



BPA
Platform

White Paper

MailChimp Integration Tool v1.0.10

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Contents

Introduction	1
The MailChimp Integration Tool Pack	1
System Requirements	1
Architecture.....	2
About the MailChimp Integration Tool	3
Global Configuration	3
Use Extended Logging.....	3
Connection Dialog	4
Test Connection	4
Update Objects and Operations	4
Step Configuration.....	5
General Tab	5
Connection Tab.....	6
Mapping Tab.....	7
Options Tab	8
Working with Other Tools.....	9
Consuming XML from Other Tools.....	9
Exposing XML to Other Tools.....	9
Supported Objects	11
Runtime	12
Error Handling.....	12
MailChimp Account Security.....	12

Introduction

The **MailChimp Integration** tool allows communication between BPA Platform and MailChimp®. All communication uses XML. You use the Integration tool to map BPA Platform data to MailChimp objects and operations. Operations such as, ADD, UPDATE, GET, and DELETE, are supported for a variety of business objects, such as, List, Campaign, and Click report— for a detailed list, see [SUPPORTED OBJECTS ON PAGE 11](#).

The XML responses received back from the MailChimp API can be saved to file or passed to another BPA Platform tool for further processing. The responses can include details of the object requested, any errors from the provider, or the values of any automatically generated ID fields. For example, you can use MailChimp Integration to provide an indirect link between systems that do not typically synchronise data with each other, such as synchronising contacts from a CRM platform as MailChimp subscribers, or even to provide reports containing data from both systems.

The MailChimp Integration Tool Pack

The tool pack consists of:

- **MailChimp Integration** – The Integration tool must be installed on the BPA Platform server and on any BPA Platform client machines. It is this that provides the translation between BPA Platform data and MailChimp objects and operations.

NOTE: This tool pack has been developed by Orbis Software Benelux BV and has been certified for use with BPA Platform by Orbis Software Ltd T/A Codeless Platforms.

System Requirements

The **MailChimp Integration** tool requires BPA Platform (formerly “TaskCentre”) 4.6 build 1944 or above.

This tool is compatible with MailChimp API version 3.0.

Architecture

The diagram below provides a high-level system architecture overview of the **MailChimp Integration** tool pack, with BPA Platform and the MailChimp API.

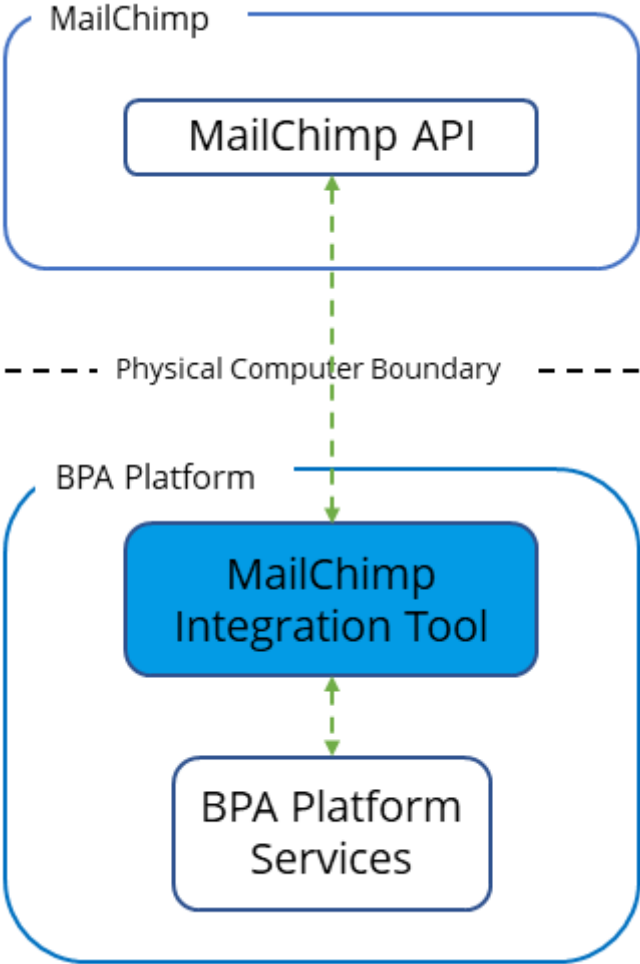


Figure 1 — High-level system architecture of the MailChimp Integration

About the MailChimp Integration Tool

Global Configuration

The global configuration for this tool is used to create connections to MailChimp.

