MARIGOLD™

API Technical Guide: Merge Symbol
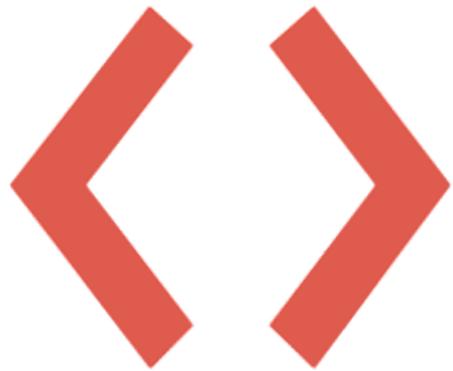
Cheetah Messaging

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1 Introduction

Purpose

The purpose of this document is to provide an overview of the MERGE SYMBOL API endpoint within Cheetah Messaging platform. This document discusses the intended use of the MERGE SYMBOL endpoint, and provides technical details for how to implement the endpoint.

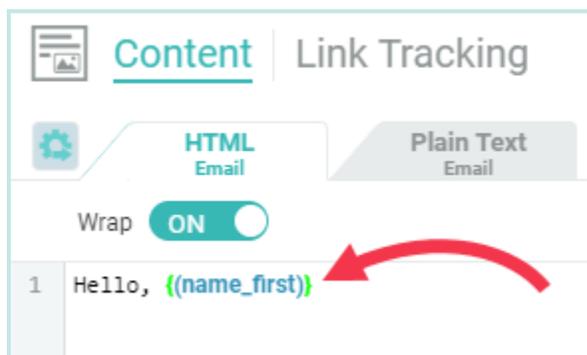## Overview

The MERGE SYMBOL endpoint is used request information about the Merge Symbols used in your Messaging Campaigns.

Merge Symbols are textual representations of field names, and are used when personalizing the content of a message. For example, instead of using "Hello, Customer" as a generic greeting, you could replace "Customer" with the recipient's actual first name, by pulling values from a "First Name" field in your source table. Within the Content Editor, the platform displays this statement using a Merge Symbol, such as: "Hello, {(name_first)}."

As depicted above, the syntax for Merge Symbols is the field's system name enclosed with parentheses and curly brackets.

When you add a Merge Symbol to your message content, you can optionally define a default value. The system will populate the Merge Symbol with this default value in the event that a record doesn't have a value in this field within the database. The syntax for default values is to insert a pipe after the field name, then include the default value, such as: "Hello, {(name_first|Customer)}."

When you add personalization to your message content, you can optionally apply a format mask to the field. The format mask is used to control the appearance of the text in the field. For example, you can format date fields as "mm/dd/yyyy." The selected format mask is represented within the Merge Symbol using a variety of different codes (see **Retrieve Format Mask Codes** for more details). Continuing the previous example, the "mm/dd/yyyy" date field format mask is represented by the code: "d:d."

The syntax for format masks is to insert a pipe after the default value (if used), followed by the format mask code, such as "{(date_field||d:d)}." Please note that even if you're not using a default value, you still need to include a pipe character as a placeholder for the default value.

Merge Symbols are also used when you insert other assets, such as Content Blocks, into the content of a message. For example, let's say you inserted a Content Block named "Silver Rewards Content" into a message. Within the Content Editor, the platform represents this Content Block using a Merge Symbol consisting of the Block's name, a pipe, and the Object Reference ID. For example: "{(Silver Rewards Content|8687)}."

The MERGE SYMBOL endpoint requires authentication using OAuth 2.0, and supports JSON and XML messages.

The URLs for this endpoint are:

- **North America:** https://api.eccmp.com/services2/api/MergeSymbol

- **Europe:** https://api.ccmp.eu/services2/api/MergeSymbol

- **Japan**: https://api.marketingsuite.jp/services2/api/MergeSymbol

Methods

The MERGE SYMBOL endpoint supports the following HTTP methods:

- **GET**: Retrieve a list of Merge Symbols for system fields

- **GET**: Retrieve a list of format mask codes

- **GET**: Retrieve Merge Symbols for all fields in a table

- **GET**: Retrieve a Merge Symbol by Object Reference ID

- **GET**: Retrieve a Merge Symbol by Object ID

Authentication

Access to the MERGE SYMBOL endpoint requires that you first be authenticated within the platform. Within Messaging, authentication is handled by OAuth 2.0. To authenticate with OAuth 2.0, you must first obtain a "Consumer Key" and a "Consumer Secret." Both of these values are managed at the user level, and can be obtained from within the Messaging application.

