

You can use macro expressions to dynamically load values related to online marketing applications. Properly using these expressions allows you to set up flexible content and behavior of your websites. With online marketing, macros are required when building conditions for:

- [Content personalization](#) variants
- Condition-based [Contact groups](#)
- [Marketing automation triggers](#) and [process steps](#)

You can also use on-line marketing macros in all other parts of Kentico where macros are supported.



#### Note

All expressions described below are *context macros*, which means they must be enclosed in `{% %}` parentheses when entered into text or other general fields. You do not need to use macro parentheses inside macrospecific fields, such as condition editors.

## Getting Contact and Scoring data

The fundamental part of most online marketing macros is the loading of a specific [contact](#) or its data. Use the following expressions for this purpose:

- **ContactManagementContext.CurrentContact** - returns a *ContactInfo* object representing the current contact, i.e. the visitor who is viewing the website when the macro is resolved.
- **ContactManagementContext.CurrentContactID** - returns the ID of the current contact.
- **Contact** - you may use this expression when writing conditions for condition-based contact groups or in marketing automation. The Contact macro allows you to work with a general *ContactInfo* object. For example: *Contact.ContactGender == 1*

*ContactInfo* objects serve as a way to access the values set for the given contact (e.g. *ContactManagementContext.CurrentContact.ContactLastName*). In addition to standard contact fields, you can also use the following advanced properties to get data related to the contact:

ContactInfo property	Description
Accounts	<i>InfoObjectCollection</i> containing all accounts ( <i>AccountInfo</i> objects) to which the given contact is assigned.
ContactGroups	<i>InfoObjectCollection</i> containing all contact groups ( <i>ContactGroupInfo</i> objects) that contain the given contact.
LastActivity	<i>ActivityInfo</i> object representing the most recently logged <a href="#">activity</a> for the given contact.
Orders	<i>InfoObjectCollection</i> containing all ecommerce orders ( <i>OrderInfo</i> objects) made by the contact on the current site.
Processes	<i>InfoObjectCollection</i> containing all marketing automation processes in which the contact is running.
PurchasedProducts	<i>InfoObjectCollection</i> containing all products ( <i>SKUInfo</i> objects) purchased by the contact across all sites in the system.
Wishlist	<i>InfoObjectCollection</i> containing all products ( <i>SKUInfo</i> objects) added to the wishlist of the given contact (across all sites in the system).

### ✓ Working with InfoObjectCollections

There are many ways how you can process **InfoObjectCollection** objects. For example:

```
ContactManagementContext.CurrentContact.Accounts.Exists(AccountName ==
"CompanyAccount")
```

Checks whether the current contact belongs to an account named *CompanyAccount* and returns the result as a boolean value.

```
ContactManagementContext.CurrentContact.Orders.Exists(OrderTotalPrice > 500)
```

Checks if the current contact has made an order with a total value greater than 500 of the given currency.

## On-line marketing macro methods

You can call the following methods inside macro expressions to retrieve online marketing data:

Method	Description / Parameters / Examples
AgreedWithConsent	Returns a <i>bool</i> representing if the contact has given a consent specified in the parameter.
	<ul style="list-style-type: none"> <li>• <b>ContactInfo contact</b> – contains <i>ContactInfo</i> object of the contact that is to be evaluated.</li> <li>• <b>String consentName</b> – specifies the code name of the <a href="#">consent declaration</a>.</li> </ul>
	<pre>ContactManagementContext.CurrentContact.AgreedWithConsent ("TrackingConsent")</pre>
FilledFormFieldWithValue	Returns a <i>bool</i> representing if the contact has filled in a specific field in a specific form with a given text value.
	<ul style="list-style-type: none"> <li>• <b>ContactInfo contact</b> – contains <i>ContactInfo</i> object of the contact that is to be evaluated.</li> <li>• <b>String formNameField</b> – specifies the name of the form combined with the specific field. Use the "&lt;site name&gt;;&lt;form name&gt;;&lt;form field&gt;" format. For example, "DancingGoat;ContactUs;FirstName".</li> <li>• <b>String expectedValue</b> – specifies the value the field should contain.</li> </ul>
	<pre>ContactManagementContext.CurrentContact.FilledFormFieldWithValue ("DancingGoat;ContactUs;City", "Chicago")</pre>
UnsubscribedFromAllEmails	Returns a <i>bool</i> representing if the contact has unsubscribed from all <a href="#">marketing emails</a> .
	<ul style="list-style-type: none"> <li>• <b>Object contact</b> – must contain the appropriate <i>ContactInfo</i> object of the contact that is to be evaluated.</li> </ul>
	<pre>ContactManagementContext.CurrentContact.UnsubscribedFromAllEmails()</pre>
IsInPersona	Returns a <i>bool</i> representing if the contact is assigned to the specified persona.