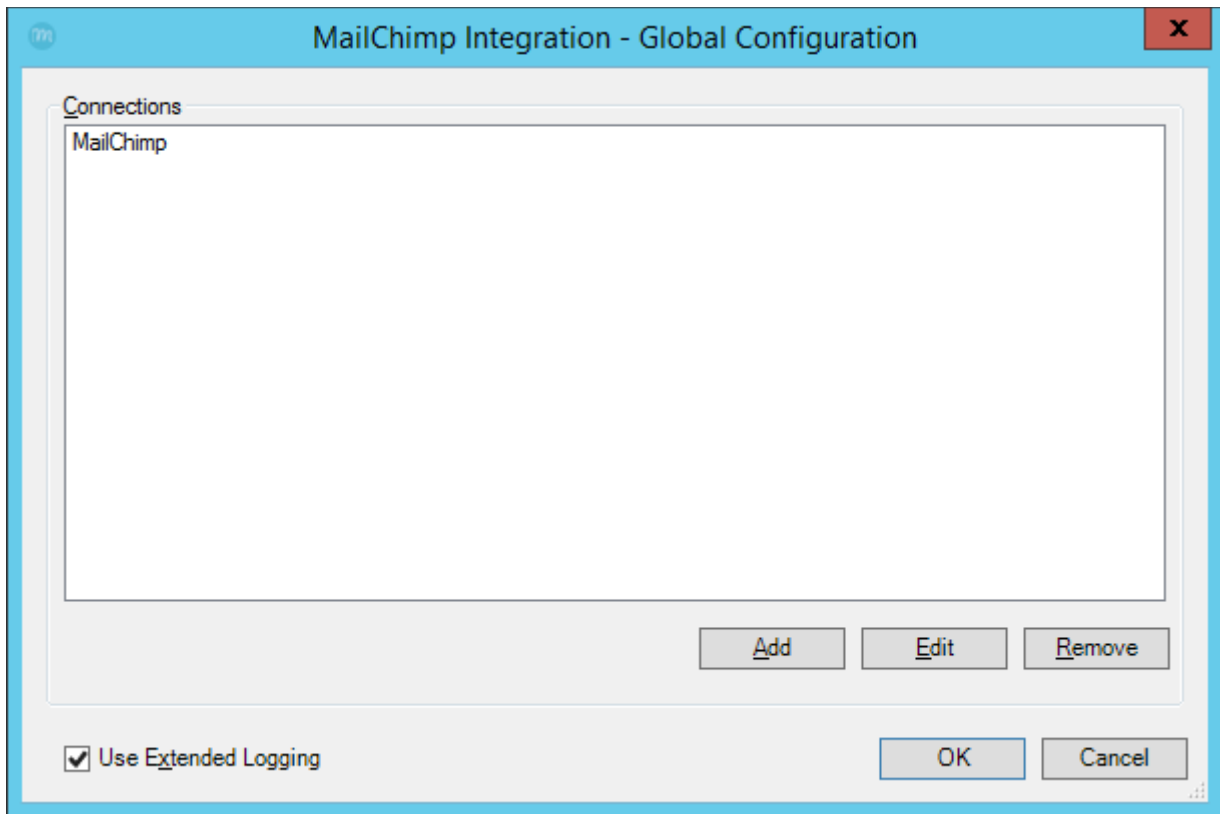


Figure 2 — MailChimp Integration - Global Configuration dialog

Click **Add** to create a connection to MailChimp.

Use Extended Logging

Enabling this option exposes the XML parsed between **MailChimp Integration** and the MailChimp API. You can view the log from the BPA Platform Event Log (*Manage > Event Log*).

Without extended logging, the Event Log only contains start and end of transaction messages, plus any error messages encountered at runtime.

Connection Dialog

You configure the connection to MailChimp here.

