Hewlett Packard Enterprise

HPE Find

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Administration Guide

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Part I: Getting Started

This section provides an introduction to HPE Find, and describes how to install the application and perform the initial set up.

Chapter 1: Introduction

HPE Find is an end-user search interface for HPE IDOL.

HPE Find supports the following functionality:

- **Advanced search**. Refine searches by database, date, or parametric values.
- **Document preview**. HPE Find uses the HPE IDOL View component to render near-native views of the source documents for your search results in a web browser. The Document Preview feature works with HPE View server and documents in source repositories.
- **Query manipulation**. HPE Find applies synonym and blacklist rules when you use the HPE IDOL Query Manipulation Service as a back end for your search. You can use HPE IDOL Data Admin to create and manage these rules.
- **Results manipulation**. HPE Find applies pin-to-position promotions when you use the HPE IDOL Query Manipulation Service as a back end for your search. You can use HPE IDOL Data Admin to create and manage these promotions.
  - **Results augmentation.** HPE Find applies spotlight promotions when you use the HPE IDOL Query Manipulation Service as a back end for your search. You can use HPE IDOL Data Admin to create and manage these promotions.
- **Document security**. You can set up document security so that only users with appropriate permissions can access the documents, or even see them in search results.
- **Visualizations**. You can view results as topic maps, sunburst charts, maps, or in table format, as well as in list format.
- **Save searches**. You can save searches and run them again later, save a result set as a snapshot, or compare two or more saved searches.

> **NOTE:**
> From the 11.0 release, HPE Find includes HPE Business Information for Human Intelligence (HPE BIFHI); visualizations, saved searches, and comparisons are available only to users with the `FindBI` role (see User Roles, on page 20 for more information).

For more information on additional HPE IDOL components that work with HPE Find, see Required HPE IDOL Components, on page 9 and Optional HPE IDOL Components, on page 10.

Chapter 2: Prerequisites

This section describes the operating systems that HPE Find supports, and the required and optional HPE IDOL components and third-party software needed to run HPE Find. It also specifies how to set up the HPE Find home directory.

Supported Operating Systems and Browsers

HPE Find supports the following operating systems:

- Windows Server 2008, 2008 R2, 2012, or 2012 R2
- Ubuntu 14.04 LTS
- CentOS 6 or 7

HPE Find supports the following web browsers:

- Chrome (latest version)
- Firefox (latest version)
- Internet Explorer 11
- Microsoft Edge

Required HPE IDOL Components

Before you install HPE Find, you must install and configure the following HPE IDOL components:

- HPE IDOL Community 11.3.0 (HPE Find requires access to the ACI and service ports).

  > **NOTE:**
  > IDOL Community requires an IDOL Agentstore subcomponent. However, you do not need to configure the details of the IDOL Community Agentstore component in HPE Find.

- HPE IDOL Content 11.4 (HPE Find requires access to the ACI and service ports).
- HPE IDOL View Server 11.3.0 (HPE Find requires access to the ACI and service ports).

  If you want to use a Connector for viewing, HPE Find also requires access to the ACI and service ports for the connector. See Configure HPE View Server, on page 25.

IDOL Content Data Index Requirements

In general, HPE Find does not place restrictions on the data that you store in the IDOL Content component.

However, if you index your data in XML format, you must use `<DOCUMENTS><DOCUMENT>` as your top level fields, to ensure that HPE Find treats the contents consistently.

IDOL Document Security

You can use IDOL Document Security in HPE Find. In this case, HPE Find requests security information from the IDOL Community component, and uses it to manage your user sessions. The security token contains information about the groups and permissions that the user has, which the IDOL Content component uses to control access to your documents.

For information about how to set up document security in IDOL, refer to the *HPE IDOL Document Security Administration Guide*.

> **NOTE:**
> The IDOL Community security tokens have an expiration time. When the security token expires, the user session in HPE Find ends. The user must log in to HPE Find again to generate a new token.

Optional HPE IDOL Components

The following HPE IDOL components are optional:

- HPE IDOL Query Manipulation Server (QMS) 11.4 (HPE Find requires access to the ACI and service ports).

  > **NOTE:**
  > IDOL QMS sends queries to an IDOL Content component data index. The IDOL Content component that you use must be the same for both QMS and the HPE Find configuration (see Required HPE IDOL Components, on the previous page).
  >
  > IDOL QMS also requires an HPE IDOL Agentstore subcomponent. However, you do not need to configure the details of the HPE IDOL QMS Agentstore component in HPE Find.

- HPE IDOL Statistics Server 11.3.0 (HPE Find requires access to the ACI and service ports).
- HPE IDOL Answer Server 11.4 (HPE Find requires access to the ACI and service ports).

Third-Party Software

HPE Find requires the following third-party software:

- Java 1.8

HPE Find Home Directory

You must specify the HPE Find home directory as a Java system property. Depending on how you are deploying the application, you can do this either in a startup script or within the appropriate application server configuration.

The home directory contains the following files:

- The HPE Find configuration file (`config.json`). If this file is not found, HPE Find generates a default configuration file when the application starts.

  You can edit the configuration file either from the Settings page in the application (recommended), or manually in a text editor. If you manually edit the file, you must restart HPE Find for any configuration changes to take effect.

- The HPE Find customization folder. This directory contains additional configuration files for additional customizable features, sure as dashboards and application links. See Configure Dashboards, on page 39 and Configure Applications, on page 63.

- The HPE Find logs folder. This directory contains the application log files, which contain details of application usage and any errors.

- The HPE Find data folder. This directory contains the local database for the saved searches.

If you need to contact support, include the HPE Find home directory as a zip file when you send your query.

> **NOTE:**
> By default, the installer stores the HPE Find home directory in the `ProgramData` folder, which might be hidden by default in Windows.

Chapter 3: Install HPE Find

HPE Find is available as an interactive installer.

Alternatively, you can install HPE Find as an HPE IDOL component by running the HPE IDOL Server installer. For more information, see the *HPE IDOL Server Getting Started Guide*.

> **NOTE:**
> To upgrade to HPE Find 11.4 from an earlier version, you must delete your existing configuration file before you install the new version. HPE also recommends that you back up your database for saved searches before you upgrade.
>
> For more information, see Upgrade HPE Find, on page 16.

Available Formats

HPE Find is available in two different formats:

- an interactive installer
- a zip package containing the components

You can also install HPE Find as an HPE IDOL component by running the HPE IDOL Server installer. For more information, see the *HPE IDOL Server Getting Started Guide*.

Interactive Installer

HPE recommends that you install HPE Find by using the interactive installer. This process creates all required directories, and sets up HPE Find to run as a service. During installation, you specify the HPE Find home directory and the paths for installation.

Zip Package

The HPE Find zip package contains an executable Java `.war` file. Unlike traditional Java web applications, HPE Find does not require a stand-alone application server (for example, Tomcat), because one is embedded within the `.war` file.

Install HPE Find with the Interactive Installer (Recommended)

Use the following procedure to install HPE Find on Windows or Linux by using the interactive installer.

To install HPE Find

- Run the installer as an Administrator user, and then follow the instructions, supplying the correct information when prompted.

HPE Find is installed at the location you specify. HPE Find is available on your machine as a service named `HPEFind`, which you can start and stop from the Windows services manager.

> **NOTE:**
> By default, the installer stores the HPE Find home directory in the `ProgramData` folder, which might be hidden by default in Windows.

Before you start HPE Find, follow the steps in Run Initial HPE Find Configuration, on page 19, and ensure that you have set up the required user roles in HPE IDOL Community. A user must be a member of at least the `FindUser` role to log into HPE Find. See User Roles, on page 20 for more information.

Install HPE Find Manually Using the Zip Package

The following sections describe how to install HPE Find by using the zip package.

Use the Executable .war File to Run HPE Find

Use the following command to run HPE Find:

```
java -Dhp.find.home=[home directory] -Dserver.port=[port] -jar find.war -
uriEncoding utf-8
```

> **NOTE:**
> On Linux, HPE recommends that you use `/opt/find` as the install directory and `/opt/find/home` as the home directory. On Windows, the home directory might be `C:\HPE\Find`. In either case, ensure that the user running HPE Find has read and write permissions for the home directory.

Install HPE Find as a Service on Linux

Use the following procedure to install HPE Find as a service on Linux.

1. Create a user and group to run HPE Find. HPE recommends that you use `find` as both the user name and the group name:

   ```
   $ useradd find
   ```

2. Create a directory in which to install HPE Find. HPE recommends that you use /opt/find as the installation directory:

```
$ mkdir /opt/find
```

3. Create a directory to serve as the home directory for HPE Find. HPE recommends that you use /opt/find/home as the home directory:

```
$ mkdir /opt/find/home
```

4. Copy find.war to the installation directory:

```
$ cp find.war /opt/find/
```

5. Recursively change the ownership of the installation directory:

```
$ chown –R find:find /opt/find
```

6. Deploy the startup script.

System V

```
$ cp install/linux/sysv/find.sh /etc/init.d/find
$ chmod +x /etc/init.d/find
$update-rc.d find defaults 99
```

Upstart

```
$ cp install/linux/upstart/find.conf /etc/init/
$ chmod +x /etc/init/find.conf
```

7. If you have used any non-default paths or settings during installation, edit the startup script to contain the corresponding values.

8. Start the application.

System V

```
$ sudo /etc/init.d/find start
```

Upstart

```
$ sudo service find start
```

Install HPE Find as a Windows Service

To run HPE Find as a Windows service, you must download a copy of the Windows service wrapper from https://github.com/hpe-idol/winsw, and change the name of the winsw.exe executable file to find.exe.

Ensure that the HPE Find home directory and port are correctly configured in the find.xml configuration file. You must also ensure that find.exe, find.xml, and find.war are all in the same directory.

Run the following command from the Windows command line to install HPE Find as a service:

```
find.exe install
```

> **NOTE:**
> You can also use the following commands with `find.exe`:
>
> - `uninstall`
> - `start`
> - `stop`
> - `status`
>
> For more information, see https://github.com/hpe-idol/winsw.

Upgrade HPE Find

To upgrade to HPE Find 11.4 from an earlier version, you must delete your existing configuration file. The configuration files might not be compatible, and if you attempt to run HPE Find with a configuration file from an earlier version, it might have unexpected results.

HPE also recommends that you back up your database for saved searches before you upgrade (that is, copy the `data` directory in the home directory). During the upgrade process, HPE Find migrates the database to the new version. If you need to revert to the earlier version of HPE Find, you must restore the `data` directory and configuration file.

