



**Adobe® Experience Cloud**

# Adobe Recommendations Classic

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# Adobe Recommendations Classic

December 19, 2018

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# Contact and Legal Information

Information to help you contact Adobe and to understand the legal issues concerning your use of this product and documentation.

## Help & Technical Support

The Adobe Marketing Cloud Customer Care team is here to assist you and provides a number of mechanisms by which they can be engaged:

- [Check the Marketing Cloud help pages for advice, tips, and FAQs](#)
- [Ask us a quick question on Twitter @AdobeMktgCare](#)
- [Log an incident in our customer portal](#)
- [Contact the Customer Care team directly](#)
- [Check availability and status of Marketing Cloud Solutions](#)

## Recommendations Client Care

To contact Recommendations Client Care by telephone, call 1-800-497-0335. When asked to select an option for your product, press 2 to go to conversion products, then 3 to contact the correct product team.

E-mail Client Care at [tt-support@adobe.com](mailto:tt-support@adobe.com).

## Service, Capability & Billing

Dependent on your solution configuration, some options described in this documentation might not be available to you. As each account is unique, please refer to your contract for pricing, due dates, terms, and conditions. If you would like to add to or otherwise change your service level, or if you have questions regarding your current service, please contact your Account Manager.

## Feedback

We welcome any suggestions or feedback regarding this solution. Enhancement ideas and suggestions for the Analytics suite [can be added to our Customer Idea Exchange](#).

## Legal

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# Release Notes

This document lists the new features and bug fixes for recent releases.

To receive advance notifications about upcoming product enhancements, sign up for the Adobe Priority Product Update:

<https://campaign.adobe.com/webApp/adbePriorityProductSubscribe>

## Adobe Recommendations Classic 17.8.1 (August 16, 2017)

This release includes the following feature update:

Feature	Description
<a href="#">Customizing a Template</a>	The following variables are available as Velocity arrays. As such, they can be iterated over or referenced via index. <ul style="list-style-type: none"><li>• entities</li><li>• entityN.categoriesList</li></ul>

## Adobe Recommendations Classic 16.10.1 (October 25, 2016)

This release does not include any new customer-facing features or enhancements.

## Adobe Recommendations Classic 16.9.1 (September 20, 2016)

This release does not include any new customer-facing features or enhancements.

## Adobe Recommendations Classic 16.8.1 (August 16, 2016)

This release does not include any new customer-facing features or enhancements.

## Adobe Recommendations Classic 16.7.1 (July 20, 2016)

This release includes the following feature update:

Feature	Description
Multi-valued Recommendations attributes	All custom Recommendations attributes can now contain multiple entity values.

## Adobe Recommendations Classic 16.6.1 (June 14, 2016)

This release doesn't include any customer-facing enhancements.

## Adobe Recommendations Classic 16.5.1 (May 18, 2016)

This release includes the following enhancement:

Enhancement	Description
Recommendations CSV download	CSV downloads now have a line for all environments, including those that do not have entity recommendations (for example: # environment: 1724).

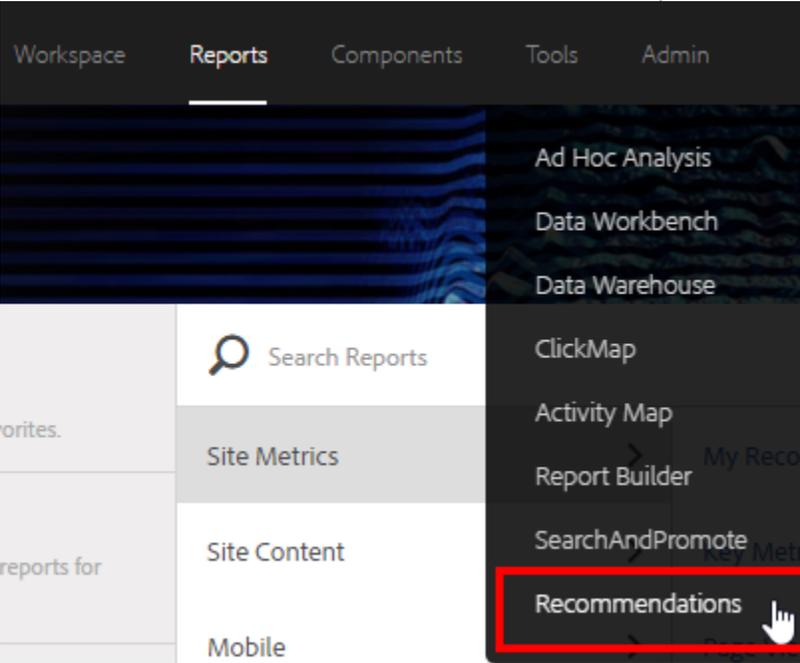
### Adobe Recommendations Classic 16.4.1 (April 14, 2016)

This release includes the following enhancement:

Enhancement	Description
Inclusion rules can be enabled for backup recommendations.	<p>When backup recommendations are enabled, you can select an option to apply inclusion rules to backup recommendations. For more information, see <a href="#">Content Serve Settings</a>.</p> <p>Previously, inclusion rules were applied by default if backup recommendations were enabled.</p>

This release includes the following change:

Feature	Description
Custom criteria support added to Honeybee API.	<p>The Honeybee API custom criteria replaces the .xml file format of the legacy custom algorithm with .csv, which is more compact and easier to generate, and supports a larger number of recommendations.</p> <p>For API documentation, see <a href="https://www.adobe.io/products/target/docs/reference/recommendations">https://www.adobe.io/products/target/docs/reference/recommendations</a>.</p>

Feature	Description
Recommendations Classic access enabled via Analytics Tools menu.	<p>Access to Recommendations Classic can now be found in the <b>Tools</b> menu of the Analytics solution on <a href="https://my.omniture.com">https://my.omniture.com</a>.</p>  <p>The screenshot shows the Adobe Analytics interface with the 'Tools' menu open. The menu items are: Ad Hoc Analysis, Data Workbench, Data Warehouse, ClickMap, Activity Map, Report Builder, SearchAndPromote, and Recommendations. The 'Recommendations' item is highlighted with a red rectangular box, and a mouse cursor is pointing at it.</p>

### Adobe Recommendations Classic 16.3.1 (March 16, 2016)

This release includes the following enhancements:

Enhancement	Description
Catalog search collection/exclusion enhancement	It is now possible to create collections/exclusions using valuesPresent and valuesNotPresent operands in catalog search.

This release includes the following fixes:

- Fixed issue that caused dynamic filtering to fail when attribute names include the underscore ( \_ ) character.

### Adobe Recommendations Classic 16.2.1 (February 18, 2016)

This release includes the following enhancements:

Enhancement	Description
Download-only activities now run beyond 21 days.	Download recommendations can now be activated so the algorithm will continue to run past 21 days.

### Adobe Recommendations Classic 16.1.1 (January 19, 2016)

This release includes the following enhancements:

Enhancement	Description
Support for "&" character added in category values	The "&" character is now supported in category values. Previously, the "&" character caused recommendations to display incorrectly.
Custom algorithm limits increased	You can now use post for the Custom algorithm API.  For GET and POST custom algorithm upload the 1000 key limit has been removed. Depending on your data around 1000 entity keys can be used for Get and about 25K keys with POST . However, no single key can have more than 500 values.
Onsite links have been deprecated from the Recommendations Classic interface	To manually specify a mbox for your recommendation, use the following workaround:  On the Recommendations Edit page in your browser URL append <code>&amp;mbox=NAME_OF_MBOX</code> and press <b>Enter</b> .  This populates the mbox name in the mbox dropdown.
Maximum characters allowed in feed name increased	Feed names can now contain 250 characters. The previous limit was 64.

### Adobe Recommendations Classic 15.8.1 (August 18, 2015)

This release includes the following enhancements:

Enhancement	Description
Google Product XML feeds improvements	Google Product XML feeds now support both RSS2 version and ATOM 1.0 version.

### Adobe Recommendations Classic 15.7.1 (July 23, 2015)

There are currently no customer-facing features scheduled for release this month.

This release includes the following fixes:

- The limit on the number of custom algorithms that can be uploaded has been increased.
- Intermittent Recommendations mbox refresh and host group loading issues have been addressed.

### Recommendations Classic 15.2.2 (February 10, 2015)

This release includes the following enhancements:

Enhancement	Description
Past-behavior algorithms now provide more than only the last-viewed items.	Some past-behavior algorithms have been renamed. Also, options have been added to past-behavior

Enhancement	Description
	<p>algorithms that allow you to key off of more than the last-viewed item.</p> <ul style="list-style-type: none"> <li>• Last Purchased Item <b>Renamed:</b> nth last purchased entity</li> <li>• Last Viewed Item <b>Renamed:</b> nth last viewed entity</li> <li>• Most Viewed item <b>Renamed:</b> nth most viewed entity</li> <li>• Favorite Category <b>Renamed:</b> nth most favorite category</li> </ul> <p>In addition, you can choose from three Cascading options when using these keys, to determine how your Recommendations template is filled based on the selected key.</p> <p>For more information, see <a href="#">Basing the Recommendation on a Recommendation Key</a>.</p>
Improved recently viewed items.	Catalogs and exclusion rules are now applied to recently viewed items.
Feed enhancement.	RSS2.0 feeds are now supported.

This release includes the following fixes:

- Fixed an issue where "Include Only When" filters were not applied to backup recommendations.

### Recommendations 15.1.1

This release includes the following enhancements:

Enhancement	Description
Improved past behavior algorithms	Allow for past behavior algorithms to serve more than just the last viewed item.
Improved exclusion rules	Exclusion rules are now applied to recently viewed items.

This release includes the following fixes:

- Fixed an issue that prevented navigating directly to product search result pages having more than 3 digits.
- Fixed a bug where the most viewed algorithm wasn't ranking products as expected.

## Recommendations 14.9.x

This release includes the following enhancements:

Enhancement	Description
<p>Added the option to disable "partial rendering" template building behavior at the algorithm level.</p>	<p>Previously, if the number of recommended items was less than the number of "slots" defined in a template, the template was not transformed to html. This partial rendering behavior can now be set at the algorithm level.</p> <p>A checkbox has been added to the Content Serve Settings on the Recommendations Edit tab, as well as a modification to the existing Recommendation create/update API to enable the rendering of a partial template.</p> <p>If partial template rendering is not enabled, the old functionality will exist; if there aren't enough recommended entities to fill all the slots, the entire template will not be rendered.</p> <p>If partial template rendering is enabled, Recommendations renders the template whether or not enough recommendations exist to fill up all the slots in the template. You will have to build your templates to account for this. For example, you might create your template to include null checks.</p> <p>See <a href="#">Content Serve Settings</a></p>
<p>Allow Backup recommendations to be disabled at the Algorithm level.</p>	<p>Added the ability to disable the appending of backups to recommendations at the algorithm level, using a checkbox located in the Content Serve Settings on the Recommendations Edit tab. Previously, this was only available at the client level.</p> <p>The value of the new field is set based on the current value of the client-level setting.</p> <p>See <a href="#">Content Serve Settings</a></p>

Custom algorithm updates for partial template rendering and disabled backup recommendations need to be set via the custom algorithm API:

```
&disableBackup=[true|false]&allowPartialTemplate=[true|false]
```

## Recommendations 14.8

This release includes the following enhancements:

Enhancement	Description
CSV download performance has been improved.	Algorithm name and environment ID details are included when there is only one algorithm returned.
Backup recommendations are included for Report Suite data sourced Affinity algorithms.	This enhancement fixes an issue that sometimes prevented backup recommendations from being served.

### Recommendations 14.6

This release includes the following changes:

- Adobe Analytics traffic classification at the product level is no longer supported.
- Recommendations now supports *pageURL* and *thumbnailURL* variations of *pageUrl* and *thumbnailUrl*. Additionally *entity.categoryId* is treated similarly to *entity.category* in that it supports multiple values.

### Recommendations 14.5

This release adds support for Past Behavior-based recommendations. These recommendations work across sessions, and include recently viewed items.

### Recommendations 14.1-TR-2.15.5

This release includes the following enhancement:

Enhancement	Description
Increase the number of data feeds shown to users on the <b>Product &gt; Feeds and Uploads</b> page.	Previously, Recommendations displayed the last five data feeds on the <b>Feeds and Uploads</b> page, although the entire history was stored. You can now use a URL parameter to configure how many days back are shown in the data feed history.

This release also includes the following fixes:

- Fixed an issue where different versions of the Recommendations algorithms returned different information.
- Improved the report suite feeds using a new compression technique. This fixes an issue where report suite feeds sometimes failed due to an unexpected EOF error.

### Recommendations 2.15c

This release includes the following change:

Feature	Description
Scheduled .csv file upload for Recommendations	Schedule uploads of .csv formatted product feeds from a FTP or HTTP location into Recommendations.

## July 2013

This release (2.15) includes the following changes:

Feature	Description
Recently Viewed Items algorithm	Shows items that have been viewed recently. See <a href="#">Selecting an Algorithm</a>
Dynamically Exclude Entity recommendations	Exclude certain items from being shown, such as items that are already in the cart. See <a href="#">Dynamically Excluding an Entity</a> .
Support for host groups with custom algorithms	A "host group name" attribute has been added to custom algorithms. If no host group name is specified, the default host group is used. See <a href="#">Uploading Custom Algorithm Data</a> .
Support for multiple environments added to production back fill	Previously, the default Production host group was hard-coded as the source for backfill. Now you can choose the source for the backfill. This setting must be set by Adobe Client Care. See <a href="#">Backfilling Environments with Production Data</a> .

This release includes the following fix:

- Fixed an issue in the UI that was causing graphs to be duplicated.

### March 2013

This release of Recommendations (2.14) includes the following changes:

Recommendations is now an integral capability within AdobeTarget. Adobe Target, part of the Adobe Marketing Cloud, is a solution that provides data-driven personalization for revenue impact by leveraging the integrated capabilities of Test&Target, Test&Target 1:1 (Automated Behavioral Targeting), Geo-targeting, Analytics-Powered Targeting, Recommendations and Search&Promote. Many of our upcoming upgrades within the tool will support new efficiencies in data/profile integration, extended algorithm options, and campaign creation / deployment within Recommendations. Inherent benefits will include stronger collaboration with the other Adobe Target capabilities, as well as across the Adobe Marketing Cloud.

Feature	Description
Mbox selection via dropdown	All available mboxes are listed in a dropdown on the Recommendations edit page. Browsing your site to find the mbox is no longer required.
Mbox Delivery Targeting	Recommendations can be limited to show only in mboxes when certain conditions are met. These can include matching particular URL values, mbox parameter values, or profile values. These rules are reevaluated on every mbox request. With this new ability, multiple recommendations can be set up on one mbox name but displayed in different circumstances. For example: one recommendation can display on women's product pages by targeting the mbox to URL contains <code>/women/</code> and show on men's product pages when the URL contains <code>/mens/</code> , even if the same mbox name is used across all product pages.
Improved support for multiple client environments (host group management)	The following improvements have been made to support multiple host group environments: <ul style="list-style-type: none"> <li>• Host groups can be selected for display in reports.</li> </ul>

Feature	Description
	<p>The report for the host group that is set as the default displays unless a different host group is selected.</p> <ul style="list-style-type: none"> <li>• The host group displays on the search details page.</li> <li>• Multiple host groups can be set when uploading a CSV file and when setting up a feed.</li> </ul>
The inclusion filter has been enhanced to include a "does not match" option.	Data can now be included when an attribute does not match the key's attribute.
Multiple filter inclusion rules	Multiple "Include Only When" filters can be used. When more than one filter is used, the filters are combined with an AND.

## September 2012

This release of Recommendations includes the following changes:

### Change to recommendation cards

If you are not testing against default content, the lower bar no longer appears on the recommendations card. See [Recommendations Cards](#)

### Changed algorithm data source

In past releases, only the Site Affinities algorithm used DataWarehouse data. In this release, View Affinities and View/Purchase Affinities also use DataWarehouse data.

### Choice of control data when viewing recommendation results

You can now choose the control data you want to use when viewing the results of a recommendation. See [Viewing Complete Recommendation Results](#)

### Improved product search

You can now search on all variables, including custom variables. You can also specify multiple search criteria to further narrow your results. See [Searching Catalogs](#).

### Increased length limit of algorithm names

The length permitted for algorithm names has been increased to 255 characters. See [Naming a Custom Algorithm](#)

## May 2012

This release of Recommendations includes the following changes:

### keyType attribute added to Custom Algorithm Name API

keyType is an optional parameter that allows users to specify their own key for custom algorithms. See [Naming a Custom Algorithm](#) for more information.

### Changed Change Log to History and added functionality

The Change Log has been renamed History. In addition to the previous functionality, the History also shows the number of recommendations uploaded per algorithm so you can see that the algorithm has run and is ready with content. See [Viewing the History](#).

## Changed Dynamic Attribute Filtering functionality

- Changed **Dynamically Matches the Key** to **Matches** to improve usability and clarity.
- Changed **Dynamically in the Range of the Key** to **Is Between** to improve usability and clarity. Also removed the upper limit for the specified range.

See [Setting Data Details](#) for more information.

## October 2011

This release of Recommendations includes the following new features:

### Dynamic Attribute Filtering

Dynamic filtering enables you to set up one recommendation that automatically applies for each item across the site. You can limit recommendations to items that match or share an attribute of the key item. For example, recommendations could be limited to items of the same brand as the current item, or could be limited to items from different categories. Or, you could set a rule to recommend items whose price is within 10% of the currently viewed item's price. See [Setting Data Details](#).

### Improved Algorithms

The existing affinity algorithms, "People who viewed this viewed that", "People who viewed this bought that", and "People who bought this bought that", will be upgraded to use enhanced collaborative filtering strategies that take into account a broader consideration set of similar visitors' behavior to drive more successful and relevant recommendations. See [Selecting an Algorithm](#).

To more accurately reflect the robust nature of these new algorithms, the names have been updated as follows:

- "People who viewed this viewed that" is now "View Affinities"
- "People who viewed this bought that" is now "View/Purchase Affinities"
- "People who bought this bought that" is now "Purchase Affinities"

Any current recommendations that employ the existing affinity algorithms will be automatically updated to their matching upgraded algorithm with no disruption to the recommendation delivery.

### Statistical Confidence in Reports

For each reported metric, you can view the statistical confidence level for the lift vs control. See [Confidence Level and Confidence Interval](#).

### Location Testing

This new recommendation type enables you to determine the best location for a recommendation on a page. The same algorithm is delivered to each mbox location at different times. When the recommendation is showing in one mbox, the other mbox shows default content. This new recommendation enables you to determine which location is the best place for the selected recommendation. See [Adding a Location Test Recommendation](#).

