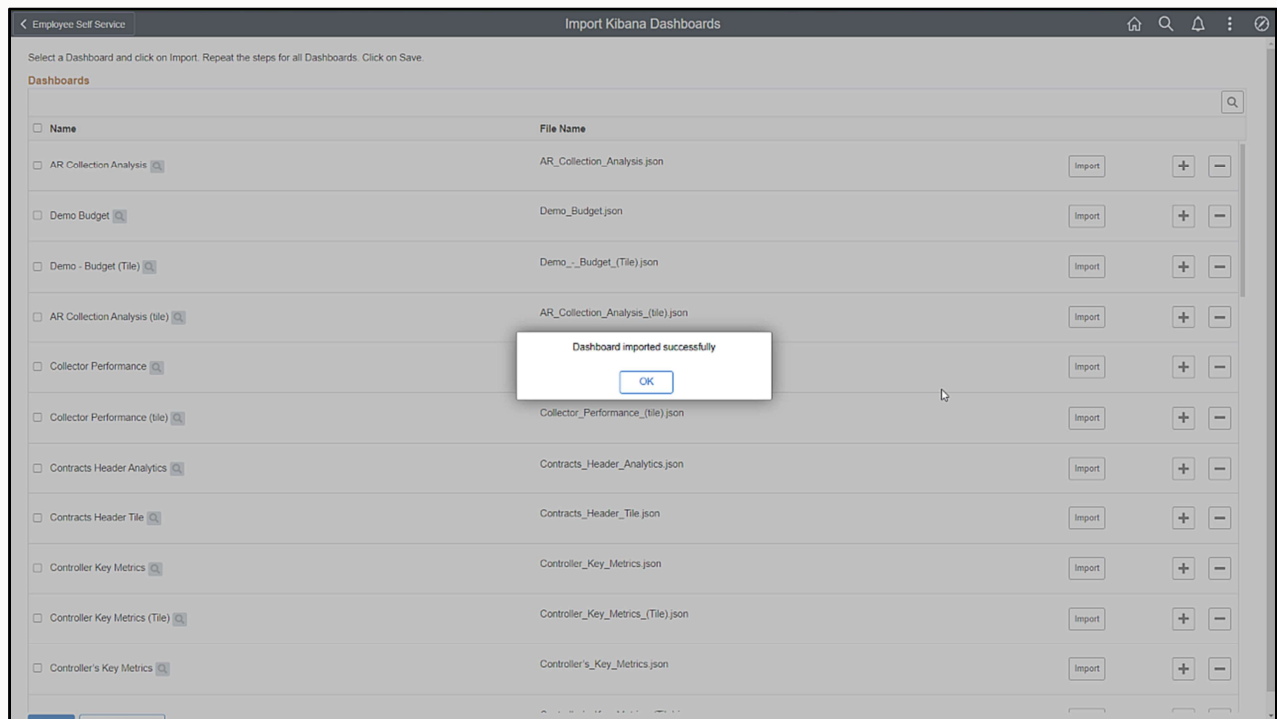
- Base currency.
- Accounting period.
- Vertical bars to appear as normal.

The Update action renders the visualization as per the options and values you selected. The visualization is saved in Kibana.