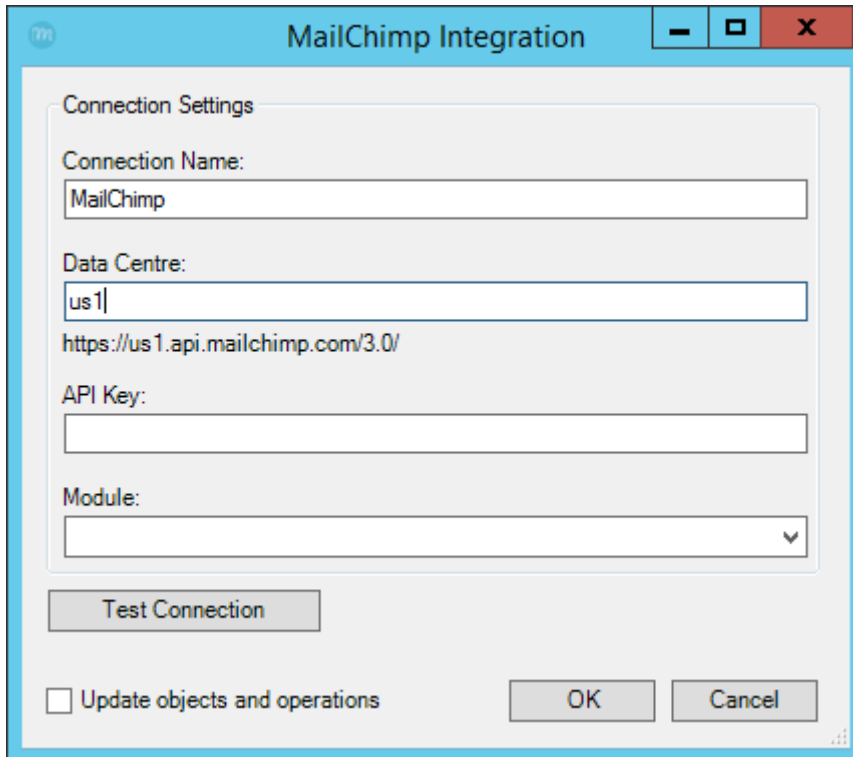
The image shows a Windows-style dialog box titled "MailChimp Integration". It has a light blue header bar with standard window controls (minimize, maximize, close). The main area is titled "Connection Settings" and contains several input fields: "Connection Name" with the value "MailChimp", "Data Centre" with the value "us1" and a URL "https://us1.api.mailchimp.com/3.0/" below it, "API Key" (empty), and "Module" (empty dropdown). Below these fields is a "Test Connection" button. At the bottom, there is a checkbox labeled "Update objects and operations" which is currently unchecked, and "OK" and "Cancel" buttons.

Figure 3 — MailChimp Integration – Connection dialog

Configure a meaningful **Connection Name** for this connection; this is the name displayed when adding tasks for MailChimp.

Within **Data Centre**, specify the MailChimp data centre linked to your account. For example, if the last part of your MailChimp API key is `us1`, the corresponding data centre is `us1`.

Within **API Key**, specify the API Key created in MailChimp for your account.

Optionally, choose a **Module** to show only objects from that module on the mapping tab, see [MAPPING TAB ON PAGE 7](#).

Test Connection

Using the **Test Connection** button allows you to test the connection to the MailChimp API.

Update Objects and Operations

Enabling the **Update objects and operations** option allows the **MailChimp Integration** schema within BPA Platform to be refreshed.

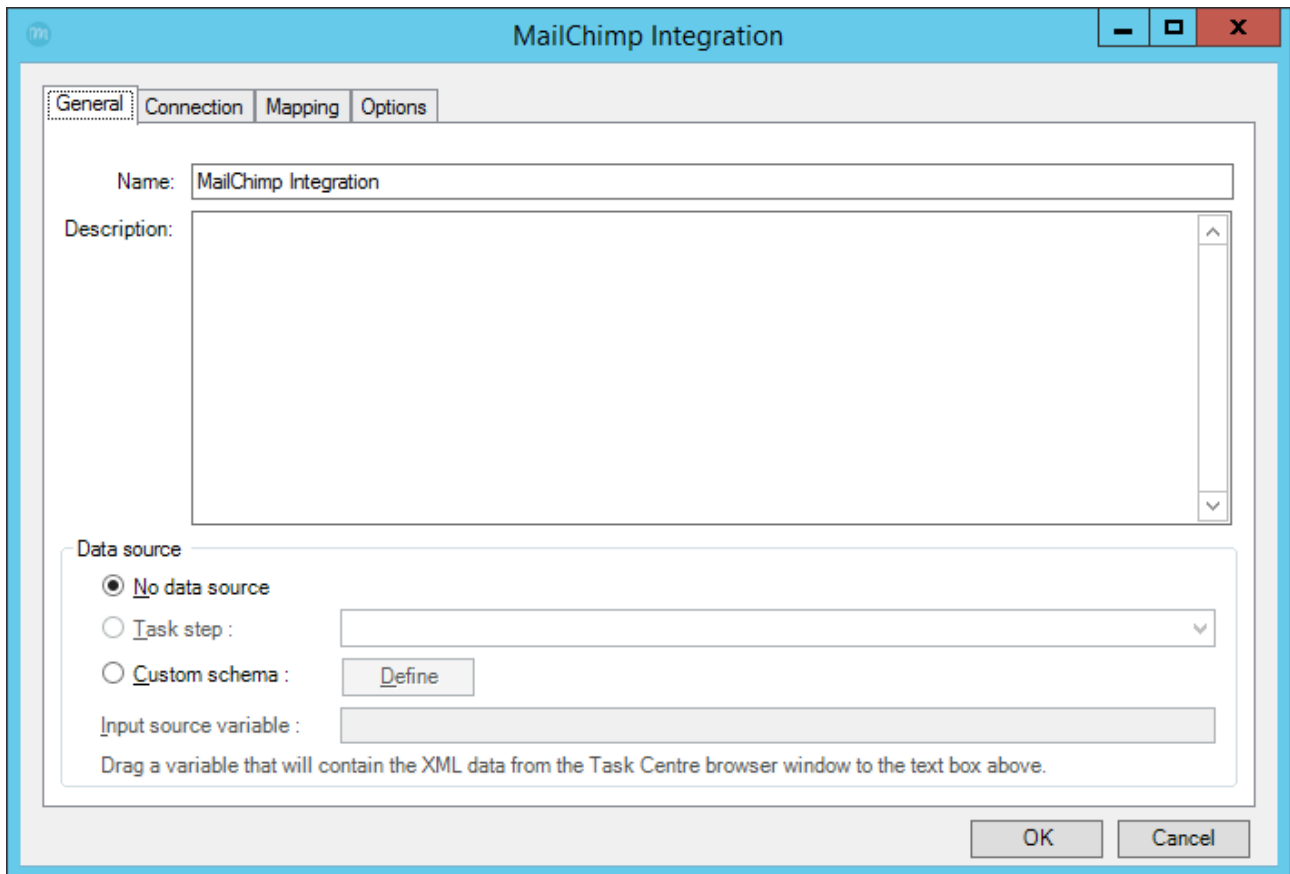
NOTE: Existing task steps using the MailChimp connection must be refreshed in order to use the latest schema.