To upgrade HPE Find

1. Back up the `data` directory in the HPE Find home directory. This directory contains the database file that stores saved search data. The backup is required if you need to revert to the previous version of HPE Find after upgrading.

2. Back up the `config.json` file in the HPE Find home directory, to use as a reference.

3. Delete the `config.json` file from the home directory.

4. Run the new HPE Find installer, or replace the `.war` file in the HPE Find home directory. You must use the same home directory as the installed version of HPE Find.

5. Follow the installation and setup instructions in Install HPE Find, on page 13.

   The installer migrates your database to the latest version, and generates a new `config.json` file for the new

   > **TIP:**
   > You can use the backup copy of the `config.json` file as a reference to specify your configuration settings in the upgraded version.

Revert to a Previous Version of HPE Find

The HPE Find upgrade process modifies the database, and the configuration settings might not be compatible between different versions. If you need to revert to a previous version of HPE Find, you must restore the configuration file and `data` directory to the earlier version.

> **CAUTION:**
> Any data that you save after you upgrade HPE Find is lost when you revert to an earlier version.

To revert to a previous version of HPE Find

1. Uninstall the existing version of HPE Find Administration Guide.

2. Follow the instructions in Install HPE Find, on page 13 to install the previous version.

3. Restore the backup copies of `config.json` and the `data` directory that you made during the upgrade process to the HPE Find home directory.

Chapter 4: Set Up HPE Find

This section describes how to run the initial required HPE Find configuration to get the application running and working with your back end HPE IDOL components.

For more information about configuration and customization, see Configure HPE Find, on page 23

Run Initial HPE Find Configuration

Use the following procedure to configure HPE Find.

1. Run HPE Find once without a `config.json` file in your HPE Find home directory to generate a default file.

2. Open the generated `config.json` file in a text editor. Find the generated default user name and password (`login.defaultLogin.username` and `login.defaultLogin.password`).

3. Go to `http://FindHost:FindPort`, where `FindHost` is the IP address or name of the machine on which HPE Find is installed, and `FindPort` is the port that you have installed HPE Find on (for example, `8080`).

4. Log in with the default user name (this is normally set to `admin`) and password from the configuration file.

   The Settings page opens.

5. Fill in the details of your backend HPE IDOL servers. Click **Test Connection** for each server to confirm that the HPE Find server can establish a connection to each server.

6. Click **Save Changes**.

   HPE Find is now ready for use.

   > **NOTE:**
   > To return to the Settings page at any time, click the cog in the top right corner of the application, and then click **Settings** in the list of options.

For more information about configuring HPE Find, see Configure HPE Find, on page 23.

Configure HPE Statistics Server

HPE Find can optionally use HPE Statistics Server to store statistics about user searches. For example, it tracks statistics about the times users open a source document or preview, and the times a user leaves a search without viewing any results.

By default, HPE Find statistics are not enabled. You can enable statistics by configuring HPE Statistics Server on the HPE Find Settings page. See Run Initial HPE Find Configuration, on the previous page.

In addition, you must use a special configuration file for your HPE Statistics Server, which contains the appropriate statistics definitions for HPE Find. This configuration file is included in the HPE Find ZIP package.

> **NOTE:**
> The HPE Find interactive installer does not include the configuration file.

To configure HPE Statistics Server

1. Open `install/statsserver/statsserver-required-config.cfg`. This file contains the statistics definitions that the HPE Statistics Server requires.

2. Copy the definitions from `statsserver-required-config.cfg` to your HPE Statistics Server configuration file.

   > **NOTE:**
   > If you want to include extra statistics definitions that are not included in `statsserver-required-config.cfg`, those extra statistics must have an HPE IDOL name in order for the server to start.

3. Restart HPE Statistics Server.

For information on how to send statistics to HPE Statistics Server, see the *HPE Query Manipulation Server Administration Guide*.

User Roles

HPE Find user roles control the access that a particular user has to the HPE Find user interface. Each role provides access to a particular set of HPE Find features, and you assign your users to one or more roles that they need to access the features that you want them to use.

Users and roles are stored in the HPE IDOL Community component. HPE Find requires three roles in HPE IDOL Community:

- `FindUser`. The search end-user role.
- `FindAdmin`. This role controls access to the Settings page. HPE does not recommend that you grant the `FindAdmin` role to end users who do not have system administrator responsibilities.
- `FindBI`. Users with the `FindBI` role have access to HPE BIFHI features in HPE Find (Sunburst charts, topic maps, comparisons, saved searches, and so on).

> **NOTE:**
> Users must belong to the `FindUser` role to log in to the application; users with only the `FindAdmin` or `FindBI` roles cannot log in.

Create HPE IDOL Community Roles

HPE Find does not automatically create the roles in HPE IDOL Community. You, or your IDOL system administrator, must create these roles.

The following procedure describes how to create the roles directly in HPE IDOL Community.

To create HPE IDOL Community roles

1. In your web browser, go to `http://CommunityHost:CommunityPort/action=admin` (where *CommunityHost* is the IP address or name of the machine on which HPE Community is installed, and *CommunityPort* is the port that you have installed HPE Community on).

   The HPE IDOL Admin interface for Community opens.

2. Click **Control > Roles**.

3. Click **Add Role** to create the roles.

   > **TIP:**
   > You can also use this page in the HPE IDOL Admin interface to assign users to the roles, by selecting a role and clicking **Add User**.
   >
   > To manage the users in your system, click **Control > Users**.

Clustering

HPE Find does not currently support clustering of the web application.

Part II: Configure HPE Find

This section provides information about more advanced configuration for HPE Find to customize the display and functionality.

Chapter 5: Configure HPE Find on the Settings Page

This section describes the features that you can configure by using the Settings page in the HPE Find interface, and gives instructions on how to set up those features.

Configure HPE View Server

HPE View Server converts original documents into HTML format for viewing in a Web browser. It can also highlight search terms in the document, when displaying a search results. HPE Find uses HPE View Server to create the document previews in searches.

There are two viewing modes. The appropriate one to use depends on how you index your documents:

- **Reference Field**. In this mode, HPE Find requests documents from View Server by using a document reference field, which you can configure. In this case, the reference must be sufficient to identify the original location of the document, such as a URL or file path (if you configure HPE View Server to view local files).

- **Connector**. In this mode, HPE Find uses a connector to retrieve the original document. The connector can retrieve the original document from the source repository, which simplifies the storage and retrieval. You must provide the host and port of the connector to use. HPE Find uses the `AUTN_IDENTIFIER` document field and connector group to request the original document.

  You can use any connector that supports the View action. If you want to retrieve documents from multiple external repositories, you can use the Distributed Connector. For more information about the HPE IDOL configuration for this set up, refer to *IDOL Expert*.

The option that you choose depends on how you store and access your documents. If you can access all your documents by file path or URL, use the **Reference Field** option. If you use an external repository with its own authentication to store your documents (such as Microsoft Exchange, or Microsoft SharePoint), then you can use the **Connector** mode to simplify access and retrieval.

Users with the **FindAdmin** role can use the Settings pages to configure the HPE View Server.

To configure HPE View Server

1. In the toolbar on the top right of the page, click .
2. In the list, click **Settings**.

   The Settings page opens.
3. Find the **View** section, and specify the host and ACI port of your HPE View Server.
4. From the **Viewing Mode** list, select the mode to use. Depending on the mode that you use, further options are required:

- In **Reference Field** mode, specify the HPE IDOL reference field to use to identify your documents in HPE View Server.

- In **Connector** mode, specify the host name and ACI port of the connector to use to retrieve documents.

5. Click **Save Changes**.

Configure HPE MMAP Integration

You can configure HPE Find to integrate with HPE Media Management and Analysis Platform (HPE MMAP). Configuring HPE Find in this way means that you can open indexed rich media documents in the HPE MMAP application from a button in preview mode or document detail view, for richer video and audio exploration.

To configure HPE MMAP integration

1. Click the cog in the top right corner of the application, and then click **Settings**.

2. In the **MMAP** section, enter the HPE MMAP host and port, for example `http://localhost:8080`.

   > **NOTE:**
   > This URL must be resolvable by the HPE Find end-user's Web browsers, because it is used for hyperlinks between HPE Find and HPE MMAP (rather than being used for HPE Find and HPE MMAP server-to-server communications).

3. Click **Enable MMAP**.

4. Click **Save Changes**, then confirm your changes.

Configure Map Visualizations

You can enable the Map visualizer to display the location data for results documents. When you enable this functionality, the HPE Find user interface includes a Map View results visualizer tab.

To enable map visualizations

1. Click the cog in the top right corner of the application, and then click **Settings**.

2. In the **Mapping** section, specify the following settings:

   - **Tile Server Url Template**. The full Slippy Map Tilenames (SXYZ) URL for requesting a tile from an accessible tile server, with the x, y, and z coordinates and S server replaced with curly brace variables. For example, `https://{s}maps.example.com/tiles/{z}/{x}/{y}.png`.

   - **Attribution**. An optional string to display in the bottom right corner of the map (for example, a copyright statement).

3. In the **Results to load each time** section, choose the maximum number of location points that you want to be able to render on your map view.

   > **NOTE:**
   > Setting this to a high number makes the map slow to render.

4. Click **Enable Mapping**.

5. Click **Save Changes**, and then confirm your changes.

You can use any image file type that your browser supports.

There are many compatible tile servers available as a service over the internet, including Mapbox (https://www.mapbox.com), MapQuest (http://www.mapquest.com/), and most OpenStreetMap servers.

> **CAUTION:**
> Ensure that you check the terms of use before you use these services.

You can also implement your own Tile Map Service to work with the Map Visualizer, as long as you use an accepted format for the tile names. For more information, see http://leafletjs.com/reference.html#url-template.

Enable Polling for Saved Searches

Users with the `FindBI` role can save their searches in HPE Find as a tab which they can return to later. Because databases are often updated or changed, the result set might change over time. You can configure HPE Find to poll for any changes to the saved search results since the search was saved, and then display the number of new results in the tab.

To enable or disable polling

1. Click the cog in the top right corner of the application, and then click **Settings**.

2. In the **Saved Searches** section, click **Enable Polling** or **Disable Polling** as appropriate.

3. Click **Save Changes**.

To specify the interval between polling attempts

1. Click the cog in the top right corner of the application, and then click **Settings**.

2. In the **Saved Searches** section, type the number of minutes that should elapse in between polling attempts in the **Polling Interval (in minutes)** field.

