

## Description

The **Ayehu NG** solution features a robust turn-key **ServiceNow** integration that allows users to interact with every form and field in their **ServiceNow** instance, whether they be standard or custom. This tutorial will show you how to use the out-of-the-box plug-and-play **ServiceNow** activities to dynamically retrieve a list of attachments associated with a specific ticket.

Before following this tutorial, ensure that the "Attachment(sys\_attachment)" form and its fields are discovered in your **ServiceNow** module.

For more information on permission requirements for accessing ticket attachments in **ServiceNow**, visit our "*ServiceNow Integration Module Access/Permissions Requirements*" support article: <https://support.ayehu.com/hc/en-us/articles/360048555853-ServiceNow-Integration-Module-Access-Permissions-Requirements>

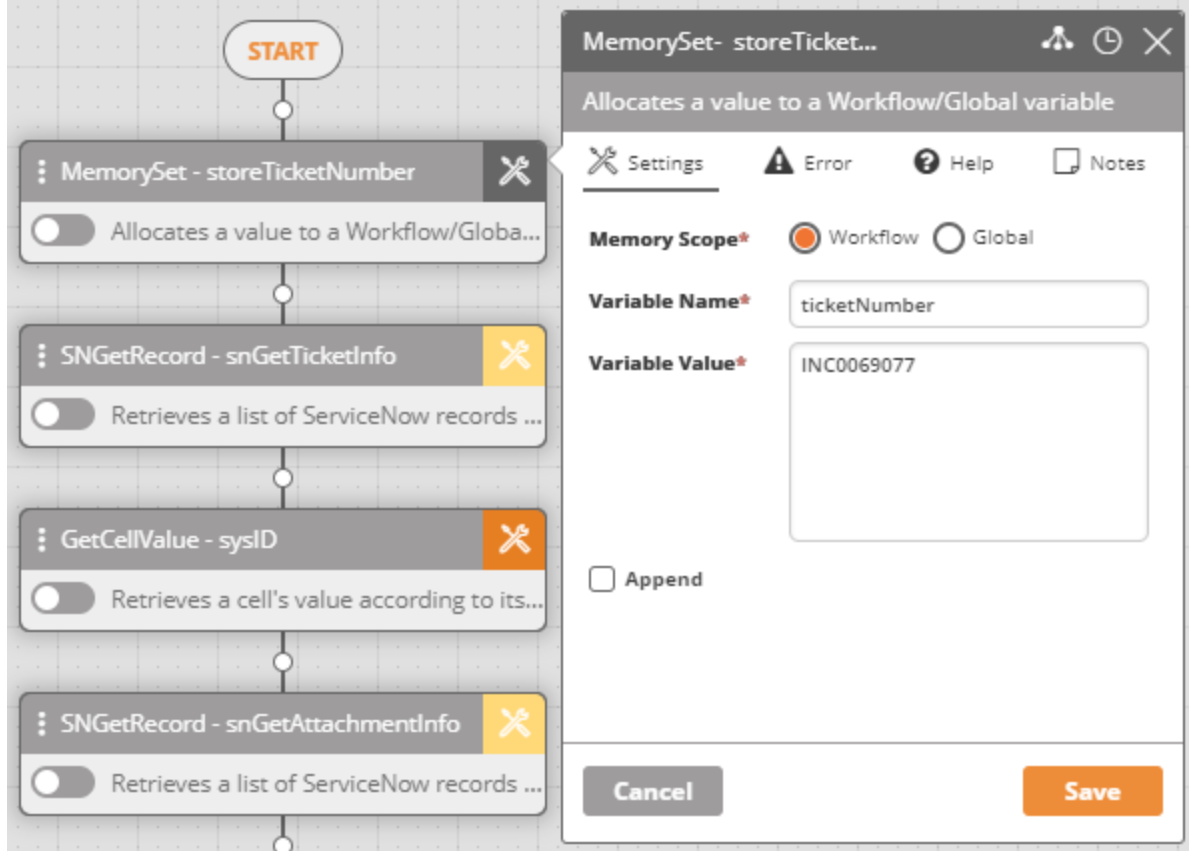
For more information on discovering forms and fields in **ServiceNow**, visit our "*Integrating with ServiceNow*" support article and scroll down to the section labeled "Forms": <https://support.ayehu.com/hc/en-us/articles/360006651853-Integrating-with-ServiceNow>