## July 2011

This release of Recommendations includes the following new features:

### Simplified Recommendation Creation

When you add a recommendation, you now begin by choosing a recommendation type. This simplifies the creation of each kind of recommendation. See [Adding a New Recommendation](#).

## Test&Target Custom Profile Attributes

Users of both Recommendations and Test&Target can base a recommendation on any Test&Target profile attribute. See [Basing the Recommendation on a Recommendation Key](#).

## Change Logs

The change log records the date and time any changes and activations occur, and who made them. See [Viewing the History](#).

## Trended Graph Report

The Trended Graph report shows trends for the recommendation over a specified amount of time. See [Viewing the Trended Graph Report](#).

## May 2011

This release of Recommendations includes the following new features:

### Affinity Algorithms

These new algorithms take the same raw data as the old algorithms, but apply collaborative filtering strategies to gather different and better results. The affinity algorithms must be enabled by Client Services. See [Selecting an Algorithm](#).

### More Logical Operators

New logical operators give the marketer increased control over the items displayed in a recommendation. See [Setting Data Details](#).

### Improved Backup Recommendations

Backup recommendations now randomly select more items from the most popular items on your site or in your catalog. See [Using a Backup Recommendation](#).

### New Report Metrics

New report metrics give you a direct understanding of the influence Recommendations had on a customer's decision to purchase by tracking whether the recommendation was clicked before something was purchased. Any purchase after the recommendation was clicked counts. See [Viewing Complete Recommendation Results](#).

### Entity Feeds

Because Recommendations users already configure XML or txt feeds to send to Google either via URL or FTP, entity feeds accept that product data and use it to build out the Recommendations catalog. Tell Recommendations where that feed exists and Recommendations retrieves the data.

Entity feeds enable more ways to get product or content information into Recommendations. Item details can be sent to Recommendations from SAINT product classifications or using the Google Product Search feed format. This allows you to bypass complex mbox implementation or augment your mbox data with information that is either unavailable on the page or unsafe to send directly from the page (like margin, COGS, and so on). See [Using Entity Feeds](#).

## February 2011

This release of Recommendations includes the following new features:

### Catalog Item Viewer

After you create a product catalog, you can view and search it within Recommendations. You can search the catalog and see all the data that Recommendations has learned about your items including ID, price, inventory, categories, and so on, so you can be confident knowing what information will display in your Recommendations. You can also delete an item you no longer want in your catalog directly from this item viewer. See [Searching Catalogs](#).

## November 2010

- Catalogs

The catalog is the set of products or items that are eligible for the recommendation. The backup recommendations generated for each algorithm within the recommendation also uses this catalog, so only items in the catalog are included in the backup recommendation. With catalogs, you can be sure that only products that make sense to show in a location are displayed. See [Creating Catalogs](#).

- Optimizing Recommendations

The Optimizing recommendation type ensures the most effective recommendations are shown more often by automatically displaying the best performing recommendations. Optimizing recommendations allow marketers to use an automated approach to improving site performance. With an Optimizing recommendation, fewer visitors see underperforming experiences. Automatically and over time, more traffic is shown the best performing recommendations. When you create an Optimizing recommendation, you specify the optimizing metric used to determine performance, which can be the conversion rate, average order value, or revenue per visit. You also choose whether to include default content in the calculations. See [Choosing a Test Type](#).

# Getting Started

Adobe Recommendations automatically displays products or content that might interest your customers based on previous user activity on your Web site. Recommendations help direct customers to items they might otherwise not know about, improving sales generated on your Web site.

A recommendation determines how a product is suggested to a Web site user, depending on that user's activities on the site. For example, if you discover that users who purchase a portable DVD player often buy batteries, you might create a recommendation that shows items that are often purchased together, using the *People who bought this also bought that* algorithm.

Recommendations helps you:

- Choose sophisticated algorithms to automate recommendations across multiple areas of your site
- Automatically display the recommendations by using a few JavaScript snippets on your site
- Test and optimize the display templates and algorithms that display the Recommendations

For a list of available in-person, instructor-led courses, visit the [Adobe Customer Training website](#).

## Prerequisites and Integrations

You can use recommendations alone or combine them with other features of Adobe Target and the Adobe Marketing Cloud.

Although most functionality remains the same whether recommendations are used alone or with other capabilities, some recommendation types are only available when used with other Adobe Marketing Cloud capabilities, as explained in [Creating or Editing a Recommendation](#).

## Preparing Your Website for Recommendations

To display your recommendations to site visitors, you must set up sections of your pages as mboxes.

Mboxes are special marketing boxes that enable you to dynamically change the content of selected areas on your Web pages based on information gathered about site visitors.

If you do not set up mboxes on your pages, you can still create and test recommendations, but you cannot display dynamic content on your pages based on the test results.

Typically, mboxes are set up by Web site designers, not the marketers who normally create and use recommendations. Setting up an mbox requires some familiarity with HTML coding and JavaScript, although you can follow the instructions in this guide even if you are not a Web designer.

Implementing mboxes requires the following steps:

1. Download the `mbox.js` file.
2. Include references to the `mbox.js` file on your Web pages.
3. Create mboxes to contain the latest information about each product that you want to recommend.
4. Create an mbox to capture order information.
5. Create mboxes to display the recommendations.

## Downloading the mbox.js Library File

Download the `mbox.js` library file and save it on all hosts (domains) serving mboxes.

You need only one copy on each host. All pages with mboxes must reference this file. You can use the same `mbox.js` file for recommendations and other Adobe Target features.

1. From the recommendations menu, click **Settings > General**.
2. In the **Download** section of the **Settings** screen, click the link to download `mbox.js`.
3. Save the file.
4. To verify the download, open a Web browser and browse to your Web domain, then browse to the URL where you saved your `mbox.js` file.

For example, if the `mbox.js` file is saved in a directory called `/js`, browse to `http://www.yourserver.com/js/mbox.js`.

You have successfully downloaded `mbox.js` if any of the following occur:

- The `mbox.js` appears in your browser as a text file filled with JavaScript functions.
- Your browser attempts to download the file, prompting you for where to save it.
- Your browser warns you about JavaScript.

### Alternative Download Option

You can also download `mbox.js` using the Target API.

The Mbox.js Download API is a REST API with the following structure:

```
https://admin3.testandtarget.omiture.com/admin/rest/v1/mboxjs/download/v58?client=CLIENTCODE&email=youremail&password=yourpassword
```

Replace "admin3" with the admin environment your account uses in Target Classic. To find the right value, log in to Target Classic and look at the beginning of the URL. Options are:

- admin3
- admin4
- admin5
- admin6
- admin7
- admin8
- admin9
- admin10
- admin12
- admin16

`v58` is the version of the `mbox.js` file being requested. All versions back to version 51 are supported by this API.

`CLIENTCODE` is the value for your client code.

`youremail` and `yourpassword` are your Adobe Target Classic login credentials.

### Validating the mbox.js Download

After you download the `mbox.js` file, you should validate the download.

1. Download the `mbox.js` file as instructed in [Downloading the mbox.js Library File](#).
2. Open a Web browser and browse to your Web domain.
3. Browse to the URL where you saved your `mbox.js` file.

For example, if the `mbox.js` file is saved in a directory called `/js`, browse to `http://www.yourserver.com/js/mbox.js`.

You have successfully downloaded `mbox.js` if any of the following occur:

- The `mbox.js` appears in your browser as a text file filled with JavaScript functions.
- Your browser attempts to download the file, prompting you for where to save it.
- Your browser warns you about JavaScript.

## Referencing the mbox.js File on Your Web Pages

Any Web page that includes an mbox must reference the `mbox.js` file on the host. This allows the page to contact the recommendations server.



**Note:** Add the `mbox.js` reference to an include or header file that exists in the head all of your Web pages.

Keep the following points in mind when adding the `mbox.js` reference to a Web page:

- Add the reference to the Web page only once, regardless of the number of mboxes on the page.
- Use a relative or absolute path depending on where you saved your `mbox.js` and as suits your file structure.

An absolute path is preferred.

- Best practice is to place the reference in the head section, but you can place it anywhere before the first mbox on your page.

1. Create the reference code.

For example, if the `mbox.js` file is saved in a directory called `/js`, the reference must be similar to:

```
<script src="http://www.mycompany.com/js/mbox.js" type="text/javascript"></script>
```

2. Add a reference to the head section of all Web pages that will have an mbox.

For example:

```
<head>  
<script src="http://www.mycompany.com/js/mbox.js" type="text/javascript"></script>  
</head>
```



**Note:** Add the `mbox.js` reference to an include or header file that exists in the head of all your Web pages.

Keep the following points in mind when adding the `mbox.js` reference to a Web page:

- Add the reference to the Web page only once, regardless of the number of mboxes on the page.
- Use a relative or absolute path depending on where you saved your `mbox.js` and as suits your file structure.

An absolute path is preferred.

- Best practice is to place the reference in the head section, but you can place it anywhere before the first mbox on your page.

## Implementing Display Data Mboxes

Display data mboxs send updated catalog data for recommendations, and display product recommendations.

Display data mboxs have two purposes:

- Show recommendations, like any other mbox
- Send dynamic catalog data to the recommendations server

Sending updated catalog data ensures that the recommendations displayed on your site always include the most updated information about your products. Display data mboxs make an offline catalog import strategy unnecessary.

The display data mbox sends the `productId` or `productPurchasedId` (referred to as `entity.id` in the code) that is used in the algorithms.



**Note:** *entity.id must match the `productPurchasedId` sent to the order confirmation page and the `productId` used in Adobe Analytics product reports).*

Each parameter can accept only one value. new values overwrite old values, except for the `categoryId` parameter. The `categoryId` parameter can accept a comma-delimited list of values for each category containing that product. There is a character limit of 250 for `categoryId`.

See [Advanced Recommendations Options](#) for more information on each of the attributes that can be passed.

In general, the display information mbox might look like the following example. Change the details in bold to refer to your products.



**Note:** *All entity parameter attributes are case sensitive.*

```
<div class="mboxDefault"></div><script language="JavaScript1.2">
mboxCreate('productPage',
'entity.id=67833',
'entity.name=GIANTS VS ROCKIES 5/12',
'entity.categoryId=BASEBALL, GIANTS, SF BAY AREA',
'entity.pageURL=../baseball/giants-tix/giantsvrockies5.12.2000-67833',
'entity.venue=AT&T PARK',
'entity.secondary=ROCKIES',
'entity.thumbnailURL=../baseball/giants-tix/giants-136px.gif',
'entity.message=FAMILY SPECIAL',
'entity.value=15.99',
'entity.inventory=1'
);
</script>
```

 **Note:** Relative URLs are preferred for `pageURL` and `thumbnailURL` rather than absolute URLs because recommendations receive data being sent from all environments on your site. Using relative URLs avoids hardcoded links to a staging or development server.

The following table describes the available variables.

Entity Attribute	Description
<code>entity.id</code>	<p>This required parameter identifies the product. This ID must be the same across all Adobe Marketing Cloud products that are used, including Analytics, for the various products to recognize the item and share data about it.</p> <p>You cannot use a comma in an entity ID, unless you escape it.</p> <p>Example:</p> <pre>'entity.id=67833'</pre>
<code>entity.name</code>	<p>Provides a name for the item.</p> <p>Example:</p> <pre>'entity.name=Giants vs Rockies 5/12'</pre>
<code>entity.categoryId</code>	<p>Category of the current page. This can include multiple categories, such as a cardigans sub-subsection (i.e. <code>womens</code>, <code>womens:sweaters</code>, <code>womens:sweaters:cardigans</code>). Multiple categories should be separated by commas.</p> <p><code>categoryId</code> is limited to 250 characters. Multiple categories should be separated by commas.</p> <p> <b>Note:</b> To show a recommendation based on a category, only one <code>categoryId</code> can be passed into the mbox used to display that particular recommendation.</p> <p>Example:</p> <pre>'entity.categoryId=BASEBALL, GIANTS, SF BAY AREA',</pre> <p>For category-based Recommendations, a comma is used to separate category value. Any values separated by commas become categories. You can also define subcategories by using a different separator, such as a colon (:), to separate subcategories within the category value.</p> <p>For example, in the following code the Womens category is divided into several subcategories:</p> <pre>mboxCreate('mboxName',   'entity.id=343942-32',   'entity.categoryId=     Womens,     Womens:Outerwear,     Womens:Outerwear:Jackets,     Womens:Outerwear:Jackets:Parka,     Womens:Outerwear:Jackets:Caban',   'entity.thumbnailUrl=...',</pre>

Entity Attribute	Description
	<pre>'entity.message=...', );</pre> <p>For the mbox delivery, the longest attribute name is used for the key. If there is a tie, the last attribute is used. In the example above, the category key is <code>Womens:Outerwear:Jackets:Caban</code>.</p>
<code>entity.pageURL</code>	<p>Defines the relative URL of the page where the item can be purchased.</p> <p>Example:</p> <pre>'entity.pageURL=baseball/giants-tix/giantsvrockies5.12.2000-67833'</pre>
<code>entity.thumbnailURL</code>	<p>Defines the relative URL to the thumbnail image that displays with the item.</p> <p>Example:</p> <pre>'entity.thumbnailURL=baseball/giants-tix/giants-136px.gif'</pre>
<code>entity.message</code>	<p>Defines additional information to display with the product in the template, such as "on sale" or "clearance."</p> <p>Example:</p> <pre>'entity.message=Family special'</pre>
<code>entity.inventory</code>	<p>Displays the inventory level of the item.</p> <p>Example:</p> <pre>'entity.inventory=1'</pre>
<code>entity.value</code>	<p>Defines the price of the item.</p> <p>Example:</p> <pre>'entity.value=15.99'</pre>
<code>entity &lt;custom&gt;</code>	<p>Define up to 100 custom variables that provide additional information about the item. For example, a ticket vendor might create attributes for the venue where an event will take place or for a secondary performer, such as a visiting team in a sporting event or an opening act in a concert.</p> <p>Examples:</p> <pre>'entity.venue=AT&amp;T Park'</pre> <pre>'entity.secondary=Rockies'</pre>

If the mbox is on a product page, you can include both the product ID and category ID. The selected algorithm determines which displays. The product ID is used for affinity algorithms and the category ID is used for category algorithms.

## Implementing an Order-Confirmation Details Mbox

You should place an mbox on the order confirmation page to capture order information as input to be used by recommendation algorithms and for measuring the performance of your recommendations.

Sales data can be sent from any mbox, but the parameters must follow the strict syntax in the sample code below. The parameters `orderId` and `orderTotal` are required. The `productPurchasedId` attribute must match the `entity.id` display variable.

`productPurchasedId` is only required if you are using mbox data to drive algorithms. It is highly recommended.



**Note:** Replace the text shown in bold with the real values for your product. Parameters are case sensitive and must be written "camel case" as shown.

```
<div class="mboxDefault"></div>
<script type="text/javascript">
mboxCreate('orderConfirmPage',
'productPurchasedId=LIST OF PRODUCT IDs FROM ORDER PAGE',
'orderId=ORDER ID FROM ORDER PAGE',
'orderTotal=ORDER TOTAL FROM ORDER PAGE');
</script>
```

`orderConfirmPage` is the default mbox and is recommended.

Although it is recommended that you use the `orderConfirmPage` mbox name, the name can be changed. If you change the name, you must contact consulting or Client Care.

## Placing Mboxes to Display Recommendations

You should place mboxes everywhere on the site where your recommendations display. This might include the home page, category pages, product or article pages, shopping cart, order confirmation pages, and so on.

The `div` before the mbox should be around the default content that displays if no recommendation is returned. The mbox name is completely customizable, but it must be shorter than 255 characters.

If you display affinity recommendations (those based on a dynamic `entity.categoryId` or `entity.id`) in the mbox, then pass the applicable value as an mbox parameter in the `mboxCreate` call.

You can display a recommendation based either on a category or on a product. For a category-based recommendation, the code might look like this:

```
<body>
My existing page.
<div class="mboxDefault">
Part that I'd like to overlay when a recommendation is displayed
</div>
<script type="text/javascript">
mboxCreate('sidebar_recommendations','entity.categoryId=EN:Guide:1');
</script>
```

```
</body>
```

For a product-based recommendation, the code might look like this:

```
<body>
My existing page.
<div class="mboxDefault">
Part that I'd like to overlay when a recommendation is displayed
</div>
<script type="text/javascript">
mboxCreate('sidebar_recommendations', 'entity.id=12345');
</script>
</body>
```



**Note:** You can pass both the `entity.categoryId` and `entity.id` values and then determine what to base the recommendation on when setting up the recommendation.

For more information about placing an mbox, see [Using an Mbox on Your Web Site](#).

## Adding an Opt-Out Link

You can add an opt-out link to your sites to enable visitors to opt-out of all recommendations counting and content delivery.

1. Add the following link to your site:

```
<a href="http://clientcode.tt.omtrdc.net/optout"> Your Opt Out Language Here</a>
```

2. Replace the `clientcode` text with your client code, and add the text or image to be linked to the opt-out URL.

Any visitor who clicks this link is not included in any mbox requests called from their browsing sessions until they delete their cookies, or for two years, whichever comes first. This works by setting a cookie for the visitor called `disableClient` in the `clientcode.tt.omtrdc.net` domain.

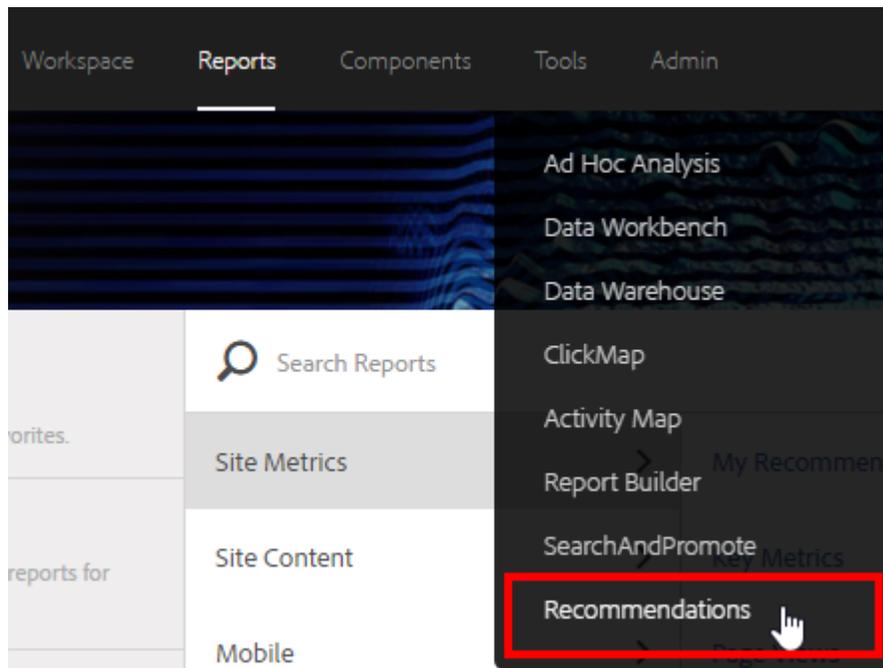
Even if you use a first-party cookie implementation, the provided opt-out is set via a 3rd-party cookie. If the client is using a first-party cookie only, Adobe checks whether an opt-out cookie is set.

