



Parse Template & Tabular Format

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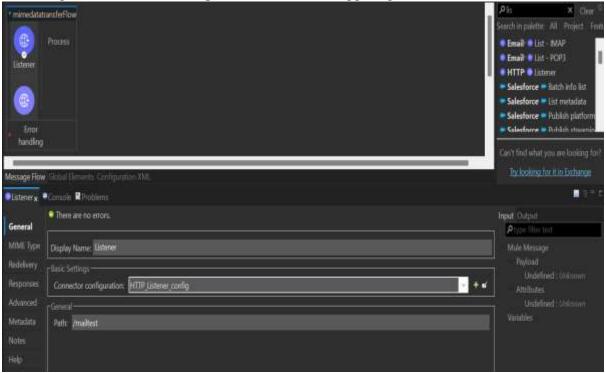


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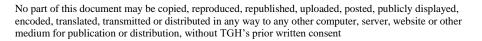
- Parse Template is the Mule component to use for processing a template and obtaining a result. A template is defined as text with embedded Mule expressions that are evaluated and replaced with their result.
- There are some scenarios where we need to use a parse template in the flow. Some of the scenarios are:
 - When we want to prepare the payload to be used by the Web Service Consumer or for a SOAP request.
 - > When we want to create a template for emailing.
 - There are other scenarios where it can be useful, such as returning HTML to a client from an HTTP transport. We can load an HTML file into the payload that includes embedded MEL (Mule Expression Language).
- ➤ In this blog, we will see how to use a parse template for creating a template for emailing. The requirement is we need to send data in a tabular format in an attachment. This is commonly used when we need to send an error that occurred in the flow via an email in a structured manner.

Steps:

1. First, we must create a new Mule Project and drag and drop a listener with HTTP configuration as well as the path mentioned for triggering the flow.

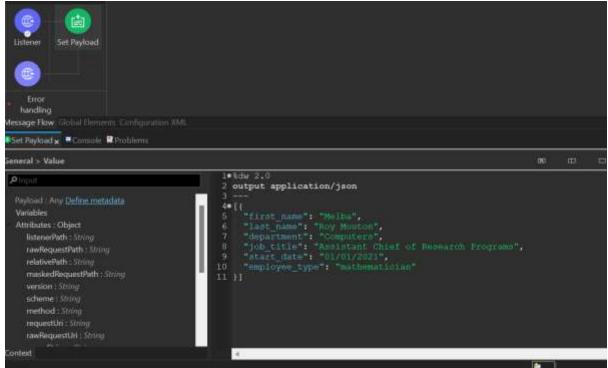


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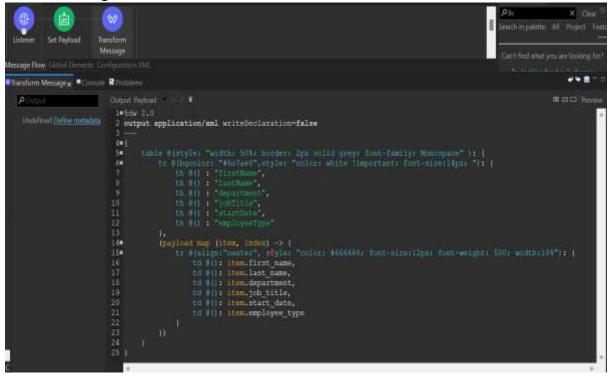




2. After the Listener, use a set variable component for setting the payload. In my case, I am using a payload containing an array that has a JSON object which would contain the data that I need to send in the tabular format.



3. Then we need to have a transform message and this transform message is used to define the content that would be going inside the table and will contain the header for the table which would be in the "th" tag as well as the data that should go inside the table which would be in the "td" tag.



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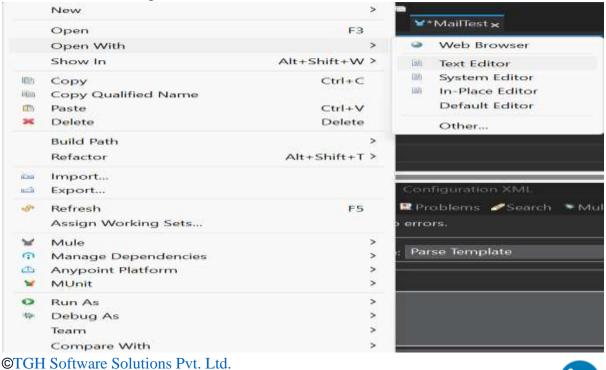