## Solution

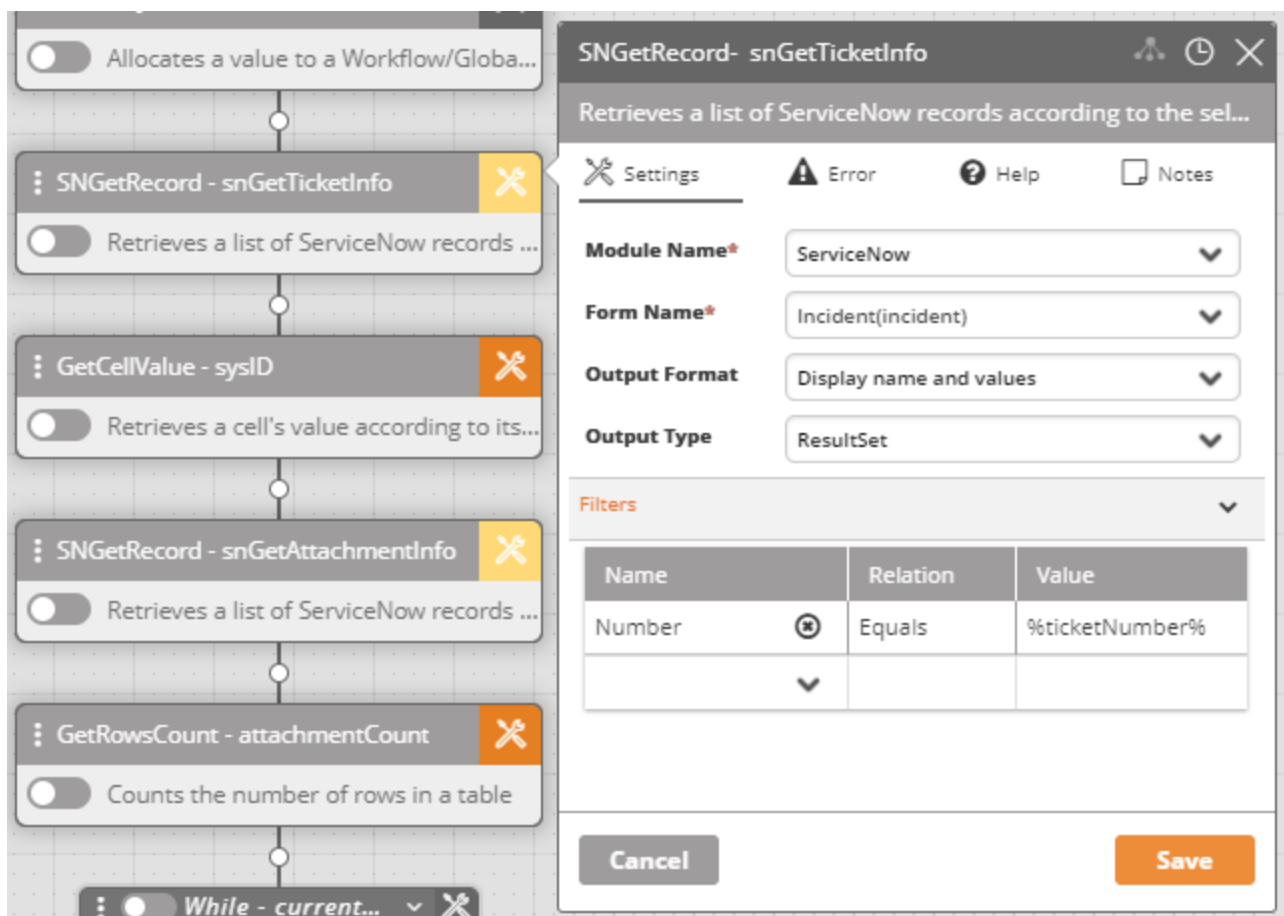
In the workflow below, we are storing a **ServiceNow** ticket number and then cross-referencing its "Sys ID" field with the "Attachment" form to retrieve a list of all attachments associated with it.



