Episerver Search & Navigation

User Guide

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Episerver Search & Navigation User Guide

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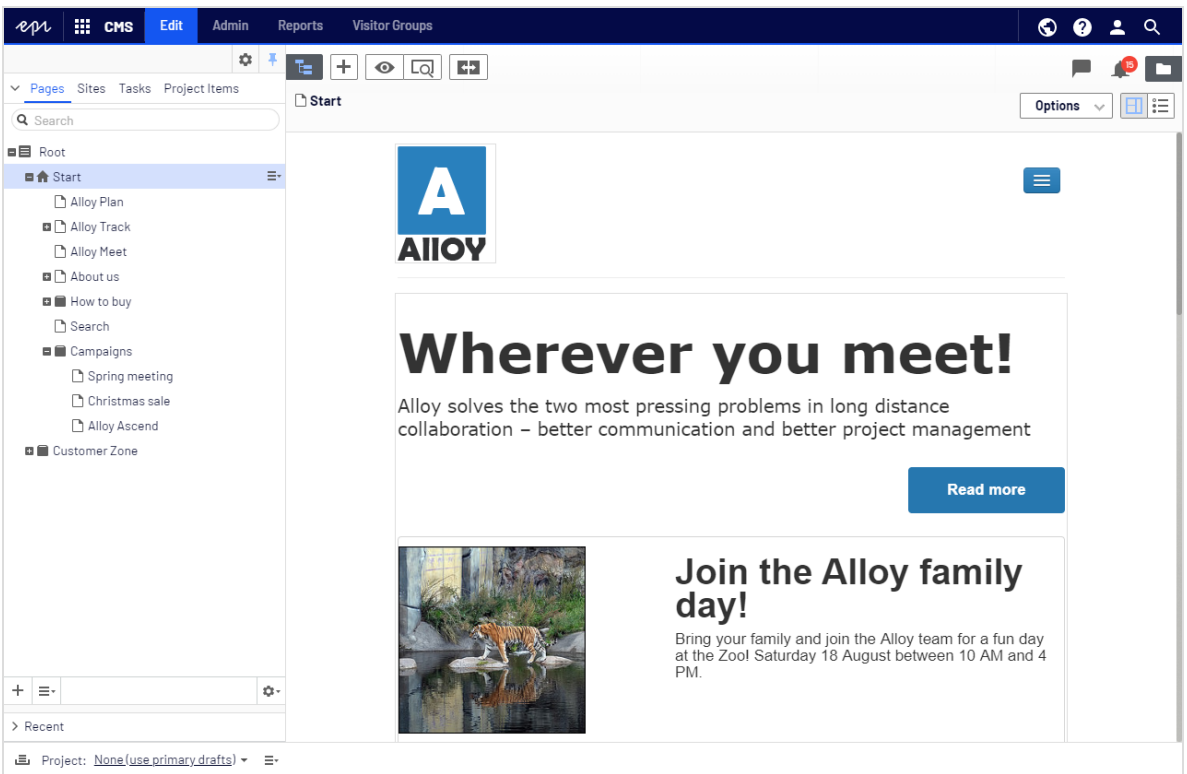
Introduction

Online help describes the features and functionality of the Episerver Digital Experience platform and covers CMS for content management, Episerver Commerce for e-commerce functionality, Episerver Campaign for omnichannel campaigns, Episerver Search & Navigation (formerly Episerver Find) for extended search, Episerver Visitor Intelligence (formerly Episerver Insight) for visitor profiles and customer segments, Product and Email Product Recommendations, and Triggered Messages for personalized product recommendations, and Episerver add-ons.

You access the online help from within the Episerver platform or from Episerver World. The online help is also available in PDF format for users who prefer PDF or want to print the documentation.

This PDF describes the features and functionality of Episerver Episerver Search & Navigation, which you can find on Episerver World. Developer guides and technical documentation also are found on Episerver World.

The user guide is intended for editors, administrators, marketers and merchandisers, working with tasks as described in Roles and tasks in the online help.



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Features, licenses and releases

The user documentation is continuously updated and covers the latest releases for the Episerver platform.

Episerver CMS is the core part of the Episerver platform providing advanced content creation and publishing features for all types of website content. CMS features are available in all Episerver installations.

Episerver Commerce adds complete e-commerce capabilities to the core functionality in CMS. It requires a specific installation and license.

Episerver Campaign lets you orchestrate omnichannel campaigns from a single screen, and send triggered emails based on real-time behavior. Campaign requires additional license activation.

Episerver Search & Navigation adds advanced search functionality to websites. It is included in the Episerver Cloud services; for on-premises installations it requires a specific installation and license.

Episerver Visitor Intelligence is a user interface for viewing and filtering visitor profiles, and creating customer segments that can be used in omnichannel marketing campaigns. It requires a specific installation and license.

Product Recommendations lets you create and configure a merchandising campaign with personalized product recommendations from the personalization portal. It requires a specific installation and license.

Email Product Recommendations lets you include personalized product recommendations in any email, including cart abandonment and retargeting emails, from the personalization portal. You can also work with behavioral triggers to detect on-site behaviors and act upon them through automated, personalized emails. It requires a specific installation and license.

Add-ons extend the Episerver capabilities with features like advanced search, multi-variate testing, and social media integration. Some add-ons are free, others require license activation. Add-ons by Episerver are described in the online help.

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> **Note**: Due to frequent feature releases, this user guide may describe functionality that is not yet available on your website. See What's new to find out in which area and release a specific feature became available.

Images and screenshots

The Episerver user guide uses images and screenshots to visually guide you through the features of the Episerver platform. Due to different versions, continuous updates, and specific system permissions, images and screenshots may differ from the actual appearance.

Notes

Three types of notes are color marked throughout the user guide: tips, notes and warnings.

> **Tip**: Green indicates tips that might show you an easier way to perform a task.

> **Note**: Yellow indicates important information that may affect your work and should not be missed.

> **Warning**: Red indicates warnings. If these warnings are ignored, serious errors or problems may occur.

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What's new?

This user guide describes functionality available in the latest release of a standard implementation of the Episerver platform software and services. New features are continuously made available. See Episerver updates.

> **Note**: Due to frequent feature releases, this user guide may describe functionality that is not yet available to you. Contact your system administrator for information about products and versions in your Episerver implementation.

This release of the Episerver User Guide describes features available in Episerver as of 2021-01-21. See release notes (below) for update history. See Archived documentation in the online version of the user guide for previously released user guides and for older release notes.

Release notes 2021

Released	Area	Features and updates
2021-01-21	B2B Commerce	The end user documentation for Episerver B2B Commerce and Episerver PIM has now been integrated in this user guide. See sections Episerver B2B Commerce and Episerver PIM.
2021-01-21	CMS	Edit and publish blocks in a quick edit view, which lets you edit relevant block properties without leaving the current context. (update 350)

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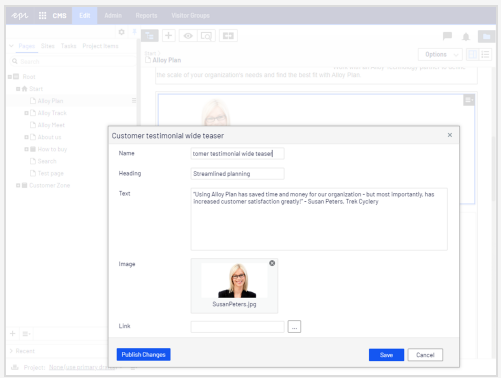
Released	Area	Features and updates
		
2021-01-21	Commerce	Customer service representatives can create *notes* associated with carts, orders, and subscriptions (update 349).
2021-01-21	Personalization	• Create reusable email templates • Export CSV data in localized format for the selected language • Users (with authorization) can change the currency selection
2021-01-21	Campaign	You can now run A/B tests for transactional mails to send different variants of a transactional mail and check which variant performs better.

Archived documentation

If your Episerver implementation is not on the latest version, you can access previous versions of the Episerver User Guide under Archived documentation in the online version of the user guide.

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Episerver Search & Navigation

> **Note**: The Episerver Customer-Centric Digital Experience Platform contains many features to support you in your daily work. Depending on how your solution is set up, some features described in this documentation may not be available to you. Contact your system administrator to find out more. See Episerver World for technical information.

Most site visitors abandon a website if they cannot quickly find what they are looking for. With increasing information volumes, menu navigation is no longer sufficient, so search becomes critical for locating information. Episerver Search & Navigation (formerly Episerver Find) adds powerful search functionality to websites. Search encompasses internet search engines (like Bing) and a website's search function.

Search optimization increases the chances of attracting visitors to your website, keeping them there, and getting them to complete an action, such as registering or shopping. This is closely related to search engine optimization (SEO), often referred to as "the process of improving the visibility of website content in the search results."

Episerver Search & Navigation bases search functionality on visitor search behavior and website statistics. Using this information, you can add automatic landing pages, adaptive navigation, and guided search to increase website traffic and boost conversion rates.

The Episerver Search & Navigation documentation shows search administrators, such as editors and site administrators, how to set up and use Episerver Search & Navigation. It also shows developers how to configure and set up search features.

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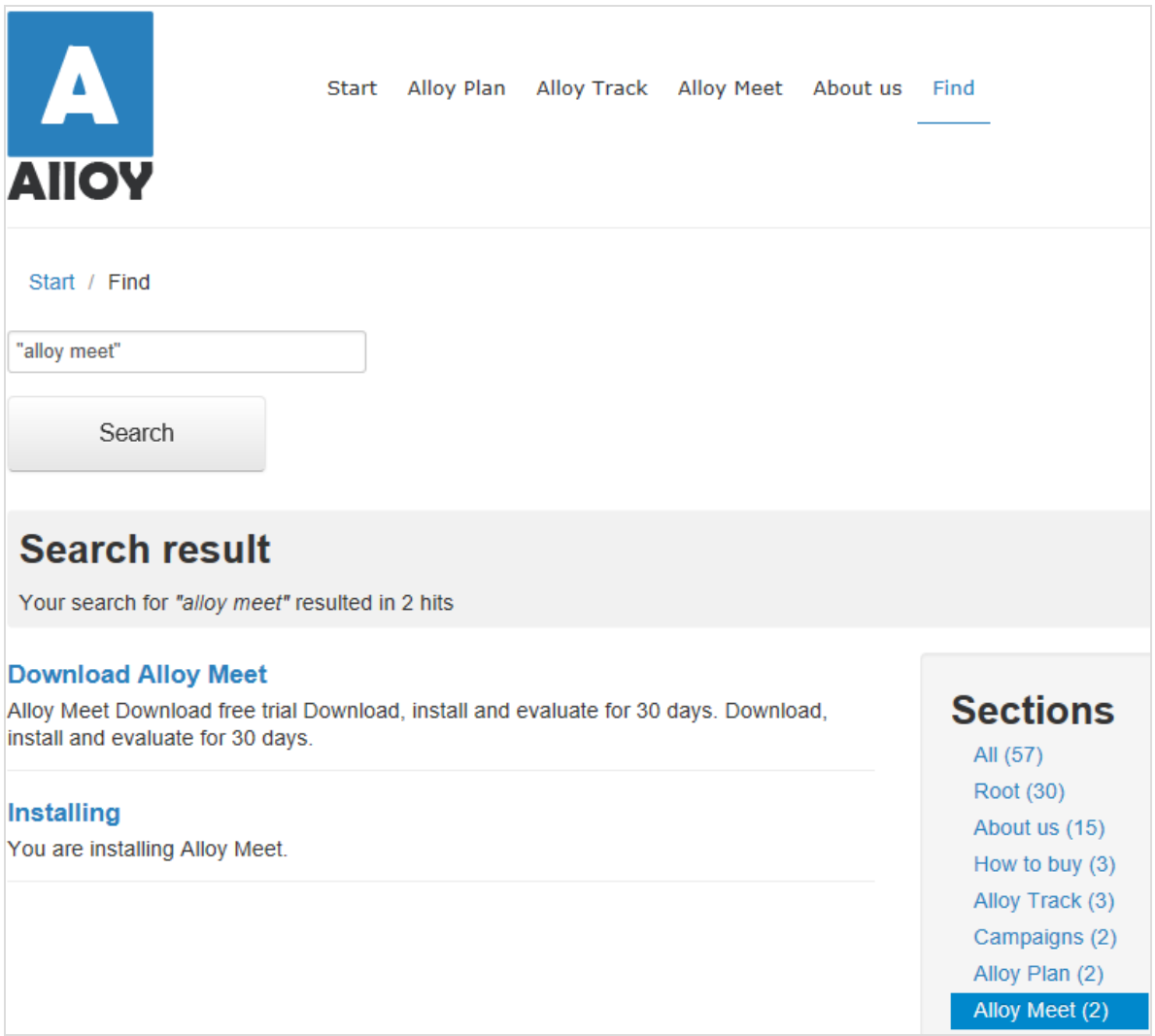

Feature summary

With Episerver Search & Navigation, you can develop customized functionality, such as filtering and faceted navigation, based on content properties, such as price or color. Episerver Search & Navigation is based on an index service and interfaces, which can be cloud-based or installed on-premises. Episerver Search & Navigation supports multiple languages.

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Episerver Search & Navigation indexes any type of website object, not only web pages. As soon as an author publishes content, Episerver Search & Navigation pushes data to the search engine, making new or updated content available in near real-time.

Features in "standard" Episerver Search & Navigation

- View and analyze search statistics for your websites, and use the statistics to optimize search.
- Explore the site index to see what was indexed and when, and use this information to customize search features.
- Promote selected content (best bets), and manage search phrases without hits.
- Add related queries to guide visitors in their search for specific content.
- Define synonyms for similar search phrases.
- Weight content properties to boost search results as desired.
- Support for basic boolean operators, like AND, OR, NOT. Special symbols like + and - are currently not supported. Complex nested combinations have limitations.

Features in Episerver Search & Navigation Connections Edition

Episerver Search & Navigation Connections Edition lets you add connectors, which index external content that is related to but not part of your website. For purchasing information about the Connections Edition, see Order Episerver Search & Navigation. To learn how to use it, see Adding connectors.

> **Note**: See Getting started in the CMS Editor User Guide for logging in, accessing features, and working with the Episerver user interface.

Help in Episerver Search & Navigation

Episerver Search & Navigation's user interface provides onscreen documentation. To access it, click **Show Help** in the upper right corner.