3. Click **Save Changes**.

> **NOTE:**
> Polling for saved searches counts as user activity, and delays a session timeout for the user. If your polling interval is shorter than your session timeout, the polling causes the session to continue until you close the browser window. See .

Upload a Custom Logo

You can modify HPE Find to display a custom logo, by using the Customizations settings page. This page allows you to upload and select a logo for the HPE Find splash screen (available to users who do not have the **FindBI** user role), and the navigation bar.

To upload a custom logo

1. In the toolbar on the top right of the page, click ⚙.
2. In the list, click **Customizations**.

   The Customizations page opens.
3. To add a new main splash screen logo, click the upload box in the Splash Screen Logo section of the page and navigate to the file that you want to upload, or drag a logo file to the upload box.
4. To add a new navigation bar logo, click the upload box in the Small Logo section of the page and navigate to the file that you want to upload, or drag a logo file to the upload box.
5. To change the logo to use, find your logo in the appropriate list and click **Apply**.
6. Refresh your Web browser to display your changes.

Chapter 6: Configure HPE Find Using the Configuration File

This section describes the features that you can configure by editing the `config.json` file in the HPE Find home directory, and gives instructions on how to set up those features.

Configure User-Friendly Names for Fields and Values

You can configure HPE Find to display user-friendly names for fields and values in the user interface, in place of the values from your raw data. HPE Find uses the display names that you specify in the parametric filter lists, as well as document metadata and the fields in document previews.

> **NOTE:**
> You cannot modify the display name for the standard metadata fields that display in the full page document preview (for example, `title`, `reference`, and `database`).

You configure user-friendly display names by adding and modifying the `fieldsInfo` section of the HPE Find configuration file.

To configure display names for fields and values

1. Go to the HPE Find home directory.

2. Open `config.json` in a text editor.

3. Find or add the `fieldsInfo` section.

4. Create a property and definition object for each field that you want to modify. You can use the following properties:

`names`	(Array, strings) An array of raw field names that you want to apply the field and value display names to.
`displayName`	(String) The user-friendly display name to use in the HPE Find user interface. **NOTE:** If you specify a display name, HPE Find applies it to all the fields in the `names` array. This might result in multiple identical field names listed in the parametric filter list, corresponding to the different raw fields in your data. In general, HPE recommends that you do not specify the display name if you set multiple values in `names`. You can specify multiple field names without the display name to normalize the field values to consistent display values.
`values`	(Object) A JSON object to specify a field value and the display value to use for that value. This object has the following subproperties: • `value` (string). The raw data value. • `displayValue` (string). The user-friendly display name to use for this value.
`advanced`	(Boolean) A Boolean value that specifies whether to display this field in document previews. For more information, see Configure Fields to Show or Hide in Document Previews, on the next page.

For example:

```
"fieldsInfo": {
   "country": {
      "names": [ "COUNTRY_ORIGIN" ],
      "displayName": "Country",
      "values": [ { "value": "UK", "displayValue": "United Kingdom of Great
Britain and Northern Ireland" } ]
   },
   "elevation": {
      "names": [ "PLACE_ELEVATION" ],
      "displayName": "Place Elevation (ft)"
   }
}
```

The user interface displays a field called *Country*, with the value *United Kingdom of Great Britain and Northern Ireland*, and a *Place Elevation (ft)* field.

5. Save the file, and then restart HPE Find to apply your configuration changes.

Configure Fields to Show or Hide in Document Previews

You can configure HPE Find to show or hide particular fields in the results list document previews.

In the default HPE Find configuration, the document preview does not show any fields for text documents. For videos, it shows the URL, content type, and transcript (if one exists).

When you expand the preview, the full document display page has a metadata panel. This shows some standard document metadata, such as the title, reference, and date, as well as an automatically generated document summary. By default, it also includes the URL for all documents, and the content type for videos. You can also display any additional IDOL fields associated with the document by clicking **Show Advanced**.

You can modify your HPE Find configuration to show additional fields in the document previews, or to hide certain fields.

> **NOTE:**
> You cannot hide the standard metadata or document summary in the full document display page.

You control the display of fields in the document preview by modifying the `fieldsInfo` section of the HPE Find configuration file.

To modify the fields that show in the document preview

1. Go to the HPE Find home directory.
2. Open `config.json` in a text editor.
3. Find or add the `fieldsInfo` section.
4. Create a property and definition object for each field that you want to show, or modify an existing one. The following table describes the properties that you can use to modify the field preview display.

`names`	(Array, strings) An array of raw field names that you want to apply the settings to.
`advanced`	(Boolean) A Boolean value that specifies whether to display this field in the document preview.
	Set `advanced` to `false` if you want to display the field as part of the document preview. In this case, the field is displayed in the preview, and also in the metadata section of the document display page when a user expands the preview.
	Set `advanced` to `true` to hide the field in the document preview. In this case, the field is available only in the document display page when a user clicks **Show Advanced** to show all available fields.
	> **NOTE:** > For videos, the document preview always includes the transcript field

	if there is a transcript (that is, you cannot hide this transcript in the preview).
`displayName`	(String) The user-friendly display name to use in the HPE Find user interface. For more information, see Configure User-Friendly Names for Fields and Values, on page 29.
`values`	(Object) A JSON object to specify a field value and the display value to use for that value. For more information, see Configure User-Friendly Names for Fields and Values, on page 29.

For example:

```
"fieldsInfo": {
   "previewFields": {
      "names": [ "author", "description" ],
      "advanced": false
   },
   "advancedFields": {
      "names": [ "contenttype" ],
      "advanced": true
   }
}
```

In this example, HPE Find displays the `author` and `description` fields in the document preview. It hides the `contenttype` field, which is then available only in the expanded document display view when a user clicks **Show Advanced**.

5. Save the configuration file, and then restart HPE Find to apply your configuration changes.

Configure the Order of Parametric Fields

You can change the order in which parametric fields appear in the sidebar.

To configure the order of parametric fields

1. Go to the HPE Find home directory.

2. Open `config.json` in a text editor.

3. In the `parametricOrder` section, list the fields in the order in which you want them to appear. For example:

   `parametricOrder: [company, author, category]`

   > **NOTE:**
   > The names of the parametric fields need to match the IDOL field name.

4. Save the file, and then restart HPE Find to apply your configuration changes.

Any parametric fields that you list in the `parametricOrder` section appear at the top of the list.

If you do not specify a parametric order, by default the fields are listed alphabetically.

If there are parametric fields that you did not list in the `parametricOrder` section, these appear after the ordered fields, in the default sort order (that is, alphabetical). For example:

```
Company
Author
Category
Date Identified
Family
Genus
```

> **NOTE:**
> Any fields that you add to the parametric never show list do not appear in the user interface. Similarly, if you have a parametric always show list, the interface does not display any fields that you specify in the parametric order that do not appear in the always show list. See Configure Parametric Filters to Never Show or Always Show, below.

Configure Parametric Filters to Never Show or Always Show

You can configure HPE Find to always show or never show particular parametric filters. For example, if you have internal filters, you can configure HPE Find so that they do not appear to your users.

To configure parametric filters that you never want to show

1. Go to the HPE Find home directory.

2. Open `config.json` in a text editor.

3. In the `parametricNeverShow` section of the configuration file, specify a list of parametic fields that you never want to show. For example:

   ```
   "parametricNeverShow": ["INTERNAL_FIELD", "FILE_TOO_LARGE", "HAS_BEEN_VIRUS_
   CHECKED"]
   ```

   This setting removes the `INTERNAL_FIELD`, `FILE_TOO_LARGE`, and `HAS_BEEN_VIRUS_CHECKED` parametric fields from the lists of parametric fields sent to the client.

   The user cannot see or work with these fields, although the fields are still visible in the metadata display.

   > **NOTE:**
   > The names of the parametric fields need to match the IDOL field name.

4. Restart HPE Find to apply your configuration changes.

To configure parametric filters that you want to always show

1. Go to the HPE Find home directory.

2. Open `config.json` in a text editor.

3. In the `parametricAlwaysShow` section of the configuration file, specify a whitelist of parametric fields. For example:

   ```
   "parametricAlwaysShow": ["COLOR", "PRICE", "MODEL"]
   ```

In the above example, the COLOR, PRICE, and MODEL fields are the only parametric fields that are available to filter by in the HPE Find user interface. Any fields not included in the always show list are not displayed. If there are any fields in both the always show and the never show lists, the never show list takes priority and the field is not visible.

> **NOTE:**
> The names of the parametric fields need to match the IDOL field name.

4.   Restart HPE Find to apply your configuration changes.

Configure the Trending Visualizer

The Trending visualization displays a chart of document rate against time for the values in a particular field, to show how particular topics change in popularity. The document rate is the number of documents added in the specified time unit (second, minute, hour, day, or year, as labeled on the chart). The appropriate time unit is chosen according to the document rates in your data.

You can configure the date field to use to specify the date and time for your documents, and you can set the number of field values and date values to display on the chart.

Configure the Date Field

The Trending visualizer uses the value of the specified date field as the document date when it creates the chart. By default, HPE Find uses the AUTN_DATE field as the date field, but you can modify this field in the config.json configuration file.

To configure the date field to use for the Trending visualizer

1.   Go to the HPE Find home directory.

2.   Open config.json in a text editor.

3.   Find the trending section, or create one if it does not exist.

4.   Set the dateField property to the name of the field to use. You can use any date field, as long as it was configured as a date field in your IDOL Content component before you indexed the data.

   For example:

```
"trending" : {
    "dateField" : "DOCUMENTDATE",
    "numberOfValues": 10,
    "defaultNumberOfBuckets": 20
}
```

5.   Save the file, and restart HPE Find to apply your configuration changes.

Configure the Number of Field Values to Display

By default, the Trending visualizer displays the trends for ten values in the selected parametric field. You can modify this value in the config.json configuration file.

To configure the number of values to display in the Trending visualizer

1. Go to the HPE Find home directory.

2. Open `config.json` in a text editor.

3. Find the `trending` section, or create one if it does not exist.

4. Set the `numberOfValues` property to the number of values to include in the visualization.

   For example:

```
"trending" : {
   "dateField" : "DOCUMENTDATE",
   "numberOfValues": 5,
   "defaultNumberOfBuckets": 20
}
```

> **NOTE:**
> In the visualization, each value has a line with a different color. There are ten possible colors, so if you set `numberOfValues` higher than ten, some values share a color.