First, we use the **MemorySet** activity to store a ticket number in the **%ticketNumber%** variable, as seen below. In this example, we're using a ticket on the "Incident(incident)" form.



Next, we use the **SNGetRecord** activity to retrieve all of the fields for the ticket number stored in **%ticketNumber%** and return them in a result-set table named **%snGetTicketInfo%**.



The next screenshot shows us using the **GetCellValue** activity to pull the "Sys ID" field from the **%snGetTicketInfo%** result-set table returned by the **SNGetRecord** activity.

The screenshot shows a workflow editor on the left with a sequence of activities: a 'Retrieves a list of ServiceNow records ...' activity, followed by 'GetCellValue- sysID', 'SNGetRecord - snGetAttachmentInfo', 'GetRowCount - attachmentCount', a 'While - current...' loop, and finally 'GetCellValue - fileName'. The 'GetCellValue- sysID' activity is selected, and its configuration window is open on the right.

**GetCellValue- sysID**  
Retrieves a cell's value according to its location in...

Settings | Error | Help | Notes

**Table Variable\***: %snGetTicketInfo%

**Row Number\***: 1

**Column Type\***: ☐ Number ☒ Name

**Column Number / Name\***: Sys ID

Cancel | Save

With our new **%sysID%** variable, we again use **SNGetRecord** to return a result-set table of all records on the "Attachment(sys\_attachment)" table whose "Table sys ID" field is equal to **%sysID%** (the unique ID of the parent ticket).

The screenshot shows a workflow editor on the left with a sequence of activities: 'Retrieves a cell's value according to its...', 'SNGetRecord - snGetAttachmentInfo', 'GetRowCount - attachmentCount', a 'While - current...' loop, 'GetCellValue - fileName', and 'SNDownloadAttachment - snDownl...'. The 'SNGetRecord - snGetAttachmentInfo' activity is selected, and its configuration window is open on the right.