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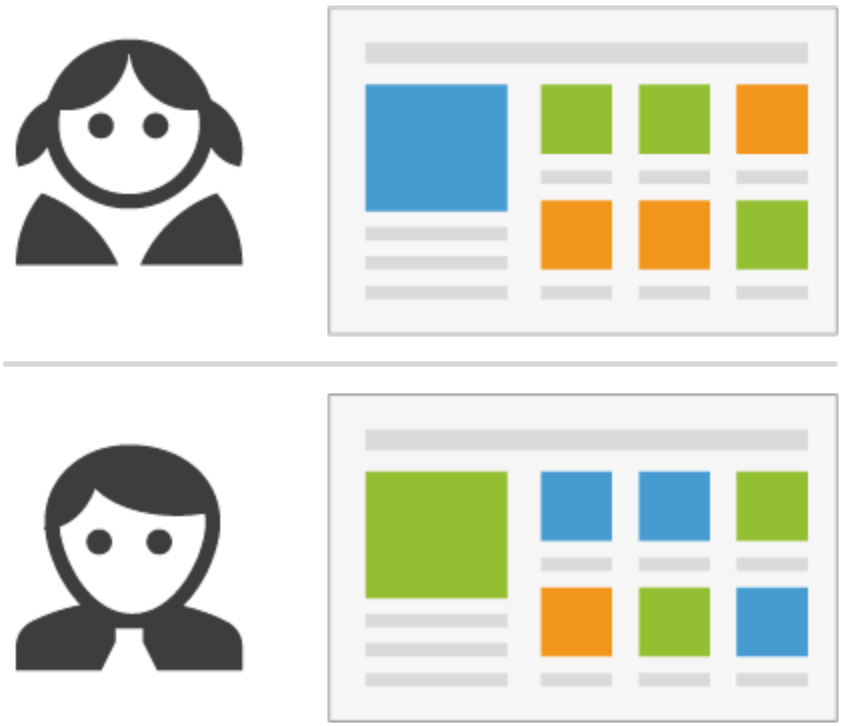
What is search optimization?

Search optimization helps site visitors quickly find the right website content. This is closely related to search engine optimization (SEO), often referred to as the *process of improving the visibility of website content in the search results*.

As a Web page's search rank increases, your website receives more visitors.



Episerver Search & Navigation lets you develop customized functionality to create automatic landing pages and different types of adaptive navigation with minimal effort. While Episerver Search & Navigation bases its SEO strategies on site visitor statistics, you can manually implement search optimization on targeted content to enhance the search experience.

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Learn by doing

Most of Episerver Search & Navigation's automatic SEO is based on queries made by site visitors. As the number of queries grows, Episerver Search & Navigation "learns" and bases search suggestions on previous successful queries.

The new website

When developers set up a website and configure search, they use the programming interface to develop custom filters (along with built-in filters) and faceted search features. Because the site is new, search optimization has few statistics, so you can help visitors by adding search phrase suggestions. See also: Autocomplete.

The growing website

As your website matures and accumulates search data, use search statistics to analyze search activity. Optimization evolves into monitoring, fine tuning, and promoting content to deliver the right content to visitors.

Automatic search optimization

You can attract visitors to your website and guide them to relevant content by coding the following features and tagging content properties.

Automatic landing pages

When you create a campaign, you usually make significant efforts to set up landing pages and display desired content in various places of the website. Tagging and search criteria let you create landing pages that dynamically display relevant content.

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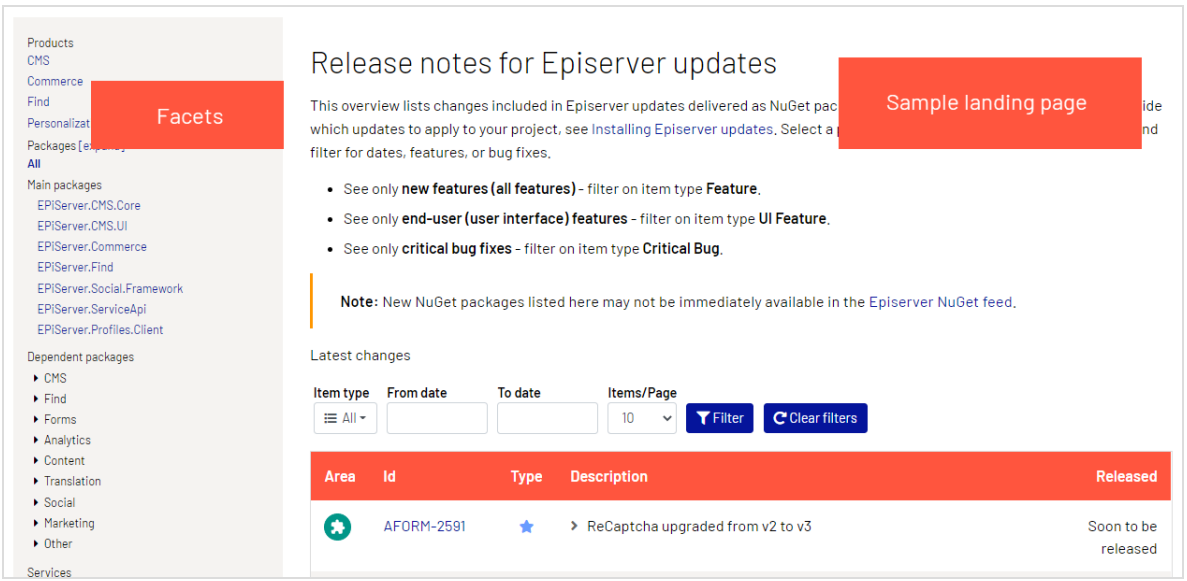

An automatic landing page (as in the example above) is actually a search page with a small editorial area at the top. Episerver Search & Navigation drives search results through content tagging. Site visitors can narrow down search results using the facets.

Using Episerver Search & Navigation, you can develop customized functionality to provide an SEO-friendly URL for the dynamic landing page, based on visitor-selected facets . Example: if you search for *sweatshirt*, the returned URL includes associated search facets, such as the following `../search/sweatshirt/women/hoodies`.

Adaptive navigation

Website navigation often is static and based on a content structure that is well-known to editors but less intuitive to visitors. With search criteria, you can create navigation that displays personalized content based on what is known about the visitor, such as content relations or a registered profile.

Guided search

Episerver Search & Navigation can suggest search phrases automatically, based on the behavior of site visitors. Example: searching for *page* returns **people searching for "page" also searched for "web page"**. The autocomplete feature also provides guided search.

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Optimizing search manually

Although Episerver Search & Navigation performs search optimization automatically, you should regularly monitor search activities on your website to fine-tune search performance and spot discrepancies. You may want override system suggestions to promote specific content.

Use the optimization view to perform manual search optimization. Optimization may also include modifying website content to achieve desired results. The following scenarios demonstrate how search optimization actions can guide visitors to appropriate content.

Search phrase does not match wording in content

Example: *basket* instead of *cart*. Help out by adding a synonym.

Promote selected content

Use best bets to promote selected pages' content. Example: if a visitor searches for *Christmas cards*, a *Christmas special offer* appears at the top of the search results.

Visitors are not clicking search result links

Low-click frequency may not be a problem—it can indicate that search results provide adequate information. But it also may indicate that the information is not attractive enough. Work with the content as described in this topic to ensure that an appropriate description appears in search results and SEO requirements are met. Or, create a best bet with a custom title and description.

No search results returned because the content is missing

Use search statistics to discover if needed content is missing from your website. This requires a strong understanding of the content. Create the missing content and ensure it appears in search results.

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Content searched for is not on your website but visitors assume it is

If visitors frequently search for content on a related website, add a connector to index that site's content and merge it with your site's search results.

Returned results do not contain the search phrase

Add the search phrase to the content, or add synonyms, which let site visitors retrieve content without knowing exact wording.

Relevant content is found but not displayed at the top

Work with the content to verify that SEO requirements are met. For example, make sure the page has a relevant title, correct and descriptive meta information, and an accurate modification date. Also, make sure the page has relevant keywords and search phrases. Use specific keywords instead of broad, widely-used terms. For example, **agile commerce** (instead of **commerce**) significantly narrows results.

See also general guidelines about optimizing content for search engines, such as Google's Search Engine Optimization Starter Guide.

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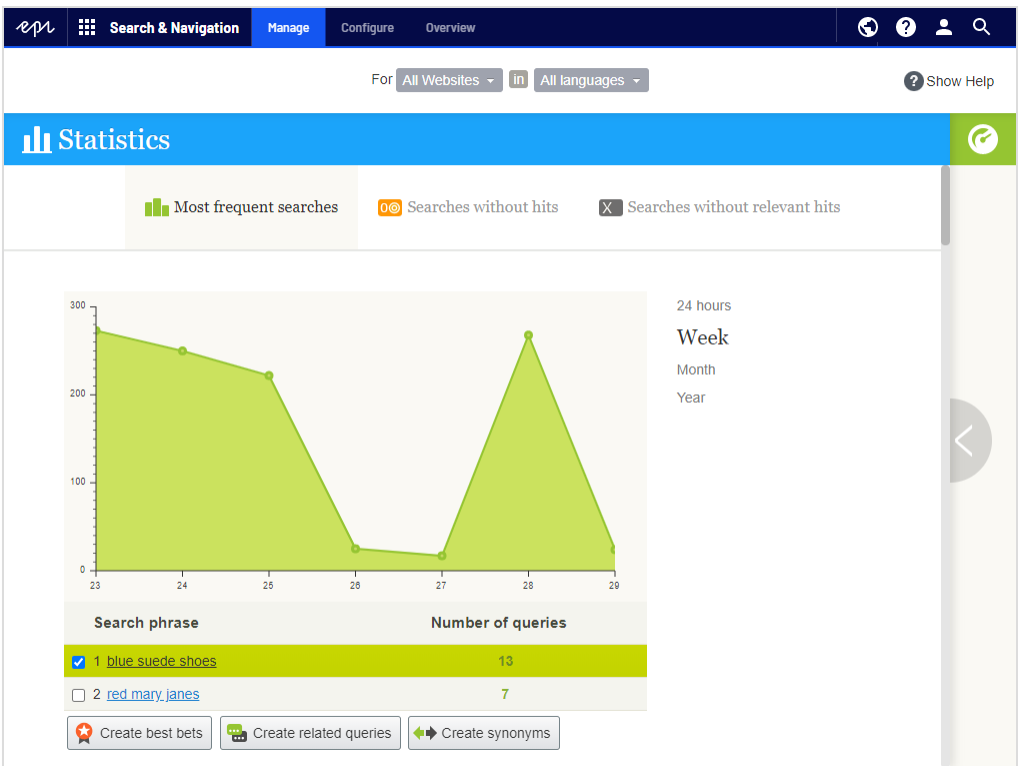
Analyzing search statistics

Episerver Search & Navigation collects statistics from site visitor activity and displays them in the Statistics View, where you can analyze the activity.

Statistics are scarce for a new website, but as your site matures and captures more search behavior, you can analyze the information to optimize the search experience.

> **Note**: You need specific access rights to access features in Episerver Search & Navigation.



The Statistics view displays popular searches during a selected time period and reveals if matching content was found. You can filter search information by time interval, web-site, and language.

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- **Most frequent searches**. Phrases searched for most often.

  > Tip: Use your most frequent search keywords to create Best Bets.

- **Searches without hits**. Phrases most often searched for *and* for which no results were found.

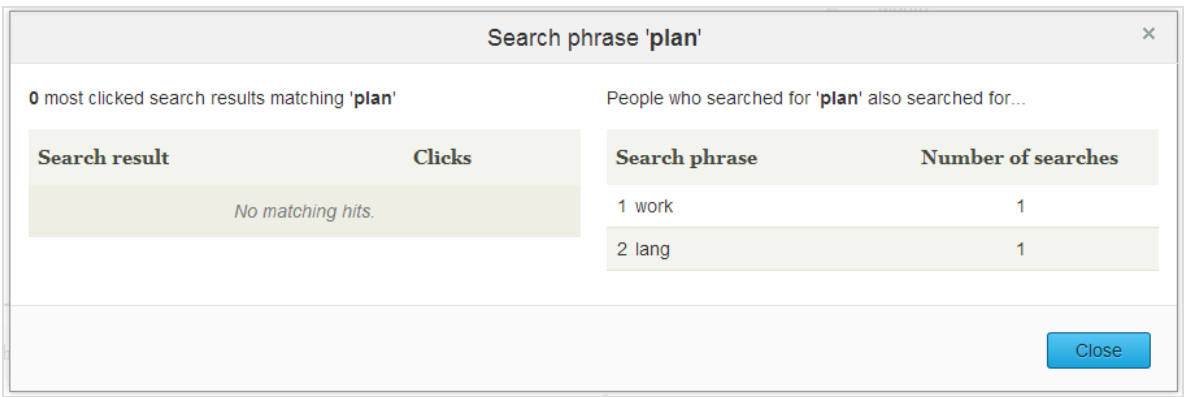
  > Tip: To improve the user experience for searches without hits, add synonyms, autocompletes and/or related queries to help users find relevant content.

- **Searches without relevant hits**. Searches that generated hits but had a low click-through rate. Phrases that are most frequently searched for *and* for which search results are clicked the least appear at the top.

  > Tip: To improve the user experience for searches without relevant hits, either create new content, or use related queries or synonyms.

If you click a search phrase in a list, a new window appears, containing the following information.

- matching search results (when using **Most frequent searches** view)
- other searches performed by the visitor who submitted that search phrase



From Statistics view, you can select one or more search phrases and switch to the optimization interface to work with best bets, autocompletes, related queries, or synonyms.

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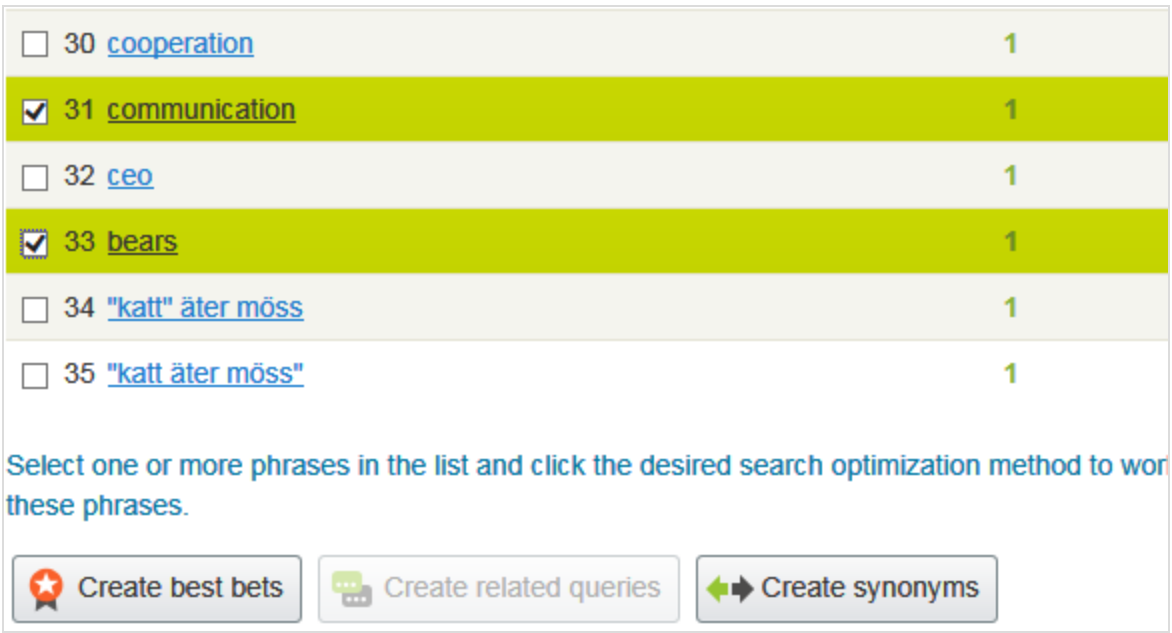

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Manually optimizing search results

Although Episerver Search & Navigation automatically optimizes the search, you should monitor your site's search activities regularly to fine-tune performance and identify trends. At times, you may want to override system suggestions or promote specific content.