Step Configuration

When creating new tasks, the **MailChimp Integration** tool is located under **Data Connectors** of the Task Browser.

NOTE: It is not possible to add the connector tool to the task until at least one connection to MailChimp has been defined in the global configuration

General Tab



The screenshot shows the 'MailChimp Integration' dialog box with the 'General' tab selected. The dialog has a title bar with a minus, maximize, and close button. Below the title bar are four tabs: 'General', 'Connection', 'Mapping', and 'Options'. The 'General' tab contains the following fields and options:

- Name:** A text box containing 'MailChimp Integration'.
- Description:** A large text area for entering a description.
- Data source:** A section with three radio button options:
 - No data source**
 - Task step :** followed by a dropdown menu.
 - Custom schema :** followed by a 'Define' button.
- Input source variable :** A text box for entering a variable name.
- A note below the input source variable: 'Drag a variable that will contain the XML data from the Task Centre browser window to the text box above.'

At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

Figure 4 — MailChimp Integration - General tab

Provide a meaningful **Name** and **Description** for this step.

Choose your **Data source**. This can either be:

- **No data source** — If you don't make use of a dedicated XML input source, select this option to use BPA Platform variables in place of the XML objects' fields. These can then be mapped to operational fields — see [MAPPING TAB ON PAGE 7](#).

For example, you can extract various bits of information from an email and store them in BPA Platform variables. Then, having mapped them to MailChimp objects and operations, these can be stored in MailChimp for later use.

- **Task step** — The data source can be set to an available BPA Platform XML data source. Only those steps that are capable of natively exposing an XML document at runtime are listed. These may be another **MailChimp Integration** step, or a tool, such as **Convert Recordset to XML**.

- **Custom schema** — An XML schema defines the structure of the parsed XML: what tags are present, and the nesting of the tags. You **Define** the schema of the XML that will be used as the input data source for this step. The industry standard XSD format is used by the **MailChimp Integration** tool. Any XML processed by this step must conform to this schema else an error will be reported.

If the XSD schema is available, either import it into the **Custom Schema Configuration** (use **the Import XSD/XML File** button) or copy and paste it into the configuration box.

If the XSD schema is not available, you can import an example of the runtime XML (**Import XSD/XML File**) or copy and paste it into the configuration box. Use the **Parse** button to create the schema.

- **Input source variable** — As well as defining the schema, you must specify the BPA Platform variable that contains the XML data at runtime.

Connection Tab

You specify the MailChimp **Connection** this step must use.