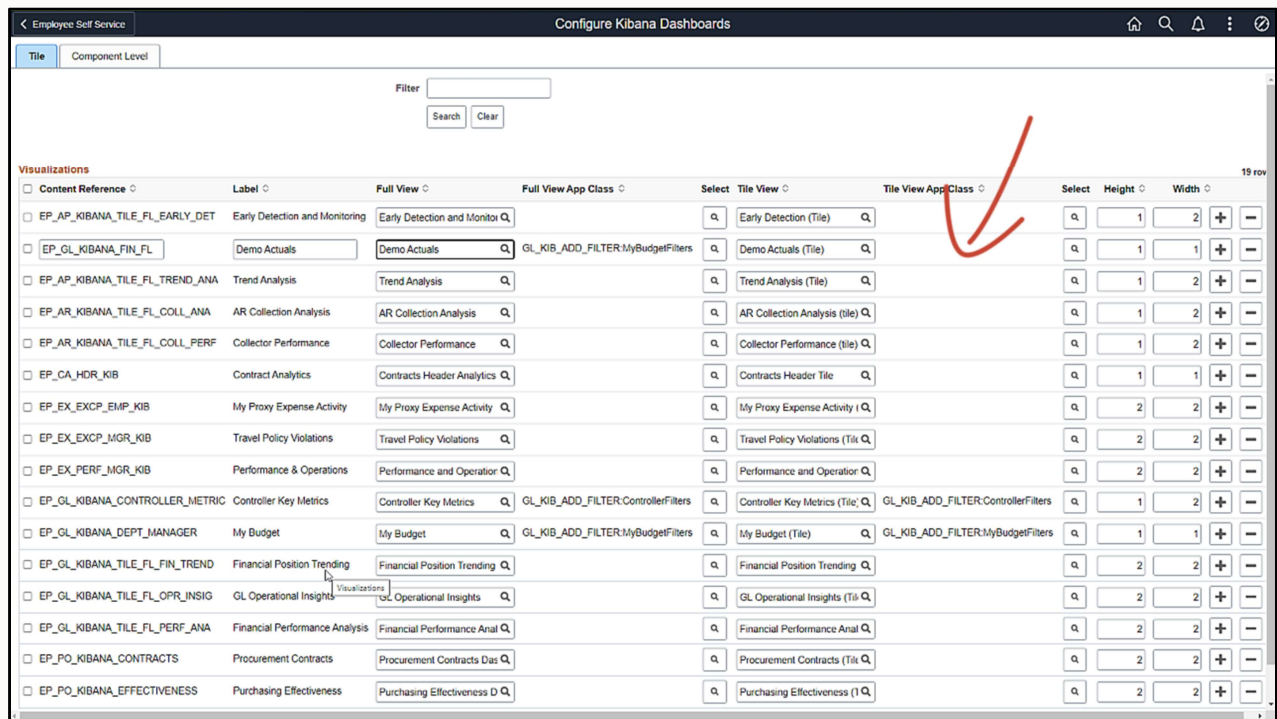


After creating a visualization, you create a container to hold the visualization. A dashboard is a container that holds one or more visualizations. You may add the visualization to an existing dashboard or create a new dashboard. Create a new dashboard called Demo - Budget. On the Add Panels page, you can choose the existing visualizations to add to the dashboard.

The dashboard name should be unique. You may add a description for the dashboard. When you save a dashboard, you can save the time range along with the dashboard so that the dashboard displays data as per the time range. The new dashboard is listed on the Dashboard page.