**SNGetRecord- snGetAttachme...**  
Retrieves a list of ServiceNow records according to the sel...

Settings | Error | Help | Notes

**Module Name\***: ServiceNow

**Form Name\***: Attachment(sys\_attachment)

**Output Format**: Display name and values

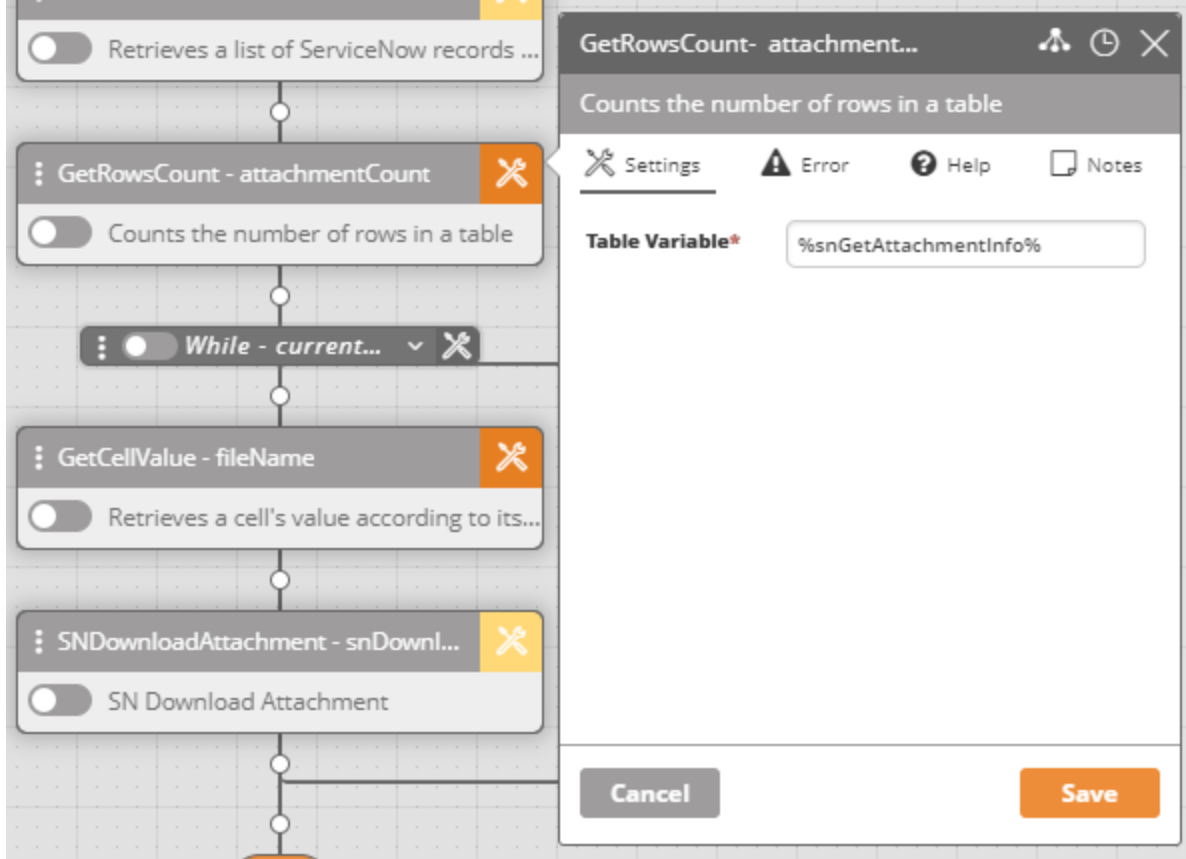
**Output Type**: ResultSet

**Filters**

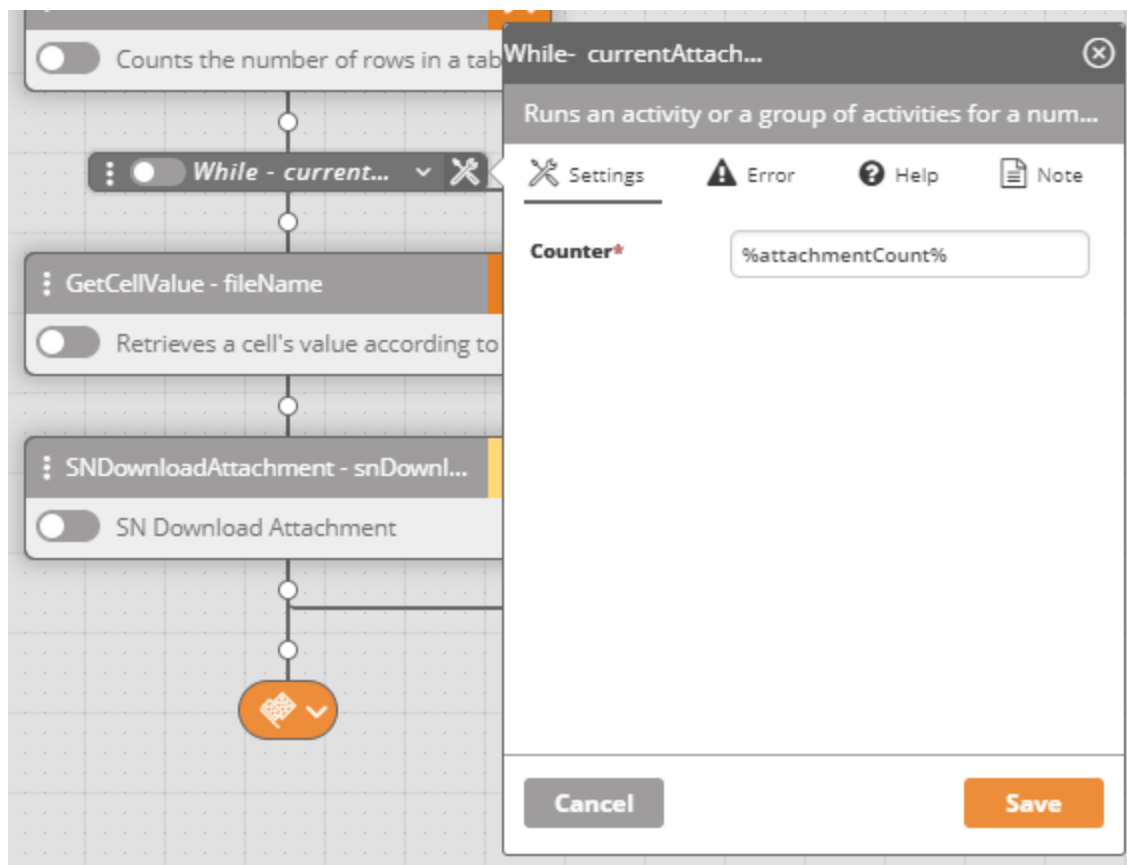
Name	Relation	Value
Table sys ID	Equals	%sysID%