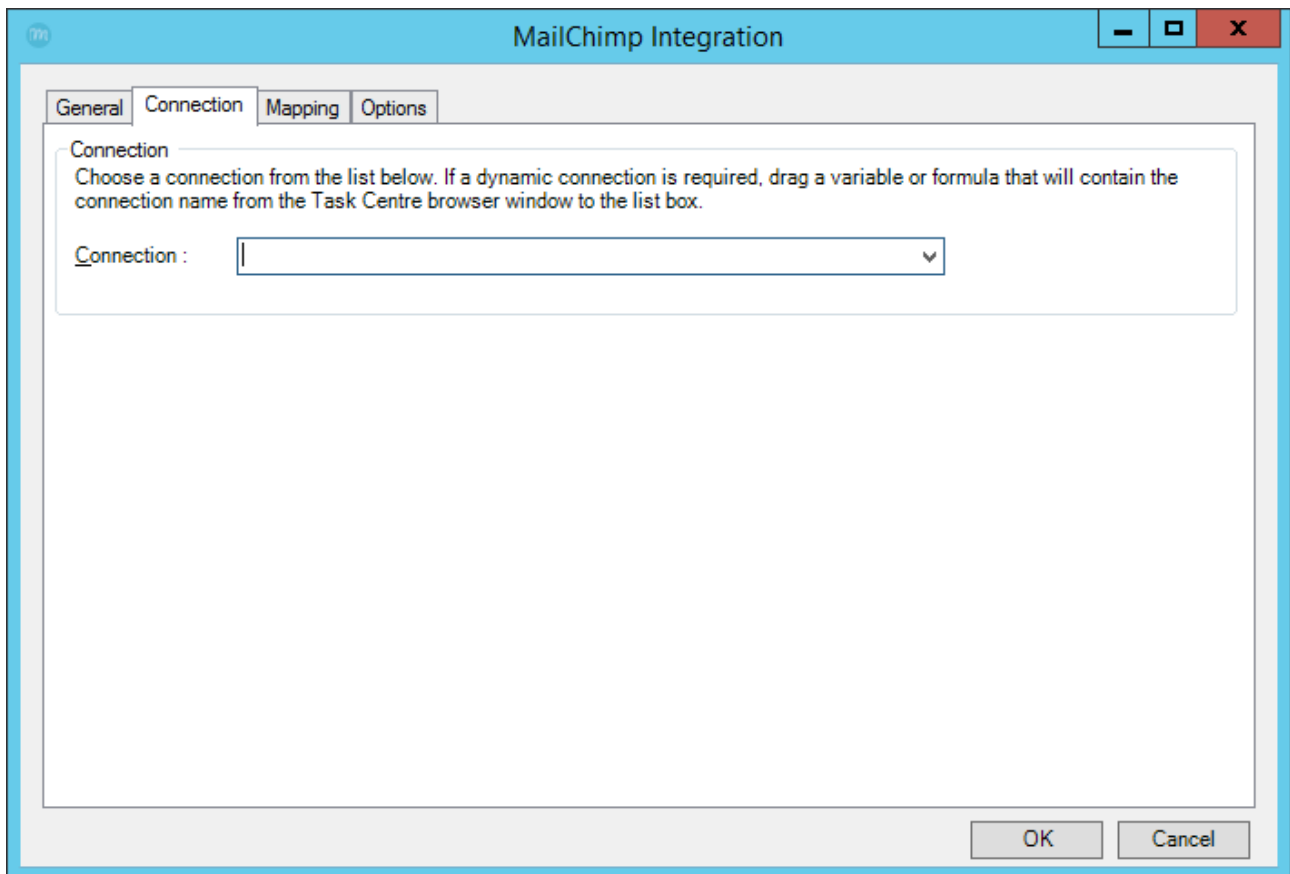


Figure 5 — MailChimp Integration - Connection tab

All connections created in **GLOBAL CONFIGURATION ON PAGE 3** are presented here.

Alternatively, you can use a BPA Platform variable to create a dynamic connection, where the connection used is determined by runtime circumstances. At runtime, the contents of the variable must match the name of one of the **GLOBAL CONFIGURATION** connections — this is case-sensitive.

Mapping Tab

Here you define links between the incoming XML and the outgoing data that is sent to the MailChimp API. This defines how, at runtime, the incoming XML is to be translated into the XML required for the relevant object and operation.