	<ul style="list-style-type: none"> <li>• <b>ContactInfo contact</b> – contains the <i>ContactInfo</i> object of the contact that is to be evaluated.</li> <li>• <b>Object persona</b> – must contain the appropriate <i>PersonaInfo</i> object of the contact that is to be evaluated.</li> </ul> <pre>IsInPersona(ContactManagementContext.CurrentContact, persona)</pre>
GetPersona	<p>Returns the persona the contact is currently assigned to. Returns null if the contact is not assigned to a persona.</p> <p><b>Note:</b> Always use this method over the <i>ContactPersona</i> property, as this method can correctly take into account the persona selected in the preview mode.</p> <ul style="list-style-type: none"> <li>• <b>ContactInfo contact</b> – contains the <i>ContactInfo</i> object of the contact that is to be evaluated.</li> </ul> <pre>ContactManagementContext.CurrentContact.GetPersona()</pre> <p>or</p> <pre>GetPersona(ContactManagementContext.CurrentContact)</pre>
LastActivityOf Type	<p>Returns an <i>ActivityInfo</i> object representing the activity most recently logged for the specified contact.</p> <ul style="list-style-type: none"> <li>• <b>Object contact</b> – must contain the appropriate <i>ContactInfo</i> object of the contact whose activity should be loaded.</li> <li>• <b>String activityType</b> – optional parameter that may be used to get the last activity of a specific type. The value must be entered as a string matching the code name of the appropriate activity type.</li> </ul> <pre>ContactManagementContext.CurrentContact.LastActivityOfType ("purchasedproduct")</pre> <p>or</p> <pre>LastActivityOfType(ContactManagementContext.CurrentContact, "purchasedproduct")</pre>
FirstActivityOf Type	<p>Returns an <i>ActivityInfo</i> object representing the first activity logged for the specified contact.</p> <ul style="list-style-type: none"> <li>• <b>Object contact</b> – must contain the appropriate <i>ContactInfo</i> object of the contact whose activity should be loaded.</li> <li>• <b>String activityType</b> – optional parameter that may be used to get the first activity of a specific type. The value must be entered as a string matching the code name of the appropriate activity type.</li> </ul>