5. Save the file, and restart HPE Find to apply your configuration changes.

Configure the Number of Date Ranges to Use

The Trending visualizer displays document rate against time. It selects date values from your documents and organizes the available dates into the specified number of ranges.

By default, the visualizer divides the total range of dates into 20 equal-sized buckets. Users can modify this number by using a slider, which by default allows them to change the number of buckets between three and 100.

You can modify the default number of buckets to display in the `config.json` configuration file, and the maximum and minimum values to add on the slider.

To configure the number of values to display in the Trending visualizer

1. Go to the HPE Find home directory.

2. Open `config.json` in a text editor.

3. Find the `trending` section, or create one if it does not exist.

4. Set the `defaultNumberOfBuckets` property to the number of date ranges to include in the visualization. Set `minNumberOfBuckets` and `maxNumberOfBuckets` to the minimum and maximum values to use in the UI slider, respectively.

   For example:

```
"trending" : {
   "dateField" : "DOCUMENTDATE",
   "numberOfValues": 5,
   "defaultNumberOfBuckets": 30,
   "minNumberOfBuckets": 5,
   "maxNumberOfBuckets": 40
```

```
}
```

5. Save the file, and restart HPE Find to apply your configuration changes.

Change the Maximum Number of Documents Used to Calculate a Topic Map

The topic map shows a collection of related concepts that are related to the results generated by a search. The choice of related concepts is affected by the number of result documents that are used to generate them. A larger number of documents provides a more accurate reflection of the full result set, but a smaller number is faster to calculate.

The user can control this by using the fast-accurate slider in the topic map view.
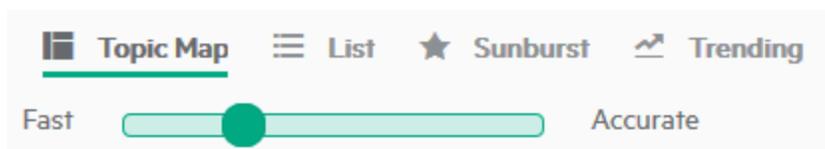
The slider enables the user to choose any number of documents for the calculations, between 50 at the fast end, and a configurable maximum value at the accurate end. By default, the maximum value is 1000.

To change the maximum number of documents to use

1. Go to the HPE Find home directory.
2. Open `config.json` in a text editor.
3. Set `topicMapMaxResults` to the maximum number of results to use to generate the topic map. For example:

   ```
   "topicMapMaxResults": 500
   ```

   This example sets the range to be 50 (fast) to 500 (accurate).
4. Restart HPE Find to apply your configuration changes.

Enable or Disable the Filter Search Bar

The filter search bar is a search bar that enables users to search through the filters in the left-hand panel in the HPE Find user interface.
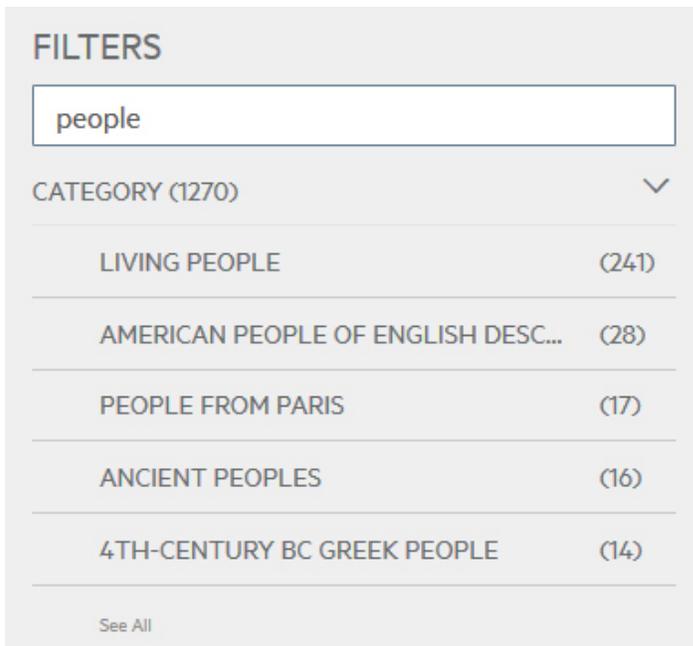
By default, this feature is present only for users with the `FindBI` user role. You can enable or disable the filter search bar for either user role.

To enable or disable the filter search bar

1. Go to the HPE Find home directory.

2. Open `config.json` in a text editor.

3. In the `enableMetaFilter` section, set a user role to `false` to disable the filter search bar, or `true` to enable it. For example:

```
"uiCustomization": {
    "options": {
        "enableMetaFilter": {
          "user": false,
          "bi": true
        },
        "enableRelatedConcepts": {
          "user": true,
          "bi": false
        }
    },
```

Enable or Disable the Related Concepts Panel

The related concepts panel is shown on the right of the HPE Find search page. By default, it is enabled for users without the `FindBI` user role, and disabled for those with the `FindBI` user role. You can disable or enable related concepts for either user role.

To enable or disable the related concepts panel

1. Go to the HPE Find home directory.

2. Open `config.json` in a text editor.

3. In the `enableRelatedConcepts` section, set a user role to **true** to enable the display of the related concepts panel, or **false** to disable it. For example:

```
"uiCustomization": {
      "options": {
      "enableRelatedConcepts": {
         "user": true,
         "bi": false
       },
        "enableMetaFilter": {
          "user": false,
          "bi": true
        }
      }
   }
```

4. Restart HPE Find to apply your configuration changes.

Customize Error Messages

When an error occurs in HPE Find, the application displays an error message describing the nature of the problem. If the error is of a nature such that a user cannot solve it, a message prompting the user to contact support is shown.

To customize error messages

1. Go to the HPE Find home directory.

2. Open `config.json` in a text editor.

3. To add your relevant support contact details, add an `errorCallSupportString` option to the `uiCustomization` section. For example:

```
"uiCustomization": {
      "errorCallSupportString": "Contact Support on 01 234 56."
   }
```

4. Restart HPE Find to apply your configuration changes.

   HPE Find uses the new message instead of the default message.

Chapter 7: Configure Dashboards

This section describes how to set up and configure dashboards.

HPE Find Dashboards

Dashboards in HPE Find are fully configurable UI pages, which you can use to set up and display the content, search results, and visualizations that you refer to most regularly.

Each dashboard contains one or more *widgets*, each of which displays a particular set of content, and can be backed by an HPE Find saved search. The standard set of widgets provide a variety of visualizations for your saved searches, as well as static content, images, or videos. For a full list of available widgets, see Widgets, on page 43.

The widgets that use a saved search display the latest available results for a particular visualization or results list. The widgets are not interactive. However, you can click a particular widget to open the saved search that the widget displays, to view and explore the information in more detail.

You configure dashboards by modifying the `dashboards.json` configuration file, in the `customizations` directory of your HPE Find installation home directory.

Dashboards are available only to users with the `FindBI` user role. You can also optionally restrict individual dashboards to a specific set of roles.

The list of available dashboards is displayed in the **Dashboards** section of the HPE Find navigation side bar.

You can also access the dashboard directly by using a link of the form *FindURL*`/public/dashboards/`*DashboardName*, where *FindURL* is the base URL for your HPE Find user interface, and *DashboardName* is the configured name of the dashboard that you want to display.

The dashboards have a full screen option. In this case, the session continues indefinitely without logging the user out of HPE Find, unless you are using IDOL document security (in which case the session ends when the user security token expires).

Users can also export dashboards to .pptx presentation format, either as a single slide or with each widget on a separate slide.

> **NOTE:**
> There are some restrictions for export on certain types of widget. See Dashboard Export Notes, on page 55.

Dashboard Configuration

You create and configure dashboards by modifying the `dashboards.json` configuration file, in the `customization` directory in your HPE Find installation home directory.

This configuration file contains the `dashboards` object, which is an array of dashboard configuration objects. To add a dashboard, you add an object to this array.

In the Find user interface, the **Dashboards** section in the navigation sidebar lists your dashboards in the same order that you list them in the configuration file.

When you add a dashboard, you can configure the name and the number of grid squares to divide your dashboard into, as well as how often to update the contents of the widgets.

> **TIP:**
> If you belong to the **FindAdmin** role, you can reload the dashboard configuration to make any configuration changes available to your users without restarting HPE Find.
>
> To reload the dashboards, you must send the following API call to HPE Find directly, by typing the URL into your Web browser address bar. You must be logged into HPE Find as a user with the **FindAdmin** role in the same Web browser, because HPE Find uses the session cookie to authorize the action.
>
> `http://FindURL/api/admin/customization/config/reload`
>
> Where `FindURL` is the URL of your HPE Find server.
>
> This option also reloads any other customization configurations (for example, applications).

The following table lists the configuration properties that you can use for the dashboards.

Property	Required	Type	Description
dashboardName	Yes	String	The name to use for the dashboard. This name is displayed in the Dashboards navigation section.
enabled	Yes	Boolean	Set to **true** to enable the dashboard and display it in the Dashboards navigation section. Set to **false** to hide the dashboard.
width	Yes	Integer	The width of the dashboard grid, in grid squares (where a widget takes up a minimum of one grid square). For more information, see Dashboard Grid Size, on page 42.
height	Yes	Integer	The height of the dashboard grid, in grid squares (where a widget takes up a minimum of one grid square). For more information, see Dashboard Grid Size, on page 42.
updateInterval	Yes	Integer	The time (in seconds) to wait between each refresh of the widgets in this dashboard. This parameter affects only widgets that reference a

Property	Required	Type	Description
			query saved search. It does not apply to static widgets and widgets that reference a snapshot.
widgets	Yes	Object Array	An array of objects that define the widgets to include in the dashboard, their positions and sizes, and the individual widget configuration. For details of the properties to use for widget configuration, see Widget Configuration, on page 43.
displayWidgetNames	No	String Enum	A string that determines whether to display the names of the widgets. Use one of the following options: • **always**. Always display names, if provided in the widget configuration. • **onhover**. Display names only when a user mouses over the widget. • **never**. Never display names, even if they are provided in the widget configuration. This is the default value. You can override this parameter for individual widgets by using the displayWidgetName option in the widget configuration. See Widget Configuration, on page 43.
roles	No	String Array	An array of strings that specify the role names of roles that can access the dashboard. Users can see the dashboard only if they belong to at least one of the roles that you specify. If you do not set the roles property, the dashboard is accessible to all users.