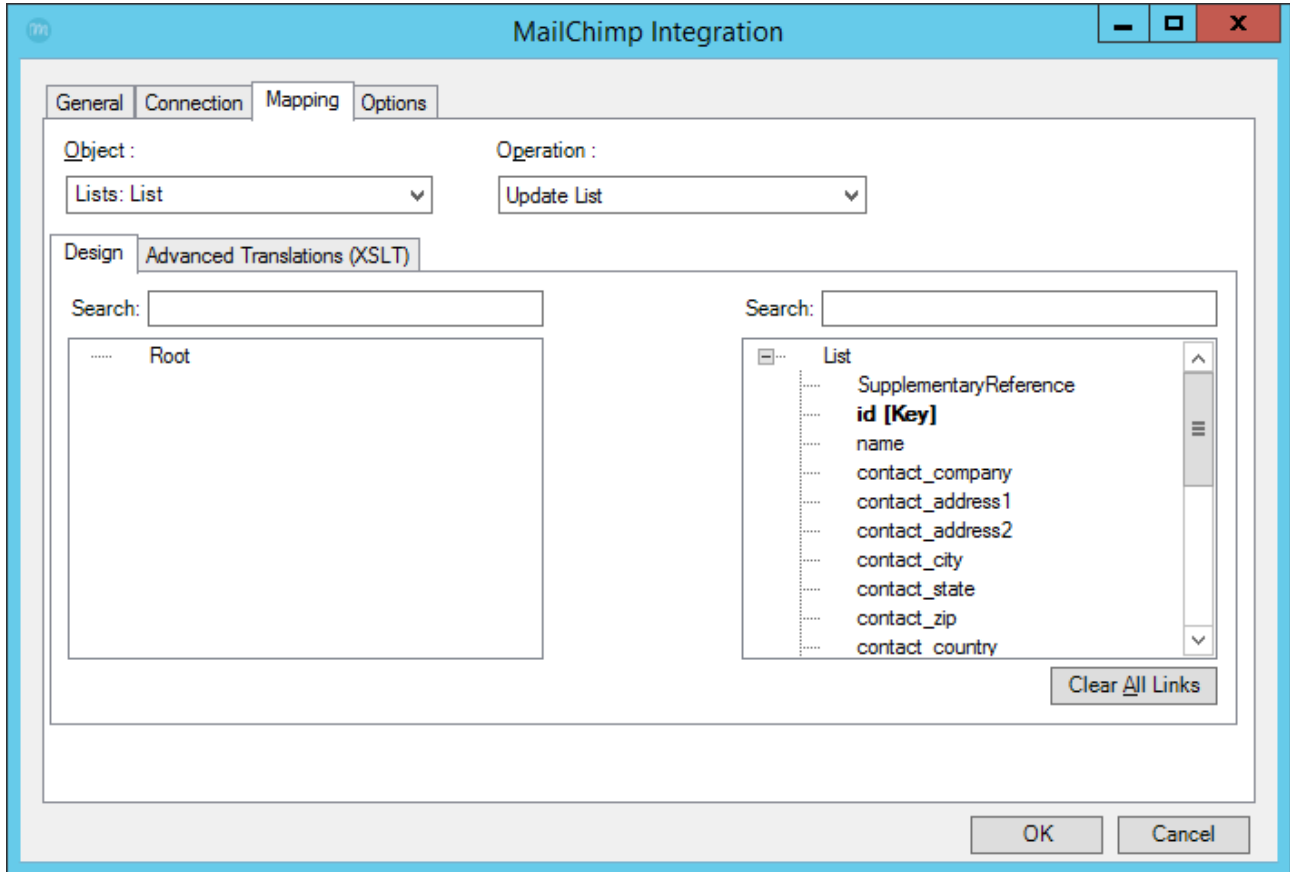


Figure 6 — MailChimp Integration - Mapping tab

The **Object** drop-down shows the available objects. The **Operations** drop-down shows the operations available for the selected **Object**. For more information about which operation is available for an object, see [SUPPORTED OBJECTS ON PAGE 11](#).

You create the links by clicking and dragging a data source field (left-hand pane) onto its corresponding data input field (right-hand pane). Note that only linked fields are used in the output XML. BPA Platform formulas and variables can be included in the source data — drag them from the Task Browser to the object's XML tree control. These can then be linked to operation fields. Note that BPA Platform recordsets must first be converted to XML using either the **Convert Recordset to XML** or **Transform Data** tool before they can be used here.

Each operation has an additional field, `SupplementaryReference`, which allows for traceability when transferring data from one place to another. When mapped, the data resides locally at runtime. It is added to the output and creates a record for reference purposes only — you can choose to map any field to `SupplementaryReference` to assist with checking where the data originated from or at what time the data transfer occurred, for example.

The **MailChimp Integration** tool uses eXtensible Stylesheet Language Transformations (XSLT) to translate the received XML. The **Advanced Translations (XSLT)** tab shows the XSLT generated for the links created for the object and operation. Use **Enable Free Type Mode** to directly edit the XSLT — this is particularly useful when translating a nonstandard requirement.

Options Tab

The **Options** tab allows you to define how errors in this step are handled at task runtime.