- Map is used in the case of td tag as there can be multiple data that will be coming inside the array as objects and we need to iterate over the same.
- 4. Now that we have made the payload into tabular format, we need to use a parse template component to make it into HTML, and for that first, we need to create a template that would be referred to by the Parse Template component.
- 5. To create the template, we need to create a file inside the src/main/resources folder

	New	>	18	Mule Project
	Go Into		TP-	API Specification Project
Kin	Open in New Window Open Type Hierarchy Show In Copy	F4 Alt+Shift+W > Ctrl+C	1 6 8 4 8	Project from Template Mule Domain Project Project from Example Java Project Project
itan ITS X	Copy Qualified Name Paste Delete	Ctrl+V Delete	ab ixib	Mule Configuration File API Specification File RAML API Fragment File
	Build Path Source Refactor	> Alt+Shift+S > Alt+Shift+T >	999	Package Class Interface Enum
	Import Export		089 4637	Annotation Source Folder
1.gr	Refresh Assign Working Sets	F5	10	Java Working Set Folder File
¥ e e e	Mule Manage Dependencies Anypoint Platform MUnit	* * * * *		Untitled Te <u>Create a new file resource</u> MUnit Test Example
0 \$	Run As Debug As Restore from Local History Team Compare With Configure Go To Node Validate	> > > >	1.1.12/3777	Other Ctrl+N testTable.html riable:
1,6540	Properties	Alt+Enter		
		Contract Provident		

6. The extension for the file should be according to the use in my case since I am creating an HTML template it would be .html. For opening the file that is created we should use open with the text editor option.





7. Now we need to create the template for the HTML as below:

1(html)	
2 <head></head>	
3 <body></body>	74
4 	
<pre>5 #[payload]</pre>	
6 	
7	
8	

8. In the Parse Template component, we need to select the location where we have defined the template so that it can refer the same.

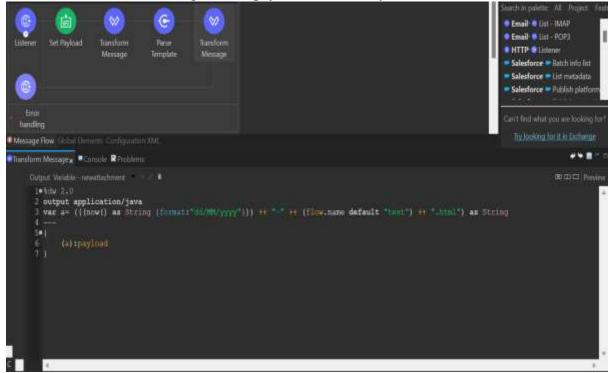
	🙆 😡 🙆	
Listener	Set Payload Transform Parse Message Template	ľ
Error		
	Global Elements: Configuration XML	
	latex Contole 🖻 Problems	
General	There are no errors.	
MIME Type	Display Name: Parse Template	
Metadata Notes	Settings Content:	
Help		
	Location: testfable.ttml	
	Output	
	Target Variable	 _
	Target Value.	
	a de la companya	

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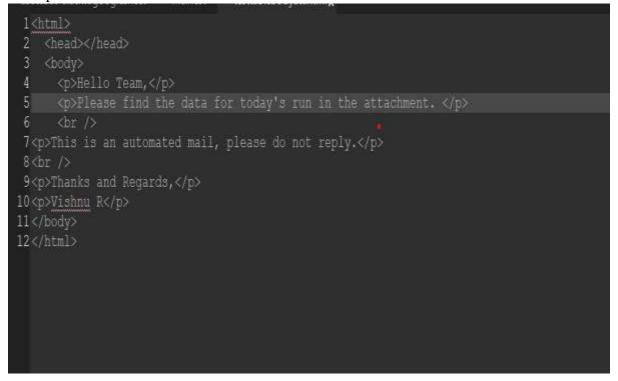




9. We need to use a transform message to create the input for the Email connector which would be in a key-value pair where the key would be the file name for the attachment and the value would be the payload that is coming from the parse template. I am storing it in a variable as I will be making another payload for the body of the email.



10.Now, for creating the body of the email I will be using another parse template and the template that is defined would be as below:



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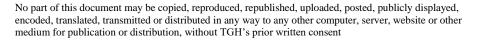
11. You need to refer to the template by using a Parse Template component by pointing to the location where the template is present.