## Starting Recommendations

Access Recommendations Classic capabilities from the Adobe Analytics Tools menu.

When you purchase the product, you receive the user name, password, and other information required for accessing the application. If you already have other Adobe Marketing Cloud products, such as Adobe Analytics, you can log in with the same credentials.

1. Sign in to [Adobe Marketing Cloud](#).
2. Click **Tools > Recommendations**.



The first time you start, you see the Manage Recommendations screen.

To learn more, click the links below **Add New Recommendation**. These links appear only if you have not yet saved a recommendation.

- To create your first recommendation, see [Creating or Editing a Recommendation](#).
- To create a new template to use for your recommendations, see [Managing Templates](#).
- To use other features, see [Recommendations Functions](#).

You can also access your other Adobe Marketing Cloud products from the product buttons along the top of the screen.

## Recommendations Functions

The **Recommendations** menu displays when you log in and is available from all main screens.

The **Recommendations** menu contains the following options:

Menu Item	Description
Recommendations	<p>Opens the <b>Manage Recommendations</b> page, where you can:</p> <ul style="list-style-type: none"> <li>• View details and statistics for each recommendation</li> <li>• Create a new recommendation</li> <li>• Activate or deactivate a recommendation</li> <li>• Preview a recommendation</li> <li>• Edit a recommendation</li> <li>• Delete a recommendation</li> </ul> <p>For more information about managing recommendations, see <a href="#">Managing Your Recommendations</a>.</p>

Menu Item	Description
Templates	<p>Opens the Template Manager page. You can perform the following actions from the Template Manager page:</p> <ul style="list-style-type: none"><li>• Create a new template</li><li>• View the number of active and inactive recommendations that use each template</li><li>• Edit a template</li><li>• Delete a template</li><li>• Copy a template</li></ul> <p>For more information about templates, see <a href="#">Managing Templates</a>.</p>
Products	<p>Group items into different product catalogs, and then create recommendations for each catalog.</p>
Settings	<p>Opens the Settings page. You can perform the following actions from the Settings page:</p> <ul style="list-style-type: none"><li>• Create exclusions that prevent entities that contain specified criteria from being included in a recommendation</li><li>• Upload a file containing additional product display information to show in your recommendations</li><li>• Download the <code>mbox.js</code> JavaScript library file</li><li>• Reset the client API token</li></ul> <p>For more information about settings, see <a href="#">Managing Recommendations Settings</a>.</p>

# Managing Your Recommendations

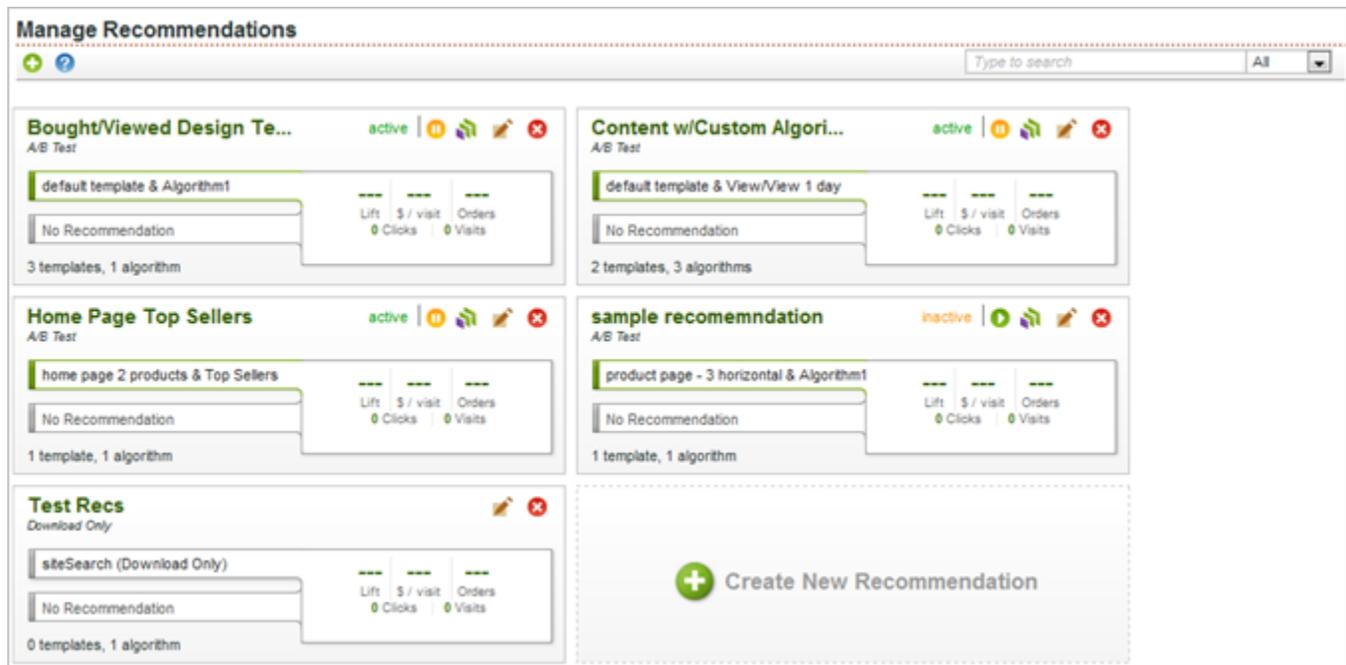
Use Recommendations to configure the criteria that determine what should be offered to a customer based on the customer's behavior on your website.

To view your recommendations, select **Recommendations** from the main menu.

The **Manage Recommendations** page contains cards showing the details of each of your recommendations.

## Viewing a Recommendation in the Recommendations Manager

The Recommendations Manager shows an overview of your recommendations.



## Recommendations Cards

Recommendations are shown in cards on the **Manage Recommendations** page.

Each recommendation card displays key information about a recommendation. Click on a card for more details.



Element	Explanation								
Recommendation Name	Displays the name of the recommendation at the top of each card.								
Type of Test	Displays the type of test beneath the recommendation name.								
Status Flag	<p>Shows whether the recommendation is active or inactive. For information about changing the status, see <a href="#">Activating a Recommendation</a>.</p> <p>The status flag does not appear next to a download-only recommendation because there is nothing to activate or deactivate.</p>								
Toolbar	<p>Contains tools that help you manage your recommendation:</p> <table border="1"> <tbody> <tr> <td>  </td> <td> <p><b>Deactivate</b> or <b>Activate</b> changes the status of your recommendation. This icon changes depending on the current status of the recommendation. See <a href="#">Activating a Recommendation</a>.</p> <p>The <b>Deactivate/Activate</b> icon does not appear next to a download-only recommendation because there is nothing to activate or deactivate.</p> </td> </tr> <tr> <td>  </td> <td> <p><b>Preview</b> opens a preview of your recommendation in a browser window. The Preview button is not available if the recommendation uses a Download Only template. See <a href="#">Previewing a Recommendation</a>.</p> </td> </tr> <tr> <td>  </td> <td> <p><b>Edit</b> lets you change the details of your recommendation. See <a href="#">Creating or Editing a Recommendation</a>.</p> </td> </tr> <tr> <td>  </td> <td> <p><b>Delete</b> permanently deletes a recommendation you no longer need. See <a href="#">Deleting a Recommendation</a>.</p> </td> </tr> </tbody> </table>		<p><b>Deactivate</b> or <b>Activate</b> changes the status of your recommendation. This icon changes depending on the current status of the recommendation. See <a href="#">Activating a Recommendation</a>.</p> <p>The <b>Deactivate/Activate</b> icon does not appear next to a download-only recommendation because there is nothing to activate or deactivate.</p>		<p><b>Preview</b> opens a preview of your recommendation in a browser window. The Preview button is not available if the recommendation uses a Download Only template. See <a href="#">Previewing a Recommendation</a>.</p>		<p><b>Edit</b> lets you change the details of your recommendation. See <a href="#">Creating or Editing a Recommendation</a>.</p>		<p><b>Delete</b> permanently deletes a recommendation you no longer need. See <a href="#">Deleting a Recommendation</a>.</p>
	<p><b>Deactivate</b> or <b>Activate</b> changes the status of your recommendation. This icon changes depending on the current status of the recommendation. See <a href="#">Activating a Recommendation</a>.</p> <p>The <b>Deactivate/Activate</b> icon does not appear next to a download-only recommendation because there is nothing to activate or deactivate.</p>								
	<p><b>Preview</b> opens a preview of your recommendation in a browser window. The Preview button is not available if the recommendation uses a Download Only template. See <a href="#">Previewing a Recommendation</a>.</p>								
	<p><b>Edit</b> lets you change the details of your recommendation. See <a href="#">Creating or Editing a Recommendation</a>.</p>								
	<p><b>Delete</b> permanently deletes a recommendation you no longer need. See <a href="#">Deleting a Recommendation</a>.</p>								
Recommendation Type	Describes the type of recommendation to be offered. Mouse over this text for statistics that show how the								

Element	Explanation
	recommendation is performing. For a list of recommendation types, see <a href="#">Creating or Editing a Recommendation</a> .
No Recommendation	<p>Mouse over this text to show the performance statistics when users are not shown a recommendation. When combined with the recommendation type described above, this enables you to compare performance with and without the recommendation.</p> <p>If you are not testing against default content, this bar does not display.</p>
Statistics	Shows the amount of lift, the revenue earned per customer visit, the number of orders resulting from the recommendation, and the number of times the recommendation has been clicked and the resulting number of site visits. Mouse over the recommendation type and <b>No Recommendation</b> text to alternate between statistics with and without the recommendation.
Templates and Algorithms	Shows the number of templates and algorithms being tested in the recommendation.

## Searching and Filtering the Recommendations List

You can locate a recommendation by its name or status on the **Manage Recommendations** page.

The displayed recommendations can be filtered to show only active or inactive recommendations, if desired. This makes it easier to locate a specific recommendation.

1. On the **Manage Recommendations** page, type all or part of a recommendation name in the **Search** box.  
As you type, the recommendations displayed on the page change to show only those that fit what you type in the **Search** box.
2. To filter the search to show only active or inactive recommendations, select **Active** or **Inactive** from the dropdown next to the Search box.  
By default, **All** is selected, showing both active and inactive recommendations.  
You can also filter the list to show all active recommendations or all inactive recommendations by selecting either **Active** or **Inactive** from the dropdown without typing anything in the **Search** box.

## Reporting Recommendation Results

You can compare the results of a recommendation with the results you get without it. This provides a clear picture of how well your recommendations are working so you can adjust them for maximum performance.

When you create a recommendation (see [Creating or Editing a Recommendation](#)), you can set up tests by selecting multiple templates and algorithms. Each algorithm is tested against each template, and visitor traffic is split evenly between each test. For information on setting up algorithms and templates, see [Selecting an Algorithm](#) and [Selecting a Template, Recommendation Area and Targeting Conditions](#).

 **Note:** Report data remains in Recommendations for five quarters (including the current quarter).

### Viewing Test Results on a Recommendations Card

The cards on the **Manage Recommendations** page show data about each recommendation, including the number of clicks, the amount of money earned per page visit, and so on.

The card shows the results for the top performing recommendation based on RPV, and for the "No Recommendation" control group.

If you are testing multiple combinations of templates and algorithms, and want to see all of your results, not just the top performer, you can do so on the recommendation's edit page, as explained in [Viewing Complete Recommendation Results](#).



The screenshot shows a recommendation card titled "Home Page Top Sellers" with an "A/B Test" label. The card is marked as "active" and includes icons for pause, refresh, edit, and delete. It compares two options: "home page 2 products & Top Sellers" and "No Recommendation". Below the options, it shows performance metrics: Lift, \$ / visit, Orders, 0 Clicks, and 3 Visits. At the bottom, it indicates "1 template, 1 algorithm".

You can compare this information to the same data without the recommendation to see whether your recommendation is improving sales.

To compare data with and without a recommendation, mouse over either the recommendation type (such as **Top Sellers**) or **No Recommendation**. The data changes to reflect the selected data type.

### Viewing Complete Recommendation Results

You can view complete recommendation results, including the results for multiple combinations of algorithms and templates, on the **Edit** page.

 **Note:** Report data remains in Recommendations for five quarters (including the current quarter).

1. Click the recommendation whose results you want to view.
2. Click **Results**.

The test results display. Use the **Showing** menu to select the host group to display in the report. The report for the host group that is set as the default displays unless a different host group is selected.

Use the radio buttons at the bottom of the results page to choose the control you want to use for the results.

This report is automatically generated for each recommendation and shows the performance of all success metrics for your recommendation.

Conversion information is gathered based on the mbox you have specified as your order confirmation page mbox (set by your consultant). The Time on Site and Page Views per Visit metrics are automatically captured, and

every page with an mbox is used in that calculation. Any page with an mbox is counted once, even if it has more than one mbox. Therefore, an mbox on every page is required to get a true count of page views.

A specific recommended item does not have to be purchased to count as a conversion.

The "clicked" metrics give you a direct understanding of the influence recommendations had on a customer's decision to purchase by tracking whether the recommendation was clicked before something was purchased. Any purchase after the recommendation was clicked counts.



**Note:** You can view the total numbers for an A/B campaign in Target. Click **Locations** > **List**, select the *orderConformPage* mbox, and click on one of the campaigns.

## Viewing the Optimizing Recommendation Report

The **Optimizing Recommendation** report shows the results of your Optimizing recommendations.

The **Optimizing Recommendation** report should help you determine whether you are getting lift by running this recommendation (total traffic) vs. running a random split test (testing traffic).



**Note:** Report data remains in Recommendations for five quarters (including the current quarter).

1. Click the recommendation whose results you want to view.
2. Click **Results**.

The left-most column in the report shows your total traffic. To the right of the dashed line is the targeted vs. testing traffic. To understand the performance of the Optimizing recommendation, 10% of traffic is sent randomly to combinations, which are compared to when the algorithm determines which combination to show to each visitor. This is done separately for each segment, so the report changes per segment. This report shows whether running the Optimizing recommendation is better than a straight a/b split.

### Viewing the Trended Graph Report

The Trended Graph report shows trends for the recommendation over a specified amount of time.

1. Click a recommendation.
2. Click **Results**, then click the Trended Graph Report icon ()
3. Define the time period for which you want to view trends.

You can mouse over a data point in each trend graph for information about that data point.

### Confidence Level and Confidence Interval

For each experience, confidence level and confidence interval are displayed.

#### Confidence Level

The *confidence level* is represented by the filled-in bars in the confidence column for each experience. To see the exact confidence level percentage, hover your mouse over the confidence column for the experience. In the example below, the confidence level is four bars and 99.90%.

The confidence level, or statistical significance indicates how likely it is that an experience's success was not due to chance. A higher confidence level indicates:

- The experience is performing significantly different from control.
- The experience performance is not just due to noise.
- If you ran this test again, it is likely that you would see same results.

If the confidence level is over 90% or 95%, then the result can be considered statistically significant. Before making any business decisions, try to wait until your sample size is large enough and that the 4 bars of confidence on one or more experiences stays consistent for a continuous length of time to ensure the results are stable.

The following list shows the meaning of the number of confidence bars:

- One bar: significance < 60%
- Two bars: significance < 75%
- Three bars: significance < 90%
- Four bars: significance  $\geq$  90%

#### Confidence Interval

The *confidence interval* is a range within which the true value can be found at a given confidence level. To view the confidence interval, rollover the "Lift" column of any experience. In the example above, the confidence interval for Experience B's lift is -10.15 to 68.82%.

**Example:** An experience's RPV is \$10, its confidence level is 95% and its **confidence interval** is \$5 to \$15. If we ran this test multiple times, 95% of the time the RPV would be between \$5 and \$15.

**What impacts the confidence interval?** The formula follows standard statistical methods for calculating confidence intervals.

- **Sample size:** As sample grows the interval will shrink or narrow. This is preferred as it means your reports are getting closer to the true value of the success metric.
- **Standard deviation smaller:** More similar results, such as similar AOVs or similar numbers or visitors converting each day, reduces the standard deviation.

## Viewing the History

The History records the date and time any changes and activations occur, and who made them.

The History also shows the number of recommendations uploaded per algorithm so you can see that the algorithm has run and is ready with content.

1. Click on a recommendation card.
2. Open the **History** tab.

## Setting Up and Deleting a Recommendation

You can create or edit a recommendation, use a backup recommendation, preview a recommendation, and delete a recommendation that you no longer need.

### Creating or Editing a Recommendation

Create and configure a new recommendation to display the items you want your site visitors to see.

To add a new recommendation or edit an existing recommendation, mouse over **Add New Recommendation** and select the type to add, or select the existing recommendation you want to modify and click **Edit**.

#### Adding a New Recommendation

Before you can use a recommendation, you must add it.

Mouse over **Add New Recommendation** to select the recommendation type you want to add. You can create three types of recommendations:

**Algorithm/Template Test recommendation:** Test the performance of your recommendations using different algorithms and templates. Use this type of recommendation to display items based on criteria such as Purchase Affinities, and to determine which recommendation layout provides the best performance.

**Location Test recommendation:** Test the performance of your recommendations based on their location on the page. For example, you might want to determine whether recommendations perform better on the right side of your page or on the bottom of the page. Use this type of recommendation to decide which page layout provides the best performance.

**Download Only recommendation:** Select **Download Only** if you do not have display mboxs on your site and you want to run a recommendation and download the results or export them using the Recommendations API. This results in a downloaded CSV file that list the recommendations with one row per key.

#### Adding an Algorithm/Template Test Recommendation

Test the performance of your recommendations using different algorithms and templates.

Use this type of recommendation to display items based on criteria such as Purchase Affinities, and to determine which recommendation layout provides the best performance.

1. Click **Add New Recommendation**, then select **Algorithm/Template Test**.

The **Edit Recommendation** page opens.