When you perform search optimization, work closely with stakeholders such as the website owner, marketers, content editors, and developers. Tasks depend on whether the site is new or mature because of the amount of statistics with which you have to work.

You can perform search optimization for multiple websites and different languages from the same user interface. To optimize search effectively, you must be familiar with your website content.

> **Note**: You need specific access rights to access Episerver Search & Navigation features.

The optimization view

To access Optimization View, from the toolbar, click **Search & Navigation** > **Manage** > **Optimization**.

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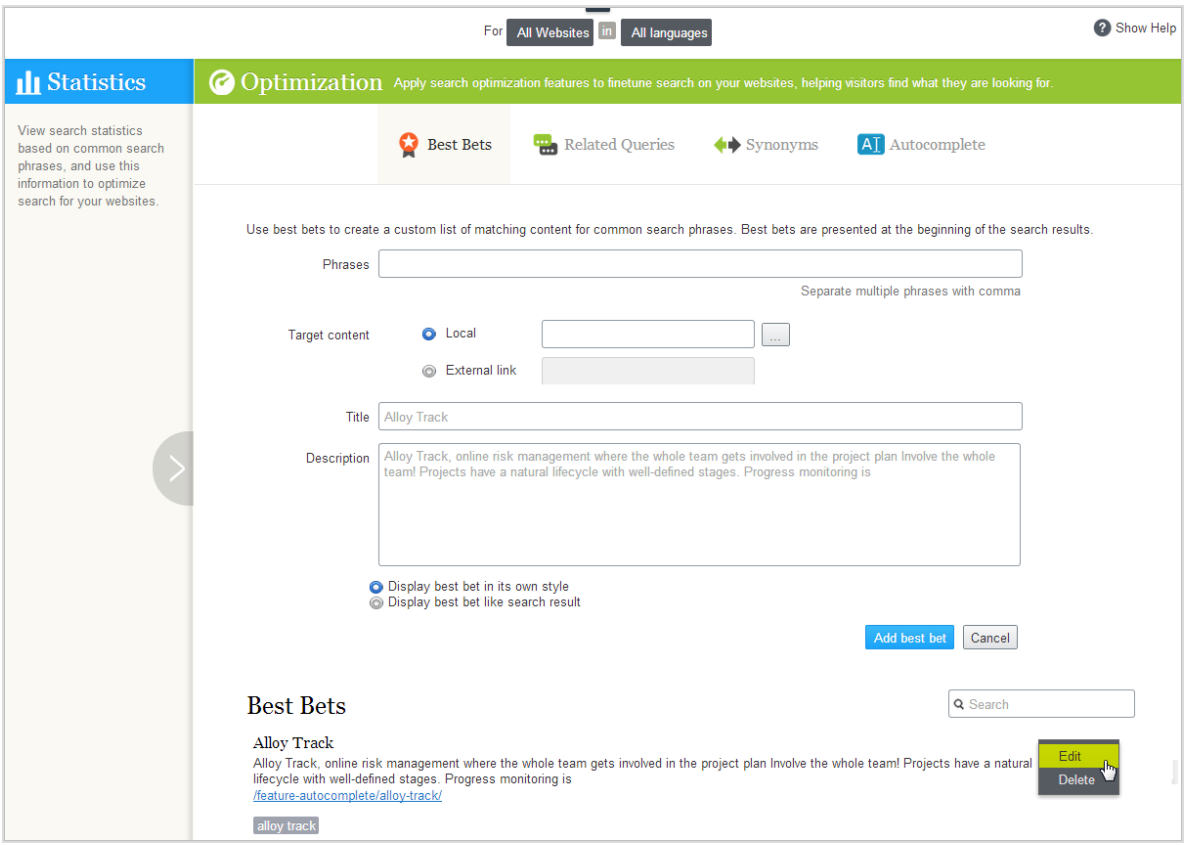

Use Optimization View to manually optimize search. You can select search phrases in the **Statistics** view, and transfer them to Optimization View. Or, you can manually enter search phrases into Optimization View's **Phrases** field.

What to look for

- Frequently-searched phrases indicate "hot" topics, content that visitors assume is on your website.
- Search phrases without hits reveal content missing from your website or a need to improve a content item's ranking in search results.
- If visitors search for content that is related to but not stored on your website, consider adding a connector to index an external website.
- Search phrases with low click-through rates may indicate that the content description is insufficient, or that the title or description is not attractive enough. In the latter case, create a best bet with a custom title and description to promote the content.
- By clicking a search phrase in the list, you see other phrases that the same visitor searched for. For example, if someone searching for **project plans** also searched for

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planning and **tracking projects**, respond by adding missing content, or creating synonyms or best bets for these phrases.

Using the Statistics View data, try the following content optimization tasks.

- Promote content using best bets
- Suggest related search phrases
- Add synonyms for similar phrases
- Create editorial autocomplete suggestions

Promoting content using best bets

Episerver Search & Navigation lets you promote content by adding *best bets*, search phrases that deliver selected Web content to the top of search results. Use best bets to provide answers to common questions, or to create sponsored links such as in an e-commerce site.

For example, if a search phrase has a low click-through rate, that might indicate that the content title or description is not compelling. Use a best bet to assign a custom title and description to promote that content. By customizing title and description, you optimize the site visitor's search experience.

A best bet's search phrase does not need to occur in the assigned content – you are simply mapping one or more phrases to an internal or external Web page, which appears above organic search results.

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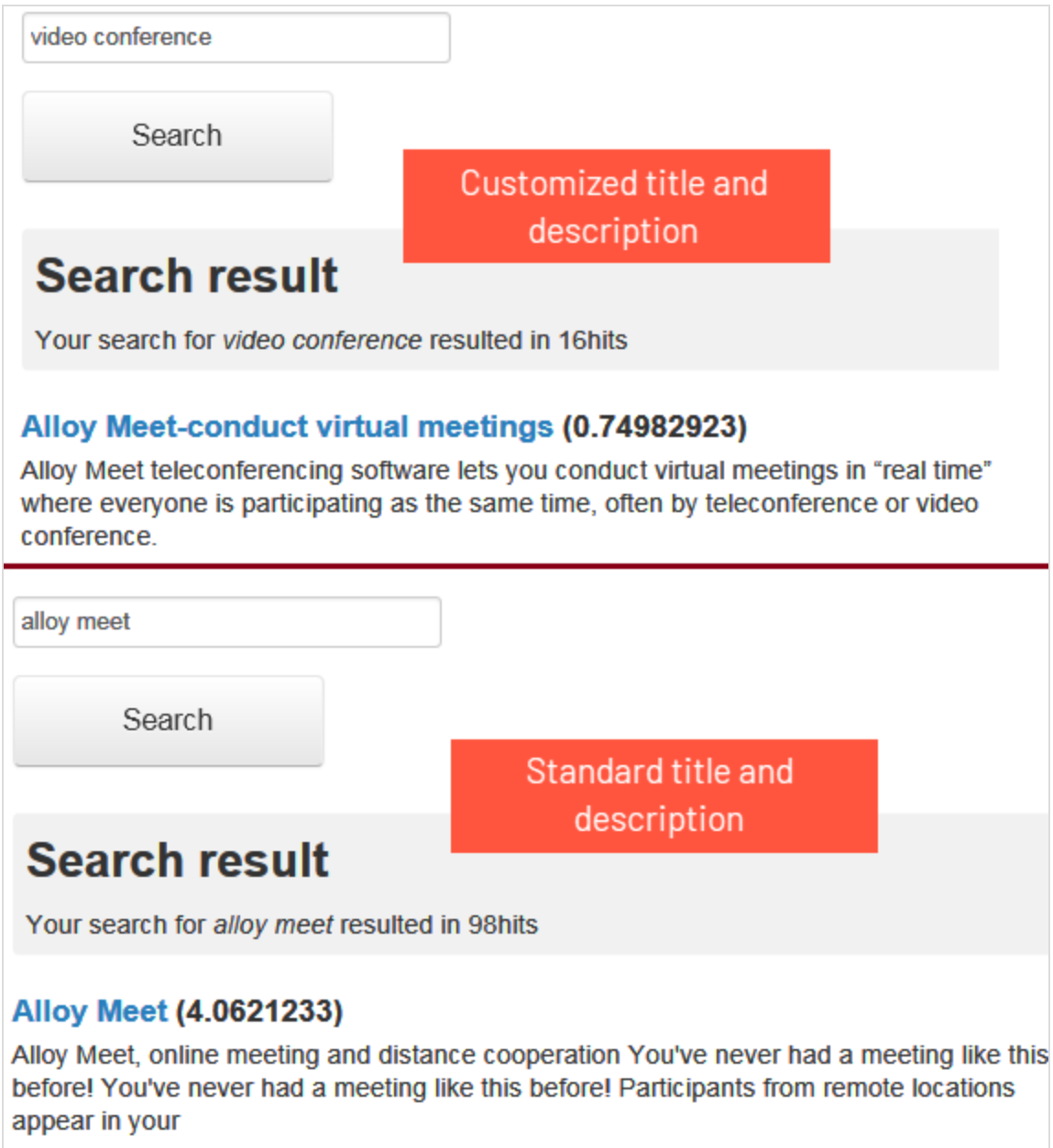

You can style a best bet to distinguish it from organic results. For example, notify visitors that a link is sponsored.

> **Note**: A developer needs to implement this feature in your website's styling.

You can define best bets for a specific language and a specific website.

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Examples of best bets

- You are running a Christmas campaign. When a visitor searches for **Christmas cards**, you want the **Christmas special offer** page to appear at the top of search results.
- Link search phrases to content that you believe visitors want. For example, for a contact information page, add a best bet with search phrases like **customer service**, **contact us**, and **opening hours**.
- You want a search phrase to return specific content. For example, if someone searches for **health insurance**, display the **health insurance card application form page** on top.
- You have a **Special offers** page, which appears in search results when searching for **offers**, but is rarely clicked. Create a best bet for the page and give it a title like **Unbelievable Deals**, while leaving the original content untouched.

Adding best bets

> Note: Best bets are not enabled by default; developers need to enable them.

1. From edit view, select **Search & Navigation** > **Manage**. The Statistics screen appears.
2. If one or more search terms that you want to promote via best bets appear in the **Search Phrase** list, select the ones you want, then **Create best bets**. You can modify the search terms on the Optimization screen.

   Otherwise, select the **Optimization** screen > **Best Bets** and use the **Phrases** field to enter one or more search phrases.

   A best bet phrase cannot contain these special characters: + - && | | ! ( ) { } [ ] ^ " ~ * ? : \ /

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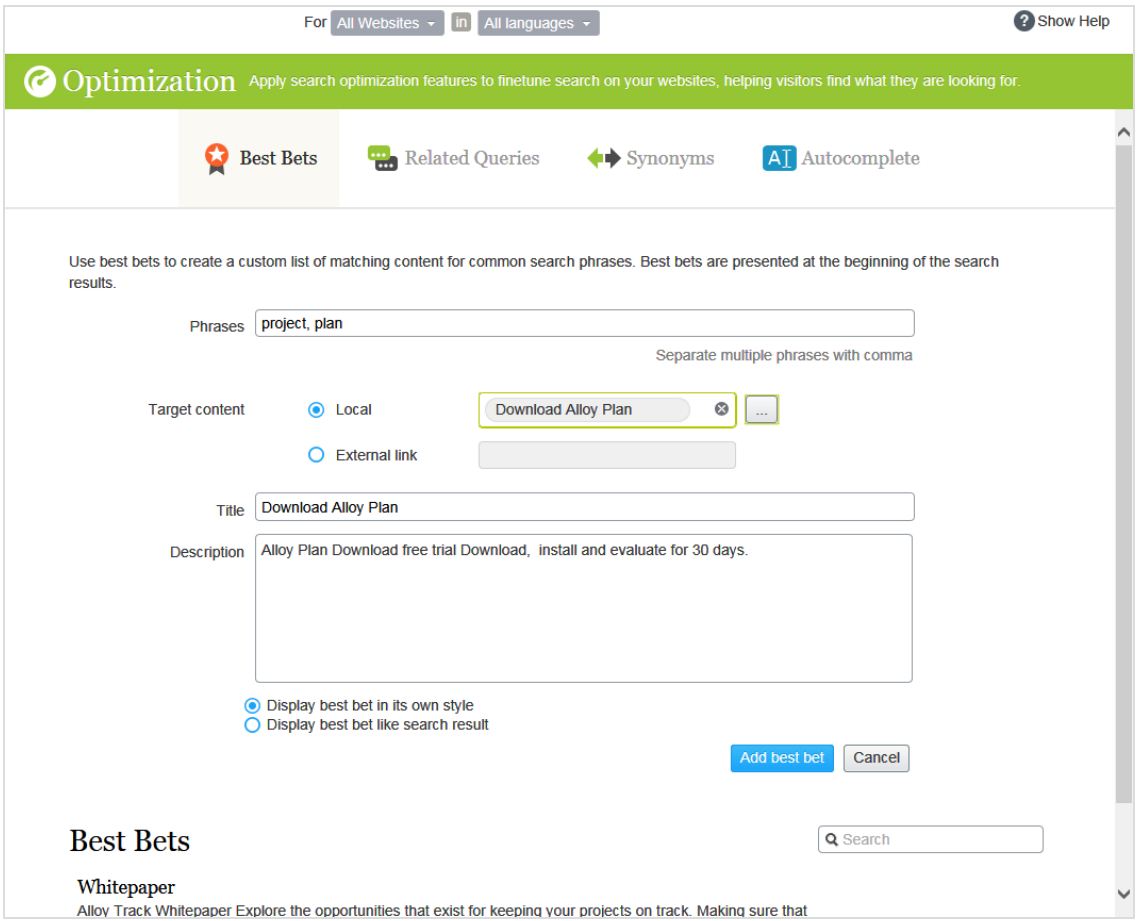

> **Note**: The site visitor must enter all words in the search phrase *exactly* to retrieve the content. Stemming is not supported. If a best bet contains several search phrases, and any of them matches the site visitor's input, the best bet content appears at the top of search results.

3. At the **Target Content** field, specify content to appear when a site visitor searches for any search phrase. To assign an Episerver page, image, video, or asset, select **Local** and navigate to it. To assign an external page, click **External link** and insert a URL with a protocol identifier, such as **https://**.
4. If you selected an Episerver page, its title and description appear. Modify them as desired. For example, enter more compelling text to encourage a site visitor to click the result.

   If you selected an external page, enter a relevant title and description.