The following example shows a simple configuration for one dashboard that contains a single widget:

```
{
    "dashboards": [
        {
            "dashboardName": "Static Content Dashboard",
            "enabled": true,
            "width": 4,
            "height": 4,
            "updateInterval": 1000,
            "roles": ["CustomRole"]
            "widgets": [
                {
                    "name": "Static Image",
                    "type": "staticImageWidget",
                    "x": 1,
```

```
            "y": 1,
            "width": 2,
            "height": 2,
            "widgetSettings": {
                "url": "http://example.com/image.png"
            }
        }
    ]
}
]
}
```

Dashboard Grid Size

You define the size of the dashboard by defining a number of grid squares that the dashboard can contain. Each widget takes up at least one grid square, although you can also configure it to use more space.

You cannot define the absolute size of a dashboard. The grid scales with the size of the dashboard window.

You can size and place your widgets anywhere on the grid, and define the size of each widget as a number of grid squares in width and height.

For example, if you define your grid to be four width by four height, you have sixteen grid squares, which you can use in several ways, such as:

- Sixteen one-by-one widgets:

- Four two-by-two widgets:

- One two-by-four widget, and two two-by-two widgets:
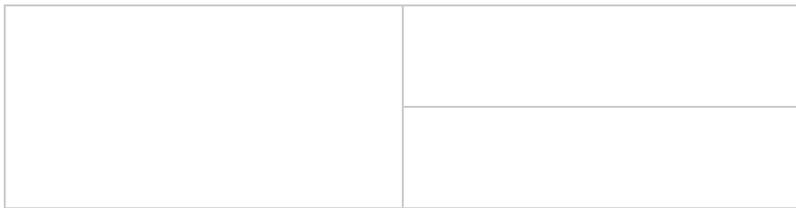
- One two-by-two widget, placed centrally, surrounded by one-by-one widgets:

Widgets

There are several standard widgets available that you can use in your dashboards.

The following widgets display results or visualizations from a saved search:

- **Topic Map**. Displays the topic map visualization for the specified saved search.
- **Results List**. Displays the result list for the specified saved search.
- **Sunburst**. Displays the sunburst visualization for the specified saved search.
- **Trending**. Displays the trending visualization for the specified saved search.
- **Map**. Displays the map visualization for the specified saved search.
- **Video Panel**. Displays a video result from the specified saved search.

Clicking on one of these widgets opens the appropriate saved search page. When the current user owns the saved search page, it opens as normal, and the user can modify the search. If the current user does not own the saved search page, the page displays the results and visualizations, but the user cannot modify the search settings.

The following widgets display information that does not relate to a specific saved search:

- **Static Content**. Displays some static HTML content that you provide.
- **Static Image**. Displays an image that you reference.
- **Current Time/Date**. Displays the current date and time.
- **Time Last Refreshed**. Displays the time that the widgets on the dashboard were last refreshed, and the time that the next update is scheduled.

Widget Configuration

For each widget, you must specify the name, and the size and position of the widget in the dashboard grid.

The following table describes the parameters for all widgets. All options are required unless otherwise specified.

Property	Description	Type
name	The name of the widget.	String
type	The type of widget. See the individual widget sections for the value to use.	String Enum
x	The position of the left side of the widget, from the left side of the dashboard (the left side is 0). Widgets align to grid squares. You must set the position so that the whole widget appears within the dashboard width.	Integer
y	The position of the top of the widget, from the top of the dashboard (the top is 0). Widgets align to grid squares. You must set the position so that the whole widget appears within the dashboard height.	Integer
width	The width of the widget, in grid squares. This value must be less than the total width of the dashboard, and less than the combined width of the widgets on the same row of the dashboard.	Integer
height	The height of the widget, in grid squares. This value must be less than the total height of the dashboard, and less than the combined height of the widgets in the same column in the dashboard.	Integer
displayWidgetName	Optional. A string that determines whether to display the name of the widget. Use one of the following options: • **always**. Always display the name for this widget, if it has one. • **onhover**. Display the name only when a user mouses over the widget. • **never**. Never display the name, even if it has one in the widget configuration. This option overrides the displayWidgetNames option in the dashboard configuration, which has a default value of **never**. See Dashboard Configuration, on page 40.	String Enum

For more information about the dashboard grid, see Dashboard Grid Size, on page 42.

For widgets that require a saved search, you must also specify the ID and type of the saved search. You add the saved search by using the datasource property, which is a JSON object with the following properties:

source	The type of data source to use for the widget. For a saved search, set this option to SavedSearch.
config	A JSON object that defines the configuration for the data source. For the SavedSearch source, this object has the following required subproperties: • id (string). The ID of the saved search to use for this widget. You find the ID by opening

the saved search tab in the HPE Find user interface, and checking the URL. In the URL, the saved search type and ID appear after `tab/`, as QUERY:*ID* or SNAPSHOT:*ID*, where ID is a number.

- `type` (string enum). The type of saved search: **QUERY** or **SNAPSHOT**.

The following example shows the basic widget configuration.

```
"widgets": [
    {
        "name": "TopicMap",
        "type": "TopicMapWidget",
        "x": 1,
        "y": 1,
        "width": 2,
        "height": 2,
        "datasource": {
            "source": "SavedSearch",
            "config": {
                "type": "QUERY",
                "id": "1234"
            }
        },
        "widgetSettings": {
            "maxResults": 1000
        }
    }
]
```

Each widget has some specific configuration details, which you specify in the `widgetSettings` object in the dashboard configuration. The available parameters are described in the following sections.

Topic Map Widget

For the Topic Map widget, set `type` to **TopicMapWidget**.

This widget type requires a saved search. You must set the `source` property to **SavedSearch** in the widget configuration.

The following table describes the options that you can use in the `widgetSettings` object.

Property	Required	Description	Default
maxResults	No	The maximum number of results to retrieve from the saved search to form the topic map. Requesting more results generally gives a more accurate topic map, but the widget might load and refresh more slowly.	300

Example widget configuration:

```
{
    "name": "TopicMap",
    "type": "TopicMapWidget",
```

```
        "x": 0,
        "y": 0,
        "width": 1,
        "height": 1,
        "datasource": {
            "source": "SavedSearch",
            "config": {
                "type": "QUERY",
                "id": "1234"
            }
        },
        "widgetSettings": {
            "maxResults": 1000
        }
    }
```

Results List Widget

For the Results List widget, set `type` to **ResultsListWidget**.

This widget type requires a saved search. You must set the `source` property to **SavedSearch** in the widget configuration.

The following table describes the options that you can use in the `widgetSettings` object.

Property	Required	Type	Description	Default
columnLayout	No	Boolean	Set to **true** to display results in columns instead of rows.	false
maxResults	No	Integer	The maximum number of results to include in the results list.	6
sort	No	String enum	The sort option to use to order the results. HPE recommends that you use only **date** and **relevance**, which match the options available in the HPE Find user interface. However, you can use any sort method that is supported by the HPE IDOL Content component. In this case, the result order might be different to the rest of your user interface. For details of the available sort options, refer to the *IDOL Content Component Reference*.	relevance

Example widget configuration:

```
{
    "name": "List",
    "type": "ResultsListWidget",
    "x": 1,
```

```
    "y": 1,
    "width": 2,
    "height": 2,
    "datasource": {
        "source": "SavedSearch",
        "config": {
            "type": "QUERY",
            "id": "1234"
        }
    },
    "widgetSettings": {
        "maxResults": 10
    }
}
```

Sunburst Widget

For the Sunburst widget, set `type` to **SunburstWidget**.

This widget type requires a saved search. You must set the `source` property to **SavedSearch** in the widget configuration.

The following table describes the options that you can use in the `widgetSettings` object.

Property	Required	Type	Description	Default
firstField	Yes	String	The name of the field to display on the inner ring.	
maxLegendEntries	No	Integer	The maximum number of values to display in the legend, for each tier. If the search returns more than the specified number of values for the field, colors and legend entries are assigned to the values with the largest contribution, and the remaining values are displayed in white.	5
secondField	No	String	The name of the field to display on the outer ring. If you do not set this property, the widget displays only a single ring.	

Example widget configuration:

```
{
    "name": "Sunburst",
    "type": "SunburstWidget",
    "x": 2,
    "y": 2,
    "width": 1,
    "height": 1,
    "datasource": {
```

```
        "source": "SavedSearch",
        "config": {
            "type": "QUERY",
            "id": "1234"
        }
    },
    "widgetSettings": {
        "firstField": "category",
        "secondField": "person"
    }
}
```

Trending Widget

For the Trending widget, set `type` to **TrendingWidget**.

This widget type requires a saved search. You must set the `source` property to **SavedSearch** in the widget configuration.

The following table describes the options that you can use in the `widgetSettings` object.

Property	Required	Type	Description	Default
parametricField	Yes	String	The name of the field to display in the trending visualization.	
dateField	No	String	The name of the date field to use to find the date associated with particular values in the trending visualization.	AUTN_ DATE
numberOfBuckets	No	Integer	The number of points to include on the trending lines. Each point represents the document rate for a particular time range (bucket). The number of buckets controls how many buckets to split the full time range into.	20
maxValues	No	Integer	The maximum number of top values to display from the specified parametric field. If you define the `values` object for this widget, it overrides the `maxValues` setting.	10
maxDate	No	String	The maximum date to include in the visualization. Specify a date in the format `YYYY-MM-DDT hh:mm:ssZ`. This value becomes the maximum value on the x-axis. By default, the visualizer displays the maximum date that occurs in the documents with the specified parametric field.	unlimited
minDate	No	String	The minimum date to include in the visualization. Specify a date in the format	unlimited

Property	Required	Type	Description	Default
			YYYY-MM-DDT hh:mm:ssZ. This value becomes the minimum value on the x-axis. By default, the visualizer displays the minimum date that occurs in the documents with the specified parametric field.	
values	No	Object	A JSON object that specifies particular values that you want to display in the visualization. If you define values, the visualization includes only the specified values, regardless of maxValues. This object contains the following properties: • name (string). Required. The field value to display in the visualization. • color (string). Optional. The color to use for the trending line for this field value. You can use the values **blue**, **light-blue**, **orange**, **pink**, **light-pink**, **green**, **light-green**, **red**, **purple**, and **yellow**. If you do not specify a color, HPE Find assigns colors at random.	