The screenshot shows the 'Edit Recommendation' page with the following sections:

- Name:**
- Type:** Site: Algorithm and template testing
- 1 Configuration** (Recommendation type and settings control)
  - Target your recommendation**
    - Show recommendation to:
  - Choose your catalog**
    - This recommendation will include items in:
  - Define your algorithms**
    -
  - Define Algorithm**
    - Base the recommendation on:
    - Choose algorithm:
    - Choose data source:
- 2 Presentation** (Placement and design of your Recommendation)
  - Choose Template(s)**
    -
  - Recommendation Area**
    -
- 3 Testing & Segments** (Testing and report segmentation)

At the bottom, there are **Save** and **Cancel** buttons.

2. Click the **Click here to name** text, then type a name for the recommendation.

The name should be descriptive enough that you can recognize it later.

3. Configure your new recommendation.

**Target your recommendation** as explained in [Configuring Entry Conditions](#).

**Choose your Catalog** containing the items to be recommended, or select **All Catalogs**, as explained in [Creating Catalogs](#).

**Base the recommendation on** a selected key, as explained in [Basing the Recommendation on a Recommendation Key](#).

**Choose algorithm** for each recommendation type as explained in [Selecting an Algorithm](#). You can test multiple recommendation types against each other by adding more than one algorithm.

**Choose data source** as explained in [Choosing the Data Source](#).

4. Configure data details.

Adjust the Data Details slider to set the period of data you want to use. To further configure your recommendation details, click **Show More** and configure the remaining details. See [Setting Data Details](#).

5. Select a template.

If supported by the selected template, you can also set the area where the recommendation displays. See [Selecting a Template, Recommendation Area and Targeting Conditions](#). This becomes your baseline. The recommendation you create is compared to the default content to show how each performs.

6. Choose a recommendation type.

If the **Recommendation Type** selector is not visible, click **Testing & Segments**.

- **A/B Test** compares two or more versions of your Web site content to see which provides the better results.

Specify the percentage of visitors who see default content, as explained in [Specifying How Many Users See Default Content](#). This becomes your baseline. The recommendation you create is compared to the default content to show how each performs.

- **Optimizing recommendation** ensures the most effective experiences are shown more often by automatically displaying the best performing recommendations.

Choose the optimizing metric that is used to determine which recommendations are the most successful.

7. To add a segment, click **Add Segment**, type a name for the segment, then select the segment parameters, as explained in [Defining Segments](#).

To delete a segment, click the box next to a segment to open it, then click the X to delete that segment. Deleting the segment also deletes any data collected for that segment.

8. Click **Save**.

After you save your new recommendation, it appears on the **Manage Recommendations** page as inactive. (See [Activating a Recommendation](#) for information about activating the new recommendation.) The algorithm runs as soon as data is available, usually within 30 minutes.

### Adding a Location Test Recommendation

Test the performance of your recommendations based on their location on the page.

You can set up a recommendation with the same algorithm in two locations with the same or different templates. This enables you to test the performance of the recommendation in different locations and with the same or different appearance in each location. For example, you might want to determine whether recommendations perform better on the right side of your page or on the bottom of the page. Use this type of recommendation to decide which page layout provides the best performance.

1. Mouse over **Add New Recommendation** and select **Location Test**.

The **Edit Recommendation** page opens.

### Edit Recommendation

**Name:**

**Type:** Site: Location testing  
*When the recommendation is displayed in one location, the other location will show default content.*

**1 Configuration** Recommendation type and settings control

**Target your recommendation**  
 Show recommendation to:

**Choose your catalog**  
 This recommendation will include items in:

**Define your algorithms**

---

**Define Algorithm**

Base the recommendation on:

Choose algorithm:

Choose data source:

**2 Presentation** Placement and design of your Recommendation

**Choose Templates** (When the recommendation is displayed in one location, the other location will show default content.)

**3 Testing & Segments** Testing and report segmentation

- Click the **Click here to name** text, then type a name for the recommendation.

The name should be descriptive enough that you can recognize it later.

- Configure your new recommendation.

**Target your recommendation** as explained in [Configuring Entry Conditions](#).

**Choose your Catalog** containing the items to be recommended, or select **All Catalogs**, as explained in [Creating Catalogs](#).

**Base the recommendation on** a selected key, as explained in [Basing the Recommendation on a Recommendation Key](#).

**Choose algorithm** for each recommendation type as explained in [Selecting an Algorithm](#). You can test multiple recommendation types against each other by adding more than one algorithm.

**Choose data source** as explained in [Choosing the Data Source](#).

- Configure data details.

Adjust the Data Details slider to set the period of data you want to use. To further configure your recommendation details, click Show More and configure the remaining details. See [Setting Data Details](#).

5. Specify the locations you want to test, then select a template for each location.

Select the mbox from the dropdown list. See [Selecting a Template, Recommendation Area and Targeting Conditions](#).

6. Set up targeting conditions.

Recommendations can be limited to show only in mboxes when certain conditions are met. These can include matching particular URL values, mbox parameter values, or profile values. These rules are reevaluated on every mbox request. With this ability, multiple recommendations can be set up on one mbox name but displayed in different circumstances. Click **Target This Mbox**, then specify the targeting criteria from the options that appear. For example: to display one recommendation can display on women's product pages select **Current Page**, as the target type, then select **URL** and **Contains** from the next two drop down lists, and type `/women/` in the final text box. To show the recommendation on men's pages, follow the same procedure, but type `/mens/`. This targets to the specified parameters, even if the same mbox name is used across all product pages.

7. Select the template for each location.

8. Specify the percentage of visitors who see default content, as explained in [Specifying How Many Users See Default Content](#).

If the **Recommendation Type** selector is not visible, click **Testing & Segments**.

This becomes your baseline. The recommendation you create is compared to the default content to show how each performs. If you choose a percentage for default content, then no recommendation is shown in either mbox for that percentage of the people to compare against.

9. To add a segment, click **Add Segment**, type a name for the segment, then select the segment parameters, as explained in [Defining Segments](#).

To delete a segment, click the box next to a segment to open it, then click the X to delete that segment. Deleting the segment also deletes any data collected for that segment.

10. Click **Save**.

After you save your new recommendation, it appears on the **Manage Recommendations** page as inactive. (See [Activating a Recommendation](#) for information about activating the new recommendation.) The algorithm runs as soon as data is available, usually within 30 minutes.

### Adding a Download Only Recommendation

Select **Download Only** if you do not have display mboxes on your site and you want to run a recommendation and download the results or export them using the Recommendations API.

This results in a downloaded CSV file that list the recommendations with one row per key.

1. Click **Add New Recommendation** or **Create New Recommendation**, or select the recommendation you want to modify and click **Edit**.

The **Edit Recommendation** page opens.

2. Click the **Click here to name** text, then type a name for the recommendation.

The name should be descriptive enough that you can recognize it later.

3. Configure your new recommendation.

**Choose your Catalog** containing the items to be recommended, or select **All Catalogs**, as explained in [Creating Catalogs](#).

4. Define your algorithm.

**Base the recommendation on** a selected key, as explained in [Basing the Recommendation on a Recommendation Key](#).

**Choose algorithm** for each recommendation type as explained in [Selecting an Algorithm](#). You can test multiple recommendation types against each other by adding more than one algorithm.

**Choose data source** as explained in [Choosing the Data Source](#).

5. Configure data details.

Adjust the Data Details slider to set the period of data you want to use. To further configure your recommendation details, click Show More and configure the remaining details. See [Setting Data Details](#).

6. Click **Save**.

After you save your new recommendation, it appears on the **Manage Recommendations** page as inactive. (See [Activating a Recommendation](#) for information about activating the new recommendation.) The algorithm runs as soon as data is available, usually within 30 minutes.

## Configuring Entry Conditions

Entry conditions help to determine who sees the recommendation when they visit your site.

To help you determine who sees your recommendation, configure entry conditions. Entry conditions are based on segments, as explained in [Defining Segments](#). Entry conditions provide the first level of targeting for your recommendations. A visitor must meet the entry conditions before the recommendation is displayed.

1. Create a new recommendation, or locate the existing recommendation you want to target and click **Edit**.
2. Under **Configuration**, select the desired entry condition.

The available options are:

**Everyone:** All visitors to your site.

**People who have purchased before:** Any visitor who has bought an item from your site.

**People who have spent...:** People who have spent more than or less than a specified amount. When you select this target, additional options appear that let you select whether the target amount is less than or more than a specified amount.

**First time visitor:** People who have not visited your site before. Note that, if cookies have been deleted, a return visitor appears as a first time visitor.

**Returning visitor:** People who have been to your site before.

**Custom profile attribute:** (For Adobe targeting users only.) People who have a particular profile value as defined in Target. When you select this option, additional parameters appear. In the first box, type the name of an in-mbox profile parameter, or a script profile parameter. (More information about these parameters is available in the Target help.) Next, select a delimiter from the menu, then type the value that must be met for the recommendation to show.

For in-mbox profile parameters, type `profile.attributeName` in the text box. For script profile parameters, type `user.attributeName`. Replace `attributeName` with the name of the attribute.

3. Set or change the remaining options for the recommendation as desired.
4. Click **Save**.

## Choosing a Test Type

You can choose either or two types of tests: A/B Test or Optimizing.

An **A/B Test** recommendation automatically splits traffic across all combinations of algorithms and templates you have set up. Optionally, traffic can be directed to default content as well to compare performance with and without recommendations.

When you create an A/B test recommendation, you specify the percentage of visitors who see the default content. All others see the recommendations.

The **Optimizing** recommendation ensures the most effective recommendations are shown more often by automatically displaying the best performing algorithm/template combination. As visitors respond to different combination over time, more traffic is automatically sent to the best performing combination. Visitors who fall into marketer-defined segments (set up at the bottom of the recommendation edit page) are sent to the best performing combination for that segment.

Unlike A/B campaigns, where a visitor has the same experience until he converts, optimizing campaigns might serve a new experience per visit (or session).

With an Optimizing recommendation, fewer visitors see underperforming combination. Automatically and over time, more traffic is shown to the best performing combinations. A small percentage is always sent to the underperforming combinations, in case there is a change and they start to perform better and even start beating the current winner.

When you create an Optimizing recommendation, you specify the optimizing metric used to determine performance, which can be the conversion rate, average order value, or revenue per visit. You also choose whether to include default content in the calculations.

To choose a test type:

1. Create a new recommendation, or locate the existing recommendation you want to target and click **Edit**.
2. Under **Testing and Segments**, select the desired test type and the parameters used by the selected type. For an A/B Test recommendation, select the percentage of users who see default content. (See [Specifying How Many Users See Default Content](#).) For an Optimizing recommendation, select the optimizing metric and whether to include default content.
3. Click **Save**.

### Choosing a Catalog

You can narrow the set of items available for a recommendation by choosing a catalog.

A catalog must be created before it can be chosen. For more information about catalogs and how to create them, see [Creating Catalogs](#).

1. Create a new recommendation, or locate the existing recommendation you want to target and click **Edit**.
2. Under **Configuration**, choose the desired catalog. You can choose one of the catalogs that has been created, or make all items available to the recommendation by choosing **All Catalogs**.
3. Click **Save**.

### Basing the Recommendation on a Recommendation Key

You can create multiple recommendation keys and test them against each other.

Each algorithm is defined in its own tab. Traffic is split evenly across your different algorithm tests. In other words, if you have two algorithms, traffic is divided equally between them. If you have two algorithms and two templates, traffic is split evenly between the four combinations. You can also specify a percentage of site visitors who see the default content, for comparison. In that case, the specified percentage of visitors see the default content, and the rest are split between your algorithm and template combinations.

1. Create a new recommendation, or find the recommendation whose type to set and click **Edit**.
2. To change the recommendation key, select the new key from the **Base the recommendation on:** dropdown list, then select any additional options.

The list contains the following options:

Option	Description
<b>Current Page Activity</b>	This set of recommendation types is defined by the visitor's activity on the current page.

Option	Description
<b>Current Item</b>	<p>The recommendation is determined by the item the visitor is currently viewing. Recommendations are set up to display other items that might interest visitors who are interested in the specified item.</p> <p>When this option is selected, the <code>entity.id</code> value must be passed as a parameter in the display mbox.</p>
<b>Current Category</b>	<p>The recommendation is determined by the product category that the visitor is currently viewing. Recommendations are set up to display items in the specified product category.</p> <p>When this option is selected, the <code>entity.categoryId</code> value must be passed as a parameter to the display mbox.</p>
<b>Custom Profile Attribute</b>	<p>For users who use the recommendations and testing and targeting functions of Adobe Target.</p> <p>The recommendation is based on any profile attribute set up for testing. The value for the attribute must resolve to an <code>entity.id</code>. For example, you might want to keep track of an item someone abandoned in their cart. You could write a profile script that stores that <code>entity.id</code>, and then deliver recommendations based on that abandoned cart item the next time the visitor returns to the site.</p>
<b>Custom Algorithms</b>	<p>This set of recommendation types lists any custom algorithms that have been defined. If there are no custom algorithms, this portion of the <b>Recommendation Type</b> list is empty.</p>
<b>Past Behavior</b>	<p>This set of recommendation types is defined by the past behavior of your site visitors.</p>
<b>Nth Last Purchased Entity</b>	<p> <b>Note:</b> This key was formerly named "Last Purchased Item."</p> <p>The recommendation is determined by a recent item that was purchased by each unique visitor. This is captured automatically, so no values need to be passed on the page.</p> <p>Choose from the following options to determine the item to key off of:</p> <ul style="list-style-type: none"> <li>• Last</li> <li>• Second-to-Last</li> <li>• Third-to-Last</li> <li>• Fourth-to-Last</li> <li>• Fifth-to-Last</li> </ul> <p>After choosing the item, select one of the following:</p> <ul style="list-style-type: none"> <li>• No Aggregate</li> </ul>

Option	Description
	<p>Only produce recommendations from the specified key.</p> <ul style="list-style-type: none"> <li>• <b>Aggregate</b></li> </ul> <p>Your recommendations begin with the specified entity, then continue in chronologically reverse order of the visitor's behavior on your site until your template is filled. For example, if you key off the third most-viewed entity, Recommendations begins with that entity, followed by the fourth most-viewed entity, then the fifth, and so on until the template is filled.</p> <ul style="list-style-type: none"> <li>• <b>All or Nothing</b></li> </ul> <p>Creates a recommendation based on the first entity ID that fills the template. For example, if your recommendation contains eight items and you key off the last purchased entity, then Recommendations begins with that entity and works back through your history until it finds an entity ID containing at least eight items. If an entity ID contains fewer than eight items, it is skipped.</p>
<p><b>Nth Last Viewed Entity</b></p>	<p> <b>Note:</b> This key was formerly named "Last Viewed Item."</p> <p>The recommendation is determined by a recent item that was viewed by each unique visitor. This is captured automatically, so no values need to be passed on the page.</p> <p>Choose from the following options to determine the item to key off of:</p> <ul style="list-style-type: none"> <li>• Last</li> <li>• Second-to-Last</li> <li>• Third-to-Last</li> <li>• Fourth-to-Last</li> <li>• Fifth-to-Last</li> </ul> <p>After choosing the item, select one of the following:</p> <ul style="list-style-type: none"> <li>• <b>No Aggregate</b></li> </ul> <p>Only produce recommendations from the specified key.</p> <ul style="list-style-type: none"> <li>• <b>Aggregate</b></li> </ul> <p>Your recommendations begin with the specified entity, then continue in chronologically reverse order of the visitor's behavior on your site until your template is filled. For example, if you key off the third most-viewed entity, Recommendations begins with that entity, followed by the fourth most-viewed entity, then the fifth, and so on until the template is filled.</p> <ul style="list-style-type: none"> <li>• <b>All or Nothing</b></li> </ul> <p>Creates a recommendation based on the first entity ID that fills the template. For example, if your recommendation contains eight items and you key off the last purchased entity, then Recommendations begins with that entity and works</p>

Option	Description
	<p>back through your history until it finds an entity ID containing at least eight items. If an entity ID contains fewer than eight items, it is skipped.</p>
<p><b>Nth Most Viewed Entity</b></p>	<p> <b>Note:</b> This key was formerly named "Most Viewed Item."</p> <p>The recommendation is determined by an item that has been viewed often, using the same method as used for Nth Most Favorite Category.</p> <p>This is determined by recency/frequency algorithm that works as follows:</p> <ul style="list-style-type: none"> <li>• 10 pts for 1st product view</li> <li>• 5 pts for every one after</li> <li>• At end of session divide all values by 2</li> </ul> <p>For example, viewing surfboardA then surfboardB in one session results in A: 10, B: 5. When the session ends, you will have A: 5, B: 2.5. If you view the same items in the next session, the values change to A: 15 B: 7.5.</p> <p>Choose from the following options to determine the item to key off of:</p> <ul style="list-style-type: none"> <li>• Most</li> <li>• Second-Most</li> <li>• Third-Most</li> <li>• Fourth-Most</li> <li>• Fifth-Most</li> </ul> <p>After choosing the item, select one of the following:</p> <ul style="list-style-type: none"> <li>• No Aggregate <ul style="list-style-type: none"> <li>Only produce recommendations from the specified key.</li> </ul> </li> <li>• Aggregate <p>Your recommendations begin with the specified entity, then continue in chronologically reverse order of the visitor's behavior on your site until your template is filled. For example, if you key off the third most-viewed entity, Recommendations begins with that entity, followed by the fourth most-viewed entity, then the fifth, and so on until the template is filled.</p> </li> <li>• All or Nothing <p>Creates a recommendation based on the first entity ID that fills the template. For example, if your recommendation contains eight items and you key off the last purchased entity, then Recommendations begins with that entity and works back through your history until it finds an entity ID containing at least eight items. If an entity ID contains fewer than eight items, it is skipped.</p> </li> </ul>
<p><b>Nth Most Favorite Category</b></p>	<p> <b>Note:</b> This key was formerly named "Favorite Category."</p>

Option	Description
	<p>The recommendation is determined by the category that has received the most activity, using the same method used for "most viewed item" except that categories are scored instead of products.</p> <p>Choose from the following options to determine the item to key off of:</p> <ul style="list-style-type: none"> <li>• Most</li> <li>• Second-Most</li> <li>• Third-Most</li> <li>• Fourth-Most</li> <li>• Fifth-Most</li> </ul> <p>After choosing the item, select one of the following:</p> <ul style="list-style-type: none"> <li>• No Aggregate <ul style="list-style-type: none"> <li>Only produce recommendations from the specified key.</li> </ul> </li> <li>• Aggregate <ul style="list-style-type: none"> <li>Your recommendations begin with the specified entity, then continue in chronologically reverse order of the visitor's behavior on your site until your template is filled. For example, if you key off the third most-viewed entity, Recommendations begins with that entity, followed by the fourth most-viewed entity, then the fifth, and so on until the template is filled.</li> </ul> </li> <li>• All or Nothing <ul style="list-style-type: none"> <li>Creates a recommendation based on the first entity ID that fills the template. For example, if your recommendation contains eight items and you key off the last purchased entity, then Recommendations begins with that entity and works back through your history until it finds an entity ID containing at least eight items. If an entity ID contains fewer than eight items, it is skipped.</li> </ul> </li> </ul>
<b>Popularity</b>	<p>The recommendation is determined by the popularity of items on your site. Popularity includes top sellers and top viewed by mbox data and, if you use Adobe Analytics, all of the metrics available in the product report (previously called <i>optimize on any metric</i>). These recommendations rank the items based on the criteria you choose in the <b>Algorithm</b> dropdown.</p>
<b>Site Search</b>	<p>(Available only if you use the search capabilities of Adobe Target.) The recommendation is determined by the search results on a particular page. Those search results are used as input to the recommendation to determine complementary items.</p>

3. Click **Save**.

## Selecting an Algorithm

The algorithm determines which action will result in which recommendation. You can test multiple recommendation types against each other by adding more than one algorithm.