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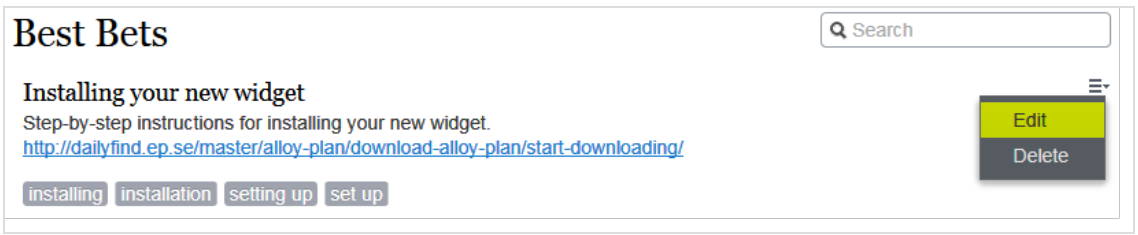
Editing best bets

The bottom of the **Optimization** page displays current best bets.

1. Using the context menu, click **Edit**. The screen is populated with the current values.



2. Change as needed.
3. Click **Save best bet**.

Deleting best bets

Best bets typically have a limited life, so maintain them continuously to ensure that out-dated promotions are removed.

1. Using the context menu, click **Delete**.
2. Confirm.

Effect of publication and expiration dates on best bets

Best bets respect content publication and expiration dates, and that information is presented on the **Best Bets** screen.

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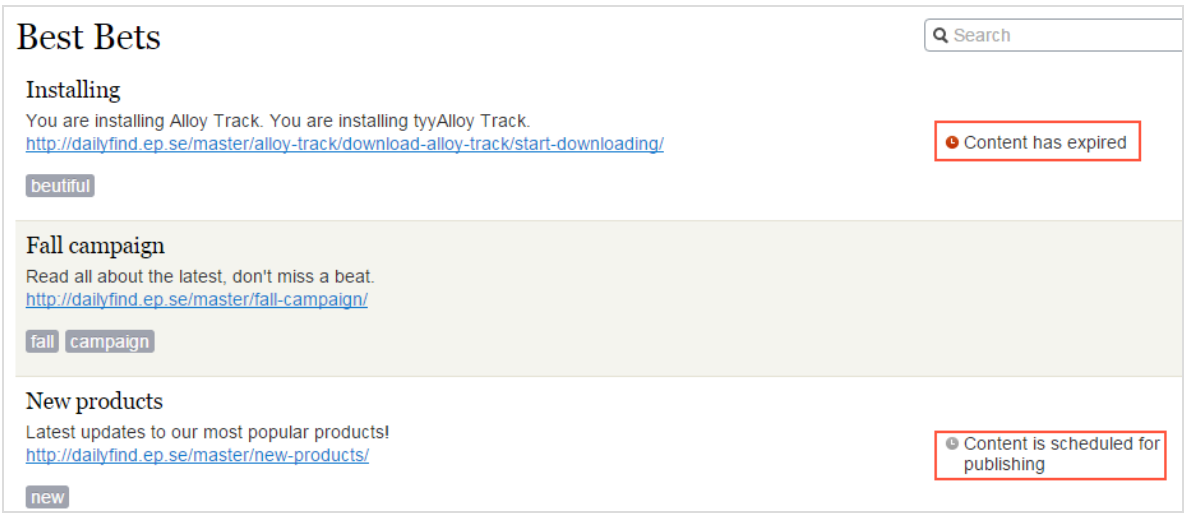

So, while you can apply a best bet to unpublished content, the best bet only affects search results if content is published. Also, if published content expires, a best bet no longer affects search results, although you can still see it on the Best Bets screen.

Best bets for catalog entries

If Episerver Commerce is installed on your website, you can promote content using the catalog content selector in best bets view. You can define best bets for products and variants and images in the catalog.

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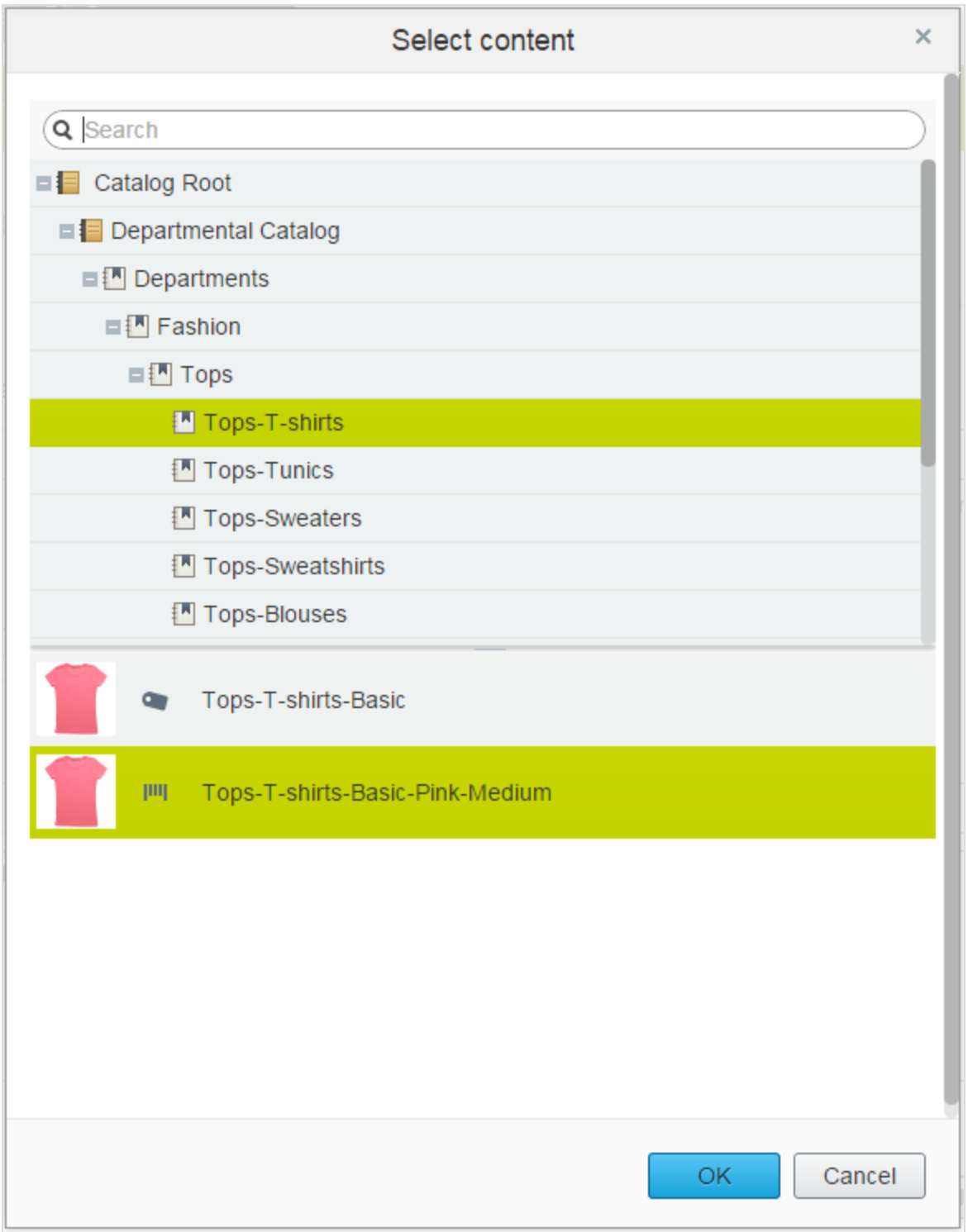

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Adding related queries

Use related queries to create suggestions associated with a search phrase, guiding visitors to certain search patterns.

Episerver Search & Navigation automatically generates suggestions from site visitors who also searched for the same phrase. You can manually add related queries that are not automatically generated because users are not entering those search terms. By manually adding related queries, you create desirable search patterns that are used as the website evolves. For example, on a travel website, to searches for *Spain*, add related queries for *Barcelona* and *Madrid*. Or, on an e-commerce site, to searches for *accessories*, add *handbags* and *shoes*.

Creating related queries

> **Note**: You can apply a related query to a specific website and a specific language.

1. From edit view, select **Search & Navigation** > **Manage**. The Statistics screen appears.
2. If search terms that you want to use for related queries appear in the **Search Phrase** list, select them then **Create related queries**. You can modify the search terms on the Optimization screen.

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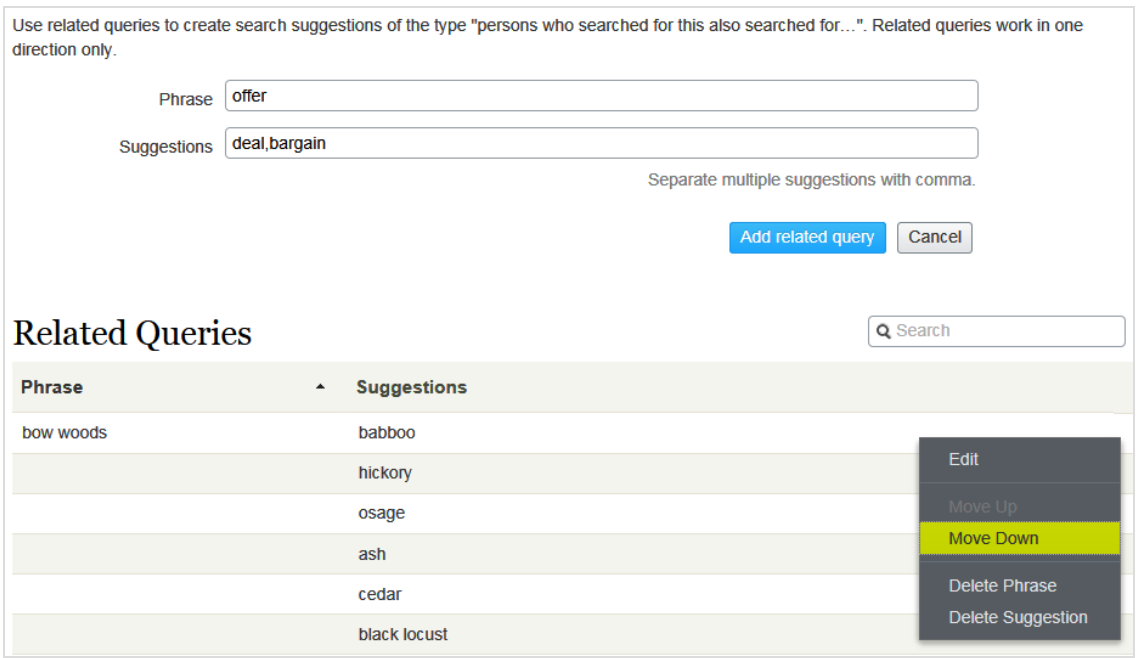
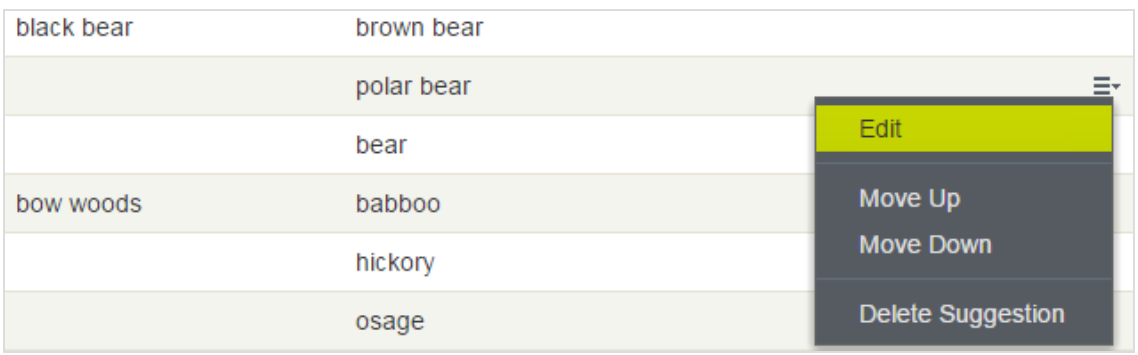
Otherwise, select the **Optimization** screen > **Related Queries** and use the **Phrases** field to enter one or more related queries.

A phrase can have up to three words, and must consist of alphanumeric characters, dashes, ampersand, or apostrophe.



3. In the **Suggestions** field, enter related terms by which users might want to search. You can apply several phrases to the same query. For example, the search term *training* has *course* and *school* as related queries. A suggestion should not match a phrase.
4. Click **Add related query**.
5. To change the position of a suggestion, click the context menu then select **Move Up** or **Move Down**. The screen position affects the presentation order of the related queries.



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Adding synonyms for similar phrases

Sometimes, site visitors enter a search term that does not occur in your content, even though your site has content of interest to them. To fix this problem, create a *synonym list*. If a site visitor searches for any term in the list, the search returns results for it and the synonym. For example:

- Phrases (terms not in your content but which site visitors submit while searching): *bill, payment, pay, fee*
- Synonym (occurs in your site content): *tuition*

If a site visitor enters *bill* into a search field that uses synonyms, the Synonyms feature adds OR *tuition* to the query. So, content containing *tuition* is returned even though it was not submitted as a search term.

The Synonym feature typically produces more hits. So, while site visitors do no more work, Episerver Search & Navigation greatly increases their chances of finding the right information.

Examples

- You have a *Special offers* page. It appears in search results when searching for *offer*, but site visitors often enter *deal* when searching. Create a synonym list with phrase: *deal;* synonym: *offer*.
- Phrases: *iPhone, Nexus, Galaxy* (three 1-word phrases)
  Synonym: *smart phone* (2-word synonym)
- Phrases: *email*, *telephone*, *people*, *twitter* (four 1-word phrases)
  Synonym: *contact* (1-word synonym)

Unidirectional versus bidirectional synonyms

When creating a synonym list, you decide if it is unidirectional or bidirectional.

- **Unidirectional**. If a site visitor submits a phrase on the list, Episerver Search & Navigation adds the synonym to the query. But, if a visitor submits the synonym, phrases on the list are not added to the query.
- **Bidirectional**. If a visitor submits the synonym or any term on the phrases list, the synonym and the term are added to the query.

On the Synonyms screen, an icon indicates a list's direction.

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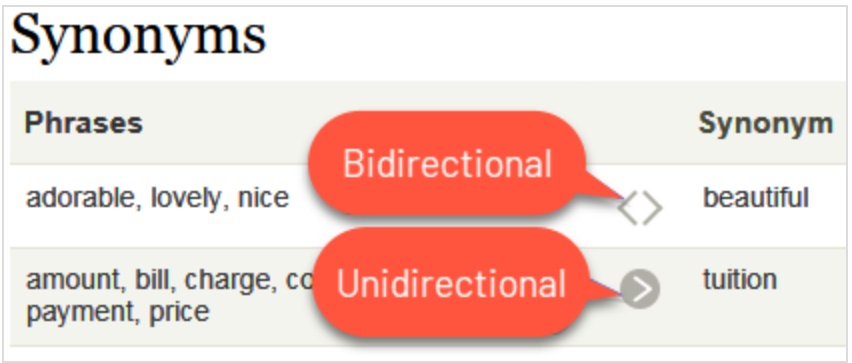

Example

- If *recycling* is a *unidirectional* synonym to *dump*, you get hits for *recycling* when searching for *dump*, but you do not get hits for dump when searching for *recycling*.
- If *recycling* is a *bidirectional* synonym for *dump*, you get hits for *dump* when searching for *recycling*, and hits for *recycling* when searching for *dump*.