Example widget configuration:

```
{
    "name": "Trending",
    "type": "TrendingWidget",
    "x": 0,
    "y": 0,
    "width": 2,
    "height": 2,
    "datasource": {
        "source": "SavedSearch",
        "config": {
            "type": "QUERY",
            "id": "1234"
        }
    },
    "widgetSettings": {
        "parametricField": "OVERALL_VIBE",
        "dateField": "AUTN_DATE",
        "numberOfBuckets": 25,
        "values": [
            {
                "name": "POSITIVE",
                "color": "purple"
            },
            {
```

```
            "name": "NEGATIVE",
            "color": "orange"
        }
    ]
  }
}
```

Map Widget

For the Map widget, set `type` to **MapWidget**.

> **NOTE:**
> Map widgets display correctly only if you configure the map visualizers. See Configure Map Visualizations, on page 26.

This widget type requires a saved search. You must set the `source` property to **SavedSearch** in the widget configuration.

The following table describes the options that you can use in the `widgetSettings` object.

Property	Required	Type	Description	Default
centerCoordinates	Yes	Object	The coordinates to center the map on. This object has the following properties: • `latitude` (number). The latitude coordinate to use as the center of the map. • `longitude` (number). The longitude coordinate to use as the center of the map.	
locationFieldPairs	Yes	String Array	The names of the configured field pairs to use as the location for the result markers. You find the names to use here in the `displayName` property of the maps section in the `config.json` configuration file.	
zoomLevel	Yes	Number	The level of zoom to use for the map. The value that you use for this option depends on your map tile server.	
clusterMarkers	No	Boolean	Set to **true** to cluster the result markers.	false
maxResults	No	Integer	The maximum number of search results to display on the map.	1000

Example widget configuration:

```
{
    "name": "Map",
    "type": "MapWidget",
```

```
    "x": 1,
    "y": 1,
    "width": 2,
    "height": 2,
    "datasource": {
        "source": "SavedSearch",
        "config": {
            "type": "QUERY",
            "id": "1234"
        }
    },
    "widgetSettings": {
        "maxResults": 10000,
        "locationFieldPairs": ["DefaultLocation", "OtherLocation"],
        "centerCoordinates": {
            "latitude": 51.5,
            "longitude": 0.12
        },
        "zoomLevel": 3,
        "clusterMarkers": true
    }
}
```

Video Panel Widget

For the Video Panel widget, set `type` to **VideoWidget**.

This widget type requires a saved search. You must set the `source` property to **SavedSearch** in the widget configuration.

The following table describes the options that you can use in the `widgetSettings` object.

Property	Required	Type	Description	Default
audio	No	Boolean	Set to **true** to play the audio for the video.	false
loop	No	Boolean	Set to **false** if you do not want to replay the video when it finishes. In this case, the video stops after it reaches the end and does not replay until the widget refreshes. By default, the video loops.	true
restrictSearch	No	Boolean	Set to **true** to restrict the saved search to return only results with the content type field value **video**.	false
searchResultNumber	No	Integer	The number of the result that you want to play (for example, 2 to play the second result in the list).	1

> **NOTE:**
> The widget displays a result only if it is type video. To ensure that the results include only
> videos, set `restrictSearch` to **true**.
>
> Alternatively, you can set `searchResultNumber` to display a specific video result (for example,
> if you want to display a particular result from a snapshot saved search).

Example widget configuration:

```
{
    "name": "Video Widget",
    "type": "VideoWidget",
    "x": 1,
    "y": 1,
    "width": 2,
    "height": 2,
    "datasource": {
        "source": "SavedSearch",
        "config": {
            "type": "QUERY",
            "id": "1234"
        }
    },
    "widgetSettings": {
        "restrictSearch": true
    }
}
```

Static Content Widget

For the Static Content widget, set `type` to **StaticContentWidget**.

You cannot use a saved search for this widget type, because its content is independent from any
search.

The following table describes the options that you can use in the `widgetSettings` object.

Property	Required	Type	Description	Default
`html`	Yes	String	The HTML to display in the widget.	

Example widget configuration:

```
{
    "name": "Static Content",
    "type": "StaticContentWidget",
    "x": 1,
    "y": 1,
    "width": 2,
    "height": 2,
    "widgetSettings": {
        "html": "<h1>Hello World!</h1>"
```

```
        }
    }
```

Static Image Widget

For the Static Image widget, set `type` to **StaticImageWidget**.

You cannot use a saved search for this widget type, because its content is independent from any search.

The following table describes the options that you can use in the `widgetSettings` object.

Property	Required	Type	Description	Default
url	Yes	String	The URL of the image to display in the widget.	

Example widget configuration:

```
{
    "name": "Static Image",
    "type": "StaticImageWidget",
    "x": 1,
    "y": 1,
    "width": 2,
    "height": 2,
    "widgetSettings": {
        "url": "http://example.com/image.png"
    }
}
```

Current Time/Date Widget

For the Current Time/Date widget, set `type` to **CurrentTimeWidget**.

You cannot use a saved search for this widget type, because its content is independent from any search.

The following table describes the options that you can use in the `widgetSettings` object.

> **NOTE:**
> The current time/date widget uses the `moment.js` library to format dates. For more information about the available formats, refer to the `moment.js` documentation.

Property	Required	Type	Description	Default
dateFormat	No	String	The date format to display. This option takes a `moment.js` date format string.	ll
timeFormat	No	String	The time format to display. This option takes a `moment.js` time format string.	HH:mm z
timeZone	No	String	The timezone to use in the date/time display. This	

Property	Required	Type	Description	Default
			option takes a `moment.js` timezone string. By default, the `moment.js` library attempts to display the local timezone.	

Example widget configuration:

```
{
   "name": "Current Time Date",
   "type": "CurrentTimeWidget",
   "x": 1,
   "y": 1,
   "width": 2,
   "height": 2,
   "widgetSettings": {
      "timeFormat": "HH:mm:ss Z"
   }
}
```

Time Last Refreshed Widget

For the Time Last Refreshed widget, set `type` to **TimeLastRefreshedWidget**.

You cannot use a saved search for this widget type, because its content is independent from any search.

The following table describes the options that you can use in the `widgetSettings` object.

> **NOTE:**
> The time last refreshed widget uses the `moment.js` library to format times. For more information about the available formats, refer to the `moment.js` documentation.

Property	Required	Type	Description	Default
`dateFormat`	No	String	The date format to display. This option takes a `moment.js` date format string.	HH:mm z
`timeZone`	No	String	The timezone to use in the date/time display. This option takes a `moment.js` timezone string. By default, the `moment.js` library attempts to display the local timezone.	

Example widget configuration:

```
{
   "name": "Time Last Refereshed",
   "type": "TimeLastRefreshedWidget",
   "x": 1,
   "y": 1,
   "width": 1,
```

```
    "height": 1
}
```

Dashboard Export Notes

The HPE Find dashboard user interface includes an option to export your dashboards to a Microsoft PowerPoint presentation Open XML format (.pptx).

For the **Video** and **Static Image** widgets, users can export the widgets only if you serve the videos or images from a domain that their browser is allowed to access by the CORS policy.

For the **Sunburst** widget, users can export only a single ring of the sunburst (if they attempt to export a two-level sunburst visualization, the presentation includes only the inner ring).

Example Dashboard Configuration

The following example JSON has a configuration for four example dashboards.