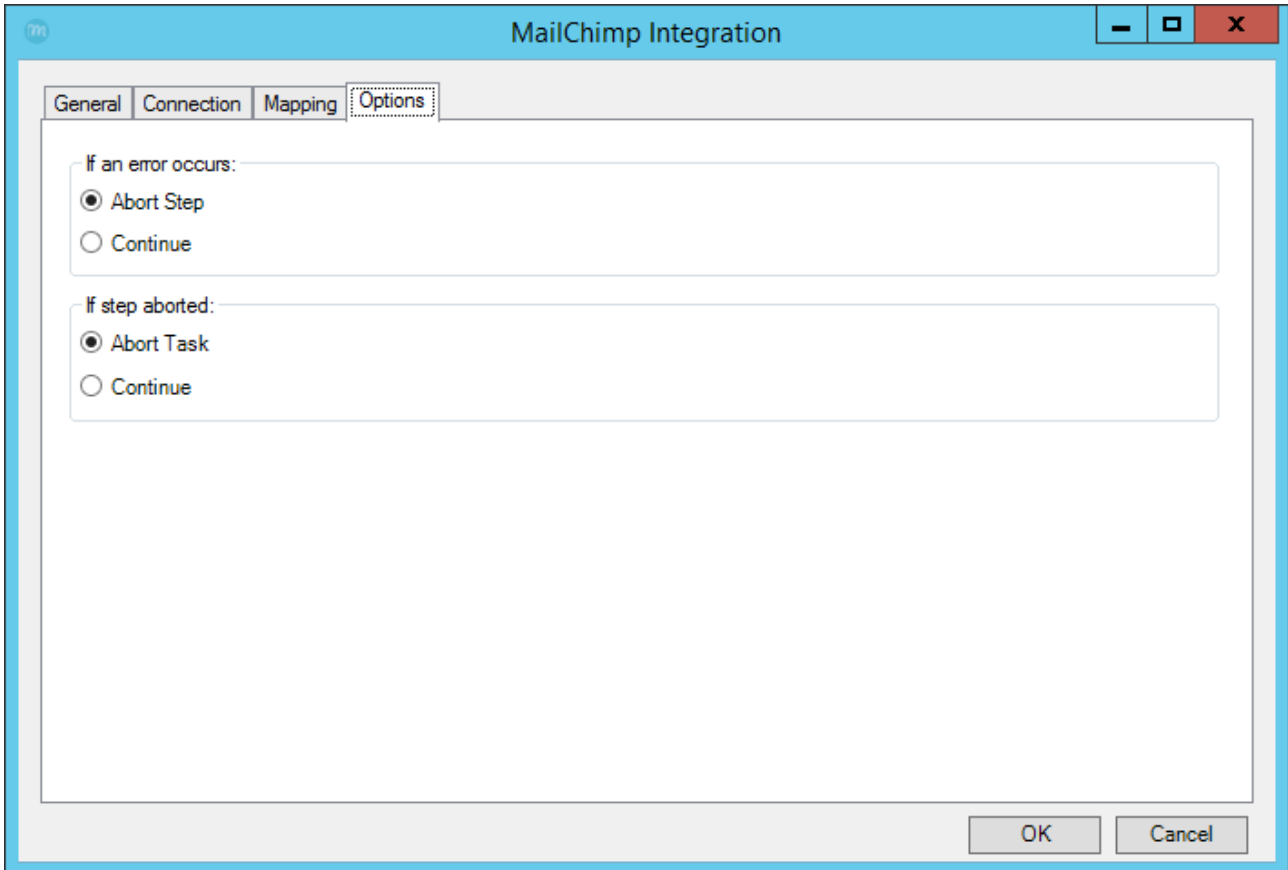


Figure 7 — MailChimp Integration - Options tab

If an error occurs, you can decide whether the step should **Continue** processing, or terminate the step immediately (**Abort Step**).

If the step is aborted, you can choose to **Continue** processing onto the next step in the task or terminate the whole task immediately (**Abort Task**).

Allowing the task to continue allows you to use the error XML received back from MailChimp Integration in a **Save File** step for investigation purposes, for example.







All errors are recorded to the BPA Platform Event Log (*Manage > Event Log*).

Working with Other Tools

The **MailChimp Integration** tool can directly interact with the following BPA Platform tools.