Next, you'll use your Consumer Key and Consumer Secret to request a "token." A token is a text string that, when provided in a request message, will allow the user access to the requested service. Tokens are valid only for a certain period of time.

For more details on how to authenticate your API request, please see the *Messaging: API How-to Guide.*

2 Retrieve Merge Symbols

Overview

This section describes how to retrieve information about Merge Symbols using the MERGE SYMBOL endpoint.

Retrieve System Merge Symbols

The MERGE SYMBOL endpoint allows you to submit a GET message to retrieve a list of Merge Symbols for the standard, system-generated fields and items.

This endpoint returns Merge Symbols for the following:

- System fields, such as Primary Key ID and Campaign ID. For example:

```
{
  "key": "Campaign ID",
  "value": "{[CampaignID]}"
}
```

- Custom Metadata fields. For example:

```
{
  "key": "Metadata Field - Marketing Division",
  "value": "{(meta:marketing_division)}"
}
```

- View as Web Page URL. For example:

```
{
  "key": "URLs - View As Web Page",
  "value":"http://!INSERT_DOMAIN_NAME!/ats/msg.aspx?sg1={(URLSignature1)}"
}
```

- Barcode image URL. For example:

```
{
```

```
            "key": "URLs - Barcode Image",
            "value": "http://!INSERT_DOMAIN_NAME!/ats/barcode.ashx?bc=!ENTER_VALUE!"
    }
```

When retrieving system Merge Symbols, the GET request message doesn't use any parameters.

Retrieve Format Mask Codes

The MERGE SYMBOL endpoint allows you to submit a GET message to retrieve a list of all the valid format mask codes.

The parameters when retrieving the valid format masks codes are described below.

showFormatter

This Boolean parameter is required.

The **showFormatter** parameter should be set to "true" in order to return all of the format mask codes. The **showFormatter** must be sent as a query type parameter within the URL. For example:

```
https://api.eccmp.com/services2/api/MergeSymbol?showFormatter=true
```

Retrieve Merge Symbols for all Fields in a Table

The MERGE SYMBOL endpoint allows you to submit a GET message to retrieve the Merge Symbols for all the fields in a table, by providing the table's Object Reference ID. The Object Reference ID is a system-generated identifier that's unique to every item, within an Item Type, in your account.

The parameters when retrieving all Merge Symbols in a table are described below.

viewId

This integer parameter is required.

The **viewId** parameter represents the **Object Reference ID** of the desired table. The **viewId** must be sent as a query type parameter within the URL. For example:

```
https://api.eccmp.com/services2/api/MergeSymbol?viewId=1002
```

Retrieve Merge Symbol for an Item by Object ID

The MERGE SYMBOL endpoint allows you to submit a GET message to retrieve the Merge Symbol for a single item or asset of a supported type (such as a Content Block or a Dynamic Block, for example), by providing its Object ID. The Object ID is a system-generate identifier that's unique to every item in your account.

The parameters when retrieving the Merge Symbol for an item by Object ID are described below.

objId

This integer parameter is required.

The **objId** parameter represents the **Object ID** of the desired Item. The **objId** must be sent as a query type parameter within the URL. For example:

```
https://api.eccmp.com/services2/api/MergeSymbol?objId=43953
```

In addition, the Object ID must refer to a item of a supported type. The MERGE SYMBOL endpoint supports the following item types:

- Web Form

- Content Block

- Opt-Out Message

- Share to Social Block

- Facebook Like Button

- Dynamic Block

- Looping Block

- Web Page

If you submit an Object ID for an unsupported item type, you'll receive the following error message: "This TypeId is not supported for Merge Symbol creation."