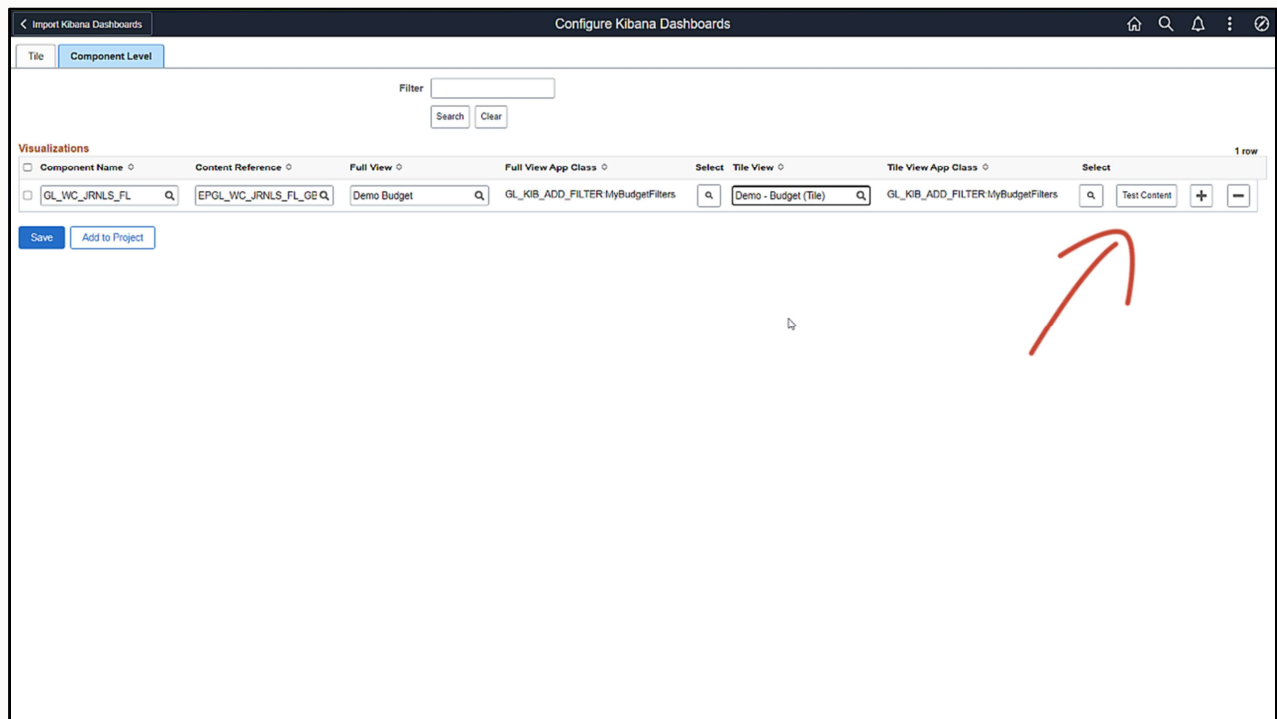


Select Home to return to the PIA homepage. Navigate to PeopleTools, Search Framework, Administration, and then select Import Dashboards from Kibana. Either use the search feature or scroll to the desired dashboard to import the two dashboards that we created, that is, Demo Budget and Demo Budget (Tile) dashboards. After the import action, you should save the imported dashboards.



Navigate to PeopleTools, Search Framework, Administration, and then select Configure Kibana Dashboards.

1. Enter a content reference for the new tile.
2. Enter a label, which appears on the tile.
3. Choose Demo Actuals for full view.
4. Choose MyBudgetFilters as the application class that sets the business unit of a visualization for different users.