**Note:** *If you are running a recommendation and change its algorithm, you will lose your settings data. A warning message reminds you that this will occur.*

All one-day and two-day algorithms run twice daily. All one-week and longer algorithms run once daily. Site Affinity algorithms run once daily. Backup algorithms run twice daily.

If the number of recommended items is less than the number of "slots" defined in a template, the ability to partially render the template can be set at the algorithm level using a checkbox located in the Content Serve Settings on the Recommendations Edit tab. If partial template rendering is not enabled and there aren't enough recommended entities to fill all the slots, the entire template is not rendered. If partial template rendering is enabled, Recommendations renders the template whether or not enough recommendations exist to fill up all the slots in the template. You should build your templates to account for this behavior. For example, you might create your template to include null checks.

Considering each key and the algorithms that map to it, different recommendations lend themselves to placement on different pages:

Key	Algorithms	Where on Your Site
Current category	<ul style="list-style-type: none"> <li>• Top Sellers</li> <li>• Most Viewed</li> </ul>	Single-category pages, such as category pages, NOT null search results pages
Popularity	<ul style="list-style-type: none"> <li>• Top Sellers</li> <li>• Most Viewed</li> <li>• Highest/Best _____</li> </ul>	General pages, such as home or landing pages and offsite ads.
Current item	<ul style="list-style-type: none"> <li>• Purchase Affinities</li> <li>• View Affinities</li> <li>• View/Purchase Affinities</li> <li>• Site Affinity</li> </ul>	Single-item pages, such as product pages, NOT null search results pages
Custom profile attribute	<ul style="list-style-type: none"> <li>• Purchase Affinities</li> <li>• View Affinities</li> <li>• View/Purchase Affinities</li> <li>• Site Affinity</li> </ul>	Varies. Home pages, landing pages, cart pages, etc.
Nth Last Purchased Entity	<ul style="list-style-type: none"> <li>• Purchase Affinities</li> <li>• View Affinities</li> <li>• View/Purchase Affinities</li> <li>• Site Affinity</li> </ul>	NOT product page, pages relevant to purchases. For example, Home page, My Account page, offsite ads.

Key	Algorithms	Where on Your Site
Nth Last Viewed Entity	<ul style="list-style-type: none"> <li>• Purchase Affinities</li> <li>• View Affinities</li> <li>• View/Purchase Affinities</li> <li>• Site Affinity</li> </ul>	NOT product page. Pages relevant to purchases. For example, Home page, My Account page, offsite ads.
Nth Most Favorite Category	<ul style="list-style-type: none"> <li>• Top Sellers</li> <li>• Most Viewed</li> </ul>	General pages, such as home or landing pages and offsite ads.
Nth Most Viewed Entity	<ul style="list-style-type: none"> <li>• Purchase Affinities</li> <li>• View Affinities</li> <li>• View/Purchase Affinities</li> <li>• Site Affinity</li> </ul>	Varies. Home pages, landing pages, offsite ads, etc.
Custom Algorithms	Custom	Varies. Item-based algorithms on product pages, category-based algorithms on category pages.

1. Create a new recommendation, or find the recommendation whose algorithm you want to set and click **Edit**.
2. Select an algorithm from the **Choose Algorithm** dropdown list.

The following algorithms are available:



**Note:** *The affinities algorithms must be enabled by Client Services.*

**Purchase Affinities:** Items that are most often purchased by someone who purchased the current item.

**View Affinities:** The items that are most often viewed in the same session that the specified item is viewed.

**View/Purchase Affinities:** The items that are most often purchased in the same session that the specified item is viewed. This algorithm returns other products people purchased after viewing this one, the specified product is not included in the results set.

**Site Affinity:** This tuning parameter determines which products are best to recommend with other products based on the following criteria:

- Product page views
- Cart adds
- Cart removes
- Purchases
- Site activity

You can configure this recommendation algorithm to determine how much data is required before a recommendation is presented. The site affinity recommendation is based on the certainty of a relationship between two products. For example, if you select **Strong**, then the products with the strongest certainty of a match are recommended.

For example, you set a strong affinity and your template includes five items, three of which meet the strength of connection threshold. The two items that do not meet the minimum strength requirements do not display in your

recommendations and are replaced by your defined backup items. The items with the strongest affinity display first.

Some customers with diverse product catalogs and diverse site behaviors might get the best results if they set a weak site affinity.

**Adobe Search&Promote Recommendation:** If you use the Adobe Target site search and merchandising capabilities, this *people who searched for this bought that* recommendation displays in a promo area on the Site Search page. The placement of the mbox is determined with your site search consulting team.

Advanced users can create custom algorithm types, as explained in [Creating a Custom Algorithm](#).

**Popularity By Metric:** Choose any metric from the products report in Adobe Analytics to show the top products by revenue, orders, cart adds, ratings, etc.

**Top Sellers:** The items that are included in the most completed orders. Multiples of the same item in a single order are counted as one order.

**Most Viewed:** The items that are viewed most often.

**Recently Viewed Items:** Items that have been viewed recently by the visitor. When using this algorithm, you should update the Target template to handle cases where blank recommendations would show when there are not enough previously viewed items to display.

3. Click **Save**.

### Choosing the Data Source

1. Create a new recommendation, or find the recommendation whose algorithm you want to set and click **Edit**.
2. Select a source from the **Choose Data Source** dropdown list.
3. Specify the period for which data should be used when calculating recommendations.
4. To configure more data options, click **Show More**.  
See [Setting Data Details](#).
5. Click **Save**.

### Content Serve Settings

The Content Serve settings are optional settings that define how content is shown.

If the number of recommended items is less than the number of "slots" defined in a template, Recommendations can either fill the template with backup recommendations or display a partially rendered template. Use the Content Serve settings to manage these options.

#### Content Serve Settings

Enable partial template rendering:

Do not show backup recommendations:  [Apply the inclusion filtering restrictions on backup recommendations](#)

Partial Template Rendering	Backup Recommendations	Result
Disabled	Disabled	If fewer recommendations are returned than the template calls for, the recommendations template is replaced by default content and no recommendations are displayed.
Enabled	Disabled	The template is rendered, but may include blank space if fewer recommendations are returned than the template calls for.
Enabled	Enabled	Backup recommendations will fill available template "slots," fully rendering the template.  If applying inclusion rules to backup recommendations restricts the number of qualifying backup recommendations to the point that the template cannot be filled, the template is partially rendered.  If the criteria does not return any recommendations, and inclusion rules restrict backup recommendations to zero, the template is replaced with default content.
Disabled	Enabled	Backup recommendations will fill available template "slots," fully rendering the template.  If applying inclusion rules to backup recommendations restricts the number of qualifying backup recommendations to the point that the template cannot be filled, the template is replaced by default content and no recommendations are displayed.

### Setting Data Details

Several options help you narrow the items that display in your recommendations.

The data details are optional. However, setting these details gives you more control over the items that display in your recommendation. Each detail you configure further narrows the display criteria. For example, you can choose to display only women's shoes that have an inventory above 50 and a price between \$25 and \$45. You can also weight each attribute so those items that are more important to your business are most likely to display.

1. Specify the period for which data should be used when calculating recommendations.

This helps you target recommendations based on recent activity over a specified time period. Set the time period to provide enough data for a valid recommendation, but not so much data that the recommendation is out of date.

2. To access the data detail options, create or edit a recommendation, then click **Show More** in the **Data Details** section under **Define Your Algorithm**.

The **Data Details** section is not available until you choose an algorithm

3. Set the minimum inventory amount for the products you want to recommend.

4. Set a price range for the products you want to recommend.
5. Configure the recommendation to display items only when they meet certain criteria.

You can specify that items are included only when one of the following attributes meets or does not match one or more specified conditions:

- ID
- Category
- Name
- Message
- Margin
- Value
- Inventory
- Brand

You can set more than one value for each attribute. Separate each value with a comma.



**Note:** If you select **Inventory** but an Inventory value is not passed, that control on the recommendations setup page is ignored. In this case, use an "include only when" rule or a catalog to achieve your inventory control goal.

In addition to the usual evaluators (`contains`, `does not contain`, `equals`, and so on), you can select one of the following options:

- **Include Only When: Matches**

The recommendation's attribute must match the key's attribute to display.

- **Include Only When: Does Not Match**

The recommendation's attribute must not match the key's attribute to display.

- **Include Only When: Is Between**

To display, a recommendation's attribute must fall within the range specified for the value, margin, or other numeric-based attribute. You might, for example, specify 50% and 200% if you want to display items that cost \$25 to \$100 when the user views a \$50 item. This prevents the recommendation from displaying a \$5000 dollar item when a \$200 value item is being viewed, showing instead items that are more likely to interest the buyer. The lower limit is 0%. There is no upper limit.

You can use multiple Include Only When filters to reduce the overhead of setting up many separate campaigns. Multiple filters are combined with an AND.



**Note:** This option limits the items that are displayed in the recommendation. It does not affect which pages the recommendation is displayed on. To limit where the recommendation displays, recommendation-level targeting is required.

Dynamic attribute filtering should be used sparingly. They are useful if, for example, your organization has rules that demand that one brand is not recommended while another brand is being shown. There is a cost to this feature. You could possibly lose a percentage of lift by restricting some items from not showing when they would normally be shown by the algorithm.

6. If desired, [weight attributes](#) so they are more or less likely to show.

Select an attribute, then enter one or more values for that attribute (separated by a comma), then use the slider to set the weight for that weighting.

To add another weighting, click **Add Weighting** and set the attribute, values, and weight. You can set as many weightings as you need.

7. Click **Save**.

## Selecting a Template, Recommendation Area and Targeting Conditions

The template and recommendation area determine the appearance of your recommendation and where it appears.

1. Create a new recommendation, or find the recommendation whose template you want to set and click **Edit**.
2. To specify the template used for the recommendation, click **Presentation** then select a template from the **Choose Template(s)** drop-down list.

You can select multiple templates if you want to test templates against each other. For more information about templates, see [Managing Templates](#).

Select **Download Only** if you do not have display mboxs on your site and you want to run a recommendation and download the results or export them using the Recommendations API. This results in a downloaded CSV file that list the recommendations with one row per key.

For example, if you have a *People who bought this bought that* recommendation, the key is the product ID that you want to show recommendations for (typically passed through the display mbox) and the products that were purchased with that product are recommended. If you are using the *Top seller in category* algorithm, the key is the category and the recommendations are the top sellers in that category.



**Note:** If you select **Download Only**, the options to choose a template and a display area (described in the next step) do not appear.

3. Select the recommendation area (mbox) where you want to display the recommendation.

This option is not available if you select **Download Only**.

4. If desired, target the selected mbox.

Recommendations can be limited to show only in mboxs when certain conditions are met. These can include matching particular URL values, mbox parameter values, or profile values. These rules are reevaluated on every mbox request. With this ability, multiple recommendations can be set up on one mbox name but displayed in different circumstances. Click **Target This Mbox**, then specify the targeting criteria from the options that appear. For example: to display one recommendation can display on women's product pages select **Current Page**, as the target type, then select **URL** and **Contains** from the next two drop down lists, and type `/women/` in the final text box. To show the recommendation on men's pages, follow the same procedure, but type `/mens/`. This targets to the specified parameters, even if the same mbox name is used across all product pages.

5. Click **Save**.

## Defining Segments

Segments show you how specific groups of visitors are performing on your site.

For example, if you present the same information to all users on your site, you can then use segments to determine how well your presentation succeeds with certain segments of visitors, such as visitors who are new to your site or visitors who have bought products from your site in the past. This information helps you determine how best to target your information so you show the right information to the best segments. Targeting a recommendation determines

who sees the recommendation when they visit your site, as explained in [Configuring Entry Conditions](#). You can add up to ten segments for each recommendation.

1. Create a new recommendation, or locate the existing recommendation you want to target and click **Edit**.
2. Under **Testing and Segments**, click **Add Segment**.
3. In the first box of the segment builder, type the name of the segment you want to define.
4. Specify the segment options.

**People who have purchased before:** Any visitor who has bought an item from your site.

**People who have spent...:** People who have spent more than or less than a specified amount. When you select this target, additional options appear that let you select whether the target amount is less than or more than a specified amount.

**First time visitor:** People who have not visited your site before. Note that, if cookies have been deleted, a return visitor appears as a first time visitor.

**Returning visitor:** People who have been to your site before.

**Custom profile attribute:** (For testing and targeting users only.) People who have a particular profile value as defined in Target. When you select this option, additional parameters appear. In the first box, type the name of an in-mbox profile parameter, or a script profile parameter. (More information about these parameters is available in the Target help.) Next, select a delimiter from the menu, then type the value that must be met for the recommendation to show.

5. Repeat this procedure for each segment you want to define.
6. Click **Save**.

### Specifying How Many Users See Default Content

For an A/B test, specify a percentage of users who will see default content. The remaining users see the recommendation.

You can compare the results from those who saw the recommendation against those who saw default content to determine how effective the recommendation is at directing users toward your desired results.

1. Create a new recommendation, or find the recommendation whose template you want to set and click **Edit**.
2. To change the template used for the recommendation, click **Testing & Results** and select **A/B Test**.
3. To change the percentage of visitors who see default content, specify a percentage.
4. Click **Save**.

### Using a Backup Recommendation

If you use the backup recommendation feature, any recommendation that does not have enough recommended items will not display default content. Instead, recommendations display the results of the backup algorithm.

If you do not use a backup recommendation, if a recommendation does not have enough items to fill the display, the system displays default content to the user.

The backup recommendation feature always uses the top-viewed items on the site to fill in any remaining slots after the algorithm's data is used. For example, your template is configured to show five recommended items, and you're using the *Purchase Affinities* algorithm. However, you only have enough data to fill two of the five slots, so the backup recommendation feature fills the other three spots with top-viewed items.

Backup recommendations are randomly chosen from the top 500 most-viewed products across the entire site. The data time period for backup recommendations is one week.

The 500 most-viewed results are ordered sequentially and then split into buckets of 20. The buckets are served in order, but the results inside each bucket are randomized and returned to the page. If users refresh the page, they are presented with new, randomized results. If the result set from the union of the collection and the filtering rules is smaller than 20, it will randomly select from the collection.

 **Note:** *If you group your items into catalogs, the backup recommendations generated for each algorithm within the recommendation also uses the catalog, so only items in the catalog are included in the backup recommendation.*

Any item that is excluded by global exclusion rules is not served as a backup recommendation.

Backup recommendations are enabled by default and fill in the extra slots in a template with a random selection of the most popular items on the site.

Duplicates are removed from batches of recommendations.

Using backup recommendations is usually part of the discussion with the implementation team during your initial setup. If you want to change the backup recommendation setting after implementation, contact your account manager.

If partial rendering (see [Content Serve Settings](#)) is not enabled and the template doesn't show, then either the backup recommendation or default content is shown instead.

## Previewing a Recommendation

You can preview a recommendation to see how it looks in a browser. Browse around the site to see how the pages change with and without the recommendations and mboxs.

 **Note:** *The Preview option is not available for recommendations that use a Download Only template.*

1. On the **Manage Recommendations** page, find the recommendation you want to preview.
2. Click **Preview** .

A new browser window opens, displaying a preview of your recommendation.



Option	Explanation
	 <p>The screenshot shows a green recommendation card with a 'less' button and an upward arrow. Below the button, it displays targeting information: 'Targeted to: everyone' and 'Conversion: orderConfirmPage'. On the right side, it shows 'Mbox: headerLogo' and 'Offer: 1st Ever Recommen...'.</p>
<b>Less</b>	Hides the additional information.
<b>Hide Mboxes</b>	Prevents the mbox overlays from displaying.

## Deleting a Recommendation

Delete a recommendation when you no longer want to use it.

When you delete a recommendation, any results data associated with the recommendation is also deleted. The template is not deleted.

1. On the **Manage Recommendations** page, find the recommendation you want to delete.
2. Click **Delete**.

## Starting a Recommendation

Start your recommendation when your site is prepared and your recommendation is ready to collect data.

## Knowing When to Launch a Recommendation

Launch a recommendation once data is being collected.

The recommendations server begins gathering item description data when mboxes are placed on the site or the entity details are uploaded via a CSV file, even if no recommendations are set up yet. These mboxes also start capturing usage data, such as views and purchases of products that are used for the recommendations algorithms. If you use Adobe Analytics for algorithm data, this information is also immediately available.

When a new recommendation is created, or a new algorithm is added to an existing recommendation, data is generated within 30 minutes for the algorithm(s). These new algorithms use existing item information and usage information, and data gathering starts before each algorithm is created. If an existing algorithm is updated or changed, then the changes are used by the system the next time the algorithm is run.

The algorithm schedule is determined by the data range specified for the algorithm. If one day of data is used, the algorithm updates every two to four hours. If two months of data is selected, then the algorithm updates every 24 hours. After the initial run of an algorithm within 30 minutes of creation, it runs on this schedule.

Algorithm filters and weighting are applied during these algorithm updates. Other controls like inventory and price rules are applied at display time. When the recommendations server is updated with item information about price and inventory (either via an mbox or csv upload), those changes are immediately reflected in the recommendation displaying on the site, even if the algorithm has not updated yet.

To confirm that recommendations are prepared and ready to go, download the recommendation output from the edit page by clicking the orange x icon next to the name. The downloaded file includes all recommendation data

that is ready. The recommendation is ready to be activated there is one row per key for an algorithm based on a particular product or category view. For a popularity algorithm, only one row of data displays.

## Activating a Recommendation

You can set whether a recommendation is active.

If a recommendation is not active, it does not run on your Web pages or recommend offers to your customers. You can easily recognize whether a recommendation is active by the status flag that appears beneath the recommendation name on the **Manage Recommendations** page:

Active 

Inactive 

The icons on the toolbar change depending on the status of the recommendation.