Retrieve Merge Symbol for an Item by Object Reference ID

The MERGE SYMBOL endpoint allows you to submit a GET message to retrieve the Merge Symbol for a single item or asset (such as a Content Block or a Dynamic Block, for example), by providing its Object Reference ID. The Object Reference ID is a system-generated identifier that's unique to every item, within an Item Type, in your account.

When using this version of the MERGE SYMBOL endpoint, you must provide both the Object Reference ID and the Item Type. The Object Reference ID is not unique across your entire account; it's unique only within an Item Type. For example, you could have a Content Block, a Web Form, and a Looping Block with the same Object Reference ID value. Conversely, those three assets would all have different Object IDs. Therefore, in order to search for a specific item by Object Reference ID, you need both the Object Reference ID AND the Item Type.

The parameters when retrieving the Merge Symbol for an item by Object Reference ID are described below.

typeId

This string parameter is required.

The typeId parameter represents the Item Type for the asset for which you're searching. The typeId parameter must be sent as a query type parameter within the URL. For example:

```
https://api.eccmp.com/services2/api/MergeSymbol?typeId=ContentBlock&refId=50378
```

The valid values for typeId are:

- "ImportForm" -- Web Form

- "ContentBlock" -- Content Block

- "ParagraphUnsub" -- Opt-Out Message

- "ParagraphSocial" -- Share to Social Block

- "ParagraphFblike" -- Facebook Like Button

- "DynamicBlock" -- Dynamic Block

- "LoopingBlock" -- Looping Block

- "CampaignWeb" -- Web Page

refId

This integer parameter is required.

The **refId** parameter represents the **Object Reference ID** of the desired Item. The **refId** must be sent as a query type parameter within the URL. For example:

```
https://api.eccmp.com/services2/api/MergeSymbol?typeId=ContentBlock&refId=50378
```

3 Response

This section describes the possible response messages sent back from the MERGE SYMBOL endpoint.

Success

A successful response to the **Retrieve System Merge Symbols** version of the MERGE SYMBOL endpoint will generate a response code of "200," followed by a list of all the Merge Symbols for system fields, URLs, etc.

A successful response to the **Retrieve Format Mask Codes** version of the MERGE SYMBOL endpoint will generate a response code of "200," followed by a list of all the valid format mask codes. The response includes a text description of the format mask in the **key** parameter, and the actual format mask code in the **value** parameter.

A successful response to the **Retrieve Merge Symbols for all Fields in a Table** version of the MERGE SYMBOL endpoint will generate a response code of "200," followed by a list of all the fields in the specified table. For each field, the response includes the display name of the field in the **key** parameter, and the Merge Symbol in the **value** parameter.

A successful response to either of the Retrieve Merge Symbol for an Item versions (by **Object ID** or by **Object Reference ID** for an Item will generate a response code of "200," followed by the details of the Item that met the provided search criteria. The response will include the following information:

- **merge_symbl_value** -- The Merge Symbol for this item
- **obj_id** -- The Object ID
- **display_name** -- The name of the item
- **type_id** -- The Item Type

- **ref_id** -- The Object Reference ID

- **parent_obj_id** -- The Folder ID for the Folder where the Item is located

- **eligibility_status_id** -- The status of the Item -- either "DRAFT" or "READY." Items in DRAFT status can't be used in Campaigns.

Errors

If Messaging encounters a problem with a MERGE SYMBOL request message, the platform will send an "error" message with details of the problem. Below is a list of error codes and their descriptions.

Response Code	Error message	Description
400	"User does not have access to this resource"	Invalid Object ID, or you don't have access to the provided Object ID
400	"This TypeId is not supported for Merge Symbol creation."	Invalid typeId value, or the provided Object ID is not for a valid item type
500	"This item does not exist"	Invalid Object Reference ID value

4 Sample Messages

This section contains several sample messages.