Keywords versus synonyms

The advantage of search keywords is that they are used by Episerver Search & Navigation and external search engines (for example, Bing) to retrieve content on your site. However, you must add SEO keywords to each content item.

Synonyms apply to all site content, or content in the selected language, but are only used if someone uses the Episerver Search & Navigation search functionality on your site.

Adding synonyms

> **Note**: Synonyms are usually language-specific but you can apply them to all languages.

1. From edit view, select **Search & Navigation** > **Manage**. The Statistics screen appears.
2. If search terms you want to use for synonyms appear in the **Search Phrase** list, click them, then select **Create synonyms**. You can modify the search terms on the Optimization screen.

   Otherwise, select the **Optimization** screen > **Synonyms**.

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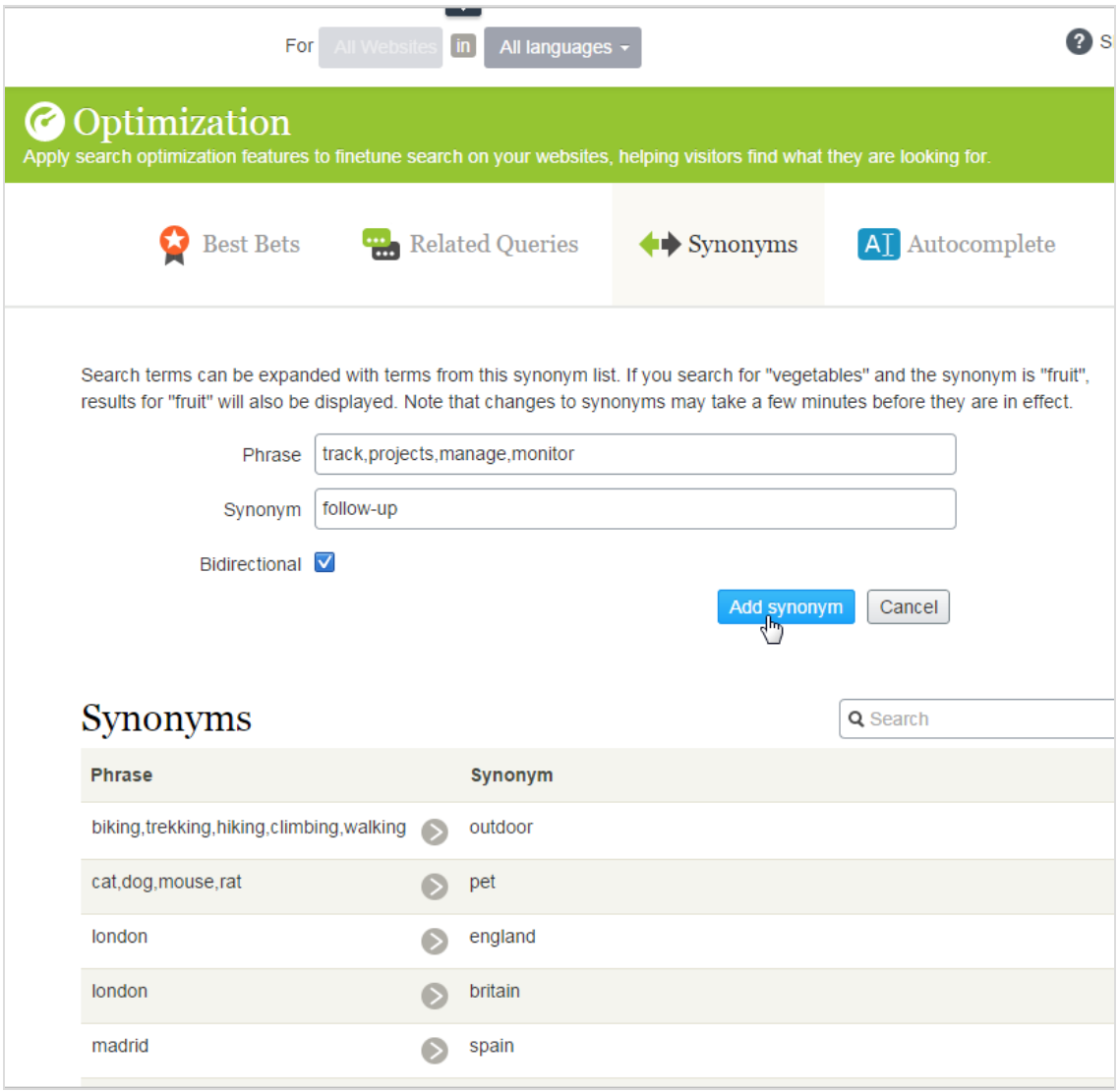

3. In the **Phrases** field, enter one or more synonym phrases that do not occur in your site content but which site visitors might submit while searching. Each phrase can have up to three words. You can enter an unlimited number of phrases.

> **Warning:** The search term must exactly match a phrase (stemming is not supported). For example, *vegetable* does not exactly match *vegetables*. As a workaround, enter two phrases: *vegetable* and *vegetables*.

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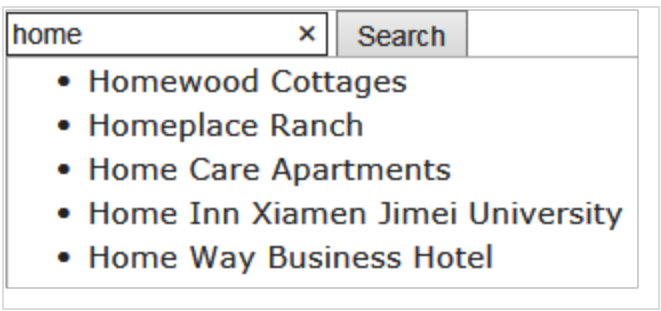
4. In the **Synonym** field, enter a term (up to three words) that exists in your website content. Episerver Search & Navigation adds the synonym to the query when a site visitor enters any phrase in the list.
5. If you want the synonym list to be bidirectional, check the **Bidirectional** box. See also: Unidirectional versus bidirectional synonyms.

Autocomplete

Autocomplete suggests search phrases as a site visitor types characters into a search field.



The suggestion list becomes more precise as a user types more characters.

If a site visitor selects a suggestion, Episerver Search & Navigation executes a query using that term. Autocomplete speeds up the search experience when it correctly predicts words being typed.

> **Note**: The autocomplete functionality will only work from the beginning of a phrase, the search term must begin with the first word in the autocomplete phrase.

Sources of autocomplete suggestions

Episerver Search & Navigation provides two sources of autocomplete suggestions.

- Manually entered, on the Episerver Search & Navigation Optimization screen's **Autocomplete** tab.

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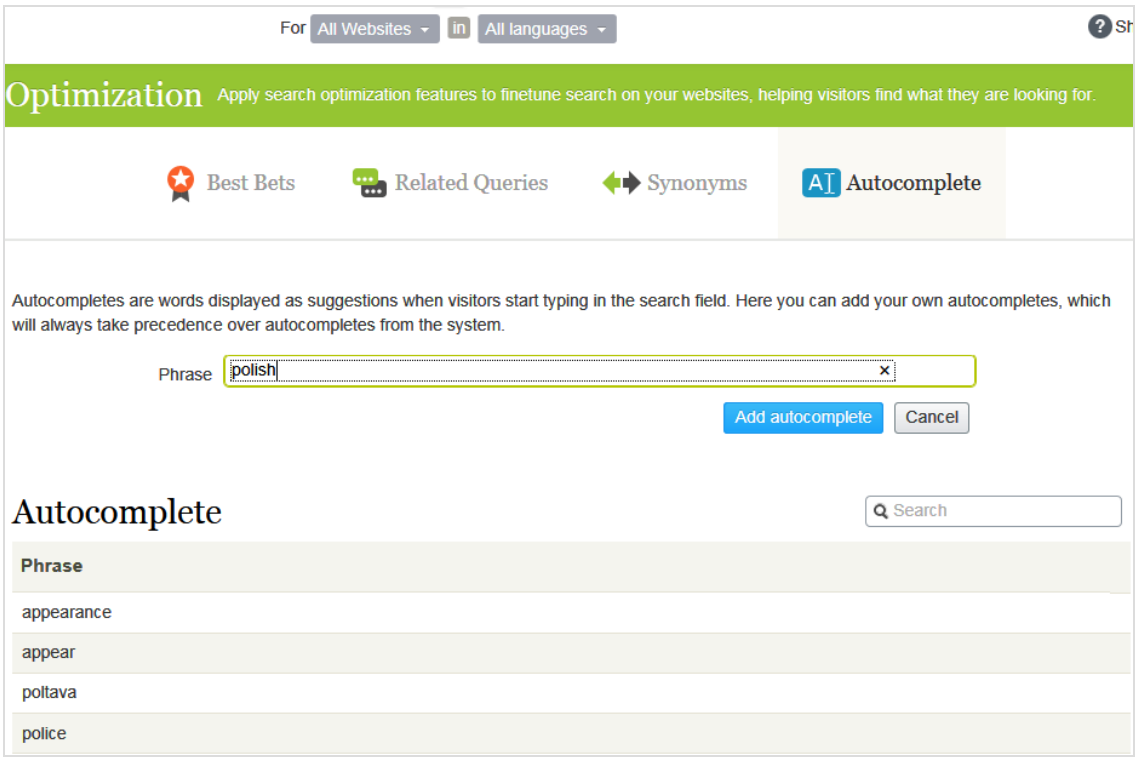

- Automatically generated, based on previous searches that resulted in at least one hit.

Manually-added suggestions take precedence over system-generated ones. For example, if a search for *polic* results in one user clicking a search result that uses *police*, Episerver Search & Navigation makes *police* an autocomplete suggestion for *polic*. But, if you manually add *policy* as a suggestion, that term appears above *police* in the suggestion list.

Usage recommendations

- Base autocomplete suggestions on search keywords for targeted content. For example, if your website sells bicycles, add the following suggestions to appear when a site visitor types *ro*.

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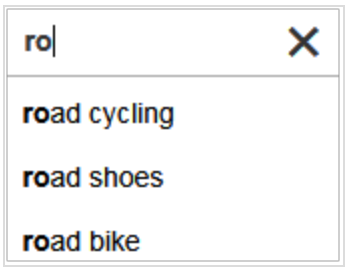

- For a new website, manually add autocomplete suggestions for important words. Even if no previous searches for them were made, the suggestions direct site visitors to appropriate pages.

Adding, editing and deleting autocomplete phrases

You can define autocomplete suggestions for a specific language and a specific web-site. To create a suggestion, follow these steps.

1. From edit view, select **Search & Navigation** > **Manage** > **Optimization** > **Autocomplete**.
2. In the **Phrase** field, enter autocomplete suggestions (one at a time).

> Note: The Autocomplete screen displays only suggestions that were manually added on this screen—it does not display suggestions based on previous, successful searches.

Use context menu options to edit or delete an autocomplete suggestion.

After you enter autocomplete suggestions, your developer must update website pages that host search controls to implement Autocomplete.

Changing the order of autocomplete phrases

The order of suggestions in the Autocomplete list determines their sequence in a search field's suggestion list.

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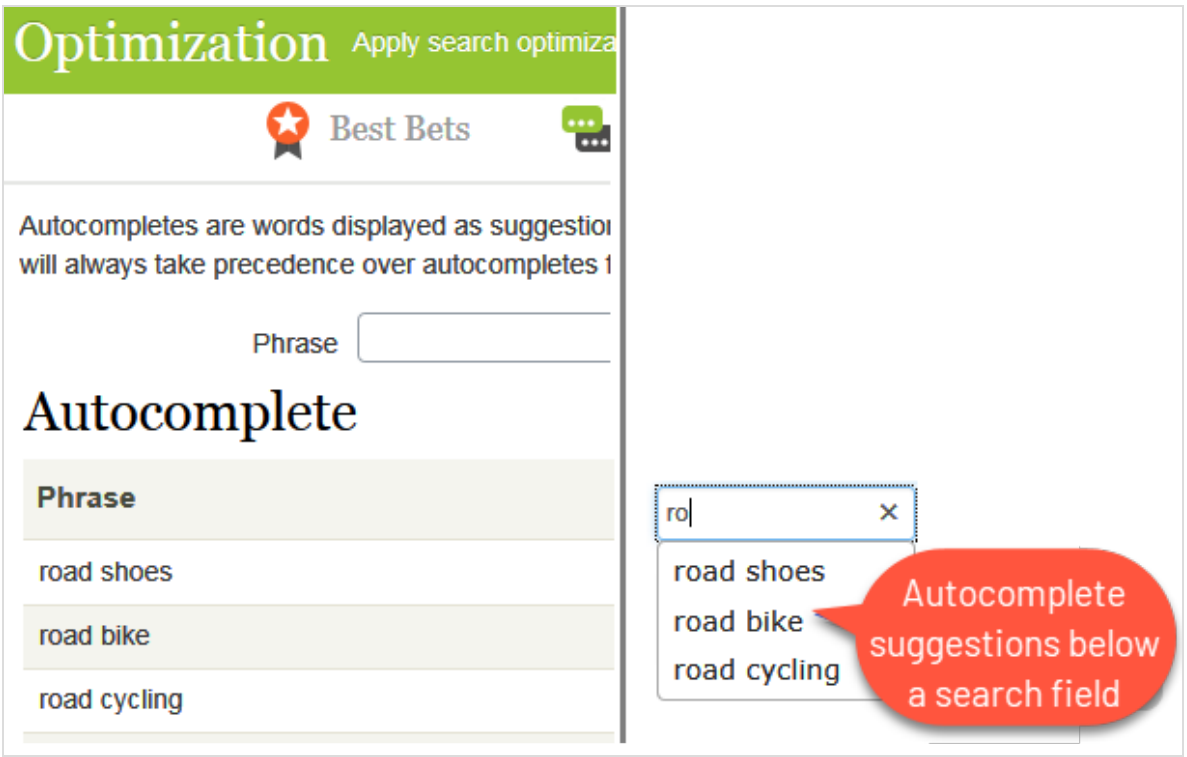
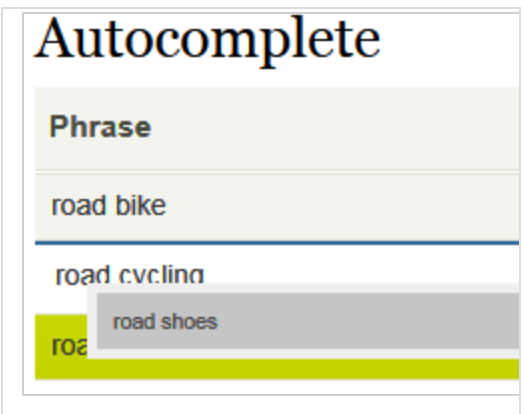


To change the order of suggestions, follow these steps:

1. Select the suggestion you want to move.
2. Drag it to the new position.
3. When you see a blue line below the new position, release the mouse button.