	If the recommendation is inactive, the Activate icon displays.
	If the recommendation is active, the Deactivate icon displays.

1. Make sure your recommendation is ready to be launched, as explained in [Knowing When to Launch a Recommendation](#).
2. On the **Manage Recommendations** page, find the inactive recommendation you want to activate.
3. Click **Activate**.

## Deactivating a Recommendation

Deactivate a recommendation to stop displaying it on your site.

If a recommendation is active, it runs on your Web pages and recommends offers to your customers. You can easily recognize whether a recommendation is active by the status flag that appears beneath the recommendation name on the **Manage Recommendations** page:

Active 

Inactive 

The icons on the toolbar change depending on the status of the recommendation.

	If the recommendation is inactive, the Activate icon displays.
	If the recommendation is active, the Deactivate icon displays.

1. On the **Manage Recommendations** page, find the active recommendation you want to deactivate.
2. Click **Deactivate**.

## Creating a Custom Algorithm

You can create one or more custom algorithms and provide a list of the recommended items to show for a specific key.



**Note:** *Creating a custom algorithm requires the use of two APIs. This process should only be performed by advanced users.*

To create a custom algorithm, you must use two APIs.

- Name the custom algorithm
- Upload the data displayed by the custom algorithm

These APIs must be used sequentially in the order shown above. However, they can be done at different times. Also, after you have created the algorithm name, you can upload data whenever needed (for example, on a schedule to keep the information up to date) without repeating the Algorithm Name API call.

You can also delete a custom algorithm, as explained in [Deleting a Custom Algorithm](#).

## Naming a Custom Algorithm

Use the Algorithm Name API to create a name for a custom algorithm.

The syntax for the Algorithm Name API is:

```
https://recommendations.omniture.com/rest?action=algorithm.upload
&client=clientId&clientToken=51dafdf4-f825-4581-a7c0-8ce9db31bd31
&algorithmName=sampleCustomAlgorithm&keyType=currentitem
```

Where:

**recommendations.omniture.com** is the domain for the current recommendations environment you are using.

**clientId** is your client code.

**51dafdf4-f825-4581-a7c0-8ce9db31bd31** is the client token that is displayed on the settings page. The token shown is a sample; yours will be different.

**sampleCustomAlgorithm** is the name of the algorithm as it will be displayed in the algorithm selection dropdown when you create or edit a recommendation. You can name it whatever you like, but it has a 255 character limit. This name is used when you upload the recommendation data, as shown in [Uploading Custom Algorithm Data](#).

**keyType** is an optional parameter that allows users to specify their own key for custom algorithms. If no value is passed, it is assumed to be the current item. The value can be changed to any `user.attribute` or `profile.attribute` defined in the A/B and multivariate testing and targeting interfaces, or to one of the following (case and space sensitive):

- `currentitem`
- `lastvieweditem`
- `lastpurchaseditem`
- `mostvieweditem`
- `favoritecategory`

- `currentcategory`

For example, if the profile script was named `abandonedCartItem`, the parameter for this API would be `keyType=user.abandonedCartItem`.

After you use this API, the new name appears immediately as an algorithm type.

## Uploading Custom Algorithm Data

After you create a custom algorithm name, you can upload a list of the recommended items to display for a specific key item when you use that custom algorithm.



**Note:** If you try to upload recommendations data to a custom algorithm that has not yet been created, you receive an error stating that the algorithm does not exist.

The syntax for the Upload API is:

```
https://recommendations.omniture.com/rest?action=entity.recommendations.upload
&client=clientId&environmentId=184868&clientToken=51dafdf4-f825-4581-a7c0-8ce9db31bd31
&algorithmName=sampleCustomAlgorithm&recommendations=<recommendations><recommendation>
<key>1</key><entityId>2</entityId><entityId>3</entityId>
<entityId>4</entityId></recommendation></recommendations>
```

Where:

**recommendations.omniture.com** is the domain for the current recommendations environment you are using.

**clientId** is your client code.

**environmentId** is the ID of the environment you want to use. You can specify a valid ID (`environmentId=8`), or `ALL` to use all host groups (`environmentId=ALL`). If `environmentId` is not included then it defaults to the default Production environment.

**51dafdf4-f825-4581-a7c0-8ce9db31bd31** is the client token that is displayed on the **Settings** page. The token shown is a sample; yours will be different.

**sampleCustomAlgorithm** is the name of the algorithm created in [Naming a Custom Algorithm](#).

**<key>...</key>** is what the recommendation is based on. This can either be an entity/product id or a category value. These values must be known `entity.id` and `entity.categoryId` values, meaning that Recommendations already has display data for the entities. The key values can also be left blank for non-keyed recommendations such as overall top sellers or top viewed.

**<entityId>...</entityId>** is the entity to be recommended for the specified key. This setting must be a known `entity.id` value, meaning that the recommendations server already has display data for the entities.

**<recommendations>...</recommendations>** is the XML representation of the recommendations that will display. A `<recommendation>` must be included for each key. The `<entityId>` values are the recommended items for the specified key. In proper XML syntax, the recommendation might look similar to the following:

```
<recommendations>
<recommendation>
<key>1</key>
<entityId>4</entityId>
```

```
<entityId>2</entityId>
<entityId>3</entityId>
</recommendation>
<recommendation>
<key>2</key>
<entityId>5</entityId>
<entityId>3</entityId>
<entityId>6</entityId>
</recommendation>
...
</recommendations>
```

## Deleting a Custom Algorithm

Delete a custom algorithm name with the Delete Algorithm API call.



**Note:** If you try to delete a custom algorithm that has not yet been created, you receive an error stating that the algorithm does not exist.

Syntax:

```
https://recommendations.omniture.com/rest?action=algorithm.delete
&client=clientId&clientToken=51dafdf4-f825-4581-a7c0-8ce9db31bd31
&algorithmName=sampleCustomAlgorithm
```

Where:

**recommendations.omniture.com** is the domain for the current recommendations environment you are using.

**clientId** is your client code.

**51dafdf4-f825-4581-a7c0-8ce9db31bd31** is the client token that is displayed on the settings page. The token shown is a sample; yours will be different.

**sampleCustomAlgorithm** is the name of the algorithm created in [Naming a Custom Algorithm](#).

## Localized Recommendations Based on Geography

You can provide recommendations such as top sellers, top viewed and so on based on the location of the browser, search, and transactions.

1. Open a Recommendation and click **Edit**, or create a new recommendation and open the Edit tab.
2. Define your algorithm.

There are three groups of geo-based recommendations:

- Hierarchical

Hierarchical algorithms use Target data to create a tree that flows from general to specific information to fill the template. For example, you might specify user attributes that flow from store to city to state to country. If there

are not enough recommendations for store to fill the template, then recommendations are added from city, then state, and finally country, until the template has been filled.

- **Sequential**

Sequential algorithms use Target data to run through a series of attributes that do not necessarily have a relation. For example, you might display items that match one color group, then another, at that match a specified gender and a then another attribute, such as location or age. If the first attribute does not fill the template, the next attribute is used, then the next until the template is filled.

- **No group**

Does not use either grouping.

### 3. Click **Save**.

## Examples

### Sequential

For example, define the following profile script attributes for a sequential grouping:

```
user.recsAttributeCity
user.recsAttributeRegion
user.recsAttributeState
user.recsAttributeCountry
```

The order in which the attributes are defined matters. Recommendations begins with the first, then moves to the second, and so on.

In this example, sequential algorithms first attempt to fill the template with City, then Region, then State, and finally Country, until the template has been filled.

### Hierarchical

Similarly, define the following profile script attributes for hierarchical grouping:

```
user.recsAttributeCountry
user.recsAttributeState
user.recsAttributeRegion
user.recsAttributeCity
```

The order in which the attributes are defined matters. Recommendations assumes that the attributes are listed from biggest to smallest, or parent to child. When using the hierarchy to fill the template, Recommendations starts with the combination that creates the smallest unit, as defined by the attribute order, then moves up to the next smallest, and so on, until the largest unit has been reached.

In this hierarchical example, Recommendations attempts to fill the template using the following attribute combinations:

```
user.recsAttributeCountry+user.recsAttributeState+user.recsAttributeRegion+user.recsAttributeCity
```

If there are not enough items to fill the template, Recommendations then uses:

```
user.recsAttributeCountry+user.recsAttributeState+user.recsAttributeRegion
```

If there are still not enough items to fill the template, Recommendations then uses:

```
user.recsAttributeCountry+user.recsAttributeState
```

Finally, if the template is still not filled, Recommendations uses:

```
user.recsAttributeCountry
```

## Advanced Recommendations Options

This topic lists all possible parameters you can set when creating or editing a recommendation, and the algorithms where each parameter can be used.

Parameter	Description	Algorithms
Only recommend products with inventory greater than or equal to	<p>Specify how many items must be in stock before a product is recommended.</p> <p>The product is not recommended unless there are at least the specified number in stock. This helps to prevent recommending products that are sold out or nearly sold out. You can also use this setting to try to reduce the inventory of products that are overstocked.</p> <p> <b>Note:</b> The .csv file follows the rules established in the algorithm setup, except for any information filtered at display time (price limit and inventory limit).</p>	<p>Top Sellers</p> <p>Most Viewed</p> <p>Purchase Affinities</p> <p>View/Purchase Affinities</p> <p>Popularity</p> <p>Site Affinity</p>
Only recommend products within the price range	<p>Specify the price range that products must fit into before they are recommended.</p> <p>This helps you target recommended products to buyers. If, for example, a customer usually purchases bargain products, lower-priced products are recommended.</p> <p> <b>Note:</b> The .csv file follows the rules established in the algorithm setup, except for any information filtered at display time (price limit and inventory limit).</p>	<p>Top Sellers</p> <p>Most Viewed</p> <p>Purchase Affinities</p> <p>Popularity</p>
Strength of connection between recommended products and the referenced product	<p>Specify the affinity between the recommended products and the source product.</p> <p>This helps you target your recommendations based on how often people act on the source product and the recommended product during the same Web session. The strength is calculated according to the number of times the recommended product has been viewed, added to the cart, or purchased in the same session as the source product.</p> <p>If you want to make recommendations without very much affinity data, select <b>Weak</b>. If you prefer to wait</p>	<p>Site Affinity</p>

Parameter	Description	Algorithms				
	until there's a lot of data before the algorithm starts to make recommendations, select <b>Strong</b> .					
Site Catalyst Report Suite	Specify the Adobe Analytics report suite used to track the data used with this recommendation.	Top Sellers Most Viewed Purchase Affinities Popularity Site Affinity				
SiteCatalyst Metric	Use any metric available on the product report in Adobe Analytics to drive your algorithm. You can choose algorithms that rank your products based on any metric, such as "add to carts," revenue, units sold, etc.	Popularity				
Attribute Weighing	<p>Use attribute weighting to "nudge" the algorithm. Marketers can influence the algorithm based on important description or metadata about the content catalog. Apply a higher weighting to these on-sale items so they show more often in the recommendation. Non-sale items are not completely excluded, but they display less often. Multiple weightings can be applied to the same algorithm, and the weightings can be tested on split traffic in the recommendation.</p> <table border="1"> <tbody> <tr> <td>High</td> <td>                             25%                              12%                              0                         </td> </tr> <tr> <td>Low</td> <td>                             -12%                              -25%                         </td> </tr> </tbody> </table>	High	25% 12% 0	Low	-12% -25%	Purchase Affinities View Affinities View/Purchase Affinities Top Sellers Most Viewed
High	25% 12% 0					
Low	-12% -25%					
Include Only When	Show this recommendation only if one or more selected variables exactly matches the specified criteria. For example, you can set this option to specify that the recommendation shows only for a specific entityID.	Site Affinity Purchase Affinities View/Purchase Affinities View Affinities Popularity Top Sellers				

Parameter	Description	Algorithms
		Most Viewed

## Creating Catalogs

The catalog is the set of products or items that are eligible for the recommendation.

The backup recommendations generated for each algorithm within the recommendation also uses this catalog, so only items in the catalog are included in the backup recommendation. With catalogs, you can be sure that only products that make sense to show in a location are displayed.

Catalogs are rebuilt or updated every time each algorithm runs.

You can group your items into catalogs, then create separate recommendations for each catalog.

1. From the recommendations menu, select **Products**, then click **Catalogs**.
2. Click **Add New Catalog**.
3. Type a name for the catalog.
4. Select the parameter used to build the catalog.

For example, your catalog might be built around a product ID or category, margin, or any other parameter in the list.

5. Type one or more values for the parameter.
6. (Optional) Add any other rules required for the category.

Multiple rules are joined with an AND. All specified rules must be matched for the catalog to apply.

7. Click **Save**.



**Note:** *Catalogs and exclusion rule modifications are reflected on your site immediately after being updated. Updated catalogs and exclusions rules filter from the existing algorithm results. For example, if you have a catalog that contained items from BrandA and you modified the catalog to contain items from BrandB, and they were exclusive, then you would get no results until the algorithm ran again. However, if you modified a catalog to be more inclusive (for example, changing the value range from \$10-\$100 to \$20->\$80), then the runtime filter rule is applied at serve time.*

## Searching Catalogs

After you create a product catalog, you can view and search it.

You can search the catalog and see all the data that has been learned about your items including ID, price, inventory, categories, and so on, so you can be confident knowing what information will display in your recommendations. You can also delete an item you no longer want in your catalog directly from this item viewer.

1. Click **Products**, then click the **Product Search** tab.
2. Select the attribute you want to search for, choose a search attribute, type a value, and click **Search**.  
You can click **Add Rule** to add additional search terms to further narrow your search results.

## Troubleshooting Recommendations

This topic includes information about fixing problems that might occur.

### Problem: My recommendations don't display on my site.

Review the [Recommendations Not Showing Workflow](#). Some tasks in this workflow are advanced operations that might best be performed by Client Care.

### Problem: My mbox is not functioning as expected.

Review [Troubleshooting Mboxes](#).

### Problem: The currently visited item is not excluded when the algorithm key is `userProfileAttribute` and the type is `customAlgorithm`.

This behavior is expected.

## Managing Templates

Templates determine how your recommendations look on a Web page or flashbox. You can create customized templates to provide the appearance you desire.

### Using the Template Manager

The **Template Manager** lists your templates so you can see how many active and inactive recommendations use each template, and so you can create, edit, delete, or copy a template.

1. Click **Templates**.

Template Name	Active Recommendations	Inactive Recommendations
default 3 across template	2	1
Default 3 vertical template	0	0
Default Template	0	0
Test 2	0	0

+ Create New Template

The **Active Recommendations** and **Inactive Recommendations** columns show how many recommendations use each template.

2. Mouse over a template name to access a toolbar that enables you to edit, delete, or copy the template.

## Creating or Editing an HTML Template

Create customized templates to provide the look you want for your recommendations.

1. From the recommendations menu, select **Templates**.

The list of current templates opens. This list includes the template name and information about how often each template is used in active and inactive recommendations.

2. Select **HTML Template**, then click **Create New Template**, or place the mouse pointer over the template you want to change and click **Edit**.

The **Edit Template** screen opens.

### Edit Template

Template Name:

Enter template code: Or start with: [3 Across](#) | [3 Down](#) | [2x2](#)

```
<table>
<tr>
<td>
<a href="$entity1.pageUrl">

<br/>$entity1.name
<br/>$entity1.message
<br/>$entity1.value
</a>
</td>
</tr>
<tr>
<td>
<a href="$entity2.pageUrl">

<br/>$entity2.name
<br/>$entity2.message
<br/>$entity2.value
</a>
</td>
</tr>
</table>
```

#### Template Usage Statistics

0 recommendations currently using this template

Show 0 All | 0 Active | 0 Inactive

3. Edit the code for the template.

Recommendation templates use the open-source Velocity template language. Information about Velocity can be found at <http://velocity.apache.org>. For more information, see [Customizing a Template](#).

You can start with one of three size options by clicking the size you want:

**3 Across:** Displays three recommendations in a one-row table with three columns.

**3 Down:** Displays three recommendations in a one-column table with three rows.

**2x2:** Displays four recommendations in two rows, each with two columns.

You are not limited to these options. For more information about creating or editing a template, see [Customizing a Template](#).

 **Note:** *The maximum number of entities that can be referenced in a template, either hardcoded or via loops, is 20.*

If the number of recommended items is less than the number of "slots" defined in a template, the ability to partially render the template can be set at the algorithm level using a checkbox located in the Content Serve Settings on the Recommendations Edit tab. If partial template rendering is not enabled and there aren't enough recommended entities to fill all the slots, the entire template is not rendered. If partial template rendering is enabled, Recommendations renders the template whether or not enough recommendations exist to fill up all the slots in the template. You should build your templates to account for this behavior. For example, you might create your template to include null checks.

4. (Optional) Select the template usage statistics you'd like to view.

You can see how many recommendations are using the template. Select **All**, **Active**, or **Inactive** to see the recommendations that use the template. Links to the recommendations that use the template appear to the right of the template usage statistics.

5. Click **Save**.

 **Note:** *When using conditional coding with Velocity, check for NULL references on the values. Processing NULL values can result in errors.*

## Customizing a Template

Use the open-source Velocity template language to customize recommendation templates.

Information about Velocity can be found at <http://velocity.apache.org>.

All Velocity logic, syntax, and so on can be used for a recommendation template. This means that you can create for loops, if statements, and other code using Velocity rather than JavaScript.

Any variable sent to recommendation in the `productPage` mbox or the CSV upload can be displayed in a template. These values are referenced with the following syntax:

```
$entityN.variable
```

Variable names must follow Velocity shorthand notation, which consists of a leading \$ character, followed by a Velocity Template Language (VTL) Identifier. The VTL Identifier must start with an alphabetic character (a-z or A-Z).

Velocity variable names are restricted to the following types of characters:

- Alphabetic (a-z, A-Z)
- Numeric (0-9)
- Hyphen ( - )
- Underscore ( \_ )

The following variables are available as Velocity arrays. As such, they can be iterated over or referenced via index.

- `entities`
- `entityN.categoriesList`

For example:

```
#foreach ($category in $entity1.categoriesList)
<br/>$category
#end
```

Or

```
#if ($entities[0].categoriesList.size() >= 3 )
$entities[0].categoriesList[2]
#end
```

For more information about Velocity variables, see

<https://velocity.apache.org/engine/releases/velocity-1.7/user-guide.html#variables>.