		Parse Femplate	W Transform Message	Parse Template					
	raise template								
Content:									
Location: test	ttablebodyatt.htm	4							
Output									
	Phyload	t Nayload Transform Message obel Element: Configuration XM Console: Problem There are no errors. Display Name: Parse Template Settings Content: Location: testtablebiodyett.htm Output Target Variable:	t Payload Transform Parse Message Template obol Elements Contiguration XML	 Payload Transform Parse Transform Message Template Message Obs/ Element: Configuration XML Contole Problem There are no errors. Display Name Parse Template Settings Content: Location: testtablebodyett.html Output Target Variables 	Payload Transform Parse Transform Parse Message Template Message Template Message Template obs/ Element: Configuration XML • Contole Problem • There are no errors. Display Name: Parse Template Settings Content: Location: testtablebodyett.html Output Target Variable;	Payload Transform Parse Transform Parse Template Message Template. Obs/ Elements Configuration XML • Console Problems • There are no errors. Display Name Parse Template Settings Content: Location: testtablebodyett.html Output Target Variable:	Reyload Transform Parse Transform Parse Message Template Message Template obs/ Element: Configuration XML Contool: Problem There are no errors. Display Name Parse Template Settings Content: Location: testtablebodyett.html Curput Target Variable:	<pre>Mayload Transform Pane Transform Parse Message Template Message Template oblit Element: Configuration XML Console P Problems There are no errors. Display Name Parse Template Settings Content: Location: testtablebodyett.html Cuput target Variable; Locatio: testtablebodyett.html</pre>	<pre>Mayload Finansform Parse Transform Parse Message Periplate Message Periplate obal Elements: Configurance XML c Console Periplateme Trates are no envirs. Display Name: Parse Template Settings: Content: Location: testtablebiodyett.html Curput— Target Variable.</pre>

12. After the parse template component, I will be using a transform message component for converting the payload that is coming to a Java format as an input for the email connector.

		- 📎 -	- <u>c</u>	- 😡 -	- C -	- 😡	
Listener	Set Payload	Transform Message	Parse Template	Transform Message	Parse Template	Transform Message	
Error handling							
and the second second	Flow Global Elim						
Iransform	Message 😿 💻 Co	nsole 🗳 Problem					
Attribute listene rawRe relativ maske versio schem metho			Output Payle 1•%dw 2. 2 output 3 4 paylos	.0 t application	n/java		

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13.Now we need to configure the email connector, for configuring the connection you can refer to a blog related to email configuration. We need to provide the body and attachment in the email connector and the encoding should be base64.

* mimedatatra	sterFlow						
Uistener S	et Payload Transform Messaga	Pars Tempi	e Transform	Parse Template	Transform Message	Send	
Message Flow		chat.					
Send x Cor	salé 🗳 Problems						
General Advenced Error Mapping Metadata Notes Help	There are no errors. Content: ContentType: Encoding: ContentTransfer Encodi	fe	1 payload 4 text/html UTE-8 Base64				N * *
	Attachments Attachments Content Transfer Encodi) A (1) (1) (2)	I Vars.newatt 	cachment.			* N

14.Now we can add a transform message so that we can get a customized message as a



Listener	Set Payload	Transform Message	Parse Template	Transform Message	Parse Template	Transform Message	Send	Transform Message
Aessage Flov	Global Element	Configuration ?						
Transform	Message 😿 💻 Cor	nsole 🗳 Problem						
Attributes listener rawRec relative maske versior schem metho reques rawRec queryS	achment : Object	ning	3 4• (auceestul	Ly sent*	

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15.Now, that the setup is done, the flow will look like this:

" mimedatatransferFlo	N								
listener Logger	E Payload	Transform	Parse	Transform	Logger	Parse	Transform	Send	Transform
e		Message	Template	Message		Template	Message		Message
Error handling									

16.Now we need to deploy the application and when we hit the application the mail will be shared and you will receive the response. I am using Postman and hitting a request.

GET v http://localhost:8081/mailt	est			Send
Params Authorization Headers (6) B	ody Pre-request Script	Tests Settings		Cookie
Query Params				
Кеу	Value		Description	••• Bulk Edit
Pretty Raw Preview Visualize	JSON ∨ ⋽			ΓοQ

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a,

17. The email that would be sent would consist of 2 parts the body and the attachment. The body would be:

Н	elio Team,
Ρ	lease find the data for today's run in the attachment.
T	his is an automated mail, please do not reply.
T	nanks and Regards,
V	ishnu R
c	Dne attachment • Scanned by Gmail ③
	A 28/11/2023-mime

When you open the attachment, it will look like:

firstName	lastName	department	jobTitle	startDate employeeType
Melba	Roy Mouton	Computers	Assistant Chief of Research Programs	01/01/2021 mathematician

18. You can customize the table according to your needs and the changes should be made while we are creating the structure for the table.

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