5. Choose Demo Actuals (Tile) for the tile view.
6. Use the MyBudgetFilters application class.
7. Save the settings for the dashboard as a tile.



Use the component level tab to configure a dashboard as related information.

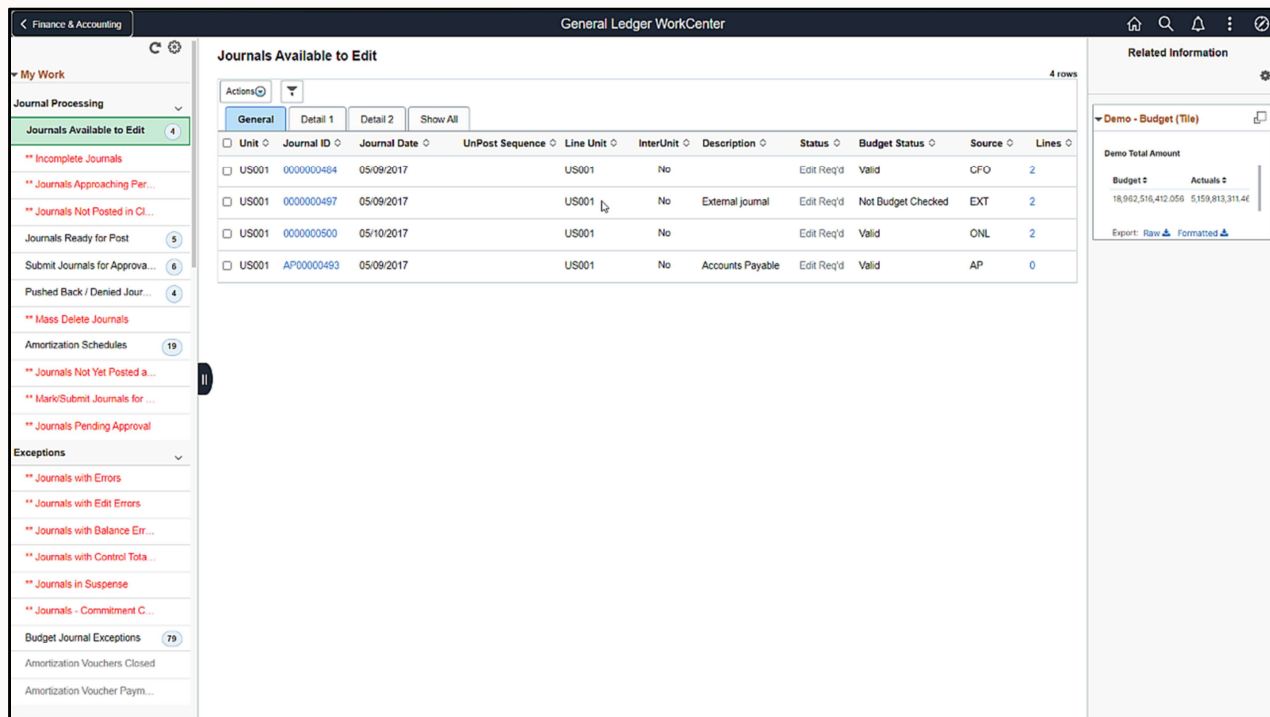
1. Either choose or enter the component information on which the dashboard will appear. Here, we'll use the GL WorkCenter component.
2. The content reference specific to the component is displayed.
3. Use the Demo Budget dashboard for full view.
4. Use the MyBudgetFilters application class.
5. Use the Demo Budget (Tile) for tile view.
6. Use the MyBudgetFilters application class.
7. Before you save, you may test the related information by selecting the Test Content button.