Cancel | Save

Now that we have a result-set table containing all attachments associated with the ticket, we use the **GetRowCount** activity to store the number of rows contained in that attachment list (stored in the **%snGetAttachmentInfo%** table).



We then create a while-loop, as seen below. In this example, the while-loop has been named **%currentAttachment%** and our counter is set to the output of the previous **GetRowCount** activity.



Using **GetCellValue**, we retrieve the "File name" column corresponding to the current row (**%currentAttachment%**) of the **%snGetAttachmentInfo%** result-set table. We have named this **GetCellValue** activity to **%fileName%**.



The screenshot shows a workflow editor with a grid background. A vertical flow line contains three elements: a 'While - current...' loop, a 'GetCellValue - fileName' activity, and an 'SNDownloadAttachment - snDownl...' activity. The 'GetCellValue' activity is selected, and its configuration panel is open on the right. The panel has a title bar 'GetCellValue- fileName' and a description 'Retrieves a cell's value according to its location in...'. It includes tabs for 'Settings', 'Error', 'Help', and 'Notes'. The 'Settings' tab is active, showing the following fields: 'Table Variable\*' with value '%snGetAttachmentInfo%', 'Row Number\*' with value '%currentAttachment%', 'Column Type\*' with radio buttons for 'Number' and 'Name' (where 'Name' is selected), and 'Column Number / Name\*' with value 'File name'. At the bottom are 'Cancel' and 'Save' buttons.

As seen in the screenshot below, our last step is to use the **SNDownloadAttachment** activity, passing to it the **%ticketNumber%** variable we hard-coded at the beginning of the workflow, as well as the **%fileName%** variable from the previous step. For this example, we're using "C:\temp\" as our output directory.

The screenshot shows the same workflow editor as above, but now the 'SNDownloadAttachment - snDownl...' activity is selected. Its configuration panel is open on the right. The panel has a title bar 'SNDownloadAt... - snDownloa...' and a description 'SN Download Attachment'. It includes tabs for 'Settings', 'Error', 'Help', and 'Notes'. The 'Settings' tab is active, showing the following fields: 'Module Name\*' with a dropdown menu showing 'ServiceNow', 'Form Name\*' with a dropdown menu showing 'Incident(incident)', 'Field Name\*' with a dropdown menu showing 'Number', 'Record Number\*' with value '%ticketNumber%', 'Name\*' with value '%fileName%', and 'Path\*' with value 'C:\temp\'. At the bottom are 'Cancel' and 'Save' buttons.

# Successful Workflow Execution

In the **Workflow Execution Log** screenshot below, we can see how the unique "Sys ID" field was retrieved for the **ServiceNow** ticket and then referenced to return a result-set table of all attachments associated with it. We can also see three (3) iterations of the while-loop as we retrieved the filename for each attachment and then downloaded it.

Event Type	Activity Name	Status	Result
Incoming event			
MemorySet	storeTicketNumber	Executed	Success
SNGetRecord	snGetTicketInfo	Executed	Result 
GetCellValue	sysID	Executed	85cc00901b351c1070950dc8cc4bcba3
SNGetRecord	snGetAttachmentInfo	Executed	Result 
GetRowCount	attachmentCount	Executed	3
GetCellValue	fileName	Executed	ayehu.jpg
SNDownloadAttachment	snDownloadFileAttachment	Executed	Success
GetCellValue	fileName	Executed	AyehuLogo_UPDATED.png
SNDownloadAttachment	snDownloadFileAttachment	Executed	Success
GetCellValue	fileName	Executed	Tuxterminal_icon.png
SNDownloadAttachment	snDownloadFileAttachment	Executed	Success
Terminate		Executed	