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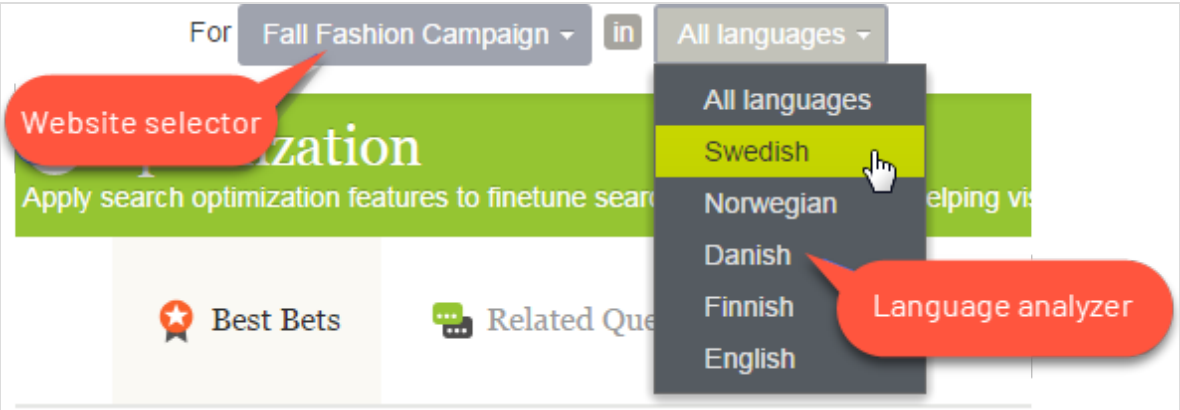
Optimizing multiple sites and languages

Because search optimization is often language-specific, Episerver Search & Navigation supports multiple languages and websites.

Filtering on websites and languages

At the top of the most Episerver Search & Navigation screens, use drop-down lists to choose a website and a language analyzer to filter the screen information before performing actions, such as viewing statistics and fine tuning search optimization.



Episerver Search & Navigation indexes

Episerver Search & Navigation needs only one main index. Multiple websites often share a single index. If you add a website, Episerver Search & Navigation adds new content to the existing index.

In addition to the main index, your Episerver Search & Navigation administrator can set up any number of *language-specific* indexes to increase search precision by employing strategies like word stemming. When content in a language with its own index is saved, Episerver Search & Navigation uses an *analyzer* to interpret and index the content. For example, the English analyzer uses word stemming to identify *fish* as the root word for *fishing* and *fisher*. So, if a user submits a search query that includes *fish*, *fishing*, or *fisher*, the search returns content with any word variation.

In contrast, if a search term matches content in the main index only, it must exactly match an indexed term to return search results; word variations are ignored.

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> **Note**: The number of supported language analyzers in Episerver Search & Navigation is determined when your organization orders an index and multi-language index support from Episerver. Your site administrator enables the analyzers during site setup.

How content from different languages appears in search results

If site visitors search a multi-language website, each language version of content appears separately in search results.

Language analyzers versus CMS content language

Your site administrator can enable one group of languages in Episerver CMS, and a different group of language analyzers in Episerver Search & Navigation. This may confuse users because, while the language selector on Episerver Search & Navigation screens might look like you are choosing content language, in reality, you are selecting an Episerver Search & Navigation analyzer.

The language analyzer is used when working with search optimization. Your site content can exist in several languages - they do not all need a language analyzer. However, a search that uses an analyzer is smarter.

Episerver Search & Navigation language analyzers are installed by a developer during implementation at a cost. Additional content languages can be added by a CMS administrator at any time and have no cost.

Examples of multiple websites and languages

The following examples illustrate search optimization with multiple websites and languages.

Enabling languages and optimizing search

You create a *Fall Fashion* page in the master language, in English (see image). Now, you want to enable Danish and Swedish on the website, and translate the page into those languages. You also want to apply search optimization techniques to promote the translated content. It is assumed that you enabled Swedish and Danish in the website's index.

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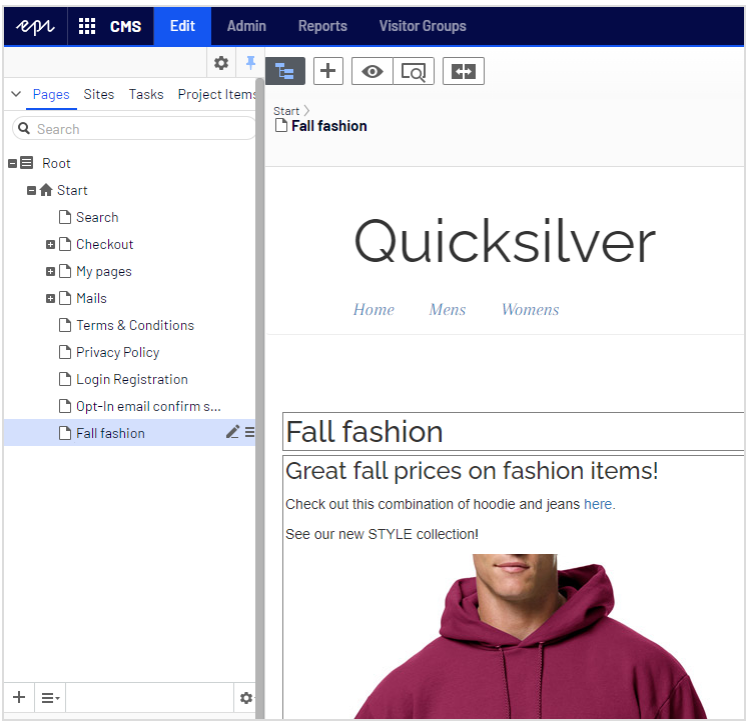

- Translate the page into Swedish and Danish.
- Because you enabled Swedish and Danish in the index, the *Fall Fashion* page appears in results when searching for *tröjor* and *trøjer*, the Swedish and Danish words for *cardigans*, even though the page contains the singular form cardigan (*tröja* and *trøje*).
- Create a best bet for the *Fall Fashion* page to promote it when someone searches for *cardigans* or *jeans*. You do not have to create best bets for the Swedish and Danish versions — Episerver Search & Navigation automatically displays the translated versions. If a best bet's content is not translated, Episerver Search & Navigation displays the master language version as a fallback language.
- Add *jeans* as a one-way synonym for *trousers* in English. If a site visitor searches for *trousers*, the *Fall Fashion* page appears at the top of search results.

  > **Note:** Because it is a one-way synonym, a search for *jeans* does not return pages containing *trousers*.

- Create the corresponding language-specific synonym pair for *jeans* in Swedish (*byxor*) and Danish (*bukser*).
- Assume that the new *style* brand is replacing the old *XX* brand in the new collection. Add *style* as a synonym for *XX*, applying to *all languages*. Visitors searching for the *XX* brand also see results for the *style* brand, regardless of language.

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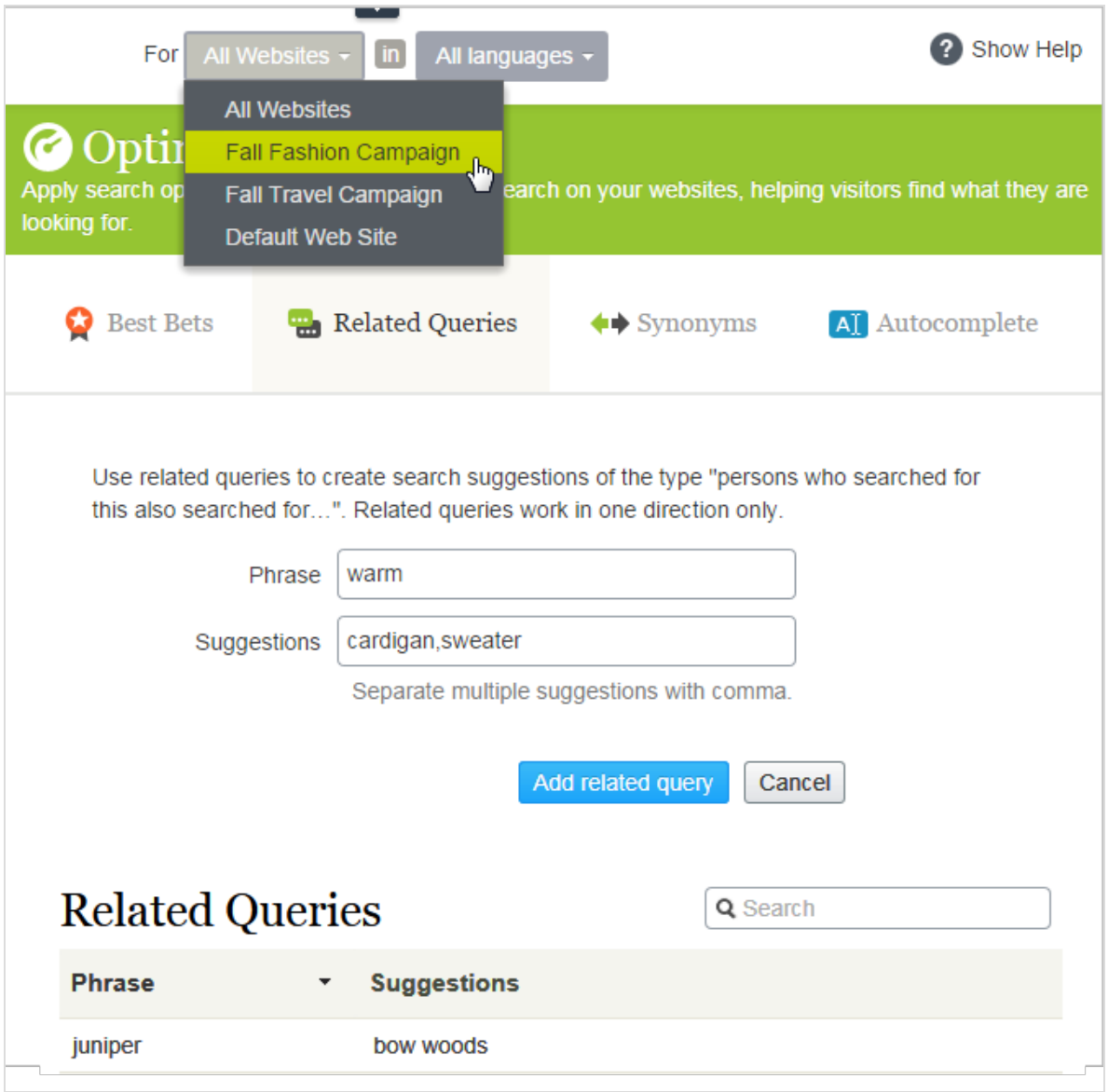
Adding websites and optimizing search

This example continues the previous one by creating two new campaign websites with targeted content: one for fashion and one for traveling, in addition to the default website. All three websites share an index and have the same languages enabled.



- Enable the desired languages in each new website, so editors can create and translate content in the sites.

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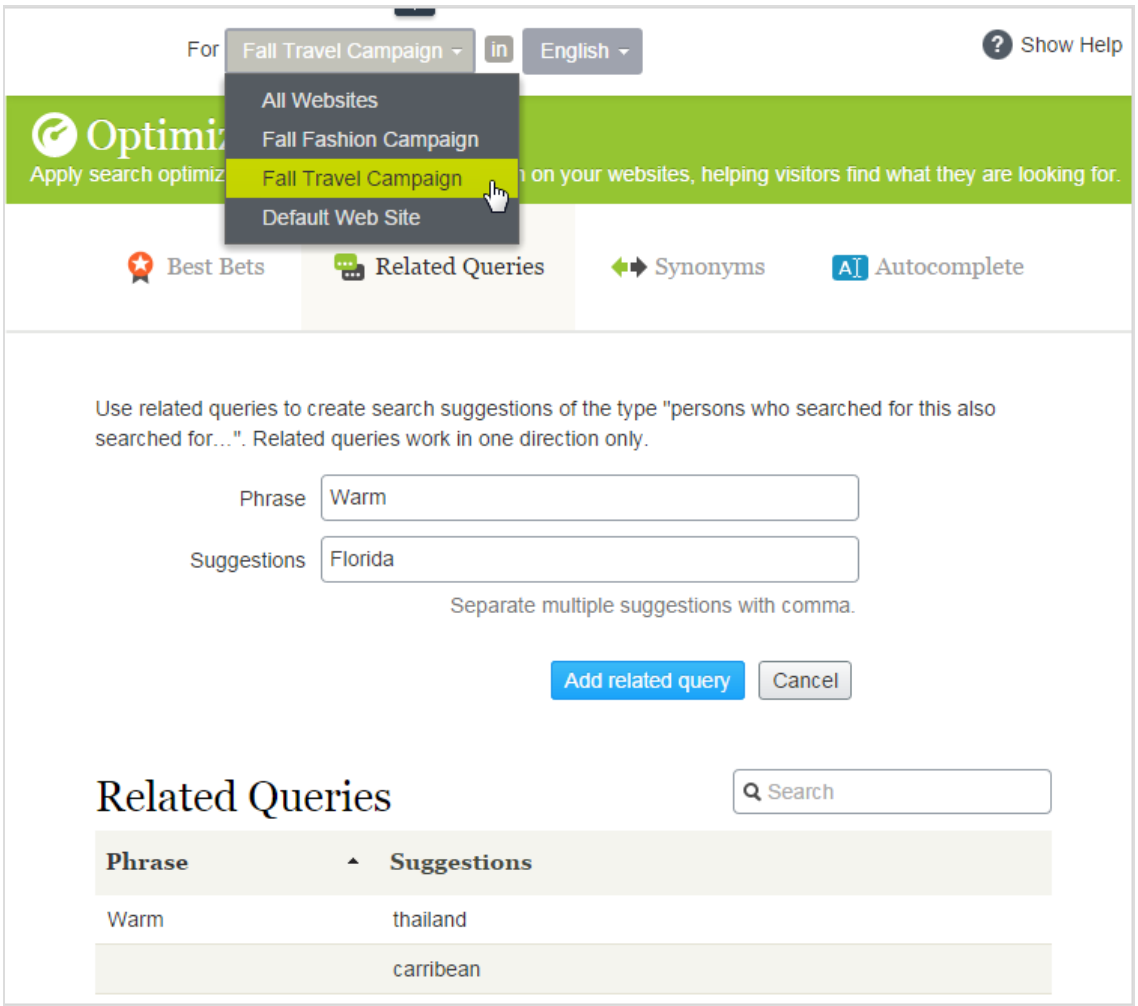
- Because the campaign websites are new and have their own URL, the statistics views are empty until visitors generate traffic and queries.
- All websites share an index, so best bets, related queries, or autocomplete suggestions are already defined the campaign websites.
- Similarly, any language-specific search optimization for all websites also applies to the campaign websites.
- By definition, synonyms apply to all websites. Synonyms can be language-specific, as explained the *style* brand example above.
- Because the campaign websites have different content (fashion and traveling), you can add website-specific related queries. For example, on the travel website, searching for *warm* (English) might suggest tropical destinations, like Jamaica. Searching for *warm* on the fashion website might suggest *cardigans* or *sweaters*.



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- Add website-specific autocompletion of search phrases. For example, if a visitor enters *car* on the fashion website, an autocomplete suggestion might be *cardigans*. On the travel website, the suggestion might be *car rental*.