> **NOTE:**
> This example configuration might not work directly in your HPE Find without modification. For example, to use these dashboards, you must have a QUERY type saved search with ID 1, and you must have appropriate fields configured.

```
{
    "dashboards": [
        {
            "dashboardName": "Single widget dashboard",
            "enabled": true,
            "width": "1",
            "height": "1",
            "displayWidgetNames": "never",
            "widgets": [
                {
                    "name": "Static Content",
                    "type": "StaticContentWidget",
                    "x": 0,
                    "y": 0,
                    "width": 1,
                    "height": 1,
                    "widgetSettings": {
                        "html": "<h1>Welcome to the Find Dashboard</h1>"
                    }
                }
            ]
        },
        {
            "dashboardName": "3 widget dashboard",
            "enabled": true,
```

```
            "width": "4",
            "height": "4",
            "updateInterval": 1000,
            "displayWidgetNames": "onhover",
            "widgets": [
                {
                    "name": "Sunburst",
                    "type": "SunburstWidget",
                    "x": 0,
                    "y": 0,
                    "height": 2,
                    "width": 2,
                    "datasource": {
                        "source": "SavedSearch",
                        "config": {
                            "id": 1,
                            "type": "QUERY"
                        }
                    },
                    "widgetSettings": {
                        "firstField": "COMPANY",
                        "secondField": "OVERALL_VIBE"
                    }
                },
                {
                    "name": "Trending",
                    "type": "TrendingWidget",
                    "x": 0,
                    "y": 2,
                    "height": 2,
                    "width": 2,
                    "datasource": {
                        "source": "SavedSearch",
                        "config": {
                            "id": 1,
                            "type": "QUERY"
                        }
                    },
                    "widgetSettings": {
                        "parametricField": "OVERALL_VIBE",
                        "dateField": "AUTN_DATE",
                        "numberOfBuckets": 20,
                        "minDate": "2016-04-02T00:00:00Z",
                        "maxDate": "2016-04-05T00:00:00Z",
                        "values": [
                            {
                                "name": "POSITIVE",
                                "color": "purple"
                            },
```

```
                {
                    "name": "NEGATIVE",
                    "color": "orange"
                }
            ]
        }
    },
    {
        "name": "Results List",
        "type": "ResultsListWidget",
        "x": 2,
        "y": 0,
        "height": 4,
        "width": 2,
        "datasource": {
            "source": "SavedSearch",
            "config": {
                "id": 1,
                "type": "QUERY"
            }
        },
        "widgetSettings": {
            "maxResults": 10
        }
    }
    ]
},
{
    "dashboardName": "Alternative 3 widget dashboard",
    "enabled": true,
    "width": "4",
    "height": "2",
    "displayWidgetNames": "always",
    "widgets": [
        {
            "name": "Static Image",
            "type": "StaticImageWidget",
            "x": 0,
            "y": 0,
            "width": 1,
            "height": 2,
            "widgetSettings": {
                "url": "http://example.com/image.png"
            }
        },
        {
            "name": "Video Panel Widget",
            "type": "VideoWidget",
            "x": 1,
```

```
            "y": 0,
            "width": 2,
            "height": 2,
            "datasource": {
                "source": "SavedSearch",
                "config": {
                    "type": "QUERY",
                    "id": "1"
                }
            },
            "widgetSettings": {
                "restrictSearch": true
            }
        },
        {
            "name": "Map Widget",
            "type": "MapWidget",
            "x": 3,
            "y": 0,
            "width": 1,
            "height": 2,
            "datasource": {
                "source": "SavedSearch",
                "config": {
                    "type": "QUERY",
                    "id": "1"
                }
            },
            "widgetSettings": {
                "locationFieldPairs": [
                    "DefaultLocation"
                ],
                "centerCoordinates": {
                    "latitude": 51.5,
                    "longitude": 0.12
                },
                "zoomLevel": 3
            }
        }
    ]
},
{
    "dashboardName": "Multi-widget dashboard",
    "enabled": true,
    "width": "8",
    "height": "9",
    "displayWidgetNames": "always",
    "widgets": [
        {
```

```
                "name": "Trending",
                "type": "TrendingWidget",
                "x": 0,
                "y": 0,
                "width": 4,
                "height": 3,
                "datasource": {
                    "source": "SavedSearch",
                    "config": {
                        "type": "QUERY",
                        "id": "1"
                    }
                },
                "widgetSettings": {
                    "parametricField": "OVERALL_VIBE",
                    "dateField": "AUTN_DATE",
                    "numberOfBuckets": 15
                },
                "values": [
                    {
                        "name": "POSITIVE",
                        "color": "red"
                    }
                ]
            },
            {
                "name": "Sunburst",
                "type": "SunburstWidget",
                "x": 4,
                "y": 0,
                "width": 2,
                "height": 3,
                "datasource": {
                    "source": "SavedSearch",
                    "config": {
                        "type": "QUERY",
                        "id": "1"
                    }
                },
                "widgetSettings": {
                    "firstField": "CATEGORY",
                    "secondField": "COMPANY"
                }
            },
            {
                "name": "Sunburst",
                "type": "SunburstWidget",
                "x": 6,
                "y": 0,
```

```
                    "width": 2,
                    "height": 3,
                    "datasource": {
                        "source": "SavedSearch",
                        "config": {
                            "type": "QUERY",
                            "id": "1"
                        }
                    },
                    "widgetSettings": {
                        "firstField": "COMPANY",
                        "secondField": "OVERALL_VIBE"
                    }
                },
                {
                    "name": "Current Time/Date",
                    "type": "CurrentTimeWidget",
                    "x": 0,
                    "y": 3,
                    "width": 1,
                    "height": 2,
                    "widgetSettings": {
                        "timeFormat": "HH:mm z"
                    }
                },
                {
                    "name": "Last Time Refreshed",
                    "type": "TimeLastRefreshedWidget",
                    "x": 1,
                    "y": 3,
                    "width": 1,
                    "height": 2
                },
                {
                    "name": "Static Content",
                    "type": "StaticContentWidget",
                    "x": 2,
                    "y": 3,
                    "width": 3,
                    "height": 3,
                    "widgetSettings": {
                        "html": "<h1>Find Multi-Widget Dashboard</h1>"
                    }
                },
                {
                    "name": "Map",
                    "type": "MapWidget",
                    "x": 5,
                    "y": 3,
```

```
            "width": 3,
            "height": 3,
            "datasource": {
                "source": "SavedSearch",
                "config": {
                    "type": "QUERY",
                    "id": "1"
                }
            },
            "widgetSettings": {
                "locationFieldPairs": [
                    "DefaultLocation"
                ],
                "centerCoordinates": {
                    "latitude": 51.5,
                    "longitude": 0.12
                },
                "zoomLevel": 3
            }
        },
        {
            "name": "Video",
            "type": "VideoWidget",
            "x": 0,
            "y": 5,
            "width": 2,
            "height": 4,
            "datasource": {
                "source": "SavedSearch",
                "config": {
                    "type": "QUERY",
                    "id": "1"
                }
            },
            "widgetSettings": {
                "restrictSearch": true
            }
        },
        {
            "name": "Results",
            "type": "ResultsListWidget",
            "x": 2,
            "y": 6,
            "width": 4,
            "height": 3,
            "datasource": {
                "source": "SavedSearch",
                "config": {
                    "type": "QUERY",
```

```
                                        "id": "1"
                                    }
                                },
                                "widgetSettings": {
                                    "maxResults": 10
                                }
                            },
                            {
                                "name": "Topic Map",
                                "type": "TopicMapWidget",
                                "x": 6,
                                "y": 6,
                                "width": 2,
                                "height": 3,
                                "datasource": {
                                    "source": "SavedSearch",
                                    "config": {
                                        "type": "QUERY",
                                        "id": "1"
                                    }
                                }
                            }
                        ]
                    }
                ]
            }
```

Chapter 8: Configure Applications

This section describes how to configure HPE Find to include other applications in the navigation sidebar.

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Configure Application Links in HPE Find

You can configure HPE Find to list some external applications in the navigation sidebar. For example, you might want to link to administrative user interfaces to allow your users to quickly access those applications, or you can link to other applications that are important to your organization.

You configure application links by using the `applications.json` configuration file, in the `customization` directory in your HPE Find installation home directory. This configuration file contains the `applications` object, which is an array of application configuration objects. To add an application, you add an object to this array.

In the HPE Find user interface, the **Applications** section in the navigation sidebar lists your applications in the same order that you list them in the configuration file.

When you configure an application, you set the name and URL to use for each application, and whether to open the application link in a new Web browser tab, or to use the current one.

> **TIP:**
> If you belong to the **FindAdmin** role, you can reload the application configuration to make any configuration changes available to your users without restarting HPE Find.
>
> To reload the application configuration, you must send the following API call to HPE Find directly, by typing the URL into your Web browser address bar. You must be logged into HPE Find as a user with the **FindAdmin** role in the same Web browser, because HPE Find uses the session cookie to authorize the action.
>
> `http://FindURL/api/admin/customization/config/reload`
>
> Where `FindURL` is the URL of your HPE Find server.
>
> This option also reloads any other customization configurations (for example, dashboards).

The following table lists the configuration properties that you can use for each application.

Property	Required	Type	Description
`applicationName`	Yes	String	The name to use for the application. This name is displayed in the Applications navigation section.
`url`	Yes	String	The URL to navigate to when a user clicks this menu item. This value must be a well-formed URL.
`openInNewTab`	No	Boolean	Set to **true** to open application links in a new Web browser tab. Set to **false** to open the link in the current

Property	Required	Type	Description
			tab. The default value is **false**.
enabled	No	Boolean	Set to **true** to enable the application link and display it in the Applications navigation section. Set to **false** to hide the application link. The default value is **true**.

The following example shows a simple configuration for three applications:

```
{
   "applications": [
      {
         "applicationName": "IDOL Data Admin",
         "url": "http://dataadmin.example.com:8080"
      },
      {
         "applicationName": "IDOL Admin (Content)",
         "url": "http://ida-content.example.com:9000/a=admin",
         "openInNewTab": true,
         "enabled": false
      },
      {
         "applicationName": "IDOL Admin (Community)",
         "url": "http://ida-community.example.com:9030/a=admin",
         "enabled": true
      }
   ]
}
```

For this example, the IDOL Data Admin link and the IDOL Admin (Community) link are listed in the Application list in HPE Find. The IDOL Admin (Content) link is not enabled, and so it is not displayed in HPE Find.

Chapter 9: Configure Templates

This section describes how to configure HPE Find to use additional templates for the results list and preview pane.

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Configure Templates in HPE Find

You can configure HPE Find to use a custom template to display results and promotions in the search results list, and metadata in the preview panel. For example, you might want to use a larger thumbnail image and title in the result list, and to remove the summary.

You configure how HPE Find uses the custom templates by using the `templates.json` configuration file, in the `customization` directory in your HPE Find installation home directory. This configuration file contains JSON objects that allow you to configure different aspects of the HPE Find results.

> **TIP:**
> If you belong to the **FindAdmin** role, you can reload the template configuration to make any configuration changes available to your users without restarting HPE Find.
>
> To reload the template configuration, you must send the following API call to HPE Find directly, by typing the URL into your Web browser address bar. You must be logged into HPE Find as a user with the **FindAdmin** role in the same Web browser, because HPE Find uses the session cookie to authorize the action.
>
> `http://`*FindURL*`/api/admin/customization/config/reload`
>
> Where *FindURL* is the URL of your HPE Find server.
>
> This option also reloads any other customization configurations (for example, dashboards).

The following table describes the configuration objects that you can include in your template configuration file. These objects are all optional.

Object	Type	Description
`searchResult`	Array	Defines the templates to use for search result items in the results list.
`promotion`	Array	Defines the templates to use for promotion items in the results list.
`previewPanel`	Array	Defines the templates to use for document metadata in the preview panel.

In each of these objects, you specify an array of template configurations, each of which specifies the template file to use and the circumstances in which to use the template.

The following table lists the configuration properties that you can use to specify a template.

Property	Required	Type	Description
file	Yes	String	The template file name. See Create Template Files, below.
triggers	Yes	Object Array	The triggers that specify when to use a template. This object contains the following properties: • field. The name of an IDOL field. • values. An array of field values that the specified field must contain for the trigger to activate. A document activates the trigger if it contains at least one of the specified values in the specified field. If the list of values is empty, a document activates the trigger if it contains any value in the specified field. You can specify multiple field conditions in the trigger. In this case, a document must match all the specified field conditions to activate the trigger.

When displaying results, HPE Find processes the templates in the order that you list them in the configuration file. For a particular document, HPE Find uses the first template that the document matches. If there are no matching templates in your configuration, HPE Find displays the result with the application default template.

The following example shows a simple search result configuration that applies to documents that contain the value **Living people** in the **categories** field.

```
{
    "searchResult": [
        {
            "file": "person.handlebars",
            "triggers": [
                {
                    "field": "categories",
                    "values": ["Living people"]
                }
            ]
        }
    ],
}
```

Create Template Files

HPE Find processes template by `handlebars.js`. Each template file must produce HTML output that represents one document.

HPE Find runs the templates with the following Handlebars context:

```
interface ResultTemplateData {
    reference: string;
    title: string;
```

```
    date: string;
    database: string;
    promotionName: string|undefined;
    summary: string; // The highlighted summary, should not be HTML escaped
    url: string|undefined; // URL of the original document or media file
    icon: string; // Icon class based on content type
    similarDocumentsUrl: string|undefined; // URL for linking to the similar
documents view, only in result and promotion
    thumbnailSrc: string|undefined, // Source attribute to load the thumbnail in an
<img> tag
    age: string; // Internationalised age of the document (e.g. "3 years ago")
    fields: {id: string, values: string[], displayName: string, advanced: boolean}
[];
}
```

The following table also describes some HPE Find custom helpers that you can use in your templates.