Response #1

Below is a sample response to the **Retrieve Format Mask Codes** version of the MERGE SYMBOL endpoint. The response includes a text description of the format mask within the **key** parameter, and the actual format mask code in the **value** parameter.

```
{
  "key": "Padded Number(000###)",
  "value": "n:"
},
{
  "key": "Number(##,###)",
  "value": "n:N0"
},
{
  "key": "Money(##,###)",
  "value": "f:N0"
}
```

Response #2

Below is a sample response to the **Retrieve Merge Symbols for all Fields in a Table** version of the MERGE SYMBOL endpoint. The response includes the Merge Symbol for every field in the specified table. For each field, the response includes the display name of the field in the **key** parameter, and the Merge Symbol in the **value** parameter.

```
{
  "key": "Home Country",
  "value": "{(home_country)}"
},
{
  "key": "Home ZipCode",
  "value": "{(home_zipcode)}"
```

```
    },
    {
      "key": "Home State",
      "value": "{(home_state)}"
    }
```

Response #3

Below is a sample response to either of the Retrieve Merge Symbol for an Item versions (by **Object ID** or by **Object Reference ID**.

```
{
    "merge_symbol_value": "{[Illinois block|50378]}",
    "obj": {
        "obj_id": 43953,
        "display_name": "Illinois block",
        "type_id": "ContentBlock",
        "ref_id": 50378,
        "parent_obj_id": 37249,
        "eligibility_status_id": "READY"
    }
}
```

5 Appendix A -- Identifiers

Messaging uses several different types of IDs when referencing assets, such as tables, fields, folders, Filters, and so forth. This appendix describes these different types of IDs, and provides steps on how to look up the value of an ID.

Object ID

The Object ID is a system-generated identifier for every asset in your account.

For many item types, the value for this identifier can be found within the Messaging application by navigating to the details screen for that item.

To find the Object ID within the application:

1. From the System Tray, select the screen for the desired Item Type.

2. Browse to and select the desired item. The item's detail screen is displayed.

3. In the Tool Ribbon, click the first tab; the name of this tab is usually the name of the item type, like "Filter" for example. The "Item Details" screen is displayed. The Object ID is listed on this screen.

Optionally, for many asset types, you can use the SEARCH endpoint, and search for the desired asset:

1. Submit a GET request to the SEARCH API endpoint. The simplest method is to use the versions of the SEARCH endpoint that allow you to retrieve information based on either the asset's name or its type. For example, to retrieve information about all of your Filters:

```
https://api.eccmp.com/services2/api/Object?type=Filter
```

2. The response message provides a list of all the assets in your system that match the search criteria. Find the desired asset in the response message.

3. As part of the API response message, the system provides the Object ID, which is referred to as the **obj_id**. For example:

```
{
  "obj_id": 22805,
  "display_name": "Summer campaign audience",
  "type_id": "Filter",
  "ref_id": 12902,
  "parent_obj_id": 37249,
  "eligibility_status_id": "READY"
```

}

Object Reference ID

The Object Reference ID is a system-generated identifier for every asset, within an Item Type, in your account.

For many item types, the value for this identifier can be found within the Messaging application by navigating to the details screen for that item.

To find the Object Reference ID within the application:

1. From the System Tray, select the screen for the desired Item Type.

2. Browse to and select the desired item. The item's detail screen is displayed.

3. In the Tool Ribbon, click the first tab; the name of this tab is usually the name of the item type, like "Filter" for example. The "Item Details" screen is displayed. The Object Reference ID is listed on this screen.

You can also look up the Object Reference ID using the SEARCH endpoint, which allows you to retrieve information about items based on name or item type.

1. Submit a GET request to the SEARCH API endpoint. The simplest method is to use the versions of the SEARCH endpoint that allow you to retrieve information based on either the asset's name or its type. For example, to retrieve information about all of your Filters:

```
https://api.eccmp.com/services2/api/Object?type=Filter
```

2. The response message provides a list of all the assets in your system that match the search criteria. Find the desired asset in the response message.

3. As part of the API response message, the system provides the Object Reference ID, which is referred to as the **ref_id**. For example:

```
{
  "obj_id": 22805,
  "display_name": "Summer campaign audience",
  "type_id": "Filter",
  "ref_id": 12902,
  "parent_obj_id": 37249,
  "eligibility_status_id": "READY"
}
```