Consuming XML from Other Tools

MailChimp Integration can consume the output from the following tools:

Step Icon	Name	Step Type
	Import Flat File	Input
	Import XML Document	Input
	Convert Recordset to XML	Format
	Transform Data	Format
	Call Task Tool	Execute
	MailChimp Integration	Data Connectors

Exposing XML to Other Tools

MailChimp Integration's output can be consumed by the following tools:

Step Icon	Name	Step Type
	Convert XML to Recordset	Format
	Run Microsoft Reporting Services	Format
	Transform Data	Format
	Save File	Output
	Call Task Tool	Execute
	Web Service Connector Tool	Data Connectors
	MailChimp Integration	Data Connectors

The **MailChimp Integration** tool outputs two documents:

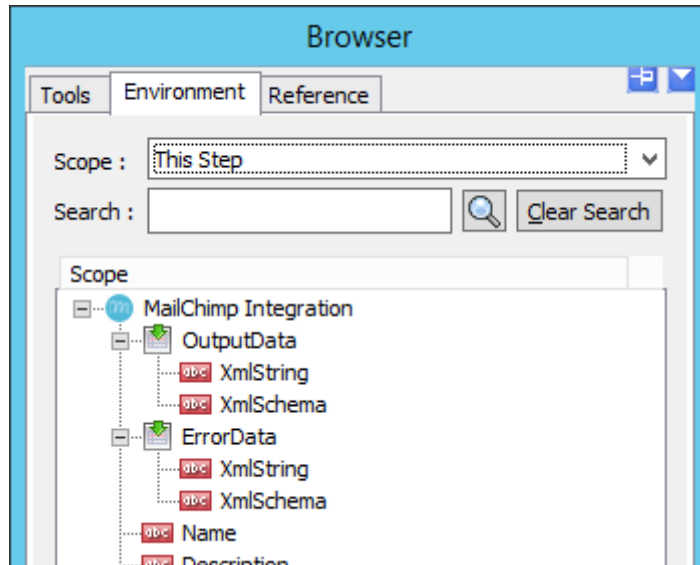


Figure 8 — MailChimp Integration tool outputs

- OutputData
 - Data returned from **MailChimp Integration**, for instance the created, updated or retrieved entity instances
 - SupplementaryReference
- ErrorData

The `ErrorData` document is structured as follows:

`<Error>` — All errors are created as an `<Error>` node, with the following sub-nodes:

`<Object>` — The name of the requested object, such as, Campaign

`<CODE>` — The error code returned by MailChimp

`<MESSAGE>` — The corresponding error message

`<EXTENDEDINFO>` — A string containing additional information about the error

`<INPUTDATA>` — The input data mapped for the object, plus all data contained in the `SupplementaryReference` field

Both outputs can be used:

- Directly by subsequent tool steps which consume XML data inputs
 - If required, use the **Convert XML to Recordset tool** to convert the XML to a BPA Platform recordset
- Accessed using the output or error objects for response data (`XmlString`), or the output or error schema (`XmlSchema`) present in the Task Browser

Supported Objects

At the time of writing, the following objects and operations are supported:

MailChimp Object	Standard Operations					Comment
	Get	Add	Update	Delete	Other	
Campaigns: Campaign folder	✓	✓	✓	✓		
Campaigns: Campaign	✓	✓	✓	✓	✓	Additional operations: <ul style="list-style-type: none"> Cancel Email Pause / Resume Replicate Schedule / Unschedule Send
Campaigns: Content	✓	✓	✓			
Lists: List	✓	✓	✓	✓	✓	Additional operation: <ul style="list-style-type: none"> Batch (un)subscribe members
Lists: Abuse report	✓					
Lists: Interest group	✓	✓	✓	✓		
Lists: Interest	✓	✓	✓	✓		
Lists: Member	✓	✓	✓	✓		
Lists: Member tag		✓	✓	✓		
Lists: Merge field	✓	✓	✓	✓		
Lists: Segment	✓	✓	✓	✓	✓	Additional operation: <ul style="list-style-type: none"> Batch add/remove members
Reports: Abuse report	✓					
Reports: Campaign report	✓					
Reports: Click report	✓					

MailChimp Object	Standard Operations					Comment
	Get	Add	Update	Delete	Other	
Reports: Click report detail	✓					
Reports: Email activity report	✓					
Reports: Sent to report	✓					
Reports: Unsubscribe report	✓					

Runtime

The incoming XML is translated into the XML format for the object and operation selected in the configuration. The data for the linked fields is brought across into the output XML — only those fields that were linked are brought across. The XML is passed to the connector tool, which then:

- Processes the data
- Performs the operation requested
- Sends back an XML document containing the response

The XML can then be used by other BPA Platform steps

Error Handling

Errors are written to the BPA Platform Event Log (*Manage > Event Log*). You define how errors are handled in the **Options** tab of the **MailChimp Integration** tool — see **OPTIONS TAB ON PAGE 8**.

Reasons for the errors could include:

- Web service connection errors
- User privilege errors
- Errors from the MailChimp API
- Warnings and messages from the MailChimp API

MailChimp Account Security

The MailChimp API is the only method used to connect to MailChimp and perform read / write tasks — all security present in the API is used.

Want to learn more?

Discover how Codeless Platforms can help your business by improving performance, boosting efficiency and cutting costs.



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