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Configuring Search & Navigation

> **Note**: This topic is intended for administrators and developers with administration access rights in Episerver.

In admin view, a system administrator or developer can configure these search-specific tasks:

- Boosting results through properties
- Clearing the index and reindexing
- Adding connectors
- Exploring the index
- Access rights

Boosting results through properties

> **Note**: This topic is intended for administrators and developers with administration access rights in Episerver.

Episerver Search & Navigation has default properties, such as **Title**, **Summary**, and **Content**, that are automatically mapped to corresponding content properties. Each property has a weight setting that affects search result rankings. You can adjust the weight settings, which is called *boosting*.

Boost weight settings if your site has specific and well-defined content types. For example, if your site hosts scientific articles whose summaries are generally well-written and of great importance, increase the **Summary** weight so it has a greater impact on search rank.

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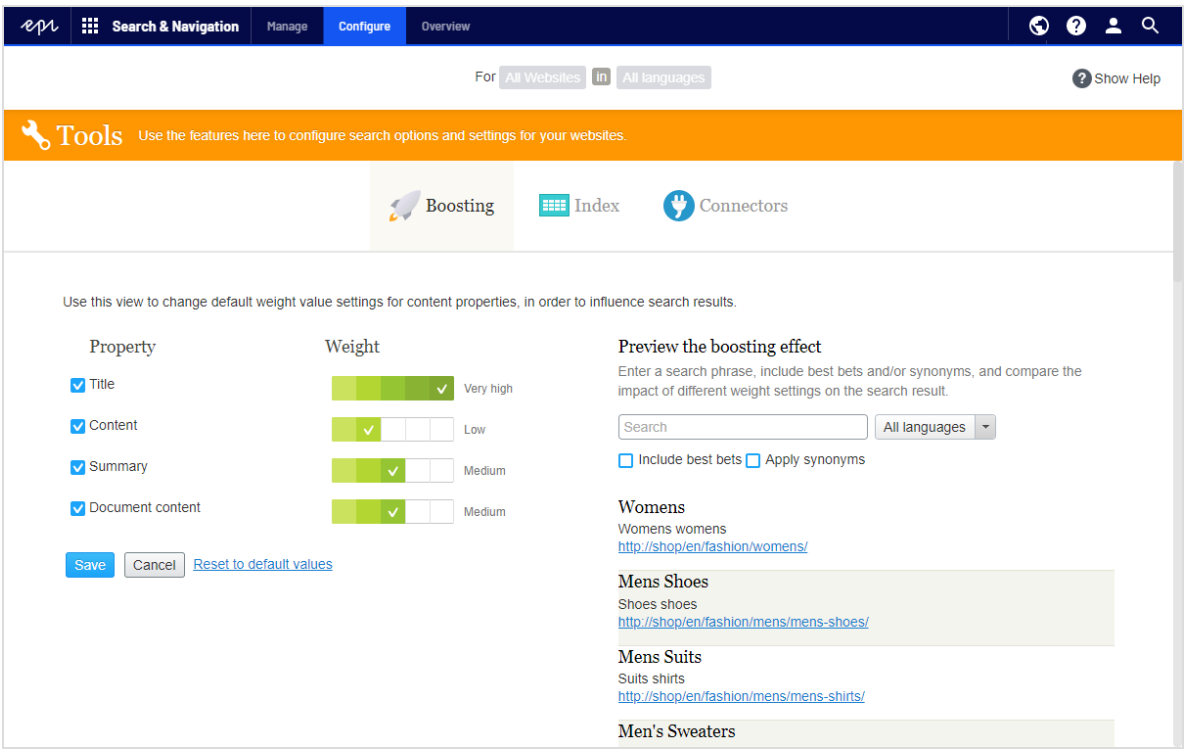

Changing weight settings

1. From edit view, select **Search & Navigation** > **Configure** > **Boosting**. Default properties appear on the left of the screen.
   - **Title**. Content title. For CMS content, it is typically the **Name** if not specified by the developer. For crawled content, it is the `<title>`-tag. For custom types, title is by default the **SearchTitle** property, if not specified by the developer.
   - **Content.** Web page content.
   - **Summary.** The introduction, summary, abstract, or similar property type.
   - **Document content**. The content of an asset, such as a PDF or Word document.
2. In the **Weight** column, click a box to change a property's weight.
3. Click **Save.**

Notes about changing weight settings

- To test the impact of property weight changes, click **Preview the boosting effect** from the right side of the Boosting screen.

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- To revert the changes, click **Reset to default values** from the Boosting screen, under the list of properties.
- These settings affect search results for *all* content types and all languages on all web-sites in your implementation.

Clearing the index and reindexing

> Note: This topic is intended for administrators and developers with administration access rights in Episerver.

You can clear (that is, remove) the Episerver Search & Navigation index and statistics. You typically do so during website development, after making extensive changes to content properties, or when reorganizing or removing content. You might also clear statistics after testing new functionality.

> Tip: After you clear the index, re-index the website.

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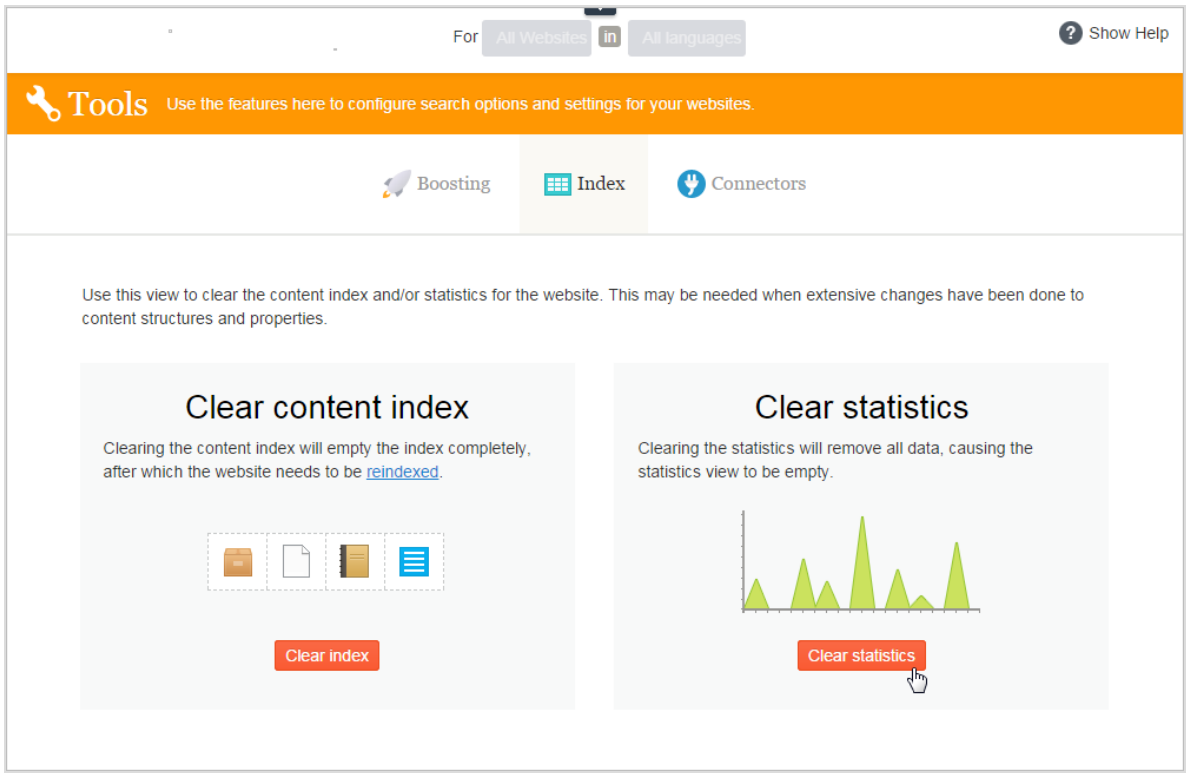

Clearing the index

When clearing the index, you remove all content from it, and have an option to clear statistics also.

> **Warning**: Index clearing operations are permanent. You cannot reverse them.

1. From edit view, select **Search & Navigation** > **Configure** > **Index**.
2. Click **Clear index**.
3. Re-index the website. See Re-indexing the website.

Re-indexing the website

1. Log into CMS admin view.
2. Go to **Scheduled Jobs**.

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3. Select the **Episerver Search & Navigation Content Indexing** job.

   You can start the job manually or on a schedule. See also: Scheduled jobs in the CMS Administrator User Guide.

Re-index your site under any of the following conditions:

- After you clear the index, because it is empty.
- If automatic indexing failed, or content must be reindexed for another reason.
- You changed content access rights, because automatic indexing does not detect those changes.

Removing statistics

1. From edit view, select **Search & Navigation**> **Configure** > **Index**.
2. Click **Clear statistics.**

If you clear statistics, statistics view is empty until new statistics are collected.

Adding connectors

> **Note**: This topic is intended for administrators and developers with administration access rights in Episerver.

A search connector lets Episerver Search & Navigation search content outside your website, such as an external blog related to your website. The connector lets your site visitors find the blog posts among your site's search results.

While Episerver Search & Navigation pushes internal content to the search engine instantly, a connector crawls external websites on a specified schedule.

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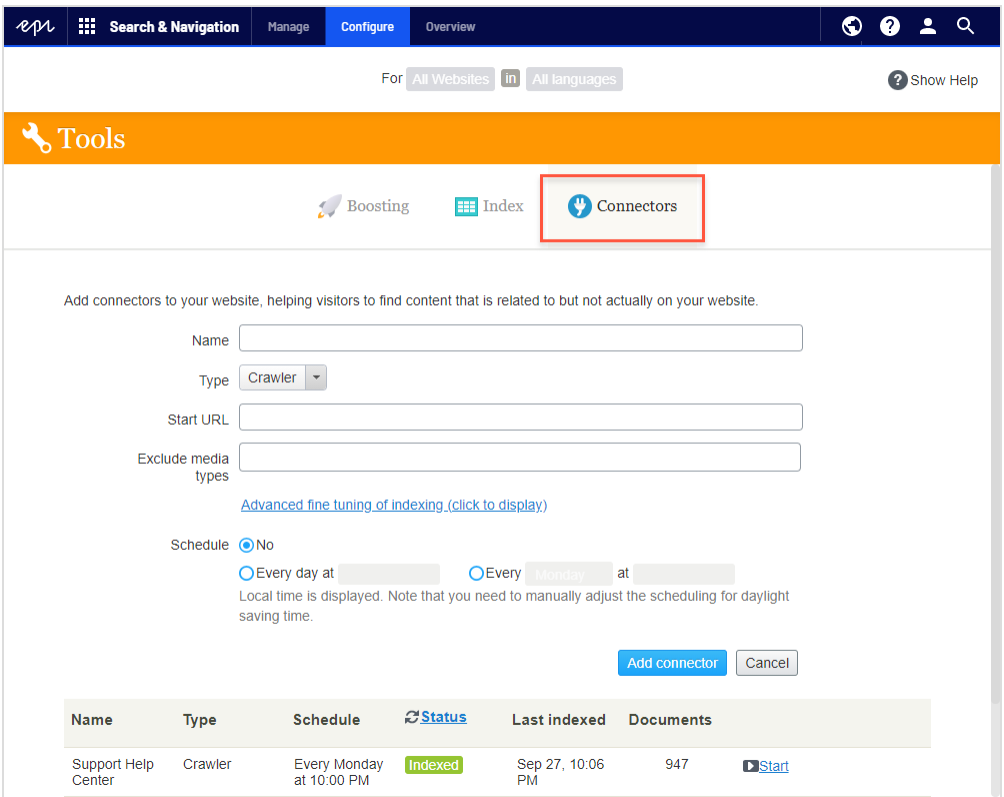

Configuring connectors

To access the Connectors screen, from the top menu, select **Search & Navigation** > **Configure** > **Connectors**. To view on-screen help, click **Show Help** in the top right corner. The following points supplement the on-screen help.

- By default, two connector types are available: **Crawler** and **RSS/Atom**. The connector type determines which configuration options appear below the **Type** drop-down list.
- If you choose **Crawler** type, you can fine-tune indexing by excluding media types such as style sheets, JavaScript, and XML files. See also: Media Types. Episerver Search & Navigation excludes the following media types from indexing by default.
    - text/css
    - text/ecmascript
    - text/javascript
    - application/ecmascript

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- application/javascript
- application/x-javascript
- application/x-pointplus

Click **Advanced fine tuning of indexing** to further limit indexing.

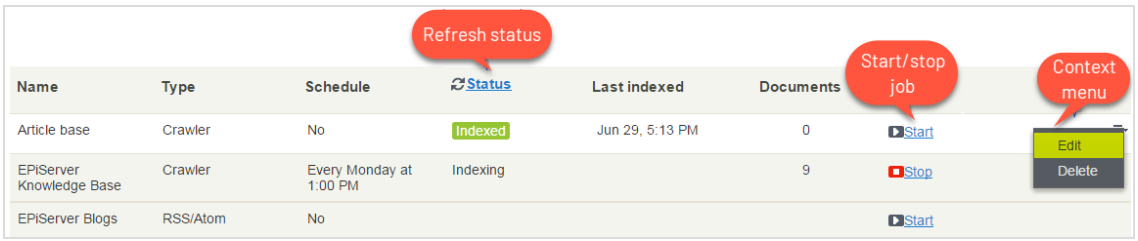
- Exclude query strings that are part of a link. For example, exclude crawling campaign tracking parameters (such as `utm_source`, used by Google Campaigns) to avoid unintentionally updating a campaign counter.
- Specify parts of a website to crawl but not index, or to not crawl at all. You may want to crawl but not index index search *links* to other pages, but not the content on those pages.

- Specifying an indexing interval.
  - Although you set a schedule in local time, it is converted to coordinated universal time (UTC) so it occurs at the same time regardless of server location. However, you must manually adjust local time when needed, such as for daylight savings time.

Viewing connectors and indexing jobs

The connectors list (at the bottom of the screen) shows status and scheduling information for all indexing jobs.

- You can manually refresh a connector's indexing status. If completed, last completion time appears.
- You can edit or delete any connector from its context menu. For example, you can update its schedule.
- You can manually start and stop indexing jobs.



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Updating a crawler's start URL

If you edit a connector's **start URL**, the crawl removes from the index all items that were previously indexed under the old URL.

Exploring the index

> Note: This topic is intended for administrators and developers with administration access rights in Episerver.

Most Episerver Search & Navigation features are built on the search index, which stores and provides quick access to data collected by the search engine. Without an index, the search would be much slower because each query would have to search through all site data.

Episerver Search & Navigation pushes content to the search index as it is published, so updates occur in near real time. Depending on how the index is set up, it can contain information about all types of content, including various file types and community comments.

To view your search index, from edit view, select **Search & Navigation** > **Overview.**

Reviewing the index overview screen

The index overview summarizes your search index at the current time. If your environment hosts multiple websites, the index is shared among them, and you can explore each site's index.