	<pre>ContactManagementContext.CurrentContact.FirstActivityOfType ( "productaddedtowishlist" )</pre>
IsInContactGroup	<p>Returns a <i>bool</i> representing if the contact is a member of the specified contact group.</p> <ul style="list-style-type: none"> <li>• <b>Object contact</b> – must contain the appropriate <i>ContactInfo</i> object of the contact that is to be evaluated.</li> <li>• <b>String groupNames</b> – must contain the code name of the given contact group.</li> </ul> <pre>ContactManagementContext.CurrentContact.IsInContactGroup( "MaleCustomers" )</pre>
GetScore	<p>Returns the total number of score points that the given contact has in the specified score (as an <i>integer</i>).</p> <ul style="list-style-type: none"> <li>• <b>Object contact</b> – specifies the <i>ContactInfo</i> object representing the contact whose score points should be loaded.</li> <li>• <b>String scoreName</b> – must contain the code name of the given score.</li> </ul> <pre>ContactManagementContext.CurrentContact.GetScore ( "InterestedInSmartphones" )</pre>
GetEmailDomain	<p>Reads an email address and returns only its domain part (all characters after the "@" sign).</p> <p>Note: The <i>GetEmailDomain</i> method is not available when resolving macros in an external application using the <i>Kentico.Libraries</i> NuGet package.</p> <ul style="list-style-type: none"> <li>• <b>String email</b> – specifies the email address from which the domain is taken.</li> </ul> <pre>ContactManagementContext.CurrentContact.ContactEmail.GetEmailDomain()</pre>
CameToLandingUrl	<p>Returns a <i>bool</i> representing if the contact has come to the landing page with the specified URL.</p> <ul style="list-style-type: none"> <li>• <b>Object contact</b> – must contain the appropriate <i>ContactInfo</i> object of the contact that is to be evaluated.</li> <li>• <b>String URL</b> – defines the part of URL specifying the landing page.</li> </ul> <pre>ContactManagementContext.CurrentContact.CameToLandingUrl( "smartphones" )</pre>
VisitedURL	<p>Returns a <i>bool</i> representing if the contact has visited a page with the specified URL in the last X days.</p> <ul style="list-style-type: none"> <li>• <b>Object contact</b> – must contain the appropriate <i>ContactInfo</i> object of the contact that is to be evaluated.</li> <li>• <b>String URL</b> – specifies the URL of the page that has been visited.</li> <li>• <b>Int lastXDays</b> – optional parameter specifying how many days ago the page was visited. If you enter the zero value, no constraint is applied.</li> </ul>

	<div> <pre>ContactManagementContext.CurrentContact.VisitedUrl("smartphones", 5)</pre> </div>
VisitedSite	<p>Returns a <i>bool</i> representing if the contact has visited the specified site.</p> <ul style="list-style-type: none"> <li>• <b>Object contact</b> – must contain the appropriate <i>ContactInfo</i> object of the contact that is to be evaluated.</li> <li>• <b>String siteName</b> – specifies the code name of the site that has been visited.</li> <li>• <b>Int lastXDays</b> – optional parameter specifying how many days ago the site was visited. If you enter the zero value, no constraint is applied.</li> </ul> <div> <pre>ContactManagementContext.CurrentContact.VisitedSite("siteName", 0)</pre> </div>
VisitedPage	<p>Returns a <i>bool</i> representing if the contact has visited the specified page.</p> <ul style="list-style-type: none"> <li>• <b>Object contact</b> – must contain the appropriate <i>ContactInfo</i> object of the contact that is to be evaluated.</li> <li>• <b>GUID nodeGuid</b> – specifies the GUID of the page that has been visited.</li> </ul> <div> <pre>ContactManagementContext.CurrentContact.VisitedPage(Documents["/Home"].NodeGuid)</pre> </div>
OpenedNewsletter	<p>Returns a <i>bool</i> representing if the contact opened the specified newsletter.</p> <ul style="list-style-type: none"> <li>• <b>Object contact</b> – must contain the appropriate <i>ContactInfo</i> object of the contact that is to be evaluated.</li> <li>• <b>GUID newsletterGuid</b> – specifies the GUID of the newsletter that has been opened.</li> </ul> <div> <pre>ContactManagementContext.CurrentContact.OpenedNewsletter(SiteObjects.Newsletters.CorporateNewsletter.NewsletterGuid)</pre> </div>
SubscribedToNewsletter	<p>Returns a <i>bool</i> representing if the contact is subscribed to the specified newsletter.</p> <ul style="list-style-type: none"> <li>• <b>Object contact</b> – must contain the appropriate <i>ContactInfo</i> object of the contact that is to be evaluated.</li> <li>• <b>String newsletterName</b> – must contain the name of the specific newsletter.</li> </ul> <div> <pre>ContactManagementContext.CurrentContact.SubscribedToNewsletter(SiteObjects.Newsletters.Coffee101)</pre> </div>
VotedInPoll	<p>Returns a <i>bool</i> representing if the contact has voted in the poll.</p> <ul style="list-style-type: none"> <li>• <b>Object contact</b> – must contain the appropriate <i>ContactInfo</i> object of the contact that is to be evaluated.</li> <li>• <b>GUID pollGuid</b> – specifies the GUID of the poll that has been voted in.</li> </ul>