**Note:** The maximum number of entities that can be referenced in a template, either hardcoded or via loops, is 20.

For example, if you want a template that displays something similar to this:

You May Also Like...		
<p><b>LA Flare Wide Leg</b> By Citizens (More) sku: Price: \$275.00</p>	<p><b>Straight Light Jean</b> By Racei Denim (More) sku: Price: \$210.00</p>	<p><b>Bling Belt High Waist Jean</b> By One For All (More) sku: Price: \$250.00</p>

you can use the following code:

```
<table style="border:1px solid #CCCCCC;">
<tr>
<td colspan="3" style="font-size: 130%; border-bottom:1px solid #CCCCCC;"> You May Also Like... </td>
</tr>
<tr>
<td style="border-right:1px solid #CCCCCC;">
<div class="search_content_inner" style="border-bottom:0px;">
<div class="search_title"><a href="$entity1.pageUrl" style="color: rgb(112, 161, 0); font-weight: bold;">$entity1.id</a></div>
By $entity1.message <a href="?x14=brand;q14=$entity1.message">(More)</a><br/>
sku: $entity1.prodId<br/> Price: $$entity1.value
<br/><br/>
</div>
</td>
<td style="border-right:1px solid #CCCCCC; padding-left:10px;">
```

```

<div class="search_content_inner" style="border-bottom:0px;">

<div class="search_title"><a href="$entity2.pageUrl"
style="color: rgb(112, 161, 0); font-weight: bold;">
$entity2.id</a></div>

By $entity2.message <a href="?x14=brand;q14=$entity2.message">
(More)</a><br/>

sku: $entity2.prodId<br/>

Price: $$entity2.value

<br/><br/>

</div>

</td>

<td style="padding-left:10px;">

<div class="search_content_inner" style="border-bottom:0px;">

<div class="search_title"><a href="$entity3.pageUrl"
style="color: rgb(112, 161, 0); font-weight: bold;">
$entity3.id</a></div>

By $entity3.message <a href="?x14=brand;q14=$entity3.message">
(More)</a><br/>

sku: $entity3.prodId<br/> Price: $$entity3.value

<br/><br/>

</div>

</td>

</tr>

</table>

```



**Note:** If you want to add information after the variable value, you can do so using formal notation. For example:  
`#{entity1.thumbnailUrl}.gif.`

You can also use `algorithm.name` and `algorithm.dayCount` as variables in templates, so one template can be used to test multiple algorithms, and the algorithm name can be dynamically displayed in the template. This shows the visitor that he's looking at "top sellers" or "people who viewed this bought that." You can even use these variables to display the `dayCount` (number of days of data used in the algorithm, like "top sellers over the last 2 days," etc.



**Note:** When referencing tokens in templates (tokens are listed in [Dynamic Values in Targets and Profiles in the Target Classic help](#)), use a backslash to escape the token. For example: `\#{campaign.recipe.id}`

## Copying a Template

You can copy a template if you want to base a new template on an existing template.

1. From the **Recommendations** menu, select **Templates**.
2. In the **Template Name** list, place the mouse pointer over the template you want to copy, and click **Copy**.  
A copy of the template appears in the template list.

3. Place the mouse pointer over the template copy and click **Edit**.
4. Give the copy of the template a unique name.
5. Make changes to the template as needed.
6. Click **Save**.

## Deleting a Template

You can delete a template you no longer need.

1. From the **Recommendations** menu, select **Templates**.
2. In the **Template Name** list, place the mouse pointer over the template you no longer want, then click **Delete**.
3. Click **OK** to confirm that you want to delete the template.

The template is removed from the template list.

## Template FAQ

There are several frequently asked questions about templates.

### Why isn't category showing in the template? I'm using `$entity1.categoryId`.

Category ID can't be displayed in the template. Since multiple categories can be stored, the system wouldn't know which category to display.

### How should I change a template to get an instant update?

Altering the template that is currently in use takes a while to update. To change the template instantly, create a new template, select it in the campaign, and save the recommendation.

### How can we capture key information for display in the template? Example: If we want to display the key product's category, how would we code that value in the velocity template?

The `$key.value` parameter captures most of the key product's information to display within the template. Example: If you want to display the key product's thumbnail, you would use `$key.thumbnailURL`.

### Which version of Velocity is used?

Version 1.5 with no additional tools or libraries added in. Basic Velocity functionality is available.

### How do I replace an existing entity value with a blank? For example, an item's `entity.message` needs to be cleared out when a promotion ends.

Sending in a JavaScript nonbreaking space seems to do this. Have the developers send in `\u00A0` as the value. Example: `entity.message=\u00A0`. You might consider having that be the default value when no value is present instead of a null.

## Managing Recommendations Settings

The **Settings** option on the **Recommendations** menu provides access to Recommendations settings.

## Creating Global Exclusions

Exclusions let you specify that a product or item never be included in your recommendations if they meet specific criteria. Multiple global exclusions are combined using "Or" logic.

1. From the recommendations menu, select **Settings**.
2. Click **Exclusions**, then click **Add exclusion rule**.
3. Specify an entity parameter.

The possible parameters are:

Parameter	Definition
category	The product category used to organize products on your site. A product can have multiple categories, but only one category can be entered in this field.
entityid	The number used to identify the product.
name	The product name that is displayed on the Web site when the product is recommended.
thumbnailUrl	The absolute URL that points to the thumbnail image of the product that is displayed in the recommendation.
pageUrl	The URL of the product page displayed in the recommendation.
message	A message about the product that is displayed in the recommendation. The message is typically more verbose than the product name.
value	The price or value of the product.
margin	The profit margin or other value of the item.
inventory	The current amount of the product in inventory.   <b>Note:</b> If you don't pass a value for the inventory parameter, the inventory control on the setup page is ignored. If you choose to use a custom parameter for inventory, use an "include only when" rule or a catalog to achieve your inventory control goal.
Custom attributes	You can include up to 100 custom attributes that provide additional information about your products. You can specify any unused attribute name for each custom attribute. For example, you might create a custom attribute called brand that specifies the brand name of the product.

4. Specify the string that must be matched for the exclusion to be used.

## 5. Click **Save**.

Once you have created a global exclusion rule, you can click **Edit** to change its settings. Click **Delete** to remove the exclusion rule.

 **Note:** *Updating or adding new global exclusions triggers all recommendations to re-run, so your changes are reflected immediately in all recommendations.*

Catalogs and exclusion rule modifications are reflected on your site immediately after being updated. Updated catalogs and exclusions rules filter from the existing algorithm results. For example, if you have a catalog that contained items from BrandA and you modified the catalog to contain items from BrandB, and they were exclusive, then you would get no results until the algorithm ran again. However, if you modified a catalog to be more inclusive (for example, changing the value range from \$10-\$100 to \$20->\$80), then the runtime filter rule is applied at serve time.

## Dynamically Excluding an Entity

In the query string, you can pass entity ids for entities that you want to exclude from your recommendations. For example, you might want to exclude items that are already in the shopping cart.

To enable the exclusion functionality, use the `excludedIds` mbox parameter. This parameter points to a list of comma-separated entity ids. For example, `mboxCreate(..., "excludedIds=1,2,3,4,5")`. The value is sent when requesting recommendations.

 **Note:** *If too many entities are excluded, recommendations behave as if there aren't enough entities to fill the recommendation template.*

To excluded entityIds, append the `&excludes=${mbox.excludedIds}` token to the offer content url. When the content url is extracted, the required parameters are substituted using current mbox request parameters.

By Default, this feature is enabled for newly created recommendations. Existing recommendations need to be saved to support Dynamically Excluded entities.

## Uploading Entities to Recommendations

You can create a .CSV file that contains display information for your products, then bulk upload it to the recommendations server.

Use the bulk upload method to send display information if you don't have mboxes on your page, or you want to supplement your display information with items that are not available on your site. For example, you might want to send inventory information that might not be published on your site.

Any data uploaded using the upload template file overwrites that value in our database, so if you send price information in JavaScript and then send different price values in the file, the values in the file override the information sent with JavaScript.

 **Note:** *You can't overwrite an existing value with a blank value. You have to pass another value in its place to overwrite it. In the case of sale price, a common solution is to either pass in an actual "NULL" or some other message. You can then write a template rule to exclude items with that value.*

The product is available in the admin interface approximately two hours after successfully uploading its entity.

## Downloading the Entity Upload Template

A template file that you should download if you want to upload entity information is provided. Using the template ensures that your entity information is properly uploaded.

1. From the recommendations menu, click **Settings**.  
The Settings screen opens.
2. Click **Uploads**.
3. In the Entity Upload Section, click the link to download the template file.
4. Save the file.

## Editing the Entity Upload Template

After you have downloaded the entity upload template, you can edit it.

1. Open the upload template file in Excel or a text editor.
2. Make the desired changes.

For example, you could fill out this file with `productId` and inventory information, and leave the other fields blank.

Entity upload data uses the form `entity.attribute`. For example, if you sell athletic shoes, the entity is the Air Jordan Show and an attribute could be the \$120 price for that shoe.

Unless otherwise noted, there is a 100-character limit for entity attribute parameters. In some cases, more than 100 characters might be possible, but only 100 characters are supported. You can have up to 80 entity attributes per product.

The possible parameters are:

Parameter	Description
<code>entity.id</code>	The number used to identify the product.
<code>entity.name</code>	The product name that is displayed on the Web site when the product is recommended.
<code>entity.categoryId</code>	The product category used to organize products on your site. A product can have multiple categories, but only one category can be entered in this field. There is a 250-character limit for <code>categoryId</code> .
<code>entity.message</code>	A message about the product that is displayed in the recommendation. The message is typically more verbose than the product name.
<code>entity.thumbnailURL</code>	The absolute URL that points to the thumbnail image of the product that is displayed in the recommendation.

Parameter	Description
entity.value	The price or value of the product. Do not include the currency sign, for example the dollar sign ( \$ ). The currency sign is not supported.
entity.pageURL	The URL of the product page displayed in the recommendation.
entity.inventory	The current amount of the product in inventory.
entity.margin	The profit margin or other value of the item.
Custom attributes	You can include up to 100 custom attributes that provide additional information about your products. You can specify any unused attribute name for each custom attribute. For example, you might create a custom attribute called <code>entity.brand</code> that specifies the brand name of the product.

3. Save the file.

### Uploading the Entity Information to Recommendations

After you have downloaded and edited the template and saved your upload file, you can upload the file.

Any data uploaded using the upload template file overwrites that value in our database, so if you send price information in JavaScript and then send different price values in the file, the values in the file override the info sent with JavaScript.

1. From the recommendations menu, click **Settings**.

The Settings screen opens.

2. Click **Uploads**.

3. In the **Entity Upload** section, browse to your save upload file, then click Upload.

It takes a moment for the upload to be processed. When the upload is complete, a message tells you how many data lines were processed and that the upload was successful.

The product is available in the Admin interface approximately two hours after successfully uploading its entity.

### Using Entity Feeds

Entity feeds enable more ways to get product or content information into your recommendations. Item details can be sent from SAINT product classifications or using the Google Product Search feed format.

This allows you to bypass complex mbox implementation or augment your mbox data with information that is either unavailable on the page or unsafe to send directly from the page (like margin, COGS, etc.).

You can select which columns from your SAINT product classifications file or Google Product Search file you want to send to the recommendations server. These pieces of data about each item can then be used in template display and for controlling recommendations.

If data is collected by both an entity feed and an mbox, the most recent data wins. Usually, the most recent data comes from an mbox, because it is viewed more often. In the rare event that entity feed data and mbox data hit at the same time, the mbox data is used.

## Google



**Important:** *The Google Product Search feed type uses the Google format. This is different from the Adobe proprietary csv upload format.*



**Note:** *It is not required to use Google data. Recommendations just uses the same format as Google. You can use this method to upload any data you have, and use the available scheduling features. However, you must retain the predefined attribute names defined by Google when you set up the file.*

Most retailers upload products to Google, so when a visitor uses Google product search their products will show up. Recommendations follows Google's specification exactly for entity feeds. Entity feeds can be sent to Recommendations via XML, .txt, or .tsv and can use the attributes defined by Google here:

<http://support.google.com/merchants/bin/answer.py?hl=en&answer=188494&topic=2473824&ctx=topic#US>. The results are searchable when a visitor goes here: <http://www.google.com/prdhp>.



**Note:** *The POST method must be allowed on the server that is hosting the Google feed content.*

Because Recommendations users already configure XML or .txt feeds to send to Google either via URL or FTP, entity feeds accept that product data and use it to build out the recommendations catalog. Specify where that feed exists and the recommendations server retrieves the data.

If you use Google Product Search for the entity feed upload, you still need to have a product page mbox on the page if you want to show recommendations there or track product views for algorithm delivery based on views.

The feed runs at the time you save and activate it. It runs at the time you save the feed, then every day an hour later.

## SAINT

The SAINT Product classification is the only classification available for recommendations. For more information about this classification file, see the [SAINT Classifications User Guide](#). It's possible that not all the information you need for recommendations will be available in your current SAINT implementation, so follow this user guide if you want to add to your classifications file.

### Adding Entity Feeds

To add entity feeds to recommendations, follow these steps:

1. Click **Products**, then click the **Feeds & Uploads** tab.
2. Click **Add Entity Feed**.

The **Edit Feed** form opens.

3. Enter a name for the feed, then select **SiteCatalyst SAINT** from the **Feed Type** dropdown.

If you are a retailer who uses Google Product Search, you can select **Google Product Search** to map your recommendation entities to the parameters you already send to Google. In this case the following steps are essentially the same, except you also select a file location type (URL or FTP) and specify the URL or FTP information.

4. Select a report suite, then select **Product** from the **Classification** dropdown.
5. Select a feed field.

The feed field is the classification field you want to map to recommendations. The value in this field for each product will be passed to the recommendations.

6. Select the recommendation entity attribute you want to map to the selected classification field.

Select **New Custom Attribute** to add a new recommendation entity attribute if an applicable one is not already listed.

7. Click **Add Mapping** to create additional mappings.

It is not necessary to map all of your entity attributes. Create a mapping only for those attributes you need to map.



**Note:** You must map a value from SAINT or Google Product Search to the "id" attribute in recommendations. This is how it is known which product recommendations to assign these new values to.

8. If you want to specify how frequently the feeds are updated, click the **Schedule** tab, then select the desired upload frequency.

Selecting **never** is the same as pausing the feed from running.

9. Click **Save**.

After you click **Save**, the status displays under the **Schedule** tab. Open an entity feed by clicking **Edit** to see your status updates.

## Managing Mboxes

An mbox is a "marketing box," a portion of your Web page that can be configured to show different content in different situations.

An mbox can also log the behavior of visitors to your site. Mboxes are defined in the code for each Web page.

Mboxes are essential to campaigns and tests. Any mbox may do one, both or none of the following as you choose:

- Display and swap content for visitors.
- Log visitor behavior in real-time.

The following image highlights an mbox that recommends two products.

The screenshot shows the JJ.ESQUIRE website homepage. At the top, the logo "JJ.ESQUIRE" is on the left, and "Now Shipping in 2 business days to Utah" is in the center. A search bar on the right contains "Enter SKU or Keywords" and a "go" button. Below the logo is a navigation menu with categories: WOMEN'S, MEN'S, JEWELRY & ACCESSORIES, BEAUTY & FRAGRANCE, GIFTS & HOME, CHILDREN & TOYS, and ELECTRONICS. Below the navigation, there are two links: "First Time? Take a tour!" and "Free Shipping with code JJ4".

The main content area features a large image of a man in a suit on the left. To the right, there are two promotional banners: "SHOP OUR SELECTION OF WOMENS APPAREL" with an image of an open book, and "CHRIS VALENTI" with an image of a woman holding a red high-heeled shoe. Below these is a "Top Sellers Just For You!" section with two product cards:

Product Image	Product Name	Brand	SKU	Price	Action
	Zip-Front Hoodie	By Fightwear (More)	sku: 200105	Price: \$110.00	(View Now)
	Silk Crepe Blouse	By LA to New York (More)	sku: 100134	Price: \$330.00	(View Now)

At the bottom, a footer contains navigation links: Feedback, Virtual Catalog, Home Page, Wedding Registry, JJ Video, My Account, Top Sellers, Contact Us, Site Map, and Gift Card.

## Using an Mbox on Your Web Site

Creating an mbox is a three-step process.

1. [Preparing for the Mbox](#)
2. [Referencing the mbox.js File on Your Web Pages](#)
3. [Creating the Mbox](#)

## Preparing for the Mbox

How you prepare for the mbox depends on the strategy and design of your recommendations

Your strategy and design determines the following:

- The Web site locations of the mboxs needed to display recommendations
- The boundaries of the default content for each mbox

The default content of display mboxs should be a size and shape that supports the offers (creative) designed for the recommendations.

- The mbox names, which Operators will recognize when setting up recommendations

Mbox names are case sensitive. Adobe recommendations recognize "Mymbox" and "myMbox" as two different mboxes.

## Creating the Mbox

After the Web site is prepared and the `mbox.js` reference is created, you can create the mbox.

1. Ensure the Web page contains a reference to `mbox.js`.

It is recommended you insert this reference in the file's `<head>` section.

2. In the body of the HTML page where you want to insert an mbox, define the beginning and end of the default content with the `div` tags as shown below.

If the mbox will only track and not display, insert no content between the default div tags. Immediately follow the default content close `</div>` tag with the `mboxCreate` function.

Before	After
<pre>&lt;head&gt; &lt;/head&gt;</pre>	<pre>&lt;head&gt; &lt;script src="http://www.mycompany.com/ myfolder/mbox.js" type="text/javascript"&gt; &lt;/script&gt; &lt;/head&gt;</pre>
<pre>&lt;body&gt; My existing page.Part that I'd like to overlay during a campaign or test. &lt;/body&gt;</pre>	<pre>&lt;body&gt; My existing page. &lt;div class="mboxDefault"&gt;Part that I'd like to overlay during a campaign or test. &lt;/div&gt; &lt;script type="text/javascript"&gt; mboxCreate('sidebar_recommendations', 'entity.categoryId=EN:Guide:1'); &lt;/script&gt; &lt;/body&gt;</pre>

## Placing an Mbox Around a Table

Wrap the default mbox around an entire table. Do not wrap rows.

Right	Wrong
<pre>&lt;div class="mboxDefault"&gt; &lt;table&gt;</pre>	<pre>&lt;table&gt; &lt;div class="mboxDefault"&gt;</pre>

Right	Wrong
<pre> &lt;tr&gt; &lt;td&gt;peaches&lt;/td&gt; &lt;td&gt;cherries&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;walnuts&lt;/td&gt; &lt;td&gt;almonds&lt;/td&gt; &lt;/tr&gt; &lt;/table&gt; &lt;/div&gt; &lt;script type="text/javascript" &gt; mboxCreate('myMbox'); &lt;/script&gt;                     </pre>	<pre> &lt;tr&gt; &lt;td&gt;peaches&lt;/td&gt; &lt;td&gt;cherries&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;walnuts&lt;/td&gt; &lt;td&gt;almonds&lt;/td&gt; &lt;/tr&gt; &lt;/div&gt; &lt;/table&gt;                     </pre>

### Placing an Mbox Around a Table Cell

Insert the default mbox within the cell, not outside the cell.