Component Level Kibana Privileges

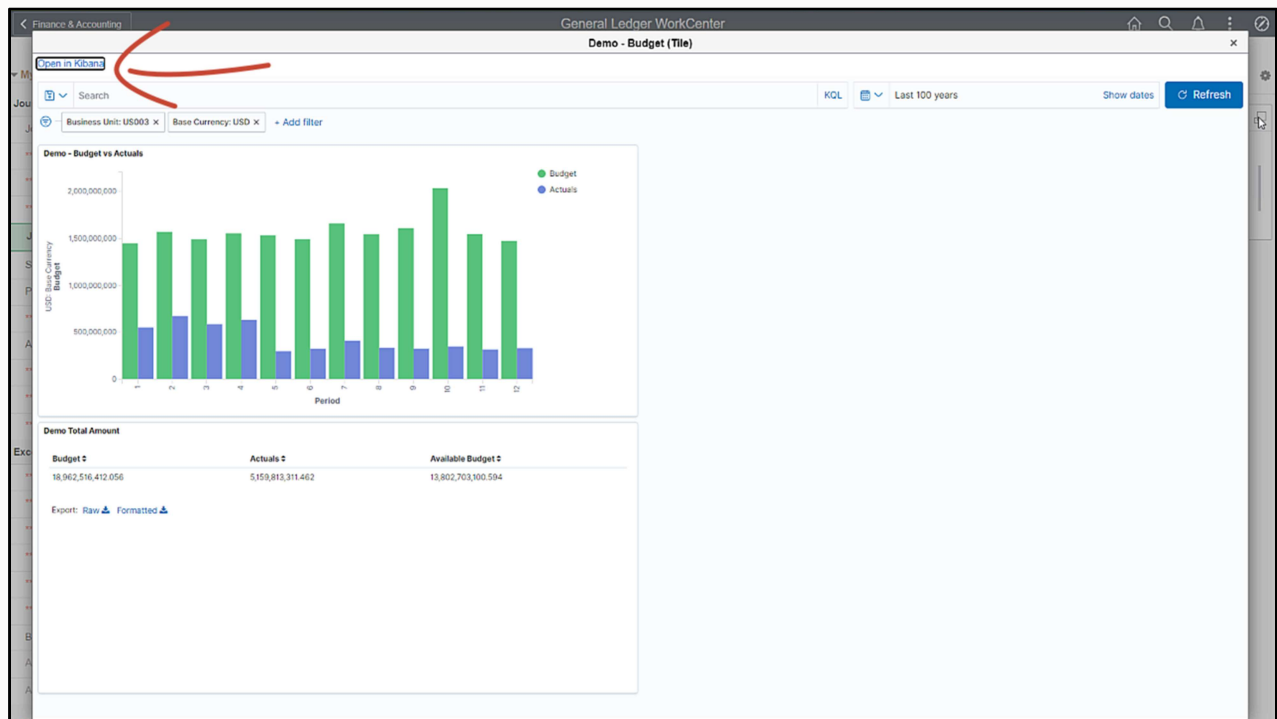
Dashboard Access 49 rows

Dashboard Name	Role Name	Privilege		
AR Collection Analysis	Kibana AR Edit Privilege	Edit	+	-
Demo Budget	Kibana GL Edit Privilege	Edit	+	-
AR Collection Analysis	Kibana AR View Privilege	View	+	-
Collector Performance	Kibana AR Edit Privilege	Edit	+	-
Collector Performance	Kibana AR View Privilege	View	+	-
Contracts Header Analytics	Kibana CA Edit Privilege	Edit	+	-
Contracts Header Analytics	Kibana CA View Privilege	View	+	-
Contracts Header Title	Kibana CA Edit Privilege	Edit	+	-
Contracts Header Title	Kibana CA View Privilege	View	+	-
Controller Key Metrics	Kibana GL Edit Privilege	Edit	+	-
Controller Key Metrics	Kibana GL View Privilege	View	+	-
Controller's Key Metrics	Kibana GL Edit Privilege	Edit	+	-
Controller's Key Metrics	Kibana GL View Privilege	View	+	-
Early Detection and Monitor	Kibana AP Edit Privilege	Edit	+	-
Early Detection and Monitor	Kibana AP View Privilege	View	+	-
Financial Performance Anal	Kibana GL Edit Privilege	Edit	+	-
Financial Performance Anal	Kibana GL View Privilege	View	+	-
Financial Position Trending	Kibana GL Edit Privilege	Edit	+	-
Financial Position Trending	Kibana GL View Privilege	View	+	-

Navigate to PeopleTools, Search Framework, Administration, and then select Assign Kibana Dashboard Roles. Use this page to specify edit or view privileges. You can also use this page to specify privilege for a role to create a visualization/dashboard. When you save the user privileges, Search Framework sets the security for the content reference on the Content and Structure page.



To use the dashboards, we'll log in as a regular user. Log in as GLS2. Here we'll see how a tile set as related information can be viewed by a user. The dashboard is configured as related information on the GL WorkCenter component.



Because the edit privilege is set for the user, you can see the Open in Kibana link at the top-left corner. This link opens the dashboard in Kibana enabling you to edit it. You should exercise caution before making any changes because the changes you make will affect the original visualization.

Additional Resources

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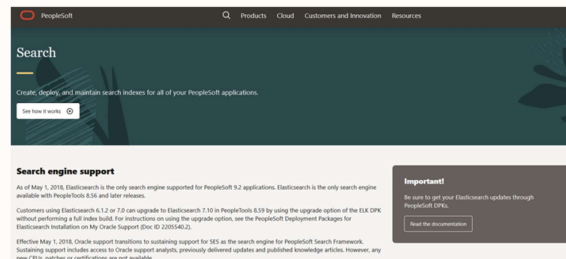


Before we complete this session, let's take a look at the various sources of additional information.

Additional Resources

Access these resources for additional information:

- Companion Slides for this Spotlight Video available from Oracle Learning Library
- Using Field Aliases in Kibana Visualizations in PeopleTools 8.58.13/8.59.03 and Later (Doc ID 2787722.1).
- PeopleSoft Applications Updates and Fixes for Field Alias in Kibana (Doc ID 2795462.1).
- PeopleTools Elasticsearch Home Page (Doc ID 2205540.2).
- PeopleSoft Information Portal (www.peoplesoftinfo.com)
- PeopleTools Search Technology documentation



You can download the Companion Slides, with images and notes from this video, from the Oracle Learning Library.

Using Field Aliases in Kibana Visualizations on My Oracle Support provides information on using field aliases and other related information.

The PeopleSoft Applications Updates and Fixes for Field Aliases in Kibana on My Oracle Support includes information on dashboards that are re-delivered with field aliases.

The Elasticsearch Home Page includes installation documentation and implementation documentation for PeopleSoft Search Framework, including Elasticsearch. Contains links to troubleshooting and support documentation to assist with the installation and implementation.

On the PeopleSoft Information Portal (www.peoplesoftinfo.com), you can find Elasticsearch Spotlight Series videos, Elasticsearch Concept page, and Analytics Concept page that contain information about how to use Kibana in PeopleSoft. And refer to the PeopleTools Search Technology documentation from Oracle Help Center.

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