	<pre>ContactManagementContext.CurrentContact.VotedInPoll(SiteObjects.Polls.NewWebsitePoll.PollGuid)</pre>
IsInRoles	<p>Returns a <i>bool</i> representing if the contact is assigned to any of the specified roles.</p> <ul style="list-style-type: none"> <li>• <b>Object contact</b> – must contain the appropriate <i>ContactInfo</i> object of the contact that is to be evaluated.</li> <li>• <b>String roleGuids</b> – specifies the GUIDs of the roles that the contact is assigned to. The GUIDs of the individual roles are separated with a semicolon.</li> </ul> <pre>ContactManagementContext.CurrentContact.IsInRoles(SiteObjects.Roles.CMSBasicUsers.RoleGuid + ";" + SiteObjects.Roles.CMSDesigner.RoleGuid)</pre>
IsInCommunityGroup	<p>Returns a <i>bool</i> representing if the contact is a member of the specified community group.</p> <ul style="list-style-type: none"> <li>• <b>Object contact</b> – must contain the appropriate <i>ContactInfo</i> object of the contact that is to be evaluated.</li> <li>• <b>String groupGuids</b> – specifies the GUID of the community groups that the contact is a member of. The GUIDs of the individual groups are separated with a semicolon.</li> </ul> <pre>ContactManagementContext.CurrentContact.IsInCommunityGroup(SiteObjects.Groups.American_travelers.GroupGuid + ";" + SiteObjects.Groups.Australian_travelers.GroupGuid)</pre>
ActivityLinkedToObject	<p>Returns a <i>bool</i> representing if the activity is linked to the given object by GUID or code name.</p> <ul style="list-style-type: none"> <li>• <b>ActivityInfo activity</b> – contains the <i>ActivityInfo</i> object of the activity that is to be evaluated.</li> <li>• <b>String objectType</b> – specifies the type of the object to which the activity is linked.</li> <li>• <b>String objectIdentifier</b> – identifies the object in the given object type by GUID or code name.</li> </ul> <pre>Activity.LinkedToObject("polls.poll", "NewWebsitePoll")</pre>

## Scoring - Notification email template macros

You can place macros into the text of the **Scoring - Notification email template** to dynamically load values. The system uses this template for the automatic messages that inform administrators or marketers that a contact has reached a certain amount of [score points](#).

The **{% ScoreValue %}** expression returns the current number of score points for the given contact.

Additionally, you can access the following related objects and their properties (e.g. **{% Score.ScoreDisplayName %}** etc.):

- **{% Score %}** - *ScoreInfo* object representing the given score.
- **{% Contact %}** - *ContactInfo* object of the contact that has reached the designated number of score points.

## Getting Campaign, A/B test and MVT test data

If you wish to check whether the current visitor has arrived on the website via a [campaign](#), or passed through a page with an [A/B](#) or [multivariate test](#), you can read the information from the appropriate browser cookie. Use the following macro expressions to get the necessary values from the cookies:

- **Cookies.Campaign** - returns the name of the campaign assigned to the visitor.
- **Cookies.CMSAB<A/B test code name>** – returns JSON data identifying the page variant assigned to the visitor by the specified A/B test, and information about performed conversions.
- **Cookies.CMSMVT<MVT test code name>** – returns JSON data identifying the combination assigned to the visitor by the specified MVT test.