Plan Metadata References

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In the body and header of HTTP tasks in your plans, you can reference the following elements of metadata from the plan run for additional contextual information.

General Syntax

All plan metadata references follow the following basic syntax:

```
{{$plan.path.to.reference}}
```

- All references can be entered with $ in the Trifacta application. These references are turned into {{$ in the code definition. The double-curly braces forms the environment for metadata replacement.

  > **Tip:** In the Trifacta application, you can start by typing $.

- Nodes in the tree are separated with a . period.

Reference values that contain whitespace must be listed in the following manner:

```
{{$plan.path['path with white space in it'].rest.of.path}}
```

Notes:

- In the Trifacta application, you can use double-quotes when specifying a whitespace value. However, these double-quotes get escaped in the actual request. It is safer and more consistent to use single quotes.

Whitespace values typically appear when referencing the display name values for underlying objects, like recipes executed as part of a flow task.

$plan References

These references apply to the plan definition or current plan run.

Text to enter:

```
$plan.
```

Reference	Description
name	Name of the plan that is run.
duration	Length of time that the plan ran or has run so far
startTime	Timestamp for when the plan run began
runId	Internal identifier for this run of the plan
user	Internal identifier of the user who launched this run.
taskCount	Count of tasks in the plan run.

$http References

These references apply to HTTP tasks in the plan run.

Enter the following, after which you can see the two-letter codes for the HTTP tasks that have already executed in the current plan run:

```
$http_ax.
```

Reference	Description
name	Name of the HTTP task
status	Current status of the task execution
duration	Length of time that the task ran or has run so far
startTime	Timestamp for when the task began. A null value if the task has not begun.
endTime	Timestamp for when the task ended. A null value if it has not ended yet.
statusCode	Status code (if any) returned from the receiving endpoint
response	Response information. See below.

Response references

These references apply to the response returned as part of the task execution.

Enter the following, after which you can see the two-letter codes for the HTTP tasks that have already executed in the current plan run:

```
$http_ax.response.
```

Reference	Description
body	Body of the response
json	JSON-formatted version of the response
headers	Headers returned with the response

$flow References

These references apply to flow tasks in the plan run.

Enter the following, after which you can see the two-letter codes for the HTTP tasks that have already executed in the current plan run:

```
$flow_ax.
```

Reference	Description
name	Name of the flow task
status	Current status of the task execution
duration	Length of time that the task ran or has run so far
startTime	Timestamp for when the task began. A null value if the task has not begun.
endTime	Timestamp for when the task ended. A null value if it has not ended yet.
jobIds	Internal identifiers for the jobs that were run as part of this flow task
flowName	Name of the flow underlying this flow task
output	Metadata from the flow task's output. See below.

Output references

These references apply to the outputs that are generated in the flow tasks of the plan run.

Enter the following for flow task 7p with output My Output Name:

```
$flow_7p['My Output Name'].
```

Reference	Description
name	Name of the flow
status	Current status of the flow
duration	Length of time that the flow execution ran or has run so far
startTime	Timestamp for when the flow execution began. A null value if the run has not begun.
endTime	Timestamp for when the flow execution ended. A null value if it has not ended yet.
lastUpdate	Timestamp for when the flow was last modified
jobId	Internal identifier for the job that was run or is running for the flow
user	Internal identifier for the user who executed the job
jobType	
fileSize	If the output generates a file or files, this value captures the size in KB of the output.
environment	Running environment where the job was executed
columnCount	Count of columns generated in the output
rowCount	Count of rows generated in the output

dataTypeCount	Count of Trifacta data types detected in the output
validValuesCount	Count of valid values in the output
mismatchedValuesCount	Count of mismatched values in the output
emptyValuesCount	Count of missing or empty values in the output
columns	Column information from the selected output for the flow. **Tip:** If you have defined any data quality rules on the column, they are listed, too. For more information, see *Data Quality Rules Reference*.
sources	Source filename and table information from the imported datasets.

Additional References

Plan metadata reference information leverages the Nunjucks templating language, which provides additional capabilities such as loops, conditions, filters, and helper functions.

NOTE: These additional capabilities are available through the language, but their implementation in the Trifacta application has not been certified. For Nunjucks capabilities not listed on this page, you should experiment with them in a development environment first.

For more information, see *https://mozilla.github.io/nunjucks/templating.html*.