Helper	Description
equal	A block helper that takes two arguments. The block is printed only if the two arguments are referentially equal.
hasField	A block helper that takes one string argument (the field). The block is printed only if the document has a value for the field.
hasFieldValue	A block helper that takes two string arguments, the field and the value. The block is printed only if the document contains the specified value in the specified field.
getFieldValue	Prints the first value for the specified field.
withField	A block helper that executes the block in the context of the given field.
i18n	Prints a string from the application internationalization file.

You reference fields in custom helpers by using the field ID (that is, the corresponding key in the fieldsInfo section of the HPE Find configuration file). Document fields are available only if you explicitly reference them in that configuration section.

Example Template

The following template is a simple search result template that displays a thumbnail image for documents that contain a thumbnail field. It also displays the document summary, an Author field, and a link to get similar documents.

```
<div>
    <h1><i class="{{icon}}"></i>{{title}}</h1>
    {{#hasField 'thumbnail'}}
        <img src="{{thumbnail}}"/>
    {{/hasField}}
    <p>{{{summary}}}</p>
    <p>Author: {{getFieldValue "Author"}}</p>
```

```
        <a href="{{similarDocumentsUrl}}">See similar documents</a>
    </div>
```

Chapter 10: Configure HPE Find with System Properties

This section describes the features that you can configure by using system properties.

Configure the Log File Locations

By default, HPE Find creates a folder of log files under the home directory. You can configure HPE Find to store these log files in a different location by setting the `logging.path` property in the java run command.

To change the location of the log files

1. At the command line, send the java run command with the `logging.path` argument set to the location where you want to store your log files. For example:

   ```
   java -Dlogging.path=[log file directory] -Dhpe.find.home=[home directory] -
   Dserver.port=[port] -jar find.war
   ```

2. Restart HPE Find to apply your configuration changes.

HPE Find creates the specified directory if it does not exist, as long as the service has the appropriate permissions. It creates the logs directly in the specified directory.

If you run HPE Find as a service on Windows, you can also add the `logging.path` property to the `find.xml` file.

If you run HPE Find as a service on Linux, you can modify the `FIND_LOGGING_DIR` variable in the start scripts (`find.sh` for SystemV, or `find.conf` for Upstart).

When you modify the HPE Find configuration by modifying the XML file or start scripts, you must restart HPE Find to apply your configuration changes.

Configure IDOL Logs

By default, HPE Find generates an `idol-access.log` file, and uses it to log all the actions it makes to IDOL component ACI and service ports. The log information includes:

- the user that sent the query.
- the IP address the user is connecting from.
- the IDOL component that the query is sent to (for example, QMS or Content).
- the host and port of the IDOL component.
- the full query that is sent to the IDOL component.

- the status code that the IDOL component returns.
- the time taken to complete the request.

You can turn off IDOL logging by setting the `idol.log.enabled` system property. You can also turn off just the information about time taken to complete requests by setting the `idol.log.timing.enabled` system property.

To turn off IDOL logging

1. At the command line, send the java run command with the `idol.log.enabled` argument set to **false**. For example:

   ```
   java -Didol.log.enabled=false -Dhpe.find.home=[home directory] -Dserver.port=
   [port] -jar find.war
   ```

2. Restart HPE Find to apply your configuration changes.

To turn off timing information in the IDOL logs

1. At the command line, send the java run command with the `idol.log.timing.enabled` argument set to **false**. For example:

   ```
   java -Didol.log.timing.enabled=false -Dhpe.find.home=[home directory]  -
   Dserver.port=[port] -jar find.war
   ```

2. Restart HPE Find to apply your configuration changes.

If you run HPE Find as a service on Windows, you can also add the `idol.log.enabled` and `idol.log.timing.enabled` properties to the `find.xml` file.

If you run HPE Find as a service on Linux, you can add the argument to the existing arguments variable in `find.sh` for SysV, or `find.conf` for Upstart.

When you modify the HPE Find configuration by modifying the XML file or start scripts, you must restart HPE Find to apply your configuration changes.

Configure Cache Size

If you see a Catalina cache warning in your log files when you run HPE Find, you can use the `server.tomcat.resources.max-cache-kb` system property to increase the size of the cache.

The cache warning might appear similar to the following example:

```
org.apache.catalina.webresources.Cache.getResource Unable to add the resource at
[/WEB-INF/Find/example.jpg] to the cache because there was insufficient free space
available after evicting expired cache entries - consider increasing the maximum
size of the cache
```

The maximum size of the cache is set in kilobytes. The default value is `20480` (20 MB).

To set the cache max size property

- Start HPE Find with the Java run command, and include the `server.tomcat.resources.max-cache-kb` argument. For example:

```
java -Dserver.tomcat.resources.max-cache-kb=30480 -Dhp.find.home=[home directory]
-Dserver.port=[port] -jar find.war -uriEncoding utf-8
```

If you run HPE Find as a service on Windows, you can also add this argument to the `find.xml` file.

If you run HPE Find as a service on Linux, you can add the argument to the existing arguments variable in `find.sh` for SysV, or `find.conf` for Upstart.

When you modify the HPE Find configuration by modifying the XML file or start scripts, you must restart HPE Find to apply your configuration changes.

For more information on installing and running HPE Find as a service on Windows or Linux, see Install HPE Find, on page 13.

Configure Default User Roles

You can configure HPE Find to set some default roles for users that do not have a valid Find role in the IDOL Community component.

You can use this option if you are using an IDOL Community component that authenticates by using a third-party repository (such as LDAP). In this case, the third-party repository handles the authentication, and the IDOL Community component creates the HPE Find user when they log in for the first time.

When you define default roles, HPE Find applies the configured default roles to the new user when they log in for the first time.

To configure default user roles in HPE Find

- Start HPE Find with the Java run command, and include the following arguments:

  `-Dfind.defaultRoles=list_of_roles`

  where `list_of_roles` is a comma-separated list of the user roles that you want to assign by default to new users.

  For example:

  ```
  java -Dfind.defaultRoles=[Users] -Dhp.find.home=[home directory] -Dserver.port=
  [port] -jar find.war -uriEncoding utf-8
  ```

If you run HPE Find as a service on Windows, you can also add the same arguments to the `find.xml` file.

If you run HPE Find as a service on Linux, you can add the argument to the existing arguments variable in `find.sh` for SysV, or `find.conf` for Upstart.

When you modify the HPE Find configuration by modifying the XML file or start scripts, you must restart HPE Find to apply your configuration changes.

For more information on installing and running HPE Find as a service on Windows or Linux, see Install HPE Find, on page 13.

Configure HPE Find to Use SSL

By default, HPE Find runs in plain HTTP mode. You can configure it to use SSL communications, by setting the appropriate system properties in the Java run command.

> **NOTE:**
> If you enable SSL, you cannot use plain HTTP with HPE Find.

To configure HPE Find to use SSL

- Start HPE Find with the Java run command, and include the following arguments:

```
-Dserver.ssl.key-store=path_to_keystore
-Dserver.ssl.key-store-password=keystore_password
-Dserver.ssl.key-password=key_password
-Dserver.port=server_port
```

where,

path_to_ keystore	is the path to a keystore. You must create a keystore and import your certificates into it. By default, HPE Find expects this keystore to be in JKS format. For more information on JKS keystore creation, see https://docs.oracle.com/cd/E19509-01/820-3503/ggfen/index.html. > **NOTE:** > If you want to use a keystore in a different format, you must also set the `-Dserver.ssl.key-store-type` argument to the type of keystore that you want to use. For example: > ``` > -Dserver.ssl.key-store-type=pkcs12 > ```
keystore_ password	is the password for the keystore.
key_ password	is the password for the key inside the keystore.
server_ port	is the port to user for HPE Find. To use SSL, you must change this value from the default port (that is, you must not use port 8080). Typically you use port 8443, but you can use any valid port value.

For example:

```
java -Dserver.ssl.key-store=/etc/ssl/private/keystore.jks -Dserver.ssl.key-store-password=MyPassword -Dserver.ssl.key-password=KeyPassword -Dhp.find.home=[home directory] -Dserver.port=8443 -jar find.war -uriEncoding utf-8
```

If you run HPE Find as a service on Windows, you can also add the same arguments to the `find.xml` file.

If you run HPE Find as a service on Linux, you can add the argument to the existing arguments variable in `find.sh` for SysV, or `find.conf` for Upstart.

When you modify the HPE Find configuration by modifying the XML file or start scripts, you must restart HPE Find to apply your configuration changes.

For more information on installing and running HPE Find as a service on Windows or Linux, see Install HPE Find, on page 13.

Configure Session Timeout

By default, a user session can remain idle for one hour before HPE Find terminates it automatically. You can edit this setting by setting the `server.session.timeout` system property to the number of seconds after which sessions should end. For example, `server.session.timeout=7200` sets a session timeout of 2 hours.

> **NOTE:**
> The session timeout does not apply when a user opens a dashboard in full screen mode. See HPE Find Dashboards, on page 39.

To set the session timeout property

- Start HPE Find with the Java run command, and include the `server.session.timeout` argument. For example:

```
java -Dserver.session.timeout=3600 -Dhp.find.home=[home directory] -Dserver.port=
[port] -jar find.war -uriEncoding utf-8
```

If you run HPE Find as a service on Windows, you can also add the same `-Dserver.session.timeout` argument to the `find.xml` file.

If you run HPE Find as a service in Linux, you can add the argument to the existing arguments variable in `find.sh` for SysV, or `find.conf` for Upstart.

When you modify the HPE Find configuration by modifying the XML file or start scripts, you must restart HPE Find to apply your configuration changes.

For more information on installing and running HPE Find as a service on Windows or Linux, see Install HPE Find, on page 13.

> **NOTE:**
> Polling for saved searches counts as user activity, and delays a session timeout for the user. If your polling interval is shorter than your session timeout, the polling causes the session to continue until you close the browser window. See Enable Polling for Saved Searches, on page 27.

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Feedback on Administration Guide (HPE Find 11.4)

Add your feedback to the email and click **Send**.

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We appreciate your feedback!