- The **Index** section displays the index name and .NET API version number.
- The **Document Types** section displays the total number of indexed objects, and the number of objects of each type. While most objects are page types, Episerver Search & Navigation also indexes other website objects.
- The **CMS Content** section summarizes each site's indexed content. The screen displays the total number of indexed objects for the entire structure and for each site. You can also see the distribution per page type and languages for each site.

> Note: A language version of a page is treated as a separate object in the index.

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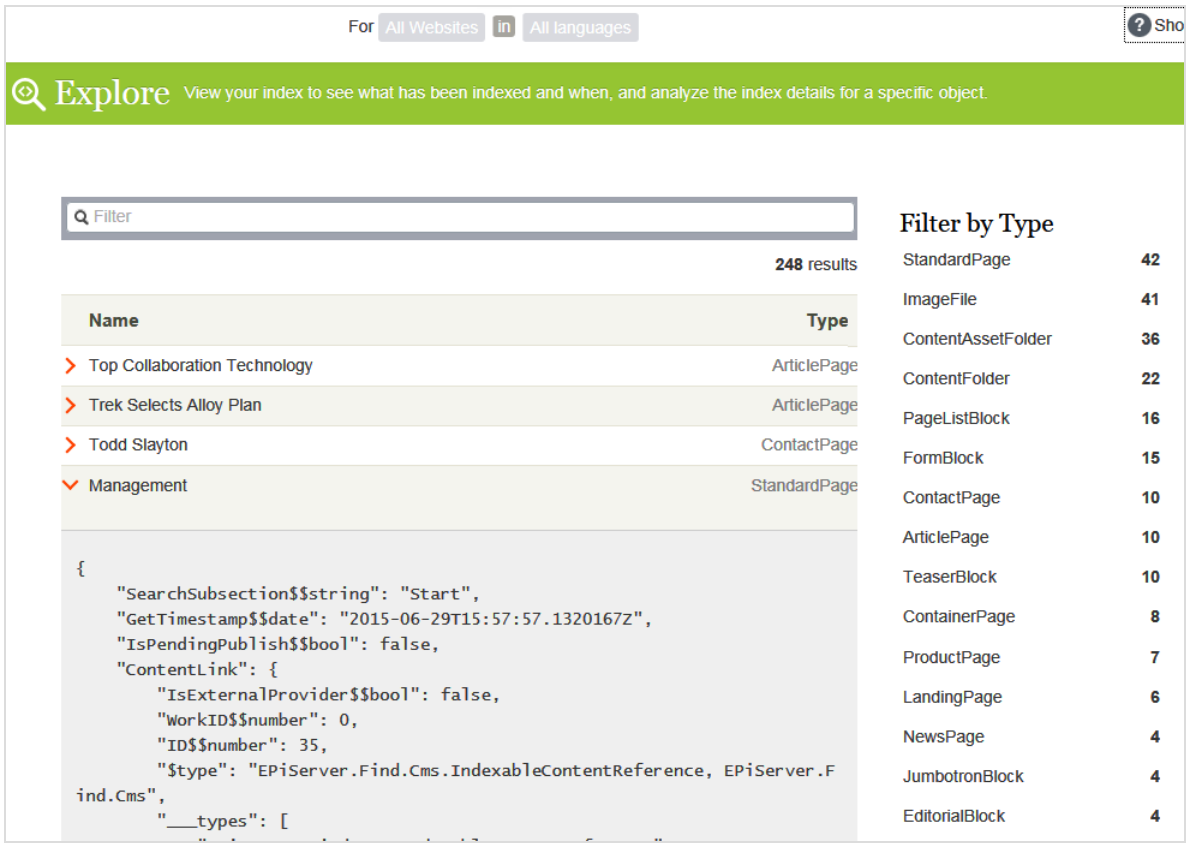
Reviewing the Explore screen

The Explore screen displays index details, such as when a page was last indexed. Episerver Search & Navigation lists the total indexed content, and you can filter by content type. You can also search for indexed content using query syntax.

Click an item to see its details. For example, you can view when an object was indexed, its IDs, and the indexed content, which is useful when you set up and fine tune the index.



Access rights

> **Note**: This topic is intended for administrators and developers with administration access rights in Episerver.

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Episerver Search & Navigation's access rights feature lets site administrators control which users can access components of the Episerver platform.

To access Episerver Search & Navigation features, a user must be a member of one of these groups:

- **Administrators**, **WebAdmins**, and **SearchAdmins** can access the Episerver edit view, Episerver Search & Navigation search features, and access to the Clear Indexes screen.
- **SearchEditors** can access the Episerver edit view and the Episerver Search & Navigation search features. They cannot access the Clear Indexes screen.

Because most users are not members of Administrators or WebAdmins, they must have membership in *both* SearchAdmins and SearchEditors to access Episerver Search & Navigation features in admin view.

> **Note**: The membership and role providers available for your website need to be configured to use the built-in groups and roles in Episerver. This is typically done during site setup.

See Managing permissions for information about managing access rights for other parts of the Episerver platform.

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Using Personalized Search & Navigation

Every site visitor is different, and looking for different things on your website. Moreover, user behavior changes from one day to the next.

Personalized Search & Navigation customizes a site visitor's search results and landing pages by considering the visitor's activity and your business rules. When you use Personalized Search & Navigation with Episerver Commerce, relevancy is unique to each visitor so should increase conversions on your website. For example, a teenage soccer fan looking for team apparel gets different results from a new mother looking for baby items, even though both search for "shoes".

Benefits of Personalized Search & Navigation

- **Increased sales**. Optimizing the search experience has been shown to increase revenue.
- **Better engagement**. Improved experience encourages customers to keep shopping.
- **Better conversion rates**. Easier for customers to find products they are looking for.
- **Better retention**. Positive experiences encourage customers to return to your site.

Personalized Search & Navigation: Part of a personalization strategy

Many Episerver products enable you to personalize the site visitor experience. For example, you can personalize related merchandise, and offer discounts based on a site visitor's history. This topic only covers Personalized Search & Navigation. To learn about other personalization features, see Personalization.

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How Personalized Search & Navigation works

Personalized Search & Navigation tracks the following visitor information for the current session.

- traffic source
- search query
- categories visited
- selected facets: color, size, brand
- use of ratings and reviews

Personalized Search & Navigation analyzes that information along with knowledge from previous interactions (preferences, purchases) in order to boost search results and landing pages so that the most relevant items *for that individual* appear at the top.

> **Note**: Personalized Search & Navigation cannot affect external search results.

Other factors affecting search results

Ranking and weighting of search results can also consider a merchandiser's business rules or strategies. So, best-selling items, high conversion rates, most revenue, or most units sold can also be used to affect search results. The result is an optimal ordering of search results for every user.

Example of search results before and after personalization is applied

Default content displayed to "unknown" visitor

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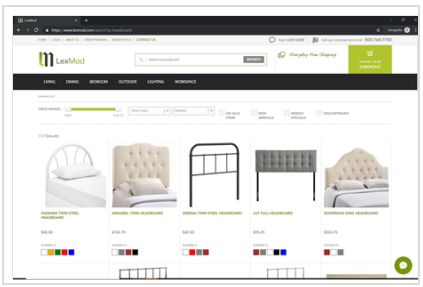
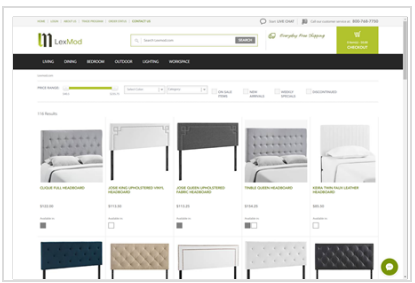
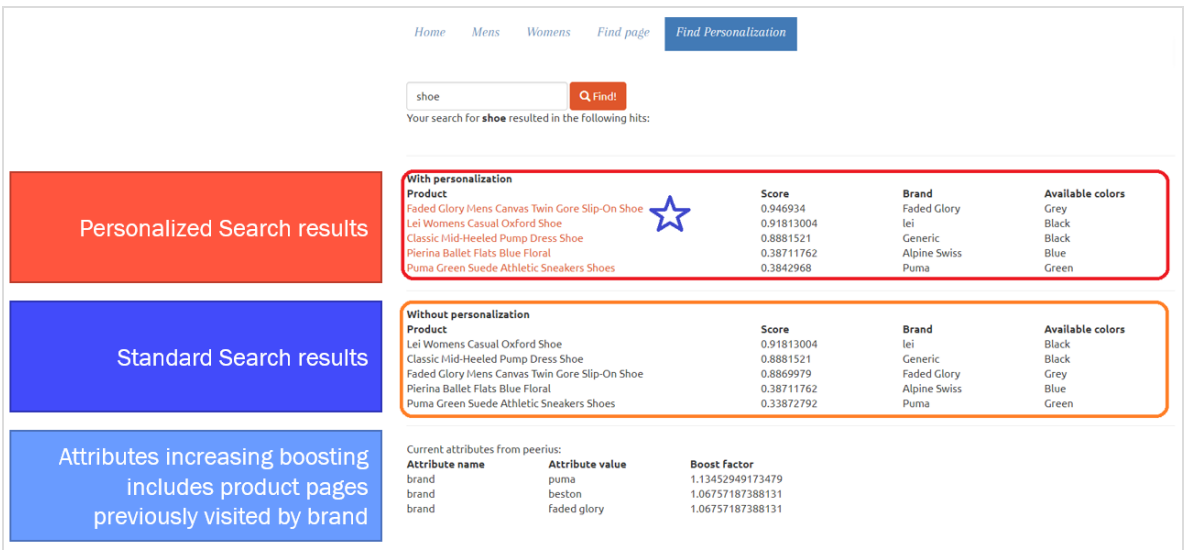


Content displayed after visitor clicked "bed headboards"



Another Personalized Search & Navigation Example

Notice how the boosting attributes moved the Faded Glory shoes to the top of the search results.



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Enabling Personalized Search & Navigation

To add Personalized Search & Navigation, a developer needs to install and configure the personalization service on your website. The developer must also customize search queries so that the factors described above can boost results. For more information, see Personalized Search & Navigation.

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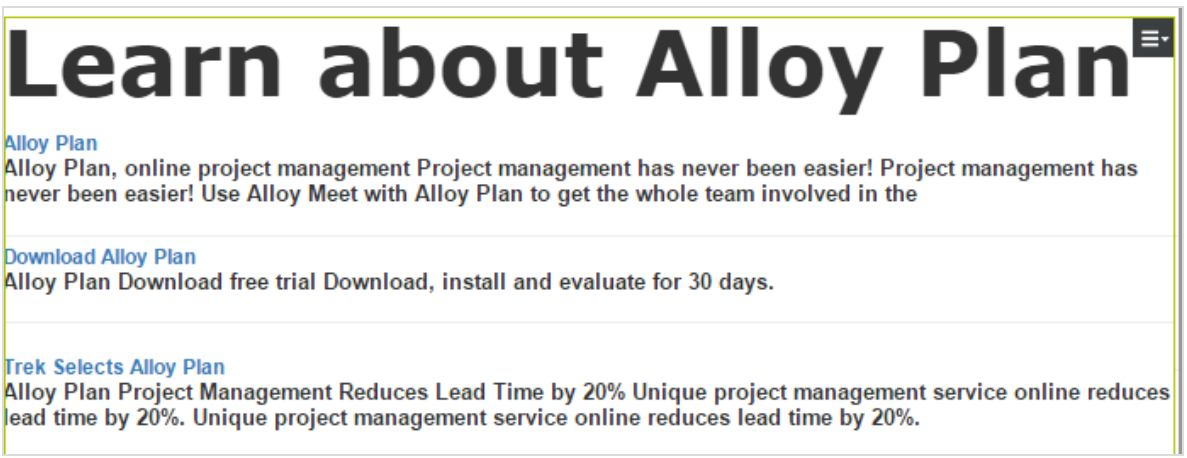
Customized search block

> **Note**: You have access to the customized search block functionality if an administrator enabled the feature.

A customized search block displays content from your website based on your search criteria. For example, you want to display content found using the search term *alloy plan*.

You can modify a block's appearance by including a heading, descriptions, and setting the number of results. When you place a customized search block on a page, the results of your criteria appear, as shown in the following image.



To create a customized search block, use the following steps after the block is created. You can edit it from the On-page editing view (basic settings only) or the All properties editing view (all settings).

1. Create a block, as explained in Blocks, using the Customized Search block type.
2. Under **Required Properties**, enter the **Search phrase**. You must enter at least one character. This phrase reappears on the block's properties screen, from where it can be edited.
3. Click **Create**. The display options screen appears.
4. Access the All properties editing view.
5. Under the **Content** tab, enter search criteria. Only **Search phrase** is required. Use the remaining fields to filter the search and control the display of results. The block displays content that satisfies *all* criteria.

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- **Search heading**. If you want a heading to appear above search results, enter its text.
- **Basic Search settings**
  - **Search phrase**. Enter text for which you want to search content. You must enter at least one character.
  - **Match all words.** Select to require the search to include *all* text; clear to search for any word in the search phrase.
  - **Number of hits.** Enter the number (1-1000) of search results that appear in the block.
  - **Include description.** Select to display the description of each search result.
- **Advanced search settings**
  - **Search root**. By default, all content is searched. To filter the search, select a content root; only content within and under the root is searched. For example, you want to search only content in the `/campaigns` folder, or its child folders.
  - **Content types**. By default, all content types are searched. To filter the search, select content types to include. For example, you want to only search pages whose type is *Landing Page*.
  - **Include Best Bets**. **Use synonyms**. If desired, use the Best Bets and Synonyms features to enhance the search results. See Promoting content using best bets and Adding synonyms for similar phrases.

Example: Real Madrid press releases

Your website provides news about the *Union of European Football Associations* (UEFA). You want to display the five most recent press releases about *Real Madrid*. So, you

1. Create a customized search block.
2. Use **Real Madrid** as the **Search phrase**.
3. Assume your site has a page tree node **News**, whose content uses two page types: **News** for ordinary news, and **Press releases**.
   a. Use the **Search root** field to select the **News** page tree node.
   b. Use the **Content types** field to select the **Press release** page type.
4. Set **Number of hits** to **5**.
5. Place the block in appropriate location(s) on your site.

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Additional resources

- Customized search block styling guide *(for developers)*
- Customized Search Block in Episerver Find *(for developers)*

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Episerver Customer-Centric Digital Experience Platform (DXP)™

The Episerver Customer-Centric Digital Experience Platform (DXP)™ unifies digital content, commerce and marketing in one platform, including omnichannel solutions for intelligent campaigns. The platform uses artificial intelligence and behavioral analytics to deliver personalized experiences everywhere. With our secure, reliable platform you can quickly increase engagement, revenue and productivity, while getting the fastest time to value.

About Episerver

At Episerver, we believe digital transformation is a journey. We have been guiding customers for more than 20 years in providing standout digital experiences. Today our network of 880 partners, in 30 countries, supports 8,000 customers and over 30,000 websites. Founded in 1994, Episerver has offices in the US, UK, Sweden, Australia, Germany, Denmark, Finland, Norway, Poland, the Netherlands, Spain, South Africa, Singapore, Vietnam and the UAE.

For more information, visit **episerver.com**.

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