Right	Wrong
<pre> &lt;table&gt; &lt;tr&gt; &lt;td&gt; &lt;div class="mboxDefault"&gt; Peaches &lt;/div&gt; &lt;script type="text/javascript" &gt; mboxCreate('myMbox'); &lt;/script&gt; &lt;/td&gt; &lt;td&gt;cherries&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;walnuts&lt;/td&gt; &lt;td&gt;almonds&lt;/td&gt; &lt;/tr&gt;                     </pre>	<pre> &lt;table&gt; &lt;tr&gt; &lt;div class="mboxDefault"&gt; &lt;td&gt; peaches &gt; &lt;/td&gt; &lt;/div&gt; &lt;td&gt;cherries&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;walnuts&lt;/td&gt; &lt;td&gt;almonds&lt;/td&gt; &lt;/tr&gt; &lt;/table&gt;                     </pre>

Right	Wrong
</table>	

### Creating Multiple Mboxes on a Page

Because each mbox adds some load time to the page, try to limit the number of mboxs on each page to ten.

Follow the instructions for inserting a single mbox, as explained in [Creating the Mbox](#). Repeat steps 2 and 3 for each mbox. Only reference the `mbox.js` file once.



**Note:** Multiple test elements on a page can be combined into a single larger-sized mbox.

### Creating a Whole Page as an Mbox

You can set up an entire page as an mbox.

Use an mbox to replace all of the content between the `<body></body>` tags. Do not place the mbox outside the `body` tags. Mboxes depend on the `<body>` `onLoad` function to execute, and mbox recursion problems can occur when a `<body>` is used in an offer.

```
<html>
<body>
<div class="mboxDefault">
<...>
...
</...>
</div>
<script type="text/javascript" > mboxCreate('wholePageMbox');
</script>
</body>
</html>
```

### About Dynamic Mboxes

Many Rich Internet Applications (RIAs) manipulate HTML after the page has already loaded by using technologies like DHTML and AJAX.

For example, after clicking a button, your Web page may display a new section of content. This scenario is supported, allowing you to define dynamic mboxs through its `mboxDefine()` and `mboxUpdate()` functions.

For example, if you want to serve content when an HTML node called "dynamicElement" appears on the page:

```
<div id="dynamicElement"></div>
```

then you could trigger the following script on a JavaScript event:

```
<script type="text/javascript">
    mboxDefine("dynamicElement", "mbox_dynamic", "parameter1=value1");
```

```
mboxUpdate("mbox_dynamic", "parameter1=value1");
</script>
```

**Of note:**

- `mboxDefine()` defines an HTML element as a container for content to be served. It takes in the unique element id, the mbox name, and any number of parameters. The parameters can be used for targeting by the active campaign, even if not passed in again with a later `mboxUpdate()` call.

`mboxDefine()` does not actually serve content so it should be followed with `mboxUpdate()`.

- `mboxUpdate()` retrieves the content. This function may be called multiple times if you want to further change the content.

Like `mboxCreate`, it takes in the mbox name and any number of parameters.

- The usual `mboxCreate()` function only works for HTML elements that exist on the page on the initial load.
- `mboxUpdate()` can also be used for mboxes created with `mboxCreate()` rather than `mboxDefine()`.

This allows the page to update content dynamically after the initial page load.

- `mboxUpdate()` applies the offer only when the DOM-ready event has been fired.

When using dynamic mboxes, delivering offers that include `document.write` cause the page where the dynamic mbox is located to appear blank because the `document.write` function is invoked after the DOM has loaded. Note also that plug-ins using offers with `document.write` should never be used on sites employing dynamic mboxes.

**Creating a Dynamic Mbox**

You can create an mbox on a page whose code is changed after the page loads.

Many Rich Internet Applications (RIAs) manipulate HTML after the page has already loaded by using technologies like DHTML and AJAX. For example, after clicking a button, your Web page might display a new section of content. Adobe supports this scenario, allowing you to define *dynamic mboxes* through its `mboxDefine()` and `mboxUpdate()` functions.

For example, if you want to serve content when an HTML node called `dynamicElement` appears on the page:

```
<div id="dynamicElement"></div>
```

Then you could trigger the following script on a JavaScript event:

```
<script type="text/javascript" >
mboxDefine('dynamicElement', 'mbox_dynamic',
'parameter1=value1');
mboxUpdate('mbox_dynamic', 'parameter1=value1');
</script>
```

**Of note:**

- `mboxDefine()` defines an HTML element as a container for content to be served.

This function takes in the unique element id, the mbox name, and any number of parameters. The parameters can be used for targeting by the active campaign, even if not passed in again with a later `mboxUpdate()` call.

`mboxDefine()` does not actually serve content so it should be followed with `mboxUpdate()`.

- `mboxUpdate()` retrieves the content from Adobe.

This function may be called multiple times if you want to further change the content. Like `mboxCreate`, it takes in the mbox name and any number of parameters.

- The usual `mboxCreate()` function only works for HTML elements that exist on the page on the initial load.
- `mboxUpdate()` can also be used for mboxes created with `mboxCreate()` rather than `mboxDefine()`.

This allows the page to update content dynamically after the initial page load.

## Troubleshooting Mboxes

This section contains information about debugging mboxes.

### Troubleshooting the Debug Window

If the Debug window does not appear as expected, use the information in this topic to solve the problem.

#### If the Debug window does not appear:

- Confirm the `mbox.js` reference is correct on all Web pages with the mboxes.
- Confirm you have downloaded the `mbox.js` into a folder with public permissions.

#### If the Debug window appears but `enabled = false`:

- Delete your cookies and clear cache. Close and reopen a browser and reload the page.
- If `enabled=false` persists, seek and remove JavaScript errors. Some common errors include:
  - Improper termination of quotes in mbox arguments
  - Spelling mistakes in your mbox functions
  - Script tags that are not invoked or that are not closed
- If `enabled=false` persists, contact your account representative.

#### If the mboxes are not listed in the `mboxDebug` popup window, or if mboxes appear blank on the page, review your page code for the following:

- Confirm the `mbox.js` reference is correct on all Web pages with the mboxes.
- Confirm that any tag opened before the mbox script is closed after the mbox script.
- Remove JavaScript errors.
- Scrub layout to support DOM rendering by all browser types.

Mboxes insert new nodes into the DOM tree as the browser creates it. Each brand of browser has its own implementation of the W3C DOM specification, so mboxes can affect page rendering differently based on the browser type. Specify absolute sizes of table cells and images to help the browser more accurately display a page's HTML layout.

### Mbox Troubleshooting Guide

This topic provides a grid to help you troubleshoot mbox problems.

Symptoms	Potential Root Cause Errors								
	Mbox.js Reference Or mbox.js file permissions incorrect	Error in mboxCreate Code	Default </div> close tag missing	Table not wrapped by default tags	Invalid HTML between default close tag and mboxCreate	li wrapped by default tags	Browser's javascript disabled	Browser's cookies disabled	td wrapped by default tags
Mbox appears blank in browser				Yes			Yes		Yes
Debug window does not show up at all	Yes	Yes					Yes		
Mbox is missing from debug window		Yes							
(in Internet Explorer) mbox Default content div tags: false		Yes	Yes	Yes	Yes				Yes
(in Firefox) mboxDefault content div tags: false			Yes		Yes			Yes	
Mbox debug window shows Enabled: <b>false</b>			Yes					Yes	
Mbox not listed for your account in UI	Yes	Yes	Yes						

### Troubleshooting Resources

The Mozilla Firefox browser includes a JavaScript console that quickly finds and lists the JavaScript errors in your page.

The Firebug extension for Firefox, available at [https://getfirebug.com/](#) provides a full-featured JavaScript debugging tool, and also shows generated source with mbox code.

### Sending Sales Data Values

Sales data can be sent to Adobe Target from any mbox.

The parameters must follow the strict syntax below. The parameters `orderId` and `orderTotal` are required. The `productPurchasedId` attribute must match the `entity.id` display variable.

```
<script type="text/javascript">
mboxCreate('orderConfirmPage',
'productPurchasedId=LIST OF PRODUCT IDs FROM ORDER PAGE',
'orderId=ORDER ID FROM ORDER PAGE',
'orderTotal=ORDER TOTAL FROM ORDER PAGE');
</script>
```

 **Note:** You must pass the `orderId` parameter value as it allows Target to remove double calls (duplicate orders). The parameter names are also case-sensitive and must be followed as shown above.

## Using the Recommendations Download API

Use the recommendations download API to download your recommendations in a .CSV file that can be viewed in a spreadsheet or text editor. The .CSV file lists all recommendations for each product key.

Every time you download recommendations results, all of the data is refreshed, not just the data that changed between when you last ran the algorithm and when you downloaded the results.

The algorithm server updates the recommendations every two to six hours. Changes are reflected immediately in the results of the download API.

This API is always available except during regularly scheduled maintenance windows, which occur on Thursday nights at 8 PM Pacific Time or later.

### API Structure

The download API uses a simple structure in a REST call. For example:

```
https://recommendations.omniture.com/rest?action=downloadRecommendations
&id=43&clientKey=24be79b2-d631-4207-a435-c6d5dd11059a
&client=clientcodehere
```

Where:

**id** is the recommendation ID visible in the app. Find the ID by looking at the URL on the recommendation's Edit page. Use the id=XXX value, not the groupId value.

**clientKey** is the API token that can be viewed and changed on the Settings page of the recommendations application.

**clientcode** is displayed under the client API token on the Settings page.

If you provide an invalid client key or recommendation ID, the error "Client key or recommendation id invalid" is returned.

## Deleting an Item From the System

You can use the Catalog Item Delete API to remove a single item from your Recommendations system.

This API deletes all information about an individual entity. Once the cache is updated after a few hours, the entity no longer shows in any recommendations. These entities will be eligible to be "relearned" through a `productPage` mbox request or a CSV product upload.



**Note:** *There is no undo for this API.*

The syntax for the Catalog Item Delete API is:

```
https://recommendations.omniture.com/rest?action=entity.delete&client=clientCode&clientToken=76bde9de-74f7-434b-ad1a-6d2d4c1b42d9&entityId=Entity_ID
```

Where:

**recommendations.omniture.com** is the domain for the current recommendations environment you are using.

**clientCode** is your client code.

**76bde9de-74f7-434b-ad1a-6d2d4c1b42d9** is the client token that is displayed on the settings page. The token shown is a sample; yours will be different.

**Entity\_ID** is the ID of the item you want to delete. You can delete multiple items by including multiple `entityId` values separated by comma.

## Deleting All Items From the System

You can use the Catalog Delete API to remove all items in your catalog.

The Catalog Delete API removes all `entity.attributes` for all items in your catalog. It does not remove behavioral data associated with product IDs. When you upload your catalog again, your algorithm data will be correctly associated if your product IDs have not changed.

 **Note:** *There is no undo for this API.*

The syntax for the Catalog Delete API is:

```
https://recommendations.omniture.com/rest?action=entity.deleteAll&client=clientId
&clientToken=76bde9de-74f7-434b-ad1a-6d2d4c1b42d9
```

Where:

**recommendations.omniture.com** is the domain for the current recommendations environment you are using.

**clientId** is your client code.

**76bde9de-74f7-434b-ad1a-6d2d4c1b42d9** is the client token that is obtained from the settings page. The token shown is a sample; yours will be different.

## Integrating Recommendations with Email

There are two ways to integrate email with recommendations.

The email service provider's capabilities determine which method to use.

 **Note:** *It is suggested that you talk with your account manager before implementing either of these options.*

### Option 1: Using a "Rawbox" Email Template

This is the preferred option.

Set up a recommendation as usual, using a template that has the desired look and feel for the email. Instead of choosing an mbox on your site to show the recommendations, select a "rawbox" that is in the email template in your ESP system. At email build time, ESP makes a call for each rawbox in each email that is being generated. A rawbox call is very similar to an adbox, but instead of returning an image, the recommendations server returns raw HTML.

The ESP needs a way to take this HTML and include it in the email when it is sent. This approach allows us to track performance of recommendations in emails, test them in the normal way with a recommendation, and continue tracking on the site.

Sample rawbox URL:

```
http://[CLIENT_CODE].omniture.com/rest?client=[CLIENT_CODE]&clientToken=[CLIENT_CODE]&action=entity.deleteAll&clientToken=[CLIENT_CODE]
```

Change the capitalized values per client/recommendation combination.

Parameter	Value	Example
mbox	MY_EMAIL_NAME	back-to-school-email
mboxContentType	text html	text html
mboxPC	UNIQUE_ID_PER_EMAIL	228722993
mboxSession	UNIQUE_ID_PER_EMAIL	387873-3878783
mboxXDomain	disabled	disabled
entity.id	PRODUCT_ID	1298-3989
mboxDefault	DEFAULT_URL	http://www.domain.com/welcome.html
mboxHost	MBOX_HOST	http://domain.com/



**Note:** Be sure to provide a unique value of `mboxSession` and `mboxPC` for each email recipient (i.e., for each API call). If you do not provide unique values for these fields, API response might slow or fail due to the large number of events generated within a single profile.

## Option 2: Using the Download-Only Template

Set up a recommendation as usual, but choose **download only** in the presentation section instead of a template and mbox combination. Then in the ESP, tell the ESP what recommendation ID you created. The ESP accesses the recommendation data via API. This data shows which items should be recommended for a particular category or key item, such as the item abandoned in the cart. The ESP then stores this data, connects it with their own look and feel, displays information about each item, and then delivers that in the emails. With this option, the recommendations server cannot directly track the performance of a recommendation or split traffic across multiple algorithm/template combinations.

For more information about the download API, see [Using the Recommendations Download API](#).

## Backfilling Environments with Production Data

Backfilling other environments with entity recommendations from your production data is available as a setting update request through Adobe Client Care.

This setting is useful for when you don't have sufficient behavioral data in lower environments (or host groups) to generate recommendation results. One consideration is you won't be able to deliver results from the lower environments as they will now show the chosen production environment results. Lower environment results can still be checked in the Recommendation CSV download.

The backfill setting switches between using environment-specific product databases and replacing non-production environment results with production environment database results. Separate product and traffic databases are maintained for each environment determined by the Target host group and environment-specific data continues to be collected for each host group irrespective of this setting.

The backfill setting doesn't affect any product or traffic data in the backend, it just affects the runtime, effectively overwriting the lower environment id at request time with the chosen environment id. Ingestion will still send the lower environment products to the lower environment while the backfill is set. As it's not affecting any data you can switch back and get the lower env results as if it had been set to the lower environment all along.

The two options are:

- No backfill. This is the default configuration. In this configuration, entity recommendation delivery will be according to the product relationship traffic in each host group / environment. Products seen in QA might not be seen in production (and vice versa).
- Backfill set for production data to backfill to other environments. In this configuration your production entity recommendation delivery results will be "mirrored" to all other environments. This means you're only using production data and is useful when you don't have enough traffic to generate entity recommendation results in lower environments.

## Recommendations FAQ

The Recommendations FAQ contains answers to common questions.

### Can I turn off backup recommendations?

Yes. Keep in mind that backup recommendations apply to all campaigns, not just one. Also, if backup recommendations are disabled and there aren't enough real recommendations to fill the number of slots in the template, then default content is shown.

### Can I geo-target recommendations?

Use the built-in profiles that are shown in the Available Tokens window when creating a new user script profile in Adobe Target. They are:

- profile.geolocation.city
- profile.geolocation.country
- profile.geolocation.dma
- profile.geolocation.state
- profile.geolocation.zip

**Does the recommendations server store products in its back-end database independently for each campaign or is the data shared across all campaigns? For example, if I create a new campaign, then download the .csv file, does the file already have data in it, because data has already been collected for another campaign, or do I get a new, empty .csv file? What if I create a new algorithm in an existing recommendation, then download the .csv file?**

Data is gathered the moment mboxs start sending recommendation data. This data is stored at the account level. Recommendations do not need to be set up for this data to be gathered. Once the algorithm runs the first time (usually within 30 minutes of setup), you have a full, ready to use recommendation. Recommendations driven from Adobe Analytics data work historically as well; therefore, as soon as you set it up you can pull usage data from up to two months in the past.

**To collect data for multiple algorithms, do I need to set up each type of algorithm up front, or will setting up just one type of algorithm capture data relationships for all other algorithm types?**

Data collection is not tied to algorithm or recommendation setup.

**How long is back-end data stored? Does it disappear after a certain amount of time? How long is reporting stored? Does it disappear after one year like other Adobe Target data?**

Usage data that drives an algorithm is completely separate from performance report data. Usage data expires after two months. Product data expires after 60 days. Performance report data follows the Target expiration rules.

**Is data in the .csv files ordered in the same way that it appears in a display recommendation?**

Yes. For example, for a *Purchase Affinities* algorithm, if column A is the key, then column B is the product most often purchased with product A. Column C is the second most purchased item with product A, and so on.

**What actions will reset the campaign's CSV data?**

When you change a campaign's catalog setting, algorithm type, or template, the cross-sell data (CSV) for that campaign will reset to prevent any information that is no longer viable from displaying.

**What actions will reset the Recommendation reporting data?**

- Switching mboxes
- Switching algorithms
- Switching templates

**How many recommended products are stored for each key? Does it depend on the algorithm?**

More is displayed in the .csv file than is supported in display. Up to 20 products are displayed, but more can be included in the .csv if you want to use that data for other purposes.

**When I download the .csv file, does it only download data for the time frame specified when setting up a recommendation, or does it download all data?**

The .csv file follows the rules established in the algorithm setup, except for any information filtered at display time (price limit and inventory limit). For example, if you set up a recommendation to use two weeks of data and only include `brand=jjesquire`, your download only includes activity for JJ Esquire products for the last two weeks.

**What is the difference between `entity.categoryId` and the regular parameter `categoryId`, and is there a priority system?**

The `categoryId` parameter is given higher weight than either `entity.category` or `entity.categoryId` even if `categoryId` is in the URL and `entity.categoryId` is in the mbox.

**If the character limit is exceeded, how are the categories prioritized? Which ones will be saved?**

Categories are prioritized by chronology. The first category passed is the first one in the list of categories that a product belongs to.

**How many categories can a product support?**

There is a 250-character limit for `categoryId`.

**What is the default setting for conversion, restart the same experience or is it always convert?**

It's restart the same experience. So, two visitors, two conversions.

**How many views are needed for a product before a recommendation is served? For example, if two products are viewed once in one session will they then be related to display in the view affinity recommendation for the next user?**

At least two sessions are required. Two